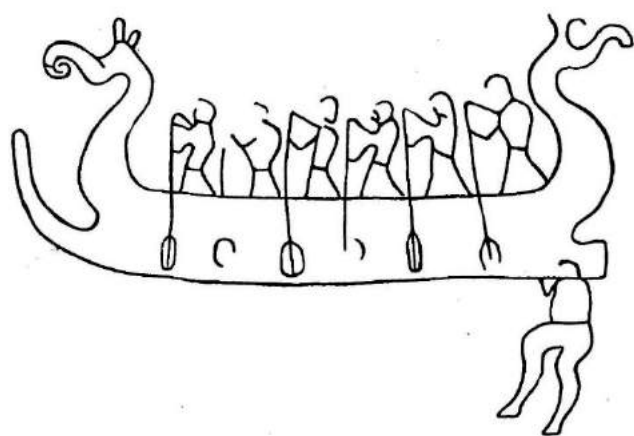




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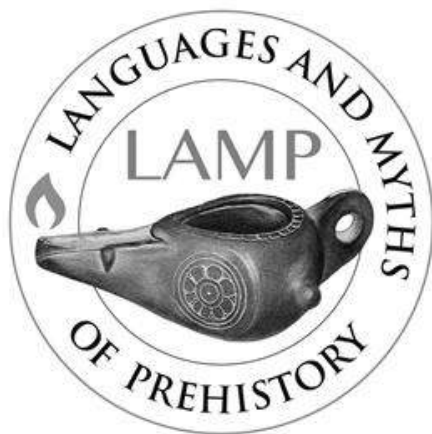




Anders Kaliff & Terje Oestigaard

# The Great Indo-European Horse Sacrifice

4000 Years of Cosmological Continuity from  
Sintashta and the Steppe to Scandinavian Skeid



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*Cover photo (back):* Picture stone from Väskinde cemetery, Gotland, Sweden, 5-7th century. Photo: Terje Oestigaard

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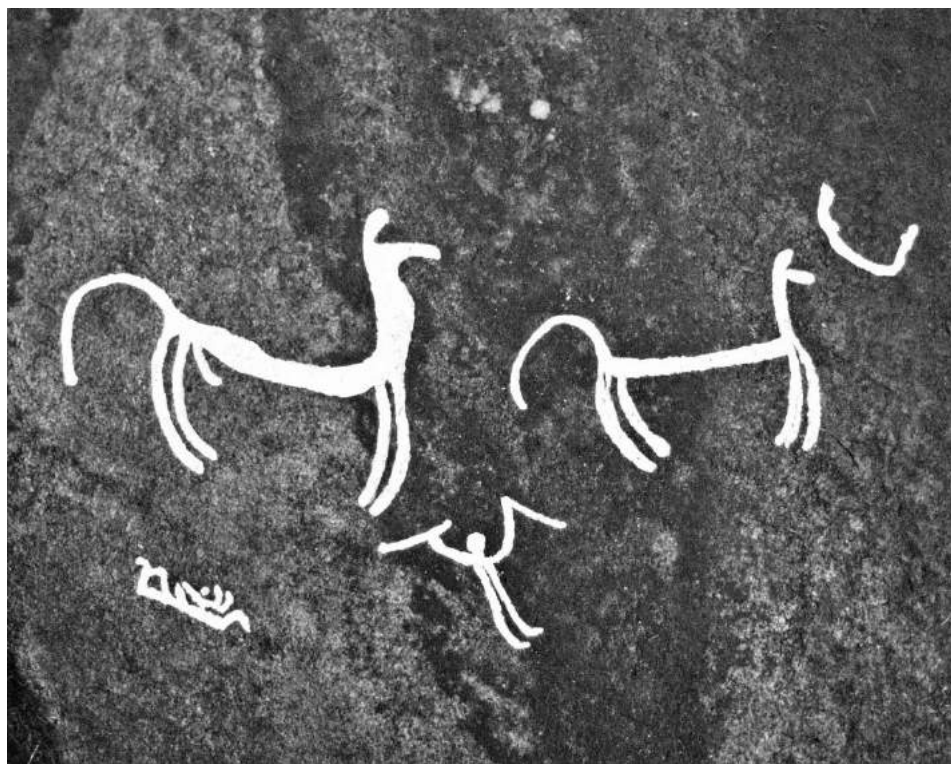
Kungl. Gustav Adolfs Akademien för svensk folkkultur, Uppsala

The great Indo-European horse sacrifice is one of the most enduring and widespread traditions in world history. This study presents a historic overview of Indo-European studies and shows the cosmological continuity of the horse-sacrificial tradition based on specific cultural innovations and ecological adaptations over time. It also sheds new light on cultural history through in-depth analysis of horse sacrifice in culture and cosmology. From Sintashta in Russia and the steppes to the legendary *ashwamedha* ritual in India and horse sacrifices in Roman, Greek and Irish traditions, the analysis finds that horse sacrifice appears to have been most successful in Scandinavia, with classic sites and funerals such as Sagaholm, Kivik and Håga in the Bronze Age and Old Uppsala, Rakne and Oseberg in the Iron Age. The horse-sacrifice tradition shows that these cosmological rituals were closely related to the region's ecology, the weather and the availability of water that was required for a successful harvest. In the cold north, the sun was important for cultivation, but it was the relation between water and winter that defined the seasons and called for horse rituals, as recent skeid traditions show. Understanding horse sacrifice as an institution therefore provides new insights into prehistoric religion from the Bronze Age to recent folklore in rural Scandinavia.



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**Skeid ritual. Litsleby 2 Tanum, Bohuslän, Sweden.**  
**Photo: Milstreu Gerhard. Source: [www.shfa.se](http://www.shfa.se)**

# Preface

The history behind this book is long, but we will keep it short. Covering 4000 years of history from Ireland to India and from the Atlantic to the Pacific Ocean is a massive task. Certain aspects and sacrifices are discussed in more depth, while others are not covered at all. We have aimed to write a continuous narrative from the first to the last chapter, but at the same time, each chapter can also be read separately.

A number of people have helped and inspired us over the years and we would like to thank all of them collectively. Those who have contributed most know who they are. Still, we would like to thank in particular Francesca de Châtel for her comments on language. Also, we would like to thank Svein Bringsdal for letting us use one of his artworks on the cover, Hans Eriksson – the owner of Flistad Well – for his hospitality, and Martin Högvall (Graphic Services, Uppsala University) for the cover layout.

Importantly, we will also thank Prof. Jenny Larsson, Stockholm University, and the other members of the LAMP-project, and we are sincerely grateful for valuable financial support from:

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Lastly, we would like to thank the Department of Archaeology and Ancient History, Uppsala University for support.

All photos featured in the book are ours, unless otherwise stated (figures 11, 15, 17, 18, 23 & 55, and map p. xiii, are from Wikipedia/Wikimedia Commons. We have referred to the artist/origin when he/she/it is known and there are no other copyrights). The horse-ship (p. iv) is from Boglösa, Enköping, Sweden, drawing by E. Kjellén, 1925, [www.shfa.se](http://www.shfa.se). Pictures of horses (without captions p. 38, 66, 124, 182 and 302) are from Håga, Sweden.

Needless to say, we are responsible for the interpretations presented in this book, as well as for any errors.

*Anders Kaliff & Terje Oestigaard*  
Uppsala, 15 June 2020







**Present-day distribution of Indo-European languages.**



**Man/god with horse-sized penis participating in royal/fertility ritual?**  
Massleberg Skee, Bohuslän, Sweden.  
Photo: Torsten Högberg, [www.shfa.se](http://www.shfa.se)

# 1. Traditions through time

*'Ultimately, I will consider these myths of creation as one of the world's most successful systems of ideology, given that they provided the mystifications and legitimations that sustained an extremely widespread, stable, and durable but also extremely rigid, hierarchic, and exploitative social system.'*

Bruce Lincoln

*Myth, Cosmos, and Society: Indo-European Themes of Creation and Destruction* (1986:4-5).

## Quest and questions

Interest in the Indo-European question is greater than ever. This is in large part due to major breakthroughs in the analysis of ancient DNA (aDNA), which has resulted in new data and evidence, but which has also raised new questions (Kaliff 2018). Indo-European horse-sacrifice is one of the world's most ancient and widespread traditions. We trace parts of the practice across large parts of Europe and Central Asia in the period ca. 2100BC-1900AD, albeit in culturally specific and changing forms. Moreover, the tradition also impacted social developments in many spheres, because this cosmogonic ritual embodied world views that affected most other spheres of lives and living.

This interdisciplinary and cultural-historic study with an emphasis on religion and comparative cosmologies in contexts will:

- 1) analyse the great Indo-European tradition of horse sacrifice in a 4000-year historic context, from the Sintashta culture in Russia in the east to historical Scandinavia in the west,
- 2) develop a theoretical and methodological approach to the study of the Indo-European questions, long time-spans and material culture in relation to language, ideology and ritual practice, and with this new understanding and perspective,
- 3) interpret major Scandinavian funerals and mortuary practices, which will include but not be limited to famous Iron-Age graves

- and cult places like Old Uppsala, Rakne and Oseberg and the Bronze-Age graves Kivik, Sagaholm and Håga, and finally,
- 4) discuss archaeological sources, discourses and resources from an ecological perspective, with a focus on water and winter, in order to understand prehistoric cosmology and continuities and change of the cosmology over millennia.

Given that this is an immense task, this study will proceed methodologically by addressing successive themes, providing analysis and discussion before applying the findings to the interpretation of horse-sacrificial traditions and practices in prehistoric Scandinavia. The study addresses the following themes:

First, *traditions through time and the horse sacrifice as 'ideal-type'*. In a brief history of Indo-European studies on the great horse sacrifices, we will present Indian, Irish, Greek and Roman sacrificial traditions and discuss how similarities across time and space have, for over a century, led different scholars to retrace these traditions to a common 'proto-Indo-European' origin. This touches directly upon the many fundamental research challenges involved in analysing such grand rituals.

Second, *creation of cosmos and world history*. The great horse sacrifice was an act of cosmogony or the creation and maintenance of cosmos, which implies that, archaeologically, one has to address the relationship between myths and cosmology, on the one hand, and rituals and sacrifices, on the other hand. Apart from the fact that the creation of the cosmos is part of world history from a religious point of view, given the broad geographical and chronological spans, Indo-European studies are part of world history and global comparative archaeology. While there are many ways to write world history, this study places particular emphasis on Scandinavian archaeology and how Indo-European studies have been conducted and criticised until recently, as this is the region with the longest historic trajectories and continuity of the ancient horse rituals.

Third, *ideal-types, theory and method*. Cross-cultural comparison in time and space has been widely criticised and has often been seen as a formal analogy. This brings us to current theoretical developments in archaeology: this study is situated in the broader field of interdisciplinary studies, combining ethnography and ethnology as the basis for developing 'ideal-types' for interpretative purposes. It also addresses the challenge of national archaeologies and nationalism, since the Indo-

European question has defined history and heritage in various countries.

Fourth, *the meaning of the concept Indo-European – use and misuse*. Coined in the 19<sup>th</sup> century, the concept of Indo-Europeanism has greatly contributed to disciplinary and interdisciplinary developments in academia. It was, however, also abused in 20<sup>th</sup>-century Europe, with grave consequences. It is important to be aware of the concept's history and to critically identify intellectual and academic shortcomings in archaeological reasoning as nationalistic paradigms tend to resurface despite scientific progress. Given that the Indo-European concept was originally developed in relation to languages, it also examines the relation between language, culture and cultural-historic processes.

Fifth, *the spread of Indo-Europeans, the clues of genetics and a return to the classics*. Thanks to the recent scientific revolution in aDNA analysis, many previous controversial interpretations about migration have now been validated. The new technology allows us to re-examine older excavations and recent archaeological finds to explore new connections and prehistoric realities. In this study, we will address the question of the Indo-European 'homeland' on the steppes north of the Black Sea. We will also address finds from the Sintashta site, east of the Ural Mountains in current-day Russia as well as other Asian contexts and their relation to the historic developments in India.

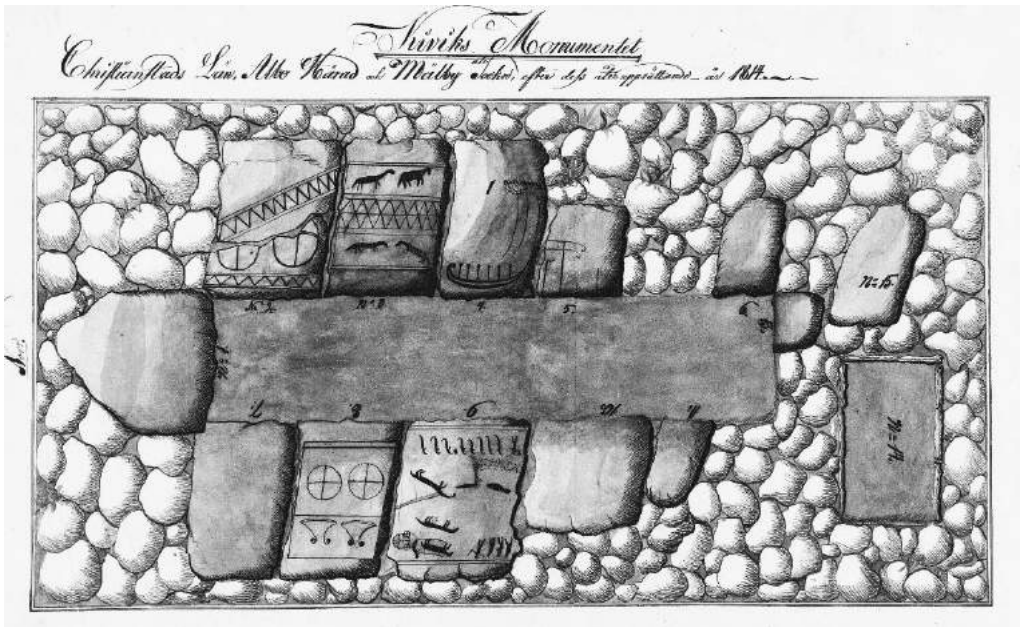
Sixth, *ashwamedha* (Sanskrit for 'horse sacrifice'). We will examine this Vedic prototype and the later Indian horse-sacrificing tradition in depth, as this ritual practice has been thoroughly documented and debated among Indologists and Indo-European scholars. The Vedic cosmogony and cosmology share many similarities with the Scandinavian Bronze-Age religion, with for instance the prominent role of the sun and its cyclic movement in relation to water. While the *ashwamedha* ritual is cultural history in itself, it may also help us understand older prototypes of the great Indo-European horse sacrifice and its associated rituals, the last traces of which we find in Scandinavia as late as the 19<sup>th</sup> century.

Seventh, *skeid* – horse-fighting and horse-racing. The skeid tradition is documented in written sources and the tradition can be traced back over the centuries. In Norway, the tradition survived until recently mainly in the most remote mountainous parts of the country, particularly in the form of horse racing and horse fighting. The stallions fought among themselves for a mare, which seems to be a relic of much older fertility rituals. However, in Sweden and large parts of Norway,

the *skeid* tradition was mainly a horse race to St. Stephan's well during Christmas, and most contemporary ethnographers and early scholars interpret this horse tradition as part of an earlier fertility and harvest cult. The Icelandic equivalent of *skeid*, described in medieval sources, is called Hestavíg. As in Norway, it consisted of a brutal and bloody confrontation between two stallions, but the occasion was also used as an opportunity for courtship between young couples, to strengthen friendship or to settle issues among rivals.

Eight, *Iron-Age horse sacrifices*. The archaeological material and physical evidences of horse sacrifices are omnipresent in Norse cosmology. The Rakne Mound in Norway, the biggest grave mound in Scandinavia, can be interpreted in light of horse sacrifices. While the finds in Rakne are small, the Oseberg funeral includes numerous horse sacrifices. Analysis of some of the old material, also from Old Uppsala and other Iron Age sites in Sweden, may provide new insights into the *skeid* tradition. While there are few written sources, they provide elaborate detail about issues such as the cult of *volse*. However, the iconography bears strong testimony to horse rituals; moreover, archaeological sites like Skedemose enable deeper insights into this ritual tradition. A close look at the variation in the archaeological material allows one to identify different sacrificial practices and how traditions changed over time, with direct continuities into the Bronze Age.

Ninth, *Bronze-Age horse sacrifices*. Great Bronze-Age graves such as Kivik (Fig. 1), Sagaholm and Håga can be better understood if the funerary and sacrificial remains and their cosmology are viewed through the Indo-European frame of great horse sacrifices. Many of the depictions on rock art can be understood in new ways (Fig. 2), potentially opening up new entrances to understanding the role and relation between the sun, chariots, boats – and horses. Heaps of fire-cracked stones or burnt mounds may also be interpreted in this light, emphasising the sacrificial hierarchies in ritual practices. The most extensive and complicated Vedic fire sacrifice, Agnicayana, has been likened to the Scandinavian heaps of fire-cracked stones in other respects. Agnicayana is one of the Vedic ceremonies that form the basis of the horse sacrifice itself. The abundant presence of bones of animals other than horses in heaps of fire-cracked stones does not contradict the relationships.



**Fig. 1. The Kivik grave, Sweden. From Nils Henrik Sjöborg, 1814. Source: [www.shfa.se](http://www.shfa.se)**

Although the horse is the main sacrificial animal, a great sacrifice and ritual may comprise of many minor sacrifices leading up to the main sacrifice. In one of the records describing the Vedic *ashwamedha* sacrifice, altogether 636 animals were sacrificed.

Tenth, *the sun and its relation to water, weather and winter*. We will not only put forward new interpretations enriching the understanding of the prehistoric cosmology in Scandinavian Iron and Bronze Age, but also try to explain the reason for the strong prevalence of the great Indo-European horse sacrificial tradition in the north. In this cold region wealth and welfare is highly dependent on sunlight and the right combination of the sun and rain for a successful harvest during the short summer season. From an ecological perspective, one can identify a reversed rainmaking logic in fertility and harvest rituals. The horse-sacrificing tradition was mainly a cosmic fertility ritual. In the cold north, the long winters form the greatest challenge: when will it come; how long will it last; and when will it end? While there were no summer or winter gods or goddesses in Scandinavia, the winter was nevertheless ritually included in the overall cosmology.



**Fig. 2. Men (or divinities?) and horse. Karlsrund Kville, Tanum, Sweden.**  
**Photo: Torsten Högberg. Source: [www.shfa.se](http://www.shfa.se)**

Eleventh, *cultural history and cosmology – Indo-European and Scandinavian traditions*. As the analysis approaches a conclusion, we aim to present ways to move from cross-cultural comparison to specific cultural-historic analyses and histories. We relate our analysis to ongoing research traditions and explore how this approach may generate new knowledge on classical questions like Ragnarök and adaptation to climate change in time and space. As climate change implies changes in the relation between the sun (seasonality) and water (weather and winter), this was also a divine matter in prehistory because the gods controlled death and life-giving powers. We will also look at how particular cultural-historic processes may be studied independently of broader Indo-European formative forces, even though they are clearly Indo-European and can best be understood in this context in many cases. In short, studies of Scandinavian prehistory do not have to be Indo-European studies, although they are part of Indo-European processes.

Twelfth, a short *epilogue* where we sum up parts of the discussion and for the last time return to the relation between archaeology, ethnography and ethnology. We frame this in constructive context to show what an Indo-European framework may enable in future studies.



This last point also highlights another goal of this study, which is to challenge existing theories and interpretations by asking questions like: how and in which ways can this empirical material and these specific contexts give new understanding to existing knowledge and form the basis for improved theory building and conceptualisations of the past? This last goal is obviously the most challenging, and can only be achieved on the basis of meticulous analysis. We will start therefore with a presentation of horse sacrifice in different Indo-European traditions.

### **Realities behind cosmogony and sexual metaphors?**

Domestication of horses ‘revolutionized how people could travel, control and trade resources, and fight each other’ (Bendrey 2012:135). Together with the plough and pastoralism, it brought about ‘secondary products revolution’ (Sherratt 1981, 1988), which strongly influenced Indo-European migrations. The domestication of horses was one of the decisive factors allowing for the rapid and effective dissemination of Indo-European language, religion and other cultural elements (Anthony 2007:193-224). Owning horses had great economic benefits, especially in a semi-nomadic society where control of large flocks of free-ranging animals was important. However, beyond this, the horse was seen also as divine, representing forces of a different world. Thus, horses and their procreation was about more than simple reproduction. While horses had to be domesticated in the first place, they remained different from other domesticated animals, as each one had to be individually tamed. This meant exercising brute force on one of the most powerful creatures in prehistory and even in the pre-industrial world. Oxen are also strong creatures that are important in agricultural practices such as ploughing, and also as draft animals for the propulsion of heavy wagons. However, they are less suited to rapid transport and oxen never became man’s companion in the way that horses did. Through history, only dogs acquired a similar position as close companions of man.

There is a long history of horse breeding. Besides being an impressive spectacle, this process of controlled creation was no doubt also dangerous and difficult. The stallion’s phallus in full vigour represented extraordinary vitality and fertility, representing intensified masculinity, mating power and the raw force of creation, which had to

be controlled and tamed, or culturalised so to speak. This happened through rituals and sacrifices.

Gamkrelidze & Ivanov (2010:403-404) have pointed out that historical Indo-European dialects also preserve reflexes of a special proto-Indo-European term for the taming or domestication of animals such as horses, cows and sheep, which is \*t'e/omH. The Sanskrit word *damáyati* means 'tames, forces' and the Vedic *damitā* means 'one who pacifies'. Other words related to this root include Hitt. *damaś*, ('crush, rape') and Hom. Gk *dámnēmi* ('marry, rape'), *admēs* ('untamed, unmarried girl'). Gamkrelidze & Ivanov conclude:

'That the word had both meanings "tame" and "rape" may point to a symbolic connection between the taming of animals and the cohabitation ritual, as reflected in ... Proto-Indo-European sacrifice rituals like the Ashvamedha.'

Given that parts of the Indo-European complex are strongly associated with war and violence, one can question whether these are merely symbols and mythology. If an unmarried girl was considered 'untamed', and taming and raping were seen as nearly synonymous, it raises questions about practices in the Indo-European past – Scandinavia, Europe and elsewhere. This will be discussed in the following chapters.

There is widespread fascination with sexual imagery in archaeological contexts. In 2019, a 52-centimetre erect phallus was found in Rollsbo, close to Kungälv outside Gothenburg (Fig. 3). The phallus was situated in the middle of what originally was thought to be a grave, but was in fact probably a site of sacrificial fertility rituals from the Swedish Bronze Age. As usual with such finds, the phallus received a lot of media attention, also internationally. The *New York Post* reported: 'A large stone penis that may have been used for sacrificial fertility rituals has been uncovered in Sweden. The bizarre phallic statue has been linked to a Bronze Age fertility cult – and stands erect at nearly two-feet high' (Keach 2019).

The find in this case is a very realistic stone phallus. However, the context is far from unique, as the stone phallus occurs frequently as an important marker in sacred sites from the Bronze and Iron Age in Scandinavia. The link to fertility and generative power is often striking (Kaliff 1997:106-111).



**Fig. 3. The stone phallus in Rollsbo, close to Kungälv outside Gothenburg, Sweden. Photo: The Archaeologist, NHM.**

This highlights the challenge of analysing the relationship between mythology and cosmology on the one hand and ritual and sacrificial practices of dominance on the other. Distinguishing between the

symbolic and the literal is, however, largely impossible, and remains a core question in rock-art research. Do the images represent mythology or actual practices, and which realities are expressed at what level (Fuglestad 2018)?

On a more general note, while many archaeologists were postmodernist, people in prehistory were not, and the symbolism is likely to have represented realities and ritual practices in a dense concentration. It is 'believing and seeing' (Lewis-Williams 1981), not because the symbols did not contain oceans of elaborate metaphysical meaning, rather the contrary. If symbols and rituals are also expressions and exhibitions of power and asymmetrical relationships, dominance is more strongly expressed when the message is clear – in addition to all other symbolic meanings. The phallus in Rollsbø is one such case in which it is impossible for the participants to misunderstand the main focus. Whether the focus was a cosmogonic myth or active participation in a ritual is more difficult to ascertain 3000 years after the event.

We will further address the relationship between visual imaginary, violence and voluntarily participation in the following chapters. This includes Ibn Fadlan's description of a funeral in which horse sacrifices and fights appear to have played a central role. Another and significantly less violent depiction is *Vølsa þáttr*, a story from the *Flateyjarbók*, about the penis (*vølsi*) of a slaughtered stallion (?) that was wrapped in a linen cloth with onions and herbs for conservation. It was then passed from hand to hand among the people of the farm, each reciting a verse to this phallus as a sacred item of worship. The written source does not elaborate on other uses in practice at the time (see Chapter 8).

### **The horse sacrifice as 'ideal-type'**

The late 1920s marked a breakthrough in Indo-European horse studies. As early as 1925, the Indian *ashwamedha* sacrifice was compared to the Roman October Equus ritual. Arthur B. Keith writes:

'The original force of the rite is somewhat obscure. The possibility of comparison with the October horse at Rome is obvious, and the eating of the horse, the fertility rite in which it appears, and the obscenity of the conversation, point to a vegetation ritual, but the absence of any suggestion that the horse was a vegetation spirit, or that its body was in part used for a direct vegetation magic, is against that theory ... the

[ashwamedha] offering was one made to the sun conceived as a steed, in order to strengthen him for his course in the heaven' (Keith 1925:346).

Paul Emile Dumont published his study on the Indian horse sacrifice and *ashwamedha* in 1927, noting the close parallels with Greek horse sacrifice (Dumont 1927). Franz Rolf Schröder (1927) was the first to point out the close parallels between Indian and Irish horse rituals, while George Dumézil (1970:224-228) claimed that the Roman October horse preserved remnants of a common Indo-European ritual linked to kingship, also analogous to the Vedic *ashwamedha* and the Irish consecrated sacrifice described by Giraldus Cambrensis in the early Middle Ages. Jaan Puhvel (1970:192) says:

'From early Europe, the Near East, and Western Asia we possess an immense amount of archaeological, antiquarian, ethnographic, mythological, and folkloristic material concerning the horse ... The only viable starting point in past research is a kind of triptych depicting Indo-European horse sacrifice, the centerpiece of which is the well-documented and much-studied Ancient Indian asvamedha ritual. One side panel is composed of the Roman October Equus as interpreted by Georges Dumezil, the other by Celtic analogues first adduced by Franz Rolf Schröder.'

While these studies and the traditions they established have been of great importance (Platte 2017, Zaroff 2005), their Nordic counterparts have not received sufficient attention. Swedish archaeologist Oscar Almgren's classic study of rock-art and cult, published in 1927, suggests that the rock engravings on one of the famous stone slabs in the royal Kivik Bronze-Age grave can be interpreted as a horse-fight, and, more specifically, as a Nordic parallel to the Roman October sacrifice (Almgren 1927:191) – an interpretation that Guttorm Gjessing described as being of 'great interest' 15 years later (Gjessing 1943:16). Almgren was not the first Scandinavian scholar to point out the close resemblance between horse fights or the historic *skeid*-tradition on the one hand and the Bronze Age in general and the Kivik grave in particular on the other. Swedish linguist Elias Wessén had already discussed this in a 1921 article in which he analysed the Nordic *skeid*-tradition (Wessén 1921:112, see Chapter 7). Also, in Arthur Nordén's analysis of the Kivik grave from 1917, he notes that the horses faced each other and were half raised. This,

he suggests, is part of the Old Norse tradition of inciting the stallions to fight. He interprets it as a way for the horses' vital life-forces to be transferred to the dead (Nordén 1917:26, 32). Thus, there existed a scholarly tradition that saw continuity in ritual horse tradition over several millennia, from the Bronze Age to the 19<sup>th</sup> century. However, this research tradition has been marginalised, both in Scandinavia and internationally.

The Norse or Northern historic developments are key to understanding the Indo-European horse sacrifice tradition, with historic continuity up to the 20<sup>th</sup> century. Scandinavian archaeology may also contain some of the earliest traces of at least one 'prototype' of this great Indo-European horse-ritual and sacrificing tradition. While the Indian *ashwamedha* is the most famous, it is dated quite late as *documented in texts*, though it obviously builds on much older traditions. The texts documenting this sacrifice are commonly dated from around 500-300 BC (see Chapter 6). The Greek or Roman sacrifices date to similar and later periods, while the Irish sacrifices took place around the turn of the first millennium AD. Hence, Scandinavian prehistory may reveal traces of this tradition that are 1000 to 1500 years older than the Indian, Greek or Roman documentation – dating back to around 1800 BC or earlier.

Given these long timespans in widely different geographical, cultural and religious areas, it is an immense task to approach this topic empirically without generalising too much. Any such great tradition will obviously change over time; the various myth-themes will have parallels, yet remain distinct and different. We will follow Wendy Doniger in the way she structures the various elements and myth-themes in the respective Indo-European horse sacrifice traditions. In general, this will be our ideal-type for analysing prehistoric examples in Scandinavia (see Chapter 3). As Doniger points out: 'I do not wish to suggest that there actually was an ancient proto-Indo-European myth that contained all the elements I have included in my summary... [but] it enables us to isolate the mythemes, to distinguish the recurrent elements from those superimposed by a few individual cultural variants. In this sense it may represent the core of the myth, but it is a thematic rather than a historic core' (Doniger 1980:150-151). She sums up the recurrent motifs in Indo-European myth and ritual in this chart (Doniger 1980:150, parentheses indicate implicit or veiled occurrence of the motif. We have omitted Welsh and Gallic examples):

	Indian myth	rite	Irish myth	rite	Greek	Roman
King mates with mare	X	(X)	X	X	X	
Mare is killed (set free)		(X)	X	X	X	
Queen mates with stallion	X	X			(X)	(X)
Stallion is killed		X			X	X
White horse	X	X		X	X	
Chariot race	X	X	X		X	X
Flesh/seed is eaten	X	X	X	X	X	
Witch eats/abandons child	X		X		X	
Mutilation of horse/father/son	X	(X)	(X)		X	X
Transformation of woman into bird		(X)	X		X	
Sun as bird or horse	X	X			X	
Goddess mates with mortal	X	(X)	(X)		X	
Chastity of king		X	(X)		(X)	
Wicked (step) (split) mother	X	X	X		X	
Hippomorphic twins	X		X		X	
Brother-sister incest	X		X		X	
Father-daughter incest	X		X		X	
Queen mates with bull	X				X	

While this table represents a thematic rather than a historic core, ‘it may indeed turn out to be the historical core’, Doniger argues, adding:

‘The more significant variations, which can be explained by the historical development of Indo-European attitudes toward women and mares, include ... the reversal of the order of copulation and killing in the Indian ritual, and the reversal of the sexes in that ritual and in some late forms of the Indian and pan-European myth (in which a god, in the form of a stallion or bird, mates with mortal women, the opposite of the pattern of the Irish ritual and the prototypical myth, in which a mortal man mates with a goddess in the form of a mare or a water bird)’ (Doniger 1980:151).

Doniger also points out the challenge of such comparison across vast geographical areas and time spans, as there are variations between myths in different cultures, and between ritual, culture and myths in general. Still, the two basic processes are 'a sacrifice and a marriage. The sacrifice brings gods and humans together through food that is obtained by slaughter. The marriage brings men and women together through sex' (Doniger 1980:151).

## **The Vedic and Indian horse sacrifice**

The Indian *ashwamedha* ritual is the most elaborate horse sacrifice in existing sources. It has also drawn the most attention from international scholars, partly because of the sexual act in which the queen copulates with the dead stallion's phallus. '[This] was a special rite performed by the kings with the aim of expanding their kingdom, obtaining offspring or atoning for a sin' (Gopal 1990:72). A particularly fine stallion was chosen to roam freely for a year and whenever the horse visited a foreign country, the ruler (sacrificer) had to conquer that kingdom. After a year, the horse returned as a symbol of the sun on its journey across the world, making the ruler the king of the whole Earth and cosmos. The rite concluded with the great sacrifice of several hundred animals, culminating in sacrifice of the stallion. The rite glorified the king, but also secured the fertility of the whole kingdom, which was visually illustrated by the queen having sexual intercourse with the dead horse's phallus.

As with other practices on the Indian continent, it is unclear how often the *ashwamedha* ritual was conducted. Some of the early documentation of the ritual is featured on coins or in inscriptions, which may or may not represent historic events. If they do document actual sacrifices, it is estimated that around 30 such grand sacrifices were conducted from the 2<sup>nd</sup> century BC (Agrawal 1990, Sircar 1990, Tripathi 2006). Other sources describe the ritual as a much more common act, for instance during the Vishnukundin dynasty during the 5<sup>th</sup> and 6<sup>th</sup> centuries, where one king apparently performed 11 *ashwamedha* and 1,000 other sacrifices, and other kings also conducted numerous *ashwamedha* rites (Bandyopadhyaya 2007:203). Historically, Sawai Jai Singh is famous for performing two *ashwamedha* sacrifices in 1734 and 1741 (Datta 2008:232), the last ones ever conducted.



On a general note, these are cosmic rites and myths in which the power of cosmos is controlled and bent by human will for human benefit. If horses are gods, then taming horses is an interaction with the divine, in which humans participate and channel the cosmic flow of powers. This has its counterpart in human sexual activities. 'Although the explicit Indian ritual involves copulation between the queen and the stallion and the feeding of the stallion by the queen, one can detect from other parts of the ritual another, probably older, form of the rite in which the king united with a dangerous mare to gain virility' (Doniger 1980:162). By conquering mares, men actively tame cosmic forces. By dominating women, stallions control female forces; their sexuality is pacified as they are violated. This is a gender theme we will return to throughout the book, as Indo-European ideology is generally understood to be violent and masculine at the expense of women. If one can use mythology and cosmology to understand actual practices and people of the past, the horse-sacrificing tradition may shed new light on life in ancient societies and women's position within them.

### **The Irish horse sacrifice**

In Ireland, horse sacrifice was part of the regal inauguration rite in Ulster. The Irish ritual was documented by Giraldus Cambrensis (Gerald of Wales) in 1185 AD, though the source is somewhat problematic as it is a Christian documentation of a pre-Christian practice. It is therefore likely that the author did not witness the ritual himself (Fickett-Wilbar 2012). He describes the ritual as follows:

'There is in the northern and farther part of Ulster, namely in Kenelcunill, a certain people which is accustomed to appoint its king with a rite altogether outlandish and abominable. When the whole people of that land has been gathered together in one place, a white mare is brought forward into the middle of the assembly. He who is to be inaugurated, not as a chief, but as an outlaw, has bestial intercourse with her before all, professing himself to be a beast also. The mare is then killed immediately, cut up in pieces, and boiled in water. A bath is prepared for the man afterwards in the same water. He sits in the bath surrounded by all his people, and all, he and they, eat of the meat of the mare which is brought to them. He quaffs and drinks of the broth in which he is bathed, not in any cup,

or using his hand, but just dipping his mouth into it round about him. When this unrighteous rite has been carried out, his kingship and dominion have been conferred' (O'Meara 1982:109-110).

As a ritual tradition, it appears to be a very distant 'prototype' of the horse ritual and sacrifice in which cosmic powers were tamed by the future king, with his participation in the ritual legitimating his divine rule. This tradition seems to be distinct from those that the Vikings brought to the Hebrides, which focused mainly on horse racing and riding in processions (Davidson 1998:46-47, see Chapter 7). The latter is the more recent *skeid*-tradition, but even this has more explicit 'proto-Indo-European' traits as one goes further back in time. Nevertheless, the Irish tradition documented in Ulster seems to be a much more archaic ritual that did not evolve much over the centuries, as it contains many of the features one would expect in one of the 'prototypes' of this cosmogonic sacrifice.

While rituals and funerals may reverse common and daily structures, 'Royal symbolism is, I believe, constructed out of nonroyal symbolism, both logically and probably also historically ... all symbolic constructions of authority involve the same elements' (Bloch 1987:271-272). The Irish ritual is religion by definition, following the literal Latin meaning of *religio* ('binding together' or to reconnect 'bonds' or 'relations') and *socio* (meaning 'compassion') (Turner 1991). The initiated king sits in the bath, sharing the sacrificial meat with his people, thus creating bonds and relations, a social activity that reflects compassion.

The compassionate aspect also involves violence and 'rebounding violence', as Maurice Block frames it: 'The element of violence involved in the renunciation of vitality leads to the return of vitality in a form which brings about aggressive reproduction of the community through consumption of the vitality of outsiders ... rebounding of violence can either take a reproductive form in which vitality is regained from creatures such as pigs or cattle or an aggressive form in which this recovery becomes extended to involve more ambitious expansionist aims' (Bloch 1992:60-61). Having sexual intercourse with a horse is rape, a molestation of the animal after which it is killed. Hence, violence creates vitality, which is also how divinities are depicted in mythology.

## The Greek horse sacrifice

It has been said that ‘the “miracle of Greece” is not merely the result of a unique talent. It also owes its existence to the simple phenomenon that the Greeks are the most easterly of the Westerners’ (Burkert 1992:129). Herodotus (Book IV, 71) documented for instance horse sacrifice as part of a royal funeral among the Scythians, who reigned in their kingdom north of the Black and Caspian Seas: ‘[...] they lay the corpse in his grave on a pallet. Then they stick spears into the ground on both sides of the corpse and make a roof out of wooden planks covered with rush matting. There is still open space left within the grave, and in it they bury, after throttling them to death, one of the king’s concubines, his wine-server, cook, groom, steward, and messenger, and some horses and a proportion of all his other possessions, including some gold cups. They do not put anything of silver and bronze in the grave.’ The important role of horses is downplayed or misunderstood, as they were as important as the wine-server and the cook.

In Greek sources, Pausanias describes a horse sacrifice, which involved a divine rape: ‘When Demeter was wandering in search of her daughter, she was followed, it is said, by Poseidon, who lusted after her. So she turned, the story runs, into a mare, and grazed with the other mares of Oncius; realising that he was outwitted, Poseidon too changed into a stallion and enjoyed Demeter. At first, they say, Demeter was angry at what had happened, but later on she laid aside her wrath and wished to bathe in the Ladon ... Demeter, they say, had by Poseidon a daughter, whose name they are not wont to divulge to the uninitiated, and a horse called Areion. For this reason they say that they were the first Arcadians to call Poseidon Horse’ (Pausanias VIII 25.4–7, p. 25).

Pausanias also describes the sacrifice of a horse as part of a funeral: ‘Further on is what is called the Tomb of Horse. For Tyndareus, having sacrificed a horse here, administered an oath to the suitors of Helen, making them stand upon the pieces of the horse. The oath was to defend Helen and him who might be chosen to marry her if ever they should be wronged. When he had sworn the suitors he buried the horse here’ (Pausanias III 20.9, p. 131).

Thus, horse sacrifices were not unknown in Greece (see Carsten 2019), but as horses were not so common, their sacrifice was also more rare. ‘Horses were rarely eaten or sacrificed in the ancient Mediterranean. From time to time, however, horse sacrifice was enacted

as part of funerary celebrations' (Mrva-Montoya 2013:169). Horses are, however, very closely associated with heroes in Greek mythology. This in itself is probably a reflection of earlier common Indo-European notions, including the royal horse sacrifice. The relationship between heroes and horses is particularly evident. This appears to be rooted in a common predisposition toward the anthropomorphising of horses and the concomitant hippomorphising of humans. This links this issue to one of the more recognisable figures of Greek mythology: the centaur (Puhvel 1987:274, Platte 2017).

Even if the ritual of the great horse sacrifice was not particularly widely practiced in Greece, the memory of the ritual may have influenced Greek poetry. Though the Greeks did not inherit the ritual itself, the notions and ideology associated with it in the mother cultures may have shaped themes of early Greek myth and poetry. To quote Ryan Platte in his book *Equine Poetics* (2017): '... research into a prominent horse sacrifice ritual in the parent culture reveals several insights into the nature of this common inheritance, namely that a ritualistic shift in identity between horse and human was central to the event.'

## **The Roman horse sacrifice**

The horse sacrificed to Mars on the Campus Martius in Rome was known as the October Horse. Every year on 15 October, the right-hand horse of the winning pair in a chariot race was sacrificed. The Roman horse sacrifice has been interpreted in three different ways: first, the sacrifice is a military rite and, as a warlike animal, the horse is an appropriate object of sacrifice; second, the horse sacrifice is a Roman equivalent of the Indian *ashwamedha*; and third, the horse personifies the Corn Spirit or a Vegetation Daemon, who is killed during the harvest (Pascal 1981:263-264). These interpretations have been variously supported by the sparse sources that mention the October Horse, which include these authors (quoted from Dumézil 1970:215-216):

Polybius: '... Again, in his history of the wars against Pyrrhus, he [Timaeus] says that the Romans still keep up the memory of the fall of Troy: on a certain fixed day they kill with thrusts [or a thrust] of a javelin a war horse before the city, on what they call the campus [the field of Mars]'.

Plutarch: 'Why on the Ides of December [should be October], after a horse race, is the right-hand horse of the winning chariot consecrated and sacrificed to Mars, and why does someone cut off its tail, carry it to what is called Regia, and there bloody the alter, while, with respect to the head, certain men, some descending from what is called Sacra Via and others from Suburra, engage in battle?'

Festus: 'The horse which is immolated each year in the month of October on the field of Mars is called *October Equus*. This is the one which was harnessed on the righthand side of the chariot which won a race. An earnest struggle then took place, for the head of this horse, between the people of Suburra and those of Sacra Via, the former trying to place it on the wall of the Regia, the latter the Turrus Mamiliæ. The tail of the same horse is carried to Regia quickly enough so that drops of blood can fall from it onto the hearthstone, in order to make it share in sacrifice. They say that the horse was sacrificed to Mars in his character as god of war and not, as the vulgar think, because, the Romans taking their origin from Ilion, they were revenging themselves on it, since Troy was taken by the enemy by means of a wooden horse.'

Georges Dumézil sees a clear parallel with India and argues that the '*Equus October* presents a direct homology with the Vedic sacrifice of the horse' (Dumézil 1970:224). In *The Golden Bough*, James G. Frazer was explicit in his interpretation of this sacrifice as a fertility rite (Frazer 1922:555):

'The Field of Mars on which the ceremony took place beside the Tiber, and formed part of the king's domain down to the abolition of the monarchy. For tradition ran that at the time when the last of the kings was driven from Rome, the corn stood ripe for the sickle on the crown lands beside the river; but no one would eat the accursed grain and it was flung into the river in such heaps that, the water being low with the summer heat, it formed the nucleus of an island. The horse sacrifice was thus an old autumn custom observed upon the king's corn-fields at the end of the harvest. The tail and blood of the horse, as the chief parts of the corn-spirit's representative, were taken to the king's house and kept there ... Thus the blessing of the corn-spirit was brought to the king's

house and hearth and, through them, to the community of which he was the head.'

A possible connection between early Greek mythology and Roman tradition has been pointed out in the legend of the Trojan horse, which may be understood as a horse sacrifice. The horse was brought into Troy and presented to the goddess at her sanctuary, as one would present a sacrifice. Also, the striking of the horse with a spear by Laocoön has been interpreted to reflect a sacrificial rite, maybe reflecting an earlier, more explicitly sacrificial version of the story (Burkert 1983:158–161). This connection seems to have been readily accepted in ancient Rome. It was a common belief that the historic origin of the Equus October lay in the slaughter of a horse in retribution for the horse that brought about the fall of Troy, the mythical homeland of the Romans. Polybius (XII 4b), for instance, confirms that this was indeed a common Roman explanation for the Equus October ritual. The sacrifice of the horse with a spear, like the one used by Laocoön, must have either developed from this belief, or at least given credence to it (Platte 2017).

## Indo-European horizons and world views

Recently, historian of religion David M. Knipe criticised the above-mentioned approach. He argues that the popularity of the *ashwamedha* ritual and sacrifice outside India:

'is due in part to the huge spectacle of the year-long rite with its cast of many hundreds, an Indian Noah's ark collection of wild and domestic animals (as many as 636 in one account), and the cachet of a handsome stallion wandering free to seek new pastures and conquer new territory for the king in the bargain. Mostly, however, its notoriety west of India is gained from apparent Indo-European roots and knowledge of counterparts in the Roman October horse, ancient Scandinavian myths and rites, and Celtic and Greek mare sacrifice' (Knipe 2015:234).

From an archaeological point of view, however, we may turn the criticism upside down and use it to our advantage to argue that this claim sums up the comparative ambitions of Indo-European studies. This is why it is necessary to return to *ashwamedha* to gain a deeper

understanding of 4000 years of cultural-historic development. Also, as the grandest sacrifice in the world, it gives insight into numerous fields that have archaeological implications, like all the other and minor animals sacrificed as part of and before the main sacrifice (see Chapters 7-9).

We will address this and other criticism of comparative Indo-European studies like this one. Such critiques highlight the problems faced by previous generations of researchers and their approach to solving these challenges has established new research traditions. In short, it is not enough to show correlations in time and space; one needs to analyse causation and show how this represents historic realities and cultural history with changing continuities throughout the centuries.

Thus, our aim is to untie some of these Gordian knots, theoretical and methodological conundrums, and interpretive challenges. As indicated, this specific horse tradition had a changing continuity up to the 20<sup>th</sup> century in Scandinavia, when the last remnants were documented, but these remnants were part of a tradition with a history going back at least 4000 years in very distinct and different regions.

Moving to the East, Sintashta is located in Chelyabinsk Oblast, Russia, in the steppe just east of the Ural Mountains. It consists of a fortified settlement dating to c. 2800–1600 BC. It gives its name to the so-called Sintashta culture, a forerunner of the Andronovo culture – and in extension to the Indo-Iranian cultures (Vedic and Ancient Iranian). Five cemeteries have been documented at Sintashta. *Sintashta mogila* is the largest, and consists of 40 graves. Some of the graves included horse sacrifices, with as many as eight horses in a single grave, and some were chariot burials, including the oldest-known chariots ever found. The funerary sacrifices at Sintashta have strong similarities to funerary rituals described in the *Rig Veda*, an ancient Indian religious text often associated with the Proto-Indo-Iranians (Anthony 2007:371-375, 2009). This also raises the question of whether there is an Indo-European connection to the recent steppe cultures that are famous for their horse sacrifices. And, if so, what kind of relationship is this? (e.g. Curtin 1909; Unterländer, Palstra & Lazaridis et al. 2017; Neumann & Wigen 2018). This will be discussed in Chapter 5.

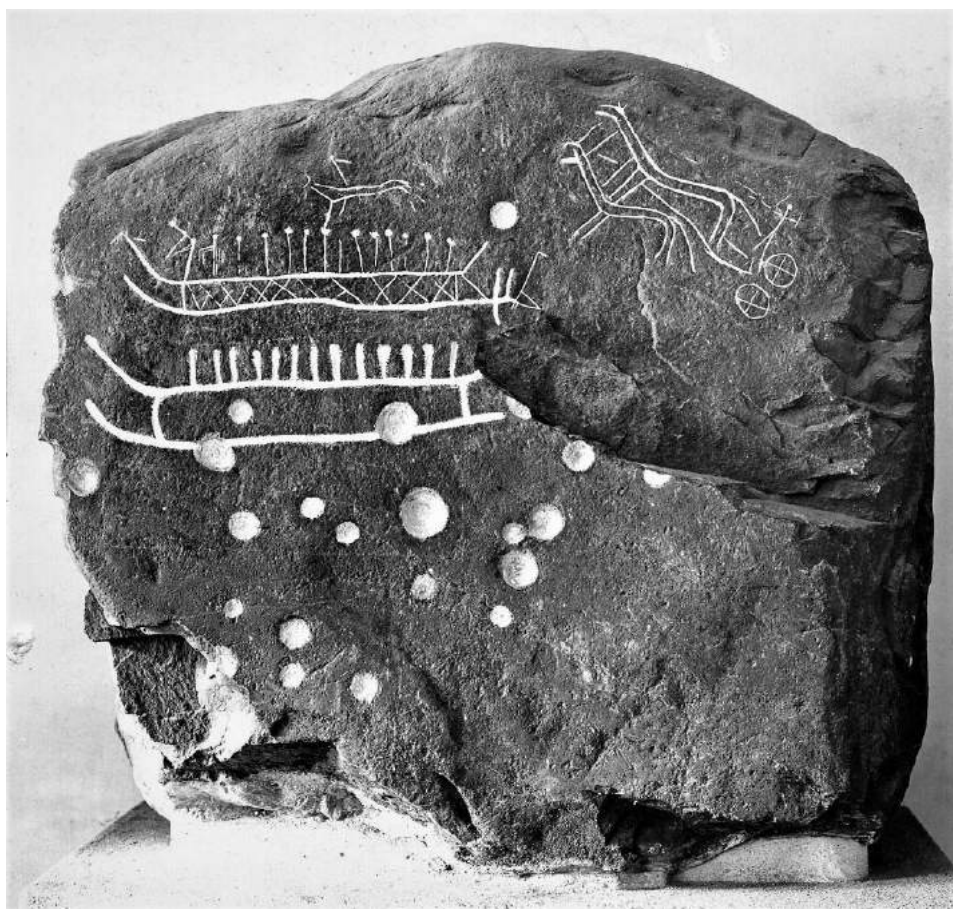
Moving to the West and Scandinavia, horses were introduced at a somewhat later stage, but it is reasonable to argue that they were part of Indo-European processes (Armstrong 2013). While horses were definitely present in the Nordic Early Bronze Age (1700–1100 BC), and probably even earlier, their importance strongly increased in the Late

Bronze Age (1100-500 BC) (Kristiansen 1998:106). The bronze razor with the horse-head handle appears in Scandinavia from the 15<sup>th</sup> century BC onwards or the Nordic period II (Kaul 2013). Dating back to about the same period, there are depictions of horses in rock carvings, notably in the burial chamber in Bredarör in Kivik. Also, the bronze horse and sun chariot from Trundholm is famous. However, it seems that the ideology and cosmology surrounding the great horse sacrifice go back further, based on evidence from rock art (though these are difficult to date) and in finds of what seems to be a chariot deposited in the Gallemose, a bog find in Denmark discovered in 1887. The hoard was deposited around 1900-1800 BC at the end of the Late Neolithic or just before the Bronze Age. The total weight of the bronze objects found in Gallemose was 11,735 grams. The closest parallels to the chariot parts at Gallemose are found in imagery on Greek vases and chariots in Tutankhamun's tomb in Egypt (Price 2015:182, Randsborg 1992, Vandkilde 2017:113). Altogether, there are approximately 185 depictions of wheeled vehicles or chariots at South Scandinavian rock-carving sites, which include some early vehicle motifs together with a ship motif from Period I-II in Simris in Scania (Fig. 4) (Johannsen 2011).

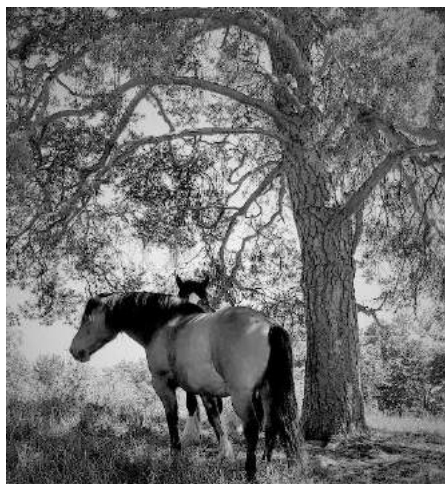
It is not clear to what extent horse chariots were operational during the Bronze Age, but the finds from Gallemose prove the physical presence of chariot parts. It also proves the presence of horse equipment before the oldest dating of domesticated horses in the North. Thus, it seems very likely that the horse was already in Scandinavia and that it was used for stately and ritual purposes. In other words, the ideology developed very early, as the rock art also shows, and can be dated back to 1800 BC or earlier. In addition to our approach and stated objectives, this opens up a Pandora's box of other challenges.

For nearly a century, archaeologists have interpreted certain Iron- and Bronze-Age finds, including many of the most famous rock-art depictions, in the context of a 'proto-Indo-European' horse-sacrificial practice. Thus, this study stands on the shoulders of giants, which creates both challenges and opportunities. We aim to develop original approaches to this theoretical and empirical question by tracing the history of archaeological thought and Indo-European studies, and the criticism of these studies. This may enable a more fruitful approach to the study of cultural-historic processes and allow us to understand how this particular Indo-European tradition survived with a continuity of 4000 years.





**Fig. 4. Horses and chariot. Simris 10, Villfarastenen, Sweden. Photo: Carl-Axel Althin, LUHM. Source: [www.shfa.se](http://www.shfa.se)**



## 2. Creation of cosmos and world history

*'Ritual exhibits a very detailed and specific knowledge. I estimate that the extent of specialized knowledge needed to put the altar together ritually is on par with the extent of technical knowledge required to build an aeroplane. The bird-shaped altar is in fact a kind of aeroplane, only it takes off in a different way.'*

Frits Staal

*Agni. The Vedic Ritual of the Fire Altar* (2001:16).

### Myth, ritual and sacrifice

One may criticise the use of Vedic rituals as a starting point for a theoretical discussion on rituals in general and the old Scandinavian rituals in particular, and most likely it will be. However, it is important to point out that the Vedic ritual should not be considered a direct example of the traditions documented in Scandinavia from prehistory into historical times or the archaeological remains from pre-Christian times. What is important is the underlying structures that emanate from a common Indo-European heritage. These formed the background to both traditions, which, in accordance with the languages, developed in dialectal directions, but with common roots that are clearly traceable.

The eminent expert on Vedic ritual, Frits Staal (1930-2012), claimed that theorists of ritual have neglected the Vedic ritual, though it remains one of the most well-documented among all ritual traditions. There is now a large body of empirical and ethnographical work on ritual that theorists can draw upon. In the history of religious scholars, nothing written by Western scholars on ritual can match the thoroughness of Staal's study of the Indian *Śrauta Sūtras*. The Indian science of ritual is based on vast amounts of precise empirical knowledge of ritual (Staal 2001:9-15).

'Vedic ritual is not only likely to be the oldest surviving ritual of mankind, it also provides the best source material for a theory of ritual. This is not because it is close to any alleged

“original” ritual. Vedic ritual is not primitive and is not an Ur-ritual. It is sophisticated and already the product of a long development. But it is the largest, most elaborate, and (on account of the Sanskrit manuals) best documented among the rituals of man’ (Staal 2001:10).

While the comparison of two related ritual traditions, the Vedic and the Norse, is of particular relevance due to a probable common Indo-European origin, the well-documented Vedic ritual tradition can also be used as a general analogy.

Still, many scholars and archaeologists remain sceptical of using Vedic tradition as a starting point for general discussions of ritual theory. Besides a widespread aversion for interpretations based on Indo-European relations, one reason for this may be the extremely rich (for the non-expert almost incomprehensible), highly sophisticated and complex nature of Vedic material (Staal 2001:16).

The complexity applies to both Vedic myths and ritual. An issue as controversial as the question of the usefulness of Vedic tradition as analogy applies to the general relationship between myth and ritual. Although Leach once argued that ‘myth implies ritual, ritual implies myth, they are one and the same’ (Leach 1954:13), most researchers agree that the relationship is much more complex, and, while closely interrelated, myths and rituals possess qualitatively different aspects (e.g. Turner 1991, Bell 1992, 1997, Humphrey & Laidlaw 1994, Rappaport 2001, Schilbrack 2014).

Following Frits Staal, there is no simple connection between myth and ritual. He argues that in contrast to the fashionable theory according to which rites re-enact myths, Vedic rites generally do not directly mirror myths. While they often have a common background, the ritual exists separately from the myth. The obvious link between myth and rite – i.e. the overall cosmological background – is eventually forgotten, and the content of the rite is no longer consciously linked to existing myths. That is the meaning of ‘rites without function’, an expression that is often misunderstood as a claim that there is no connection at all between myth and ritual. A key element of Staal’s reasoning is that rituals have their own meaning and do not necessarily illustrate anything. Nonetheless, originally they had a significance (of course there is reason for their existence), but this significance has long been lost. The Vedic tradition attaches great importance to the oral transmission of complex rituals and texts for recitation, but not on the

transmission of their meaning. The content is less important than the correct performance of the ritual (e.g. Staal 2001:20).

Furthermore, Staal believes that one of the underlying themes of later (after the Vedic period) Indian philosophy is the interpretation of rituals whose significance had been lost. This was recorded in *The Upanisades*, one of the works featuring interpretations of rituals. Those who made these interpretations were regarded as intellectuals and researchers of old traditions rather than as performers and ritualists themselves (Staal 2001:60-62). In other words, the original reason behind a ritual is not necessarily the same as the one that is later assigned to it. For example, mythological content may appear to correspond closely to a ritual whose origins may be quite different.

‘... the rites lead a life of their own, full of ritual features that have nothing to do with, and are not explicable in terms of mythology. An example is the construction of the fire altar from a thousand bricks. This is probably related to a hymn in the Rgveda which refers to a Man with a thousand heads, eyes and feet. Although the precise relationship is not clear, the mythological background has no ritual significance. What is ritually relevant is that numerous rules are followed that determine the shape of the bricks, their arrangement, the order in which they are piled, and the various mantras with which they are consecrated’ (Staal 2001:11).

However, while there is no inherent relation between myth and ritual, this does not apply to sacrifice, as illustrated in parts of the Vedic sacrifice, where basic cosmological myths are clearly reflected (Fig. 5):

‘One of the most obvious practical applications of a myth describing creation through bodily dismemberment is ritual sacrifice. Sacrifice is in fact, the most prominent of all Indo-European rituals, attested in a stunning variety of forms among the various Indo-European groups. Offerings included human victims; domestic animals, including the horse (use of which was limited to royal sacrifices), and more commonly oxen, sheep, pigs, and goats; milk products; agricultural products; and intoxicants such as mead, wine and the pressed drink the Indo-Iranians called \*sauma...’ (Lincoln 1986:41).



Fig. 5. Hindu priest reciting holy Sanskrit texts, Nepal.

Speculation about the origin of the world is central to almost all religions, often forming the basis of much of the rest of their philosophies. This especially applies to one of the Vedic origin myths that describes fragmentation of a primordial being: the myth of Purusha (Puruṣa). In the early Vedas, Purusha was a cosmic being whose sacrifice by the gods created all life, which is one of several creation theories discussed in the Vedas (Klostermair 2007:87). This creation myth has parallels in several Indo-European traditions, as in the Old Norse story of the giant Ymir. According to Bruce Lincoln (1986), this myth is of fundamental importance to understand the background of the Vedic sacrificial ritual and therefore also mortuary rituals. However, the influence of this Indo-European myth on ritual tradition goes far beyond Vedic texts and traditions alone. In particular, archaeological finds from Scandinavian Bronze- and Iron-Age societies – from both cemeteries and sacrificial sites – have shown a strong agreement with the basic features of the same origin myth (Kaliff 2005, 2007, 2018).

The cosmological and universal elements of the *ashwamedha* rite are clear, linking the horse and its sacrifice to the god Prajāpati, ‘the lord of creation’. He is credited with the invention of all sacrifice and believed to be the first to perform the horse sacrifice (Gonda 1989:25; Zaroff 2005:77). In the Brahmanic period, Prajāpati was furthermore conceptually fused with the cosmic giant Purusha, whose dismemberment by the gods created the universe. During the Vedic period Purusha was considered the ultimate sacrificial victim, whose sacrifice was the act of creation. ‘In this new dimension of the rite, the sacrificial horse also became an incarnation of Prajāpati. And consequently the horse-Prajāpati is voluntarily sacrificed to himself. However, the focus of the sacrifice, like in the immolation of Puruṣa, is not on the death of the horse, but on the forces released during the sacrifice: the forces that re-juvenate and renew the cosmic order’ (Zaroff 2005:77-78). In the final stage of the *ashwamedha* ritual, a priest cut the horse’s body apart, according to the pattern of the creation myths, while other priests started reciting the verses of Vedas to heal and regenerate the horse (Talbot 2005:111-123; Glücklich 2008:112).

The cosmological aspect of *ashwamedha* is thus clear. According to Mircea Eliade, the sacrifice may originally have been intended for one of the most important original Indo-European deities:

‘it is most likely that this sacrifice of a horse was originally performed in honour of the ancient Indo-Aryan sky god ... The

essential and primitive element of the Ásvamedha is its connection with the creation of the world. The horse is identified with the cosmos and the sacrificing of it symbolizes (that is, *reproduces*) the act of creation ... That the Ásvamedha is at the same time a ritual of initiation is shown clearly ... The initiation is in fact a conquest of immortality and a change over from the human to divine state ... All that interest us here is the *dramatic* nature of the act of creation as we have it in such myths: the Cosmos is no more created *ex nihilo* by the supreme divinity, but comes into existence by means of the sacrifice ... The Ásvamedha is an excellent example to show the complexity of the rituals honouring sky gods' (Eliade 1993:96-97).

Thus, '[t]he manifestation of the sacred ontology found the world' (Eliade 1987:21), and the sky gods are intrinsically linked to the origin of the cosmos, but also to controlling the life-giving rains. Sky gods may have distinct forms or embody dual qualities, but they are most often symbolised by sun, rain and the right combination of both, which was so essential for survival in agrarian economies (Seligman 1932, 1934, Wainwright 1935, 1938). Sacrifice therefore also expresses the ultimate power of rainmaking rituals in culture and cosmology (Oestigaard 2005a, 2014, 2018a, 2018b, 2019). This is cosmogony, a term derived from the two Greek words *kosmos* and *genesis*, where *kosmos* refers to the order of the universe and/or the universe as the order and *genesis* to the process of coming into being (Long 1993:94).

Although cosmogony was an analytical term before Mircea Eliade developed this perspective further, he studied Sanskrit and Hindu philosophy at the University of Calcutta from 1928-1931 with his early work focusing on Hinduism (Eliade 1954, 1958, 1976). His Hindu background structured much of his writings, which have been criticised as cross-cultural generalisations. However, he emphasised non-historical universal structures and trans-historical meaning of religious experiences allowing for ontological claims about human nature (e.g. Altizer 1963, Allen 1978, 1988), and such an approach is 'essentially philosophical because it is concerned with essence, experience and meaning' (Berger 1986:156).

Many of the leading scholars studying myths and mythology have an ahistorical or phenomenological approach. While theoretical approaches open up many interpretative possibilities, such frameworks are also easily criticised. The usefulness for historical analysis has to be judged according to how they allow for new understanding of culture-



specific patterns besides generalised and cross-cultural structures across time and space. Archaeology can benefit from such studies if they can contribute to the analysis and better understanding of specific contexts (Oestigaard 2011a, 2011b).

Although Eliade is often criticised for proposing cross-cultural laws, in many cases it is rather the underlying Indo-European scheme that is exposed, which makes similarities strong (Fig. 6). Scholars like Mircea Eliade, Carl Gustav Jung and Joseph Campbell are often considered to have taken a phenomenological and psychological approach in their quest for universal truths.

Joseph Campbell worked specifically with comparative mythology and religion (Campbell 1959, 1962, 1964). In *The Hero with a Thousand Faces* (1949) he developed the concept of the 'monomyth', which he uses to analyse the theme of the hero setting off on a great adventure, facing supernatural events and epic battles before returning with unique powers that allow him to better the lives of his fellow men. This monomyth clearly applies to Homer's *Odyssey* (1891) as well as to the heroes in *Ramayana*, *Mahabharata* and *Beowulf*. The male hero is also commonly portrayed (as victorious) in war. The monomyth is clearly gender biased, as heroines, goddesses and female characters usually have other virtues and visions (Frankel 2010:4-6). These and other generalisations have been criticised: 'A tendency to think in generic terms of people, races, religions, or parties ... is undoubtedly the profoundest flaw in mythological thinking' (Ellwood 1999:x).

This forms a challenge in archaeology, particularly in Indo-European studies, and even more so in this study in which we propose a 4000-year evolving continuity in mythology and ritual tradition. As a term, 'monomyth' is useful to designate the importance of a specific myth and myth-theme. While many definitions are general (e.g. 'a myth is a sacred narrative explaining how the world and man came to be in their present form' [Dundes 1984:1]) and creation myths attempt to answer profound questions (e.g. questions of life and death; who are we and why are we here) (Sproul 1979:1), the overall challenge is to account for dynamic change through continuity. The concept of 'death myths' aims to conceptualise variation in mortuary practices within overall structures of similarity. Each funeral is conducted according to myths that prescribe ideal death rituals, but these are adapted to specific contexts (Kristoffersen & Oestigaard 2006, 2008).



Fig. 6. Fire ritual, Pashupatinath, Nepal, 2002.

Myths are spoken words that play an essential role in illiterate societies, which brings us to knowledge transmission and traditions. A shared feature of all mythological systems is that the most important stories reoccur in several versions (Leach 1969:7), including the most important myths or ‘monomyths’.

According to Jan Vansina, “oral tradition” applies both to a process and to its products. The products are oral messages based on previous oral messages, at least a generation old. The process is the transmission of such messages by word of the mouth over time until the disappearance of the message’ (Vansina 1985:3). Tradition has also been seen as the ‘grandfather response’ referring to ‘the way our grandfathers did it’ (Alland 1972:117). If this is a passive response, since it cannot account for change and innovation, tradition is nevertheless ‘a narrative describing, or purporting to describe, eras before the time of the person who relates it’ (Miller 1980:2). Importantly, there is often a contradiction or tension between ‘the written tradition of the ascetic religion and the everyday social practice of merit-making combined with the rites of the “magico-animist”, the spirit cults’ (Goody 1986:25). This brings us to an important point. In oral traditions without writing, the great storytellers who preserve and transmit the oral history of a group may record up to 250 distinct narratives (Tillhagen 1965, 1994). But while these stories were perhaps told for entertainment as a kind of dramatic theatre (Herschend 2018), the great myths we are talking about not only guided fundamental sacrifices, but also constituted cosmos. Every great ruler performed variants of the *ashwamedha* ritual as an ‘ideal-type’ of this grand narrative.

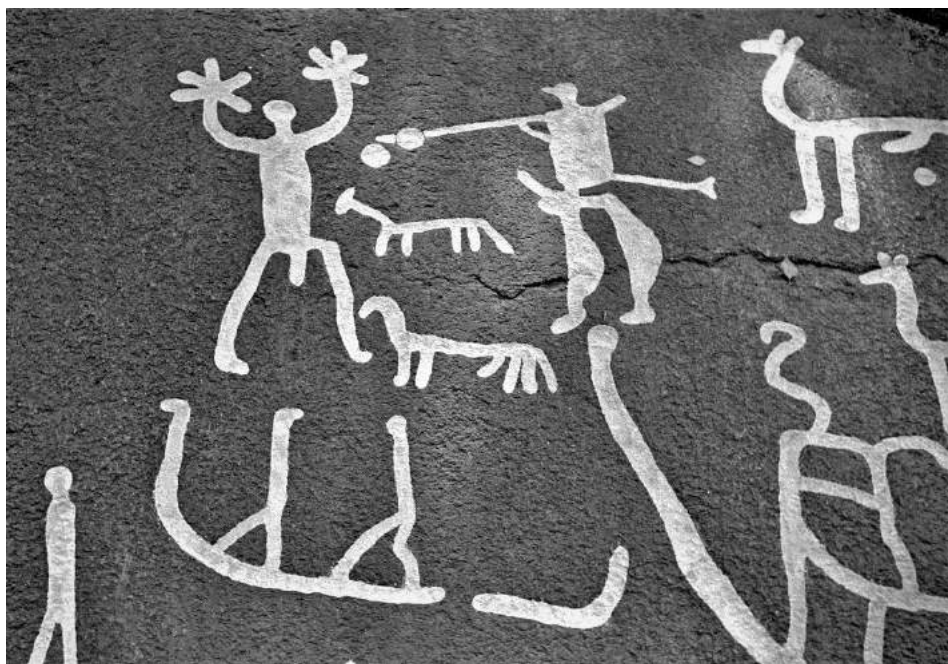
We are therefore talking about a hierarchy among myths here, in which some are greater than others. There might be hundreds of stories in a society, but there are only a few core-myths or monomyths. Importantly, while they may have a central place in society and cosmos (e.g. Genesis in the Hebrew tradition), the importance of mythology in cosmology does not equal ritual performances and sacrifices.

Claude Lévi-Strauss analysed in depth the role of myths and closely associated them with structuralism (Lévi-Strauss 1981, 1983, 1990, 1994). Gananath Obeyesekere (2002) criticises traditional structuralism and thereby opens up a field of structural comparison as a mode for investigating social phenomena, which also has relevance for Indo-European studies and the long historic trajectories. According to Obeyesekere, Lévi-Strauss’ structuralism is epistemologically unacceptable, partly because it is based on the distinction between *langue*

(structure) and *parole* (social phenomena), where the ordinary world is so to speak pushed aside in the quest for some infrastructure beneath the lived world. Obeyesekere turns this upside down: 'I want to seek structure not in langue but in parole ... by parole I refer not to the spoken word per se but to the worlds that exist out there in what ethnographers call "culture" – the worlds of meaning to which we as human beings orient ourselves ... the phenomenal world does not exist outside of meaningframes imposed on it by human beings' (Obeyesekere 2002:351). This allows one to study continuities in practice, not only as a mythological structure, because the ultimate concern for Lévi-Strauss was with 'the unconscious nature of collective phenomena' (Leach 1989:59). As archaeologists, this is an impossible task. We must focus on practice and material remains, which brings us to sacrifice as a special type of ritual.

Sacrifice is widely used (Hubert & Mauss 1964) and criticised as a concept and practice, because 'the general concept of sacrifice is too vague to be of use when we try to understand specific cultural action' (Modéus 2005:32). The sacrificial tradition originating from the great horse sacrifice also defined what sacrifice was to become: it shaped particular ways of understanding sacrifice as a ritual practice. Therefore, we will not present one definition of sacrifice (see Insoll 2011), but rather discuss empirically different historic practices structured around the *ashwamedha* ritual as an ideal-type in time and space. At the same time, one does need concepts, and cosmogonically a sacrifice is 'a religious rite in which an object is offered to a divinity in order to establish, maintain or restore a right relationship to the sacred order' (Faherty 1974:128). Moreover, the logical limit to and ultimate sacrifice of any sacrificial system is the sacrificer's own death (Valeri 1985:49, 62).

Historically, humans have been sacrificed in many cultures, for instance among the Aztecs (e.g. Carrasco 1999, Soustelle 2002). According to Read: 'Sacrifice was not just an act of destroying one thing to make another; it also was an act of eating one thing to create another, an act where living beings in this cosmos reciprocally feed each other [...] transformative sacrificial acts destroy in order to create, but they also cause life-giving powers to flow' (Read 1998:134, 145). Turning to India, the Vedic period was a time of action, and sacrifice to the gods was undoubtedly the most important human action (Mascaró 1962:xix). Sacrifices 'feed and satisfy deities and other ethereal beings with prana (life force) transported to them via the fragrance of the smoke from the burnt offerings of consecrated plants and animals' (Svoboda 1998:30).



**Fig. 7. Life-forces. Svälte Kville, Tanum, Sweden. Photo: Gunnar Ekelund.**  
**Source: [www.shfa.se](http://www.shfa.se)**

Traditional religions are often more concerned with ‘life’ than with ‘spirits’ as such, and they are therefore more ‘biocentric’ or ‘pantheistic’ than ‘theocentric’ (Morris 1998:211). Sacrifices, specifically in cosmogonic traditions, are about transforming and transmitting life-force in its widest sense, which includes the lives and wellbeing of deities (Fig. 7).

There is also a difference between original creation and procreation. ‘Only procreation is possible if it is expelled from the body, ejaculated during the sexual act. If it is retained within the body, stored instead of being wasted; the real creation becomes possible through ojas. Ojas is the source of the body’s metabolic energy, the Jathara Agni. Loss of semen means loss of ojas and thus loss of digestive powers’ (Svoboda 1993a:260). Sacrifice and death are also closely linked, possibly even to the extent that there would be no distinctions between a funeral pyre and a sacrificial fire (Svoboda 1993b:45). In Vedic times in India, when the custom of sacrifice was increasing in scope, the cremation ritual was viewed as a person’s last sacrifice, in which his own body was offered to the flames. It was believed that the deceased would be reborn from the sacrifice to a new existence, together with his ancestors. In Vedic texts

this is called a person's third birth. The cremation was therefore regarded as a transition from earthly existence to the world beyond (Olivelle 1987:389). Dutch Indologist Jan Heesterman points out that sacrifice is an act of controlled death and destruction, which may explain the many sacrificial practices in funerals, which we will return to in depth with archaeological examples. In the words of Heesterman (1978:87):

‘We must begin with the nature of sacrifice. When taken seriously sacrifice is, quite bluntly, an act of controlled death and destruction. This act purports to force access to the other world, the transcendent. The gap, the vacuum created by the sacrifice has to be filled by the other side with the opposite of death and destruction that is the goods of life, in the most tangible sense of food and survival. Or in simple terms one must sacrifice a cow in order to obtain cows. It is definitely not an ethereal business for the delicate metaphysical-minded, but essentially a rather gruesome exercise in controlled catastrophe. An exercise in which, moreover, one is never quite sure of the outcome, for it involves two parties who ever and again have to renew their cruel compact.’

While ‘Shatapatha Brahmana states clearly that a human is the best sacrifice of all [...], the evil karma that Vedic sacrificer incurs by killing his victims is negated by the good karma for all that the ritual engenders’ (Svoboda 1998:30). Thus, while it may seem paradoxical at the outset, killing is a sin, even in sacrifices where the sacrificial item or gift is given to gods. *Purushamedha* is the ancient Vedic ritual of human sacrifice, closely related to the horse sacrifice, the *ashwamedha*. Whether human sacrifice really took place has been the subject of debate ever since Henry Thomas Colebrook (1765-1837) first brought attention to the issue. Colebrook regarded human sacrifice as mostly symbolic, relating to the Vedic cosmological creation act, but he never ruled out the historical existence of human sacrifice in the medieval period and earlier. Human as well as animal sacrifice became less common over time, as non-violence (*ahimsa*) became an important part of Hinduism. Despite this, the notion that *purushamedha* was a purely symbolic ritual has a strong research tradition. Many of these researchers rely on what they believe is the lack of concrete written evidence that any such sacrifice was performed (Knipe 2015:237).

However, this may be because the texts were written later, when the tradition had become increasingly symbolic. For instance, the *Chandogya Upanishad* (3.16) states that the *purushamedha* is a metaphor for life itself, and not a sacrificial ritual (Bailey 2001:437). Although several researchers agree that *purushamedha* is essentially a symbol and not an actual sacrificial ritual, there are influential exceptions. Asko Parpola has argued that human sacrifice did take place in Indian tradition. He discusses specific textual references in the Vedas, and says he is 'hoping to establish beyond reasonable doubt that Vedic texts do indeed attest to real human sacrifices' (Parpola 2007:161).

The two greatest sacrifices in the Vedic age were *purushamedha*, the human sacrifice, and *ashwamedha*, the horse sacrifice. We will focus on the horse sacrifice because it seems that it was of more importance than human sacrifices, at least initially, which intuitively contradicts the sacrificial ladder with humans as the ultimate sacrifice. Still, the only sacrifice more valuable than human sacrifice – and the sacrifice of the king in particular – is the sacrifice of a divinity. The horse was not merely an animal, but a deity, and cosmic sacrifices of divinities (performed by humans) represent both the ultimate sin (killing a god) but also the ultimate sacrifice.

Historically, the most well-known sacrifice of a god was Jesus' crucifixion, but this was partly a self-sacrifice. It was also both voluntarily and involuntarily. Turning from gods to humans, self-sacrifice may also be a way of killing without dying. The Yajur Veda states 'that originally all sacrifice was of the sacrificer's own flesh ... you can offer oblations continually as long as you continue to breathe, using your body as your sacrificial altar and your life itself as your sacrifice' (Svoboda 1998:31-32). However, apart from in yoga and tantric practices, self-sacrifice has often involved others, who most likely involuntarily offered their body for ritual use and self-sacrifice, or, in less academic terms: women were raped before being killed as part of major sacrifices and funerals.

It is well known that horse sacrifices were important in Indo-European traditions, and many of its branches show evidence of this type of sacrifice. The *ashwamedha* is the clearest evidence preserved, but vestiges in Latin and Celtic traditions speak of similar rituals, and there are, as mentioned, also other traces in Iranian, Greek, Germanic and Armenian traditions (Talbot 2005: 142).

'Rituals involving horses, more particularly rituals that involve the killing of a white stallion, are attested throughout the Indo-European

world ... Among the Greeks, white horses were sacrificed to Poseidon and to the sun; a white mare was sacrificed at the grave of a maiden who had been raped and had committed suicide. Both Roman and Greek sources indicate a fertility cult associated with the horse, one that often agrees in striking detail with the Vedic cult of the horse,' Wendy Doniger writes: 'it is the Vedic, Roman and Irish horse sacrifices that provide the triangle on which the Indo-European evidence rests, however shakily' (Doniger 2005:4132).

As we will argue in this book, the Nordic or Norse horse sacrifice is perhaps the very last trace of this once great tradition of Indo-European horse sacrifices. While remnants of this practice have been documented in written sources over time, the most important parts are only traceable in the archaeological record. We must therefore first consider Indo-European studies as world history and the particular trends in Scandinavia before examining theoretical and methodological approaches as well as the history of archaeological thought.

## **World archaeology**

With its problematic history, the Indo-European question remains controversial (see Chapters 3-4). However, it is part of world history. Comparative Indo-European studies are by definition world archaeology, as the themes cover greater parts of the world.

World histories – always in plural – can also be approached in many ways, because they need to be thematically or geographically demarcated. Even histories of archaeology can be seen as specific ways of writing world archaeology (e.g. Champion et al. 1984, Cunliffe (ed.) 1998, Renfrew & Bahn 2012, Trigger 1994, 2003, Wenke 1990). Another approach is to structure the analysis in time and space around a single parameter in historic developments, like water (Tvedt 2004, 2012, 2006-2016), or death and burial (Tarlow & Nilsson Stutz (eds.) 2013) or ritual and religion (Insoll 2011 (ed.)). An archaeology of world religions (e.g. Insoll (ed.). 1999, 2001, 2004) is particularly relevant, as religions such as Judaism, Christianity, Zoroastrianism, Hinduism and Buddhism developed in the same geographical areas where ancient prehistoric Indo-European traditions spread. Though it is a pre-dominantly Muslim country today, Turkey was in the past one of the main bridges for the early transmission between East and West. A focus on cosmology instead of religion may therefore shift the focus away from more recent



religious developments (cf. Flannery & Marcus 1996), as Barth says: '[a] cosmology is not merely about a world out there, isolated from the self. More essentially, it provides a web of concepts, connections and identities whereby one's own attitudes and orientation to the various parts of the world are directed and moulded' (Barth 1989:72).

The Indo-European tradition is first and foremost about *languages*, and languages only, but since people speak languages, one is inevitably thrown into a discussion about religions, cultures and migration. While there are striking similarities, we clearly do not have the right tools to understand prehistoric processes. At least, there has been no consensus on what the toolbox for such analysis should contain. Although this goes for most archaeological analyses, it becomes more visible in Indo-European studies. 'Interpretation is an attempt to make clear ... a text, or a text analogue, which in some way is confused, incomplete, cloudy, seemingly contradictory – in one way or another unclear' (Taylor 1987:33). There are many enigmas in Indo-European studies. However, the recent breakthroughs in aDNA research has introduced a new element, which will allow for further studies on new premises (see Chapter 5).

Tim Insoll asks: 'Are we trying to reconstruct a past in our own image, chained to our own unacknowledged emotional, intellectual, and philosophical traditions, or should we attempt to look beyond this at the fundamental concepts we often take for granted? If these concepts are recognized as constructs of the relatively recent past, can we begin to acknowledge our limitations and potentially more profitably engage with archaeological evidence in various ways?' (Insoll 2007:9). Our role is to interpret, and 'To understand society is in a sense to transcend it, for though our theoretical concepts help us understand empirical phenomena they are themselves not empirical phenomena but *ideas* of such phenomena. If culture consist of the ideas people have about their world, an anthropological [and archaeological] theory is *our* conceptual and abstract rendering of *their* conceptual and abstract rendering of their world' (Obeyesekere 1981:9-10). Still, it is a challenge if *our* etic (contemporary) perspectives and terminologies not only overpower the emic ones, but have nothing to do with each other, because then we cannot understand the past. As there are shared linguistic, cultural and cosmological features, 'sharing a world with others means learning to attend to it in the same way' (Wikan 1992:471). If we take Modern English as an example, a shared language or understanding cannot represent a shared culture or cosmology from

Ireland to India or the Atlantic coast to the Pacific coast. Yet, our analytical frameworks are mainly culture (and ethnicity), religion, ideology and processes of colonisation.

Although it has been said that ‘culture’ is one of the most difficult words to define (Williams 1980:76-77), from Edward Tylor’s definition in 1871 onwards, identity and values have been fundamental in defining and understanding culture: ‘Culture or Civilization, taken in its widest ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, custom, and any other capabilities and habits acquired by man as a member of society’ (Tylor 1968[1871]). Culture always involves diversity and change. Herskovits described the problem as early as 1945: ‘To think in terms of a single pattern for a single culture is to distort reality ... for no culture is [so] simple [as not] to have various patterns. We may conceive of them as a series of interlocking behavior and thought and value systems, some even in conflict with others. The pattern of fundamental values in a society ... will be effective over the entire group; but there will be subpatterns by which men order their lives differently from women, young and middle-aged folk from elders, members of lower from those of higher socioeconomic status ... But all must be taken into account when an understanding of the mutations of culture in change is the end of the analysis’ (Herskovits 1945:158).

One way archaeologists have sought to avoid terms like culture or cosmology, or religion for that matter, is to use the seemingly more neutral word ‘ideology’, as if it were self-explanatory. Still, as McGuire & Bernbeck argue: ‘Archaeologists have rarely taken up the complex concept of ideology. When discussing past ideologies, archaeologists mainly use the term as a substitute for “world view”, “religion”, or “political doctrine”. [...] However, “ideology” is not a coherent sphere of collective thought that can be investigated like a landscape or group of material objects’ (McGuire & Bernbeck 2011:166).

Marxism is one such ideology, but often ideas of ‘pan-Europeanisation’, colonialism, migration, stratification and warfare are perceived as ideologies, or as social and historic processes, which further complicates the context and conceptualisations of Indo-European questions. We will address these concepts, since they clearly show the challenge of identifying what ‘Indo-European’ is.

‘Pan-Europeanisation’. While the EU may have an idea of a shared ‘pan-European identity’, this concept is today mainly related to Pan-Africanism. Mudimbe argues that *deviation* is what mainly characterises the idea of Africa in the West (Mudimbe 1994:xii), which is a

consequence of colonialism. As a movement, Pan-Africanism was initiated in 1891 in Paris by Du Bois. One of the main goals was to create political unity among African states in relation to the wider world (Baaz 2001: 9) by emphasising 'the sameness and oneness of the African family, seeking from there to provide a framework for the unity and growth of African peoples' (Ugwuanyi 2011:354). Still, Pan-African unity has been challenged from within Africa. As the first Nigerian prime minister, Abubakar Tafawa Balewa, said in 1960 when his country gained independence: 'Nigeria has not the slightest intention of surrendering her sovereignty, no sooner has she gained independence [*sic*], to anyone else' (Ugwuanyi 2011:357). If we look at shared Indo-European ideology or identity, it is unlikely that anyone would have been able to maintain dominance over such a vast region and for such a protracted period. It would be an ideology without any master, yet serving those in power.

The most infamous 'pan'-identity is no doubt Pan-Germanism, which was highly influential in 19<sup>th</sup>-century German politics during the unification of Germany (Kirk 2002:21-22; Drummond 2005:528-529). From the late 19<sup>th</sup> century, many Pan-German thinkers, who had joined the Pan-German League that had been created in 1891, had adopted openly ethnocentric and racist ideologies, which ultimately gave rise to the policy pursued by Nazi Germany. As a result, Pan-Germanism has mostly been seen as a taboo ideology in the post-war period. Pan-Slavism as a movement also crystallised in the mid-19<sup>th</sup> century as a political ideology concerned with the advancement of unity for the Slavic-speaking peoples. Extensive Pan-Slavism began much like Pan-Germanism, both of which grew from the sense of unity and nationalism experienced within ethnic groups after the French Revolution and the Napoleonic Wars (Evans 2006:101-114). Another influential example is Pan-Turkism, a movement that emerged during the 1880s to further the cultural and political unification of all Turkic peoples (Landau 1995).

*Colonialism.* 'Most archaeological studies of frontiers and boundaries are informed by a colonialist perspective of core-periphery relationships' (Lightfoot & Martinez 1995:471). However, frontier processes are in theory different from colonisation and often result in cultural and physical clashes between the newcomers and local communities. Still, while colonialism is often used in different ways, the standard dictionary definition is one *country* or *state* colonising another: 'the belief in and support for the system of one country controlling another' (Cambridge Dictionary 2020) or 'Colonialism is the maintenance of political, social, economic, and cultural domination

over people by a foreign power for an extended period' (Science Direct 2020). The Stanford Encyclopaedia of Philosophy (2020) writes: 'Colonialism is a practice of domination, which involves the subjugation of one people to another. One of the difficulties in defining colonialism is that it is hard to distinguish it from imperialism.' Thus, while the British exercised indirect rule and the politics of decentralised despotism in many places (Mamdani 1996), colonial definitions are based on both historic and recent examples of states controlling others, and colonialism refers 'to *group* domination and not to social relations and processes among sets of individuals at the family or subclan level' (Horvath 1972:46). It is not clear whether the popular (and sometimes scientific) image of the Indo-European process, showing hordes of colonisers on horseback, conquering (and killing) everything along their way, is accurate. However, if it was a process of colonialism, the central question is whether it was organised by a *group* and, if so, how?

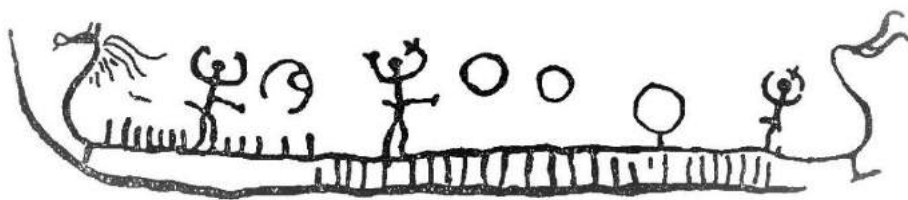
*Migration.* For a long time, there was an implicit understanding among archaeologists that though theoretically possible, in practice long-distance migrations would not have been possible, despite historic knowledge of for instance the Huns and Djingis Khan (e.g. Thompson 1996[1948]; Kelly 2008; Saunders 2001[1971]). Since 2015, it is widely accepted that populations moved – by foot or using other modes of transport – from the Indo-European core areas on the Pontic Steppe to areas as distant as Scandinavia, and that this could take just a few months with directionality and determination. As male migrants cannot form lasting societies on their own, women either migrated with the men, or the men married local women. Moreover, in contemporary migration processes, people migrate away from war and violence (e.g. Bjarnesen 2016), creating various diasporas of displacement (Hammar 2016). Prehistoric studies of migration should also address these mechanisms and examine how migration worked as a cultural vehicle for change that was brought about through other means than brutality and domination (e.g. Tilly 1978, Anthony 1997).

*Stratification.* While there is no doubt that stratification processes took place as part of the Indo-Europeanisation, archaeologists use this as a historic explanation without further comment. For instance, the Greek historian Xenophon (c. 430-350 BC) who fought in the Persian Wars explained stratification more clearly than many archaeologists have: 'It is impossible for a man who is a jack-of-many trades to do all things well. In large cities, because of the fact that many persons need each commodity, a single trade suffices for making a living, and often

not a complete trade; but one workman makes men's sandals, another women's. One person makes his living exclusively by stitching sandals, another by cutting them out. One man is exclusively a cutter of chitons. Another takes no part in this work, but merely puts the pieces together' (Westermann 1925:521).

*Warfare.* Gordon V. Childe noted that the princes owed their power and wealth to their monopoly on new weapons (Childe 1952:172). Bronze-Age swords (Kristiansen 2002), scimitars (Engedal 2002, 2010) and chariots signalled power and dominance. In recent decades, numerous studies have focused on violence, warfare and war as both distinct and parallel phenomena that change over time (Otto et al. (eds.) 2016, Vandkilde (ed.). 2007, 2013, 2014). Professional armies also grew in size. Hundreds and perhaps thousands of professional warriors and larger military units coincided with Urnfield culture (ca. 1300-700 BC) (Kristiansen & Suchowska-Ducke 2015). Cornesti-Iarcuri in current-day Romania is a huge fortified settlement with four defence lines, covering an area of more than 1,700 hectares (Szentmiklosi, et al. 2011). Nothing on this scale existed anywhere else in Central Europe until historic times. One can therefore not speak of *one* Indo-European ideology of war and violence; there were many, and they changed over time. Similar processes took place in India, as documented in the Mahabharata (see Chapter 6).

Today, there is concrete archaeological evidence of major war events in Northern Europe as early as the 13<sup>th</sup> century BC. At Tollense in north-eastern Germany, the remains of a large battlefield have been uncovered, preserved in a wetland where even organic material survived the test of time. The largest excavations at Tollense took place in 2010-15. A large number of bronze weapons and armour, as well as wooden weapons and flint tips were found, as well as bones of fallen warriors that bear the marks of close combat. The equipment indicates the presence of professional warriors, some of whom were on horseback. The surveyed area is limited, but suggests that the entire site may contain the remains of around 750 dead warriors. It is estimated that up to 4,000 people may have participated in the battle, while many of those who lost their lives at Tollense had come from hundreds of kilometres away (Jantzen & Bringer 2011; Price, Frei & Brinker et al. 2017). Violence, war and warfare were prehistoric realities. It is however not clear what role they played in cultural and cosmological transmission and change.



**Fig. 8. Ship horse from Bakkehaugen in Skjeberg, Østfold, Norway.**  
From Gjessing 1943:7.

## **Indo-European studies in Scandinavia**

We will place our study within the archaeological theoretical discourse (Chapter 3). Since we will address the Scandinavian horse sacrifice from the start of the Bronze Age onwards with a continuity in Norway and Sweden to the 20<sup>th</sup> century AD (Fig. 8, Chapters 7-10), we will now give a short introduction to previous Scandinavian studies on Indo-European questions (the international and century-long field of Indo-European studies will be discussed in Chapter 4), and the current state of the art within Indo-European studies from 2015 onwards (Chapter 5). Here, we will focus on studies from the last 40 years until 2015 and the breakthrough in ancient aDNA-analysis.

In much of Scandinavian archaeology, concepts/ideas/data are frequently mixed up/confused and presented rather self-evidently and self-referentially as Indo-European studies. Anyone studying anything from approx. 2400 BC is considered to be analysing Indo-Europeans and processes of Indo-Europeanisation. This has clearly been seen as offensive by many archaeologists, in line with the Indo-European ideology of colonising or expropriating fields and thematic focuses. Obviously, as scholars studying specific phenomena in the 19<sup>th</sup> and 20<sup>th</sup> century, it is perfectly possible to study economy, social organisation, hierarchies, warfare, masculinity, trade routes, technology, ideology and cosmology, without studying, say, colonialism or globalisation. In the same vein, it is possible to study all these processes as *part of* colonialism or globalisation, but it is important to keep the two approaches distinct when analysing history or archaeological thought – the actual archaeological material, and the specific cultural-historical development. Moreover, given the history of archaeology and Indo-

European studies, many archaeologists have strongly objected to being associated with these frames of inferences. Also, much of the criticism has been informal (verbal), rather than explicit and published. Still, one may broadly classify different traditions within these overlapping and not mutually exclusive categories.

### 1) Global comparative archaeology

A handful Scandinavian archaeologists has been engaged with global comparative archaeology, as well as addressing Indo-European questions. Randi and Gunnar Haaland published their *World History* in 1982 (*In the Beginning*). They emphasised the Indo-European migration across Europe and the cultural consequences for social formation. As such, this pioneering work brought the Indo-Europeans back into Scandinavian research. It was, however, still a highly controversial topic at that time, so much so that the publishers decided to omit whole sections about Indo-Europeans in the Swedish translation (1983), even though there was a small note about Indo-European languages (p. 97-98) and the Indo-Aryans and their role in Indian developments (p. 225-227).

In 1995, also ahead of its time, Randi and Gunnar Haaland published the provocative article 'Who Speaks the Goddess' Language?' (Haaland & Haaland 1995), where they returned to the Indo-European question and also actively discussed many of Marija Gimbutas' theories, such as the relation between matriarchy and patriarchy, and the Old and New World (e.g. Gimbutas 1970, 1989, 1991). In their article, Haaland and Haaland (1995:120) quote Raymond Aron: '[A] work of history or sociology partly owes its significance to the kinds of questions the historian or sociologist raises. If the historian is not interested in interesting things, he may write a book free of error of fact, but in the last analysis his work will be of little interest to us. The social sciences are given force and direction by the questions the scientists address to reality, and the interest of their answers depends largely on whether they asked interesting questions' (Aron 1967:195). Despite methodological problems, Gimbutas obviously asked interesting questions.

Knut Odner (2000) was another scholar who tried to shed new light on long trajectories in history in *Tradition and transmission. Bantu, Indo-European, and circumpolar great traditions*. Methodologically, he

explores how a comparative approach may enhance understanding of distinct traditions. However, while comparison in general is often seen in a favourable light, there has been little agreement on common standards of a methodology for comparative studies (Barth 1999:78). While typology and chronology are fundamentally based on comparison, challenges arise when moving from counting and classifications to culture and processes in prehistoric societies.

## **2) European comparative archaeology**

Kristian Kristiansen has for decades studied Bronze-Age societies and transformations (for recent studies and Indo-European perspectives after the aDNA revolution, see Chapter 5). Starting out with a focus on Scandinavia (e.g. Kristiansen 1981, 1984, 1987), the greater studies focus on Europe's development, the rise of different societies and their interactions (Kristiansen 1993, 1998, Kristiansen & Larsson 2005). These studies have an explicit comparative perspective across the continent, both with and without Indo-European approaches.

The larger narratives relating to Indo-European mythology have been explicitly discussed in relation to the sun cosmology, the sun's journey as depicted on Bronze-Age rock-art in Southern Scandinavia, and in the proposed theory of a social and cosmological organisation structured around divine Twin rulers, who formed a religious and political institution (e.g. Kristiansen 1999, 2004, 2005, 2006, 2010, 2012a). However, Europe did not develop in isolation, but as part of broader Indo-Europeanisation processes in which Bronze-Age World Systems bridged India and Scandinavia through elite conquests and institutional transmissions (Kristiansen 2012b).

The existence of cultural contacts across Europe, through trade in metal, but also in cult activities as depicted on rock-art, has recently been confirmed as fact (see Chapter 5). However, it is still not clear how these trade routes operated. This relates to the first strand of criticism, namely that many of these models are too general and that the empirical realities do not fit chronologically or contextually.

With regards to the travelling chiefs in *The Rise of Bronze Age Society. Travels, transmissions and transformations* (Kristiansen & Larsson 2005), Nordquist & Whittaker write in a harsh tone: 'To sum up, with regard to both the Aegean and Homer, this book displays patchy, outdated, and even totally incorrect knowledge about the material and



the literature. This is also in many ways a strangely oldfashioned book. There is an obsession with origins and a lack of interest in looking at the material in its context' (Nordquist & Whittaker 2007:82).

Another, more subtle and implicit criticism is that a Bronze-Age cosmology with an emphasis on the sun and its movement in cosmos was presented without any Indo-European references by for instance Flemming Kaul (e.g. Kaul 1998, 2000, 2004, 2005) and Joakim Goldhahn (e.g. Goldhahn 2000, 2005, 2006a, 2006b). In an article reflecting upon wide-ranging contacts across Europe and beyond, the Indo-European question is not addressed at all, on the contrary, it is a 'historiographical exposé on lifelong scientific dialogues between Klavs Randsborg and the author that have shaped the current understanding of Nordic Bronze Age beliefs' (Kaul 2018:35). Although this cyclic sun cosmology with horses and chariots in the sky is generally accepted and largely unchallenged, Kristin Oma Armstrong says, 'Beautiful as this image may be, I often wonder at the reality of the lives of horses in the Bronze Age' (Armstrong 2013:143). If Randsborg and Kaul have shaped the current understanding of the Nordic Bronze Age beliefs, their cosmology does not include the historic tradition of the great Indo-European horse sacrifice. This also relates to studies of Indo-European phenomena without focusing on cosmology.

### **3) Scandinavian archaeology without comparative cosmology**

Certain studies that directly address Indo-Europeanisation as a process (Prescott & Walderhaug 1995, Østmo 1996, 1997, Østigård 1996, 1998) relate to the more ambiguous studies of processes in the era of Indo-European expansion and timeframe. There are of course many purely archaeological studies on, for instance, the introduction of agriculture, early metallurgists or transformation processes in the 3<sup>rd</sup> millennium BC (e.g. Prescott 1996, 2005, 2014, Prescott & Glørstad 2015, Prescott, Sand-Eriksen & Austvoll 2018, Melheim 2012, Melheim & Prescott 2016, Melheim 2012, Melheim & Ling 2017).

While these and other studies clearly show that far-reaching transformations took place in Scandinavia from c. 2400 BC, materialising in settlement patterns, economy and social organisation, it becomes much more problematic when these changes are explicitly framed in an Indo-European framework in which the new 'ideology' is fundamental. Not only is the ideology undefined (apart from general

characteristics such as hierarchies, warriors and masculinities, etc.), but the term is often used as a more neutral way of not talking explicitly about cosmology or religion. As an example, Indo-European studies have been criticised because they were held in the highest regard in 19<sup>th</sup>-century Norway, during the movement to strengthen national identity and formation (Prescott 2013). Still, national-identity interpretations have resurfaced. In the book *Becoming European*, the transformation of 3<sup>rd</sup>-millennium Northern and the Nordic region is seen as identifying 'patterns in prehistory that constitute a trajectory which is defined through analytical types and definitions which are relevant in much wider contexts' (Prescott & Glørstad 2012:2). More specifically, these identity processes apparently relate to the creation of the farm and an agrarian political economy, institutionalised networks overseas, as well as social hierarchies and the recognition and importance of metals. However, these historic processes are all too general to identify what it means to become European, if it should represent some kind of 'pan-Europeanism'. Also, if these processes/developments define the Western part of Indo-Europeanisation, they are equally present in, for instance, India where Hindu nationalism is currently gaining momentum (see Chapters 3-6). This makes it not only problematic in current politics, but also with regards to how the past is used to achieve political goals in the present.

Recently, such an identity paradigm has been pushed even further ('Dramatic beginnings of Norway's history?'), and it is argued 'that several fundamental, referential institutions condition and are conditioned by a Nordic identity in Norway, and they have their origin in dramatic and far reaching changes with the transition to the Late Neolithic (LN, 2350–1750 BCE). Examples are the farm/"garden", focused agro-pastoral production, a male-dominated ideology, metallurgy, ideologically anchored institutions of social inequality, and a common Northern European ideology, cosmology and developing ritual practice ... Thus, if regional identities of the Nordic region attained historical definition in response to political developments in the Iron Age, the history of such ethnic identities rest on – are in time partially constituted by – much older institutions; ideology, knowledge, practices and landscape' (Prescott 2017). Parts of the complex Indo-European question is hence reduced to a form of simplified nationalism, or a type of undefined 'proto-nationalism' (or perhaps ethno-nationalism?). Though agriculture, hierarchies, trade and metal technologies are obviously important, attempting to trace a Nordic and Norwegian

(national and ethnic) identity back so far in prehistory does not give meaning apart from as political ideology. Fredrik Barth published his classic work on ethnicity in 1969. His studies should form the basis for any such interpretations, even in archaeology. A simple reference is not good enough, since he criticised, not supported, primordialism. Current ethnicity, national identity and nation building are substantially different processes (see Skagen 2018). Theoretically and methodologically, one cannot take any archaeological shortcuts on these topics (Østigård 1999, 2001), especially given the history of Indo-European studies (see Chapters 3-4). As such, the Indo-European enigma will continue to ignite debate in Scandinavia, because once gained, a paradigm may easily be lost again, throwing out the baby with the bathwater (Prescott 1994), in particular if interdisciplinary cultural-history, history and religion studies are not seen as the core of archaeology in general and Indo-European studies in particular.

#### **4) Scandinavian archaeology with comparative cosmology and cremation**

Finally, studies on cremation and prehistoric cosmology in general offer yet another approach to the study of Indo-European traditions. A number of earlier studies (Kaliff 1992, 1994, 1995a, 1997, 1998, 1999a, 2001) led to more systematic and comparative approaches (Kaliff 2005, Kaliff & Oestigaard 2004, Kaliff & Sundqvist 2004), which were further synthesised and theoretically developed in *Fire, Water, Heaven and Earth. Ritual practice and cosmology in ancient Scandinavia. An Indo-European perspective* (Kaliff 2007) and other comparative works (Kaliff & Oestigaard 2013, 2017). One obvious reason is the very clear link between how cremation is described in the old Vedic and Hindu texts and the material remains of ceremonies in Scandinavian Bronze Age, which in many cases almost seem to be a ‘ritual guide’ for archaeologists to interpret prehistoric funerals and cremation. Also, there are often greater differences between modern cremation practices on the Indian sub-continent and ancient sources than between those same sources and prehistoric mortuary material in Scandinavia (Oestigaard 2000a, 2005a, 2005b, 2013a).

This is the aim of relational analogies, which ‘demonstrate that similarities between past and present situations are relevant to the “unknowns” that are being interpreted, whereas the differences that can

be observed do not really matter; they are not relevant because there is little link between what is different and what is suggested as being the same' (Hodder 1982a:19). The main criticism of many studies is that it is based on analogy, and while emphasising that it is a relational analogy, it has often been perceived as a formal analogy and cross-cultural generalisation. Others argue that it is based on ethnoarchaeology and that there is a gap in time and space (see Chapter 3). Still, while the interpretations may have been seen as 'acceptable', the direct link to the Vedas and Hinduism as analogies has been more problematic. Any direct Indo-European connection could terminate any discussion by the end of the last millennium. Today, parts of this discursive practice have probably changed.



It will be important to reflect on all these approaches and their criticism as this analysis proceeds. The challenge will be to keep the past at a distance, while at the same time studying it at an intimate level. When the *skeid*-races were conducted in 19<sup>th</sup>-century Norway, this tradition had coexisted with Christianity for almost a thousand years, and it was eventually Christianity which terminated the last remnants of this 4000-year trajectory. The tradition was obviously important to the identity of the local community. However, identities operate on many levels simultaneously and this tradition had nothing to do with the romantic idea of national identity that was developing at the same time. The world we will discuss is therefore both strangely familiar and absolutely distant and impossible to understand.

The presence of ships and horses on rock-art is considered to be part of the original Indo-European package of myth and ritual (Østmo 1997). However, the roots of this relationship have not been systematically analysed with an emphasis on religion. The ca. 2<sup>nd</sup>-century BC Gundestrup cauldron found in a bog in Denmark may illustrate this enigma. Following Timothy Taylor,

'a shared pictorial and technical tradition stretched from India to Thrace, where the cauldron was made, and thence to Denmark. Yogic rituals, for example, can be inferred from the poses of an antler-bearing man on the cauldron and of an ox-headed figure on a seal impress from the Indian city of Mohenjo-Daro ... Three other Indian links: ritual baths of goddesses with elephants (the Indian goddess is Lakshmi);

wheel gods (the Indian is Vishnu); the goddesses with braided hair and paired birds (the Indian is Hariti)' (Taylor 1992:70).

The presence of pictures of Indian elephants and gods in Western Europe, intimately linked in the period from 300 BC to 300 AD, emphasises the East-West connections (Taylor 1998:402). With regards to the Gundestrup cauldron, there may have been a group of travelling craftsmen or silversmiths (Taylor 1992), somehow related to the kingly ideal (Helms 1993), or it might have been Kristiansen's travelling chiefs.

On the one hand, this is when many of the sacred texts in India were written, including the *Mahabharata* and the documentation of the *ashwamedha* ritual. Thus, many of the Indo-European links and transmissions took place around this time. On the other hand, while many key historical developments took place in this period, such as the crystallisation of Judaism, Hinduism and Buddhism and, at the beginning of the first millennium, also Christianity, the Gundestrup cauldron clearly shows another world and a totally unknown cosmology. As archaeologists, understanding and interpreting this world is challenging. It also seems that apart from knowledge of elephants, different yoga techniques were part of probable shamanistic practices, which may have been expressed in the material culture like the juxtaposed Grevensvænge figure or the kneeling figurine from the Fårup bog find (Armstrong 2008, Armstrong & Melheim 2019). Shamanistic practices and means of attaining ecstatic and transcendental consciousness have been common throughout history (Eliade 1972, Holmberg 1987, Hulkrantz 1978), and the Indo-European cosmology took many different forms.

Intriguingly, many of the rituals associated with the great Indo-European horse sacrifice are depicted on rock-art. In these rituals, both domesticated animals (horses or cows/bulls), but also wild species (deer and elks) were used. If this represented an ongoing process of Indo-Europeanisation, where the main rituals were conducted in new ecological environments with different animal species, it testifies to the pervasiveness of this tradition and opens up new fields of investigation, which we will discuss in Chapter 11. Given the complexity of the topics being investigated, we must first engage in a theoretical and methodological discussion to justify how our study relates to the history of archaeological thought.



### 3. Ideal-types, theory and method

*'The tendencies of rites to be without function and of ritual language to be without meaning ... would offer a simple explanation for the inadequacies of Western theories of ritual ... for all theorists of ritual have assumed that ritual cannot merely have intrinsic value, but must be provided with meaning, function, or outside reference. If the assumption is wrong, this would indicate that theorists are in this respect not different from ordinary believers, who always assume that rites have special, if not extraordinary effects.'*

Frits Staal

*Agni. The Vedic Ritual of the Fire Altar* (2001:16).

#### **Ethnography and ethnology as theory**

Stephen J. Gould once said: 'Science, in its most fundamental definition, is a fruitful mode of inquiry, not a list of enticing conclusions. The conclusions are the consequence, not the essence' (Gould 1987 [1985]:417). Ethnography is considered one of the most basic forms of social research (Hammersley & Atkinson 1996:2), as it focuses on seeing and studying real people doing real things, including their belief and cosmological systems. Fredrik Barth says that 'there is a real world out there – but that our representations of that world are constructions' (Barth 1989:87) and it is an aim to 'look at how people through their collective and separate activities reproduce and modify the realities of their past and present' (Barth 1993:8). Following phenomenology (Merleau-Ponty 1995), everyone is part of and partakes in horizons and prejudices, because these processes also allow us to see, sense and comprehend realities, which has been a central theme in archaeology, both theoretically and empirically (e.g. Bradley 1993, 2000, Ingold 2000, Tilley 2004, Fuglestad 2009, 2018). Comparison is inevitably part of any interpretations whether implicit or explicit, as the researcher's own cultural experience and research horizon shape horizons of understanding (Gadamer (1996). This is not necessarily a constraint, but

can, on the contrary, be a constructive resource, as Donna Haraway says: 'The theory is meant to orient' but it 'forbids any direct si(gh)tings of nature' (Haraway 2004: 63), or culture or religion for that matter. Hence, theory influences, guides and directs the scholar to see the world in specific ways. If one reflects on optical technology and cameras as a way of understanding theories and frames of understanding, different lenses provide different pictures (Havnevik 2016). The object or the landscape for the photo is the same, but a zoom lens captures certain specifics of the totality whereas a fish-eye lens gives another picture. Seen from this angle, there are no right or wrong perspectives, but certain directionalities and lenses are more relevant to one's research questions.

We have chosen to approach the four-millennia-long continuity of the great horse sacrifices, from its earliest traces in the Sintashta culture to its last living representation in 20<sup>th</sup>-century Scandinavia, as 'an ideal-type' – a concept developed by Max Weber (1864-1920). This approach inevitably engenders other archaeological challenges, which will be discussed in the rest of this chapter after the general theory and methodology have been presented.

### **Max Weber's 'ideal-types'**

Max Weber is best-known for his *The Protestant Ethics and the Spirit of Capitalism* (2006 [1930]) in which he argues that the Protestant ethic created a capitalist spirit because magic was eliminated from the sacraments. Weber's concern was not primarily studying religion for the sake of understanding religions as such, but to understand the world. Max Weber's *The Sociology of Religion* has been described as 'the most crucial contribution of our century to comparative and evolutionary understanding of the relations between religion and society, and even of society and culture generally' (Parsons 1964:lxvii). In this book Weber himself says: 'To define "religion", to say what it is, is not possible at the start of a presentation such as this. Definition can only be attempted, if at all, at the conclusion of the study. The essence of religion is not even our concern, as we make it our task to study the conditions and effects of a particular type of social behaviour' (Weber 1964:1). Hence, religion was important, but it was part of another overall framework, namely economy and society (Weber 2013a, 2013b). Comparison was an essential method for understanding why the West, with its protestant ethics and capitalism, had rationalised religion and the world differently than



Judaism (Weber 1952); Hinduism and Buddhism in India (2000[1958]); and Confucianism and Taoism in China (1951).

The greatest horse sacrifices from the Vedic *ashwamedha* to the Scandinavian *skeid* revolve around the same themes. The great epos Mahabharata is mainly a religious text documenting mythology, whereas much later, when documented, the *skeid*-ritual was described as a physical horse fight among men and horses in which the sexual content is fundamentally different. Whether the horse was conceptualised in a cosmological framework in the 19<sup>th</sup>-century rural Norway and Sweden is uncertain. It is likely that the practice was continued as a tradition, something that should be done as part of this ceremony because it has always been this way. It is common that rituals survive on their own inherent power, acquiring their own value and even being enriched with new explanations of imagined meanings. The well-documented Vedic ritual tradition is an example of this.

Using archaeological material and written texts, we will argue that the horse sacrifice is essentially the same ritual with a continuity that extends over millennia. Such an assertion clearly presents a number of inherent problems. By considering the great horse sacrifice as an ideal-type ritual, this historical phenomenon is depicted in a constructive way. Weber sums up the concept of 'ideal-type': 'the ideal-type is an attempt to analyse historically unique configurations of their individual components by means of generic concepts' (Weber 1949:93). He adds: 'The type of social science in which we are interested is an *empirical science* of concrete *reality* [...] Our aim is the understanding of the characteristic uniqueness of the reality in which we move. We wish to understand on the one hand the relationships and the cultural significance of individual events in their contemporary manifestations and on the other hand the causes of their being historically so and not *otherwise*' (Weber 1949:72).

An ideal-type 'is no "hypotheses" but it offers guidance to the construction of hypotheses. It is not a *description* of reality but it aims to give unambiguous means of expression to such a description [...] An ideal type is formed by the one-sided *accentuation* of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent *concrete individual* phenomena, which are arranged according to those one-sidedly emphasized viewpoint into unified *analytical* construct' (Weber 1949:90).

Weber continues: 'In its conceptual purity, this mental construct cannot be found empirically anywhere in reality ... Historical research

faces the task of determining in each individual case, the extent to which this ideal-construct approximates to or diverges from reality ...' (Weber 1949:90). As the model of the great horse sacrifice is an idealised presentation of a cosmic ritual, of which various sources provide different glimpses, it is difficult to present a comprehensive historic description of this ritual tradition.

'This ideal-type is then related to the idea ... The construction of abstract ideal-types recommends itself not as an end but as a *means*' (Weber 1949:91-92). Weber points out: 'It has the significance of a purely ideal *limiting* concept with which the real situation or action is *compared* and surveyed for the explication of certain of its significant components (Weber 1949:93). Hence, 'we have purposely considered the ideal type essentially – if not exclusively – as a mental construct for the scrutiny and systematic characterization of individual concrete patterns, which are significant in their uniqueness' (Weber 1949:99-100).

In archaeological terms, we will first present parts of the Vedic mythology from the Mahabharata, the Ramayana and the Satapatha Brahmana, and then the 19<sup>th</sup>- and 20<sup>th</sup>-century Scandinavian documentation. As Weber says: 'Every *individual* ideal type comprises both *generic* and ideal-typically constructed conceptual *elements*' (Weber 1949:100).

'*Developmental* sequences too can be constructed into ideal types and these constructs have quite considerable heuristic value. But this quite particularly gives rise to the danger that the ideal type and reality will be confused with one another ... Whether the empirical-historical course of development was actually identical with the constructed one, can be investigated only by using this construct as a heuristic device for the comparison of the ideal type and the "facts"' (Weber 1949:101-102). Weber also states explicitly: 'The goal of ideal-typical concept-construction is always to make explicit not the class or average character but rather the unique individual character of cultural phenomena' (Weber 1949:101). This combines, on the one hand, ethnography and ethnology (including mythology), since it is cultural history in itself, but, on the other hand, it may also serve as an ideal-type for interpreting archaeological contexts.

Theories bring new knowledge into being, which is what a good theory should do; it is empirically or evidentially justified (Obeyesekere 1992:57). Hence, as an empirical discipline we need to test general theories against particular cases in order to seek a 'best explanation'

within a frame of reference that is not contradicted by the data as they stand (Anthony 1995:86-87). Following Clifford Geertz, 'we must measure the cogency of our explications (...) not against a body of uninterpreted data (...) but against the power of scientific imagination to bring us into touch with the lives of strangers' (Geertz 1973:16). In line with Jack Goody, 'the basic procedures of such analysis involve first making a series of functional or logical models which can be interwoven, then, second, constructing a single model which can generate the different forms' (Goody 1989:vii-viii). Importantly, in the words of Gananath Obeyesekere, 'Models of the sort I construct in this work are simplifications of the complex empirical data and are never exactly replicated in reality. They are ... "ideal types", constructs that re-present in topographical form the world of empirical reality' (Obeyesekere 2002:16).

Ideal-types may therefore exemplify the complex conditions of empirical reality, in which contemporary and historic ethnography can function as an ideal-type or model in archaeology (Kaliff & Oestigaard 2004). Being explicit about the frames and horizons of understanding may also enable the analysis of specific archaeological contexts. This would also avoid a debate about whether 'scientific testing' is possible in archaeology as a discipline. It is perhaps more interesting to look at what Karl Popper once said about science and explanations:

'Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or "given" base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being' (Popper 1995:111).

Or, as Rorty says: 'We shall never know for sure whether a given belief is true, but we can be sure that nobody is presently able to summon up any residual objections to it, that everybody agrees that it ought to be held' (Rorty 2000:2).

By analysing the horse sacrifices as an ideal-type, we may avoid some of the theoretical and methodological pitfalls and interpretative challenges that have haunted archaeological discourses over the decades. We will therefore apply this approach to the history of archaeological thought and the recent theoretical developments. This

will include a discussion of 1) beyond analogies and ethnoarchaeology, 2) archaeological theories and current discourses, including the ontological turn, 3) post-colonial theories, 4) anthropology and the study of the Other, 5) identity, history and heritage, and 6) how ethnography and ethnology, on the one hand, and archaeology, on the other, mutually benefit from perspectives that combine comparative and historic trajectories when addressing continuities and change throughout centuries and millennia.

## **Beyond analogies and ethnoarchaeology**

Ian Hodder once said: 'If new ideas are to have more than a superficial impact, they need to be related to the practice of archaeology' (Hodder 1995:1). Kristian Kristiansen (2014a) has proposed that the recent developments in aDNA-analysis may represent a paradigm shift (see Kuhn 1962) in archaeology, comparable in importance to the Three-Age system proposed by Christian Jürgensen Thomsen (1836) and developed and divided by John Lubbock (1865), or the ground-breaking implications of the C<sub>14</sub> method from the 1950s onwards (Trigger 1994). A third science revolution has profound implications for the interdisciplinarity of archaeology (Nilsson Stutz 2018). While these three scientific innovations have been of fundamental importance to archaeology, interpretative challenges remain. Even with more precise dating of people on the move, these data need to be interpreted. In a positivist language 'data' (Latin) means 'given' (Lucas 1995), but while dates and DNA are data, understanding them is not a given.

Christopher Tilley argues that ethnoarchaeology gave rise to both the processual and the post-processual paradigm in archaeology (Tilley 1989). For more than 50 years, the debate about the relationship between archaeology and anthropology has caused disproportionately severe disagreements, since 'archaeological theorists are trapped in separate non-communicating discourses' (Hodder 2001:10-11). However, it has also been part of engaging theoretical discourses and defining the discipline from, on the one hand, Binford's well-known characterisation of 'archaeology as anthropology' (Binford 1962), and, on the other hand, Clarke's equally well-known statement that 'archaeology is archaeology is archaeology' (Clarke 1968:13).

There has been much debate as to the scientific and methodological grounds that can define analogies (Hodder 1982a, 1982b, 1982c, 1987): 'It

seems logically to be the case that, if we interpret the past by analogies to the present, we can never find out about forms of society and cultures which do not exist today' (Dalton 1981, op. cit. Hodder 1982a:14), and therefore, 'what would be the point of repeating our knowledge of contemporary societies by tagging labels on to societies in the past' (ibid). Also, would archaeology just become prehistoric ethnography (Spaulding 1988:268)?

'Ethnoarchaeology' aimed to bridge archaeology and anthropology, on the one hand, and to be a methodological tool providing analogies and interpretations, on the other (e.g. Haaland 1977, 1988, Haaland & Haaland 1995, Gramsch 2000, Oestigaard 2000b, 2004a, 2004b). Kleindienst & Watson (1956) called it 'action archaeology', while Gould (1974) used the term 'living archaeology' and Nicholas & Kramer in their *Ethnoarchaeology in Action* refer to twelve different approaches to ethnoarchaeology (Nicholas & Kramer 2001:12).

After almost half a century of intensive debate about analogies and the relation between archaeology and anthropology, the discourse faded away by the turn of the millennium, taking ethnoarchaeology as a subdiscipline with it. There are several reasons for this, which brings us to the archaeological approaches to materiality and texts, and a rhetoric which made the subdiscipline redundant (Reybrouck 2000). Moreover, Chris Gosden claims that 'all archaeology today is postcolonial' (Gosden 2001:241) and that 'ethnoarchaeology is immoral, in that we have no justification for using the present of one society simply to interpret the past of another' (Gosden 1999:9).

But while the debate faded to the background at the turn of the millennium, it resurfaced in full strength 15 years later when Oliver Gosselain (2016, a French version was published in 2011) suggested that ethnoarchaeology should 'go to hell!' and attacked its ideology, theory, methodology and fieldwork. There was an immediate response (Roux 2017), as much of the criticism of Gosselain did not accurately describe how contemporary ethnoarchaeology is conducted (e.g. Lane 2015, Lyons & Casey 2016). Thus, the question is whether ethnoarchaeology is a vibrant research strategy or just another identity crisis, given that criticism of ethnoarchaeology is almost as old as the discipline itself (Hamon 2016). Certainly, ethnoarchaeology as a practice will not disappear, because whatever archaeologists do, the interpretative challenges remain (see Oestigaard 2016a).

Thus, Lyons & Nicholas conclude that, after this detour to hell, ethnoarchaeology is back: '*archaeologists who practice ethno-*

*archaeology become better archaeologists'* (Lyons & Nicholas 2019:121, for extended references see this article). In any case, Hamilakis (2016) suggests that as archaeologies decolonise one should shift from ethnoarchaeology to ethnographic archaeology, which was in fact the ethnoarchaeological approach of some of the early pioneers (e.g. Watson 1979). Ethnographic archaeology can combine the past and the present with regards to living heritage and future cultural heritage management practices (e.g. Meskell 2014, 2018, Meskell & Brumann 2015). Nevertheless, the interpretative challenge remains.

## **Archaeological theories and current discourses**

From the mid-1980s onwards, archaeology has had a very ambivalent, almost paradoxical, relation to material cultures and materialities, despite the fact that archaeological finds are material. While material culture studies developed as a discipline (e.g. Miller 1985, 1987, 2004, 1998, Miller & Tilley 1996), the linguistic turn was developing in parallel (Barthes 1973, Saussure 1960) turning away from things and focusing on texts and discourses (Olsen 1987, 1990, 1997, Tilley 1989, 1990, 1991). While ethnoarchaeology was always a subdiscipline that provided material culture studies on its own and as a basis for analogies, alternative approaches were favoured, like using metaphors and metonymies (Tilley 1999, Holtorf 2000) or science-fiction for inspiration (Fahlander 2001). Obviously, as archaeologists, one can only theorise up to a certain point about linguistics, so that after a while material culture studies and materiality returned as the core of archaeology (Olsen 2003, 2010, 2012a).

Hence, it was possible to claim: 'Things are back. After a century of neglect, and after decades of linguistic and textual turns, there has for a while been much buzz about a material twist in the humanities and social sciences: a (re)turn to things' (Olsen 2016). And one could make this claim without dwelling on the question of who had been neglecting things and why there was such a buzz. From Oscar Montelius onwards (1885), things have always been in focus, including the classical works like Rygh's (1885) *Norske Oldsager* and Montelius' (1917) *Minnen från vår forntid*. Most archaeologists have always focused on materiality, even during the heyday of post-processual archaeology and the linguistic turn, partly because it was the empirical basis, but also because material

metaphors in culture are not entirely arbitrary; there is always likely to be an inherent connection between form and meaning (Barth 1975:208).

A 'more-than-human' anthropology has come to dominate our sister discipline. This has its parallels in archaeology, though archaeology has always been about more than humans – or more precisely things – in that it has always been more interdisciplinary – than any discipline in the humanities. 'Disciplinary knowledge is focused upon a precise set of objects of analysis and prescribes definite ways of studying them. Interdisciplinary knowledge constructions offers opportunities for looking at different sides of an event or problem, drawing together the assumptions and methods of different disciplines,' Smith says: 'Post-disciplinary social science, which looks for the parallels in knowledge constructions across the social sciences, throws such inhibitions out of the window and asks us to be more flexible and innovative in the ways we define objects and the methods we use' (Smith 1998:311).

Many of the new directions build on Actor-Network-Theories (Latour 1993) in various ways and variously labelled post-humanism and neo-materialism. However, the material emphasis is strictly speaking not new, and although the approach has not previously been sufficiently applied, this has also been emphasised: 'In the current state of post-disciplinary sciences we argue that it is important to put even more stress on archaeology as the discipline which studies material culture or the structuring agency of materiality in general. Material culture studies are the totality of approaches to all kinds of materiality and the interaction with, and influence on, humans, and vice-versa' (Fahlander & Oestigaard 2004:10)

The new materiality came with the ontological turn in social sciences, which replaced the linguistic turn. Many postmodernists and French philosophers are still used as the theoretical anchoring of the discourse, but the world has changed: it is no longer just a matter of arbitrary relations between signs and signifiers. There is a real world out there, and it is changing. The impacts of climate change have also redefined this school of thought, with debates about whether the planet has entered the *Anthropocene*, a new geological 'era' that replaces the Holocene (Crutzen & Stoermer 2000, Crutzen 2002). In the post-processual archaeology, it was a heresy to include nature and ecology as relevant variables to explain adaptation and cultural development. This was stigmatised as processual archaeology, nature determinism, nature reductionism and vulgar materialism (see also Friedman 1974, Homans

1941, Rappaport 1979). The new materiality opens up debates about the material relationality of human engagements with the external world, and engenders new philosophies and anthropologies that challenge anthropocentric perspectives (e.g. Solli 2011, Strang 2014). Studies of materiality have also focused on entanglement (e.g. Hodder 2012), differences in effective and conscious agencies (e.g. Robb 2004), or primary or secondary agencies in human-non-human relations (e.g. Gell 1988). There is also a vibrant debate regarding symmetrical /asymmetrical archaeology and humans' place in the world among things and other actors (e.g. Olsen 2012b, Olsen et al. 2012, Shanks 2007, Witmore 2007).

While many of these studies address important perspectives, the primary question in this study is not whether these approaches are right or wrong, but whether they are relevant, constructive and fruitful to our purpose? On a general note, there is an inherent problem with cross-cultural theories, whether they are ontological in nature or not, since the same theories can be applied on garbage, garments or gardens. More specifically with regards to our study, we are not talking about entanglements as such; effective and conscious agencies, primary or secondary agencies in human-non-human relations, or symmetrical ontology of things: these perspectives are too minor and insignificant.

The great horse sacrifices were precisely that: the greatest, as they involved not only the world, but the whole cosmos and all the gods. It was cosmogony, transcending all that was known and defining everything that was still to come. It was certainly about human-non-human relationships and material entanglements – including horses and cosmic regenerative forces – but these are human constructs and constraints; we are talking about divine engagements and the creation and maintenance of cosmos. Describing for instance human engagements with horses and phalluses as material entanglements or human-non-human relations is but one option, and it certainly overlooks the role of the ritual in society and cosmos.

The perspectives do, however, overlap, with regards to the specific etymological root of 'material'. In Greek, 'material' (*hylē*) is in its ordinary form 'forest' or 'woodland', but in Latin 'material' or 'mater' meant both mother and wood (Leclerc 2014:122). While the former understanding of material as deriving from wood is perfect for material culture studies and its emphasis on things, our primary focus is on the maternal aspect, which emphasises fertility and regenerative forces, ranging in scale from the individual to the gods and cosmos, and



exploring how they relate. This also brings us to post-colonial theories, which follow up the criticism of ethnoarchaeology as immoral and colonial in character. Moreover, it also addresses the criticism that the recent 'new materialism' direction of archaeology is dominated by white middle-class Westerners, and is more male-dominated than mainstream archaeology, which is in itself already dominated by the white West. Or, in the words of Felix Guattari and Gilles Deleuze, the dominant standard 'is the average adult-white-heterosexual-European-male-speaking a standard language' (Deleuze & Guattari 1987:105).

### **Post-colonial theories and Indo-European questions**

The post-colonial discourse is more diverse and disparate than many other theoretical approaches. It includes studies and criticisms of politics and structures of dominance, identities and understanding of the 'other', and fundamental ontological and epistemological questions: who can study and understand what? The decolonising discourse builds on the works of scholars like Fanon, Tuhiwai Smith, Mbembe, Ngugi and Nyamnjoh. Their publications include *Black Skin, White Masks* (Fanon 2008), *On the Postcolony* (Mbembe 2001), *Decolonising the Mind* (Ngugi 1986), *Decolonizing Methodologies* (Smith 1991), *Theory from the South* (Comaroffs 2012) and *#RhodesMustFall* (Nyamnjoh 2016).

Bruce Trigger states: 'Colonialist archaeology ... served to denigrate native societies and peoples by trying to demonstrate that they had been static in prehistoric times and lacked the initiative to develop on their own' (Trigger 1984:363). As a consequence, 'While the colonisers had every reason to glorify their own past, they had no reason to extol the past of the peoples they were subjugating and supplanting. Indeed, they sought by emphasising the primitiveness and lack of accomplishments of these peoples to justify their own poor treatment of them' (Trigger 1984:360). 'The white man's burden' (as framed by Kipling in 1899) embodied the European colonial attitude at the time that the German philosopher Hegel stated that Africa 'is no historical part of the World; it has no movement or development to exhibit. Historical movements in it – that is in its northern part – belong to the Asiatic or European World' (Hegel 2007 [1899]:99). Moreover, Africans were not only perceived as barbaric and lagging behind the rest of humanity in terms of evolution, but they were 'capable of no development or culture, and as we see them at this day, such have they always been' (ibid:98). In

archaeology, the *ex oriente lux* ('light from the East') school also downplayed development in certain regions at the expense of others (Childe 1934, Frankfort 1948, 1956). While it is a historic fact that there have been different historic developments and civilisations at various time periods (Wittfogel 1957, Service 1975, Trigger 2003), different historic trajectories have also been ascribed cultural values and derogatory stereotypes. Rorty points out the dilemma, which also includes archaeology's role in society:

'National pride is to countries what self-respect is to individuals: a necessary condition for self-improvement. Too much national pride can produce bellicosity and imperialism, just as excessive self-respect can produce arrogance. But just as too little self-respect makes it difficult for a person to display moral courage, so insufficient national pride makes energetic and effective debate about national policy unlikely. Emotional involvement with one's country – feelings of intense shame or of glowing pride aroused by various parts of its history, and by various present-day national policies – is necessary if political deliberation is to be imaginative and productive. Such deliberation will probably not occur unless pride outweighs shame' (Rorty 1998:3).

Colonial attitudes have certainly shaped and upheld some national images at the expense of others. The distinguished Oxford professor Hugh Trevor-Roper wrote as late as 1965:

'...the history of black Africa. Perhaps, in the future, there will be some African history to teach. But at present, there is none, or very little: there is only the history of the Europeans in Africa. The rest is largely darkness, like the history of pre-European, pre-Columbian America. And darkness is not a subject for history ... I do not deny that men existed even in dark countries in dark centuries, nor that they had political life and culture, interesting to sociologists and anthropologists; but history, I believe, is essentially a form of movement, and purposive movement too. It is not a mere phantasmagoria of changing shapes and costumes, of battles and conquests, dynasties and usurpations, social forms and social disintegration' (Trevor-Roper 1965:9).

Trevor-Roper thus defines history and the purpose of history: 'history, or rather the study of history, has a purpose. We study it not merely for amusement – though it can be amusing – but in order to discover how we have come to where we are' (Trevor-Roper 1965:9-10). He concludes:

'It may well be that the future will be the future of non-European peoples: that the "colonial" peoples of Africa and Asia will inherit that primacy in the world which the "imperialist" West can no longer sustain ... But even if that should happen, it would not alter the past. The new rulers of the world, whoever they may be, will inherit a position that has been built up by Europe, and by Europe alone. It is European techniques, European examples, European ideas which have shaken the non-European world out of its past – out of barbarism in Africa, out of the far older, slower, more majestic civilization in Asia; and the history of the world, for the last five centuries, in so far as it has significance, has been European history' (Trevor-Roper 1965:11).

In 1969, Trevor-Roper stated that 'we see the same process today in historic Asia and unhistoric Africa. In 1900 the colonial empires seemed "enlightened" ... The West was benevolent, cosmopolitan, the educator of the world' (Trevor-Roper 1969:6). While Trevor-Roper has been heavily critiqued for being extreme and African perspectives and developments have been emphasised (Diop 1974, Bernal 1987, 1991, Fuglestad 1992, Mudimbe 1994), his arguments raise the question of the asymmetries of political archaeology (Kohl & Fawcett 1995, Atkinson, Banks & O'Sullivan 1996, Díaz-Andreu & Champion 1996, Kohl 1998, Østigård 1999a, 2001, Oestigaard 2003a) and nationalism (Anderson 1993, Gellner 1997). Thus, this is but one definition of political archaeology (Oestigaard 2007:11):

'Political archaeology is the study of how archaeology is a part of political structures whereby archaeology as a discipline gives these constructions legitimacy, authority and scientific autonomy in contemporary societies. The study of the relation between archaeology and nationalism is crucial for two reasons: (1) The past is used to give nation-states territorial legitimacy in relation to other nation-states. Archaeology is a means for nation-states in territorial disputes, and the integration of archaeology and nationalism has consequences

for the organisation and the hierarchies in between nation-states. (2) Different ethnic groups within a given nation-state are ascribed various, political rights and economical resources. The legitimacy for these internal hierarchies is often found in claims of exclusively inherited rights from the past. Political archaeology aims to illuminate the premises and the ideologies behind the contemporary political hierarchies when ethnic groups or nation-states aiming strategic advantages use archaeology as a means in their enterprises.'

There are hardly any topics as controversial as the construction of nation states and how certain groups legitimise rights and privileges at the expense of others. In this context, the Israel-Palestine conflict is a hotly debated theme (e.g. Kohn 1971, Dayan 1978, Said 1978, Lemche 1985, Thompson 1987, Finkelstein 1995, Whitelam 1997, Phoh 2009, Oestigaard 2013b). Part of the challenge is how one understands ethnicity in the past with relevance for the future (Lemche 1998, Lemche & Tronier 1998), but another fundamental controversy surrounds the interpretation of religious texts (Thompson 1992, 1999). Thomas L. Thompson says: '*It is only as history that the Bible does not make sense*' (Thompson 1999:210), and 'to use the biblical traditions as the primary source for the history of Israel's origin, is to establish a hopeless situation for the historian who wants to write critical, rather than anachronistic, history' (Thompson 1987:26). In other words, what is the historicity of the texts and what is dated, the text as text when it is found or the text as tradition, which may document mythologies and events centuries and even millennia older than the actual date of the text as a manuscript? This has particular relevance for studying Vedic texts.

On the one hand, the Vedic texts are religious fundamentals of Hindu nationalism, which considers them to be the origin of Hinduism, but on the other hand, Indo-European studies emphasise that the Vedic sources came *to* India and not *from* India (e.g. Lal 1997, 2005; Talageri 2000, 2005; Misra 2005). The motive for the denial of any form of Indo-Aryan migration to India follows essentially two lines, first, a school whose endeavour is to rewrite India's history based on their view that the Indo-Aryan migration was very much the creation of 19<sup>th</sup>-century British political ideology, and second, those who are trying to prove that the geographic origin of the 'Aryans' lies on the Indian subcontinent, and that from there they spread throughout the world (Witzel 2001:23).

'In these views, though often for quite different reasons, any immigration or trickling in (nearly always called "invasion") of the (Indo-)Aryans into the subcontinent is suspect or simply denied: The Ārya of the RV are supposed to be just another tribe or group of tribes that always have been resident in India, next to the Dravidians, Mundas, etc. The theory of an immigration of IA speaking Ārya ("Aryan invasion") is seen as a means of British policy to justify their own intrusion into India and their subsequent colonial rule: in both cases, a "white race" was seen as subduing the local darker-colored population' (Witzel 2001:24).

This 'inverted' nationalist abuse of research on Indo-European migration in prehistory has a far greater scope than many scholars in the West are aware of. In fact, a vast amount of Indian scholars adhere to the notion of an autochthonous Indo-Aryan origin in one form or another. We will return to this question in Chapter 4 where we will place it in its research-historical context (for an overview of the controversy, see also Bryant & Patton (eds.) 2005).

This question obviously causes controversies. Indian identity is profoundly rooted in archaeology and the Indological and/or colonial framework of race, language, and the Aryan – non-Aryan dichotomy, but these frameworks are unacceptable to modern India and Indians (Chakrabarti 2000). Archaeologically speaking, there is no Vedic Age or Vedic Archaeology, and 'the first textual phase of Indian philosophical and religious tradition has to remain undated and ... archaeology has to be kept out of it' (Chakrabarti 2001:35). Still, Chakrabarti argues, methodologically 'the religion of Indus civilisation is better understood if we interpret it in the light of later Hindu rituals and concepts, but there is also nothing in the Harappan context which would permit the inference of an organised Brahmanical framework in it' (Chakrabarti 2001:35, 52-53).

Thus, the Indus civilisation was neither a Hindu nor Brahmanic 'religious-culture', although later traditions bear similarities to these historic trajectories. As Gordon Childe said, the Indus civilisation 'represents a very perfect adjustment of human life to a specific environment, that can only have resulted from years of patient effort. And, it has endured; it is already specifically Indian and forms the basis of modern Indian culture. In architecture and industry, still more in dress and religion, Mohenjo-daro reveals features that have always been characteristic of historical India' (Childe 1952:183-184).

The Indus civilisation is most renowned for the legendary cities Mohenjo-daro and Harappa and the urban revolution (Jansen 1989, 1993, 2014, Possehl 1990), which took place in a wide area that covers current-day Pakistan, western India and north-eastern Afghanistan. There is no entirely satisfactory chronology for the Indus Age, but the major cities are dated to the second half of the third millennium, or ca. 2500-1900 BC, with the Early Harappan phase from around 3200-2600 BC and then a transition phase lasting for about a century (Kenoyer 1998, Chakrabarti 1999, Possehl 1999, 2002, 2010).

The scriptural challenge of the holy texts is very important, because the challenge also includes the origin and function of the most persistent social organisation in the world: the caste system. The Rig Veda (X, 90) directly states that castes are made from sacrifice, while the Mahabharata and all other Vedic texts are full of references to Brahmans and their ritual purity. Consequently, there are far-reaching implications to interpreting caste, dating the Vedas and seeing the Indo-European and Vedic era and ideology coming from within or outside today's Hindu and Indian areas. However, the problem for the 'autochthonous Hindu nationalists' is that all the facts speak for the traditional image of an Indo-European immigration to India, even more so after the breakthrough in aDNA technology in recent years (see Chapter 5).

'Certainly, a revisiting of old theories should be carried out if the new evidence is strong and unambiguous. But the observations made by revisionists and indigenists do not add up to a complete, self-contained theory that is in agreement with the other, independently developed fields of knowledge. Instead, it is rigged with lacunae and internal contradictions and it frequently clashes with the established sciences. These features make the autochthonous theory particularly unfavorable as a replacement of earlier explanations' (Witzel 2001:75).

Caste as a social structure has a fundamental role in many of these debates, since it privileges the Brahmins and the 'pure castes'. Understanding caste involves understanding society and cosmos, and hence *ritual and sacrificial structures* (Hocart 1950, 1954, 1969, 1970a), *economy* (Dumont 1970), *sin, transactions and the body as a bio-moral substance* (Marriott 1976, 1990, Marriott and Inden 1974, 1977, Inden & Nicholas 1977), *gender and hierarchies* (McGilvray 1982, Bennet 1983,

Das 1990, Torén 1990), *spatial organisation* (Quigley 1995), and *funeral rituals* (Parry 1979, 1980, 1982, 1985, 1986, 1987, 1994), but also *whether caste is a solely Hindu or Indian type of social organisation*, or if it is a cultural-specific form of a broader set of structuring and organising society (Leach 1960, Yalman 1960). While this represents only a fragment of the studies on caste, another central aspect is religious purity, which will be discussed in the next chapters. This underscores the complexity of understanding caste, including the challenges of dating this specific type of social structure.

British colonisation impacted the caste structure as the British colonisers organised society according to these principles (Fuller 1977), so that caste society became a colonial form of civil society (Dirks 1993, 2001). If castes were principally a British and colonial construct, it has huge political consequences, since it is a dominating and oppressing ideology (Dushkin 1998). Today, this image of the caste system's origins is based on the same kind of view that drives many of the revisionist Indian scholars, who, as mentioned above, perceive the interpretation of an Indo-Aryan migration (which they usually classify as an invasion) to the Indian sub-continent as a British projection. A thorough analysis of data and facts, however, shows that this approach is more about a politically motivated attitude than the result of careful scientific examination (e.g. Fosse 2005:434-467; Witzel 2005:341-404).

Furthermore, archaeological studies ascribe much longer timeframes to the caste system (Coningham & Young 1999), while religious texts show that some forms of castes go far back in history. The *Rig Veda*, for instance, is often dated to 1200-800 BC (Possehl 1999:6). In 1859, Max Müller dated the work to c. 1200 BC (Müller 1859). The *Rig Veda* was later dated to c. 1000 BC on linguistic grounds (Ghosh 1952). More recently, other scholars have estimated a much later date (e.g. Inden 1990). However, today's dominant view is again mostly in line with Müller's dating, or even earlier, though the text was only recorded in writing at a later stage (e.g. Witzel 1995a, 1995b; Anthony 2007; Jamison & Brereton 2014).

The origin of the caste system matters beyond academia, as it impacts politics and is used to justify discriminatory practices. 'The burden on the head is always there' (Miller & Kale 1998). Hierarchies are social injustice in daily life, and caste and colonisation bear many similarities. 'This [British] colonialism colonizes minds in addition to bodies and it releases forces within the colonized societies to alter their cultural priorities once for all' (Nancy 1983:xi). Moreover, Albert Memmi

argues: 'In order for the colonizer to be the complete master, it is not enough for him to be so in actual fact, but he must also believe in its legitimacy'. But the process is even more complex, because 'in order for that legitimacy to be complete, it is not enough for the colonized to be a slave, he must also accept this role. The bond between colonized and colonizer is thus destructive and creative. It destroys and re-creates the two partners of colonisation into colonizer and colonized' (Memmi 1965:89). Hence, theoretical decolonisation debates focus on the worldviews of those who have suffered a long history of oppression and marginalisation. Chilisa defines decolonisation as follows:

'Decolonization is thus a process of conducting research in such a way that the worldviews of those who have suffered a long history of oppression and marginalization are given space to communicate from their frames of reference. It is a process that involves "researching back" to question how the disciplines — psychology, education, history, anthropology, sociology, or science — through an ideology of Othering have described and theorized about the colonized Other, and refused to let the colonized Other name and know their frame of reference' (Chilisa 2012:14).

This relates to what Edward Said labelled 'Orientalism'. 'The Orient is an integral part of European material civilisation and culture,' Said writes. 'Anyone who teaches, writes about, or researches the Orient – and this applies whether the person is an anthropologist, sociologist, or philologist – either in its specific or its general aspect, is an Orientalist, and what he or she does is Orientalism' (Said 1978:2). Moreover, according to Said, knowledge and universities are inherently political. They are part of power structures and shape discourses of domination, so that they partake in domination and control. 'The mystic East' and India have undoubtedly been part of Orientalist discourses (King 1999), but Said paints with too broad a brush when labelling everyone Orientalist, since that would also include non-Western scholars. If the Vedic and Indo-European ideology came to India from areas *outside* the subcontinent, and if the caste structure has Indian origins, then Indian scholars cannot be privileged in studying these topics, as this would make them Orientalists too. In addition, in this case the means of domination and control (caste structures) are not externally imposed, but internally developed and maintained. This relates to another classic debate within anthropology.



## **Anthropology and the study of the Other**

How to study the 'other' has been a major problem in anthropology and development studies from a theoretical and anthropological standpoint (Oestigaard 2016b). In the early 1990s, prominent anthropologists engaged in heated debate about how to interpret Captain Cook in the history of the Pacific (Sahlins 1985, 1995, Obeyesekere 1992). Seldom has a debate raged in academia as this one, which empirically was concerned with whether Captain Cook was seen as a god (Lono) when he went to Hawaii in 1778–79, or merely as a chief. Sahlins favoured the first position and Obeyesekere the second, but the controversy did not only focus on the empirical data. Instead it was centred on the interpretation of the data and the ideology that favoured a European colonial worldview of dominance and superiority. The common interpretation of Captain Cook as an explorer being perceived as a god fitted the European self-image of their own conquests, as Obeyesekere says: 'To put it bluntly, I doubt that the natives created their European god; the Europeans created god for them. This "European god" is a myth of conquest, imperialism, and civilization' (Obeyesekere 1992:3).

When the academic dust from the dynamite of the debates had settled (see Borofsky 1997, Obeyesekere 1997, Sahlins 1997), most agreed that Sahlins was empirically right after all, and that Obeyesekere could not prove and document his hypothesis. At the same time, many favoured Obeyesekere and his perspective, which fitted well with post-colonial theory. One of the central questions causing the controversies was not only about data, facts and what constitutes our empirics, but also the cultural question and the question of representation – who can speak for the Others (in this case the Hawaiians)?

Clifford Geertz (1995) summarised the debate in his article 'Culture War'. One fundamental issue is what 'knowing' about 'others' implies; whether it is possible to know others – and if so, is it good? Or should anthropologists work to advance the fortune and lives of the people being studied? The other, and perhaps more fundamental disagreement between Sahlins and Obeyesekere was cultural: how do we understand cultural difference? What are the implications of different standpoints and what do cultural differences mean? According to Geertz, for Sahlins it represents substance and for Obeyesekere it represents surface. Following Sahlins, different cultures have different rationalities; Obeyesekere argues that everybody is like us and fundamentally thinks the same way, since we are all humans (Geertz 1995).

However, despite the fierce debate between Sahlins and Obeyesekere, they agreed on this point (albeit from different perspectives): they do not want to speak for the Hawaiians. Obeyesekere says: 'I find it utterly presumptuous that ethnographers should tell native peoples how they think or formulate their "classical rules" for them, without an iota of scepticism or tentativeness' (Obeyesekere 1997: 271). Sahlins does not wish to speak for the Hawaiians either, but on different grounds: 'Yet, the issue is not, I think ... who can speak for Hawaiians, whether back then or now ... To assume the right to speak for Hawaiians would be morally repugnant as well as epistemologically madness. Nor is the problem whether they – the so-called ... subalterns can speak. The problem is whether they can be heard and understood' (Sahlins 1997:273). Thus, whereas Obeyesekere argues for a type of essentialism or universalism, Sahlins argues for a type of relativism: 'Relativism is the simple prescription that, in order to be intelligible, other peoples' practices and ideals must be placed in their own context, thus understood as positional values in a field of their own cultural relationships, rather than appropriated in the intellectual and moral judgments of our own categories' (Sahlins 1997:273)

Strictly speaking, from a theoretical and philosophical point of view, the Other is as fundamental as the self. Identity is a fundamental aspect of being human, and 'identification can be defined minimally as the ways in which individuals and collectives are distinguished in their social relations with other individuals and collectives. Identity is a matter of knowing who's who (without which we can't know what's what)' (Jenkins 2004:5). Sahlins quotes Benveniste:

'Consciousness of self is only possible if it is experienced by contrast. I use *I* only when I am speaking to someone who will be *you* in my address. It is this condition of dialogue that is constitutive of *person*, for it implies reciprocally *I* becomes *you* in the address of the one who in turn designates himself as *I* ... Language is possible only because each speaker sets himself up as a *subject* by referring to himself as *I* in his discourse ... This polarity does not mean either equality or symmetry: "ego" always has a position of transcendence with regard to *you*. Nevertheless, neither of these terms can be conceived of without the other ... The condition of man in language is unique' (Benveniste 1971:224–225, quoted in Sahlins 1997:275).

Essentially, we are all other people's Other, which is inevitable in any social interaction. This is not problematic from an empirical and philosophical point of view, but as Foucault emphasised (e.g. Foucault 1989, 1990, 1991, 2001), all social relations are imbued with power and hence asymmetrical relationships. Moreover, external definitions are embedded within social relationships between ethnic groups, and thus external groups may have possibilities to define others as groups either by power or authority relations (Jenkins 1994:199). Thus, we are back to square one: who can interpret what?

The question may also tell us something fundamental about the difficulty of trying to find the right balance between scientific correctness and subjective perceptions – our own and others' – which unknowingly or consciously affect our work, regardless of our endeavour. Nevertheless, it is important to pay careful attention to what the main purpose of scholarly endeavour and research is, and to strive to avoid repeating mistakes from the past, which happens all too often:

'Today's theories, however well-meaning and however different their perspective may be, unfortunately contain the same kind of fundamental mistake, based on a kind of political correctness. What we in the West want to see today is often the counter to the image of colonialism. We would be wise to avoid making scholarly mistakes in the opposite direction. The abuse of an interpretation in a particular period does not automatically mean that the interpretation itself must be wrong. Nor does it mean that what is politically correct today must be right when it concerns the past. A fact that not all Western critics of the immigration theory are aware of is that many Hindu nationalist researchers in India have an ambition to see as many links as possible between the older Harappā culture (c. 2500–1700 BC) and Vedic culture. This has led to statements that might at first sight seem to demolish the old idea of a Vedic immigration, but on closer inspection are seen to be empty ideology – statements with as little substance as the old theories of an Aryan immigration' (Kaliff 2007:43).

## **Identity, history and heritage**

The Comaroffs argue that, scientifically, 'Western enlightenment thought has [...] posited itself as the wellspring of universal learning, of

Science and Philosophy [...], it has regarded the non-West – variously known as the ancient, the orient, the primitive world, the third world, the underdeveloped world, the developing world, and now the global south — primarily as a place of parochial wisdom, of antiquarian traditions, of exotic ways and means’ (Comaroff & Comaroff 2012:1). Thus, critical heritage studies in combination with decolonisation and religious theories (for overviews, see e.g. Bowie 2000, Morris 1987, Rappaport 2001, Schilbrack 2014, Turner 1991) may open up a new space for understanding the role of heritage as a source of living traditions and experiences with relevance for the future (e.g. Baird 2017, Blaising et al. (eds.) 2017, Brumann & Berliner 2016, Harrison 2013, Smith 2006).

However, addressing this is a major task, and we will briefly point out some aspects, relating to a) Non-Western frames of understanding and interpretations, b) Otherness and who can speak and interpret which type of cultural data, c) archaeology and identity, d) personal and cultural symbols, and e) identity and tradition as heritage.

First, the study of non-Western concepts has a long history and also a different terminology, which is useful to address. The terms ‘emic’ and ‘etic’ were introduced by Marvin Harris (1964, 1979) to designate the difference between the point of view of the native and that of the ethnographer. It is important to grasp the significance of the emic perspective, but that is not enough; documenting ethnography by itself from an emic perspective does not make up social science. It has to be analysed and interpreted, and this relates to what Schutz called constructions of first and second degree, and the continuities between ‘common sense’ thinking of members of a community and the ‘scientific thinking’ of social research, since all scientific thinking has its roots in common-sense thinking (Bloor 1997:41). Thus, following Schutz, ‘the primary goal of social sciences is to obtain organised knowledge of social reality’ (Schutz 1971:53). He makes a distinction between constructs of the first and second degree. ‘The constructs of social sciences are ... constructs of the second degree, namely constructs of the constructs made by the actors on the social scene, whose behaviour the social scientist has to observe and to explain in accordance with the procedural rules of his science’ (Schutz 1970:273). This is of course a challenge when analysing such complex rituals as horse sacrifices, because ‘in a ritual, the world as lived and the world as imagined ... turns out to be the same world, producing ... idiosyncratic transformation in one’s sense of reality’ and societies ‘contain their own interpretations’ (Geertz 1973:112, 453). In short, the aim is to be empirically meticulous

and follow and document the emic perspectives, then analyse the data. This brings us to the question: who can study the emic perspective, the etic perspective, and combine them?

Second, post-colonial studies often follow Said's premise of Orientalism which posits that dominant, white (male) westerners should be excluded or not be given the privilege of studying these topics, because this upholds asymmetrical colonial power structures. However, for a number of reasons, this premise is not valid in studies of Indo-European mythology or ideology (if one follows Said in this case one may also follow the proponents of autochthonous Indo-Aryan origin). Moreover, such a premise has to be discarded on specific grounds, but also on general grounds, since archaeology cannot work on these premises (see below). Furthermore, as post-colonial studies emphasise 'blackness' and intersectionality, being Asian may also be problematic, which was exemplified during the Rhodes Must Fall Movement:

'For as much as the Asian, Arab, or other non-Black person of colour may rage against white supremacy, they can just as easily and inadvertently act in ways that exclude and oppress people racialised as Black. For non-Black people, regardless of gender, to attempt to assert control over anyone or anything in a Black movement is, quite simply, peak anti-Blackness [...] We had to quite sternly insert the idea that whilst white supremacy is a problem suffered by all people of colour, anti-Blackness is a problem uniquely suffered by Black people even among people of colour. In particular, the non-Black people of colour who railed against white supremacy for oppressing them did not seem to realise or acknowledge that Blackness occupies the bottom position in the racial hierarchy in Britain, below that of non-Black people of colour' (Nkopo & Chantiluke 2018:140-141).

In the case of the great horse sacrifice, gaining an understanding of the past from the perspective of dominance with its current-day political implications may challenge Edward Said's thesis, because if the Mahabharata represents historic events, the horse roamed freely for a year before the sacrifice. The ruler was bound to attack and conquer any kingdom or territory into which the horse crossed. Thus, the Mahabharata describes dominance on the Indian subcontinent, not between the colonial West and Indian East, but within and among Vedic and mythological kingdoms. This relates to history and heritage, but not necessarily to any existing specific ethnic group or any contemporary

people. Rather, it is a legacy that can be related to many different individuals and groups of people, which also forms a main theme in our analysis of the spread of the great horse sacrifice in time and space.

If one argues that Hindus are best qualified because of *their* history and heritage (knowledge of language is of course always a fundamental asset in ethnographic and historic/archival studies), one may favour one particular, and increasingly dominant interpretation, namely the Hindu ethno-nationalist one, which implies that Vedic mythology and its Indo-European roots have their origins in Hindu or Indian religion and culture. The above-mentioned advances in aDNA-technology show the opposite, as will be discussed in Chapter 5. And if one moves from India to Scandinavia: are Kaliff and Oestigaard better qualified to study Swedish and Norwegian material respectively, because of their birth ethnicity or nationality? Archaeology has taught us that this is a highly dangerous approach, in particular with regards to studies of Indo-European questions, which 100 years ago was framed in terms of Indo-Aryans.

A concluding passage from one of Michael Witzel's papers – a critical review of autochthonous Aryanism – provides a good summary of the dangers of uncritically embracing the counter-image in the post-colonial agenda; an agenda that on the surface may seem historically justified:

'Some adjustments both to local South Asian conditions and, simultaneously, to the emerging global village certainly are in order. On the other hand, present autochthonously minded efforts are the wrong way to follow. Fifty years after Indian independence, it should not be regarded as a scholarly, but simply as a political undertaking to "rewrite" history for the purpose of national pride or "nation building". We know to what such exercises have lead during the past century. If the present wave of apologetic, revisionist, and nationalistic writing should continue unabated, and if it should remain largely unobserved, unstudied and unchecked by post-enlightenment scholarship, future historians will look back at these excesses of the end of the 20th century and the beginning 21st in the same way as some now like to do with regard to the 19th century. And they will criticize the present generation of scholars for having looked the other way – for whatever reasons. It remains for us to hope that the recent spate of revisionist, autochthonous and chauvinistic writings will not

lead to similar, real life consequences as those that we have witnessed during the 20th century' (Witzel 2001:78).

In 1911, Gustav Kossinna defined and systematically applied the concept of an archaeological culture in conjunction with the 'direct ethno-historical' method in the book *Die Herkunft der Germanen* or *The Origin of the Germans*. This culture-historical view also influenced European and British archaeology. The title of Gordon Childe's 1926 book, *The Aryans: a study of Indo-European origins*, sums up the challenges in the history of archaeological thoughts. In *The Danube in Prehistory* (1929), Childe defines culture in this way:

'We find certain types of remains – pots, implements, ornaments, burial rites, house forms – constantly recurring together. Such a complex of regularly associated traits we shall term a "cultural group" or just a "culture". We assume that such a complex is the material expression of what would to-day be called a "people" (as the adjective from "people", corresponding to the German "völkische", we may use the term "ethnic"). Only where the complex in question is regularly and exclusively associated with skeletal remains of a specifically physical type would we venture to replace "people" by the term "race" (Childe 1929:v-vi).

Only four years later, Childe rejected this view of culture and its connection to race (Childe 1933). Thus, despite the national paradigms, archaeology benefits from keeping the past and the politics of the past at arms' length and remembering David Lowenthal's thesis that 'the past is a foreign country – they do things differently there' (Lowenthal 1985:xvi, see also Eriksen 1996, Solli 1996). 'We' are not 'they' and vice-versa.

Third, the relation between archaeology and identity is challenging, with many unsolvable problems. First, archaeology as a discipline is closely connected to the state, with national projects and heritage laws. Second, based on this legal framework, archaeology is supposed to identify, create and maintain spheres of identity and belonging, as evidenced, for instance, in Norwegian heritage law (see Cultural Heritage Act. 1978, NOU 2002, Sontum & Fredriksen 2018). Given this national premise and legislation, the sphere of identity and belonging is mostly the national one whether the archaeologists are Norwegian or Nigerian, Swedish or Scots, or Indian or Israeli. Thirdly, given the above

premises as well as the university systems and the financing systems of museums and contract archaeology, most archaeologists tend to work within their own national borders on archaeological material protected by the national heritage laws. This relation and practice has benefitted archaeology as a discipline and the careers of archaeologists, and it is difficult to imagine another realistic disciplinary foundation.

On the other hand, without this notion of identity (or, in more monetary terms, 'relevance' or 'importance') in the community at large, it is difficult to legitimise archaeology as a large tax-funded enterprise. While global heritage transcending national borders is an ideal (e.g. Brück & Nilsson Stutz 2016, Holtorf & Högborg 2015, Högborg 2016, Högborg et al. 2017), it is difficult to fund as the EU's largely failed project of creating a shared European cultural heritage has shown (Shore 1993). However, given the history of archaeological thought and the relation between archaeology and nationalism, this close identification has been highly problematic (e.g. Cooney 1996, Guidi 1996, Raczkowski 1996, Slapsak & Novakovic 1996).

Thus, there are many advantages of *not* studying one's own identity, culture or national belonging, along the lines of 'the past is a foreign country', thereby enabling the 'Otherness' of the past. This approach contradicts the principles of identity projects, whether of minority, gender, ethnic or national groups, such as Sami people studying Sami material, or Norwegians and Swedes studying Norwegian and Swedish material. From this perspective, archaeology can be a truly global discipline, enabling anyone to study anything irrespective of birth, nationality, faith, gender or age. The idea that interest and knowledge should define contents, and that conditions of research should enable mutual intellectual exchange of ideas of historic global interest is laudable, but the practical realities often result in other structures.

Fourth, understanding personal and cultural symbols apart from national identity paradigms may enable fruitful approaches. Deep symbols are rooted in culture and religion, like the horse-sacrifice with its changing meaning throughout the millennia. Building on psychologists (e.g. Freud 1913, 1920, Jung 1958, 1959, 1968a, 1968b, 1968c), a psychoanalytical perspective may contribute significant knowledge about the relationship between *personal* and *cultural* symbols, since culture imposes limits on elaborations, the comprehension of symbols, collective representations and researchers' interpretation of symbols (Obeyesekere 1990:22, 49ff). Personal symbols are public symbols 'that permit the expression of the unconscious thoughts of the individual; but



since they make sense to others, they also permit communications with others in the language of everyday discourse' (Obeyesekere 1990:22-23). Subjective imagery is often culture in the making or protoculture, but not all forms of innovative imagery end up as culture. Practices and beliefs have to be legitimated by the group in terms of the larger culture (Obeyesekere 1981:169), which is particularly relevant with regards to the more obscure practices of horse sacrifice.

Lastly, there is identity and tradition as heritage. The heritage of the great horse sacrifice has structured Europe for 4000 years, to use Giddens' terminology (1979, 1987, 1989, 1990, 1993). Or, to use a phrase from Bourdieu, it has been part of people's habitus (1977, 1984, 1995). On the one hand, there are long continuities in history, as Braudel says:

'History exists at different levels, I would even go so far as to say three levels but that would be only in a manner of speaking, and simplifying things too much. There are ten, a hundred levels to be examined, ten, a hundred time spans. On the surface, the history of events works itself out in the short term: it is a sort of microhistory. Halfway down, a history of conjunctures follows a broader, slower rhythm ... And over and above the "recitatif" of the conjuncture, structural history, or the history of the *longue durée*, inquires into whole centuries at a time' (Braudel 1980:74).

On the other hand, no condition is permanent (Berry 1983); traditions are both invented (Hobsbawm 1983) and acquire legitimacy from the past, whether there is an authentic continuity or not. Lost traditions that are recreated work as well as any other (Gombrich & Obeyesekere 1988:241).

All social practices change over time; the perception of tradition as a timeless continuity without change is a construction. Strictly speaking, the Indo-European horse sacrifice is a tradition that belongs to everyone and no one, because it is no longer a tradition as ritual practice. Oxford Dictionaries (2020) defines tradition thus: 'The transmission of customs or beliefs from generation to generation, or the fact of being passed on in this way'. This is an operational definition, because it puts emphasis on the transmission of knowledge between generations. Thus, while the archaeological culture is heritage in legal terms, it is not tradition as living heritage: "Heritage" is everything that belongs to the distinct identity of a people and which is theirs to share, if they wish, with other peoples. It includes all of those things ...

international law regards as the creative production of human thought and craftsmanship, such as songs, stories, scientific knowledge and artworks' (Daes 1993).

This also sums up our role as archaeologists studying this mythology and cosmology from the Indian subcontinent to Scandinavia from a 4000-year perspective. On the one hand, it is 'our' common and shared Indo-European heritage, but on the other, it is not: while we belong to this cultural sphere, it is also so shrouded in mythology that it is difficult to claim it as an identifying heritage, because most of it is lost to collective memory. In other words, this topic is mainly an archaeological quest, hardly ideal for individual identification as living history or heritage. This also makes the topic inclusive for comparative studies cross-culturally in time and space by qualified scholars. Nonetheless, the interpretative challenge remains, even after this journey through theoretical approaches.

## **Ethnography and ethnology as ideal-types**

In an ideal world, lives lived in one context and knowledge about them would enrich understanding of other cultures and religions. However, in the real world, asymmetrical relations exist – not only between countries and continents (Dietz, Kaag, Havnevik & Oestigaard 2011), but also, if we follow post-colonial criticism, in the frameworks that shape the world, including those used in archaeology and anthropology (Fagan 2004). Gender and feminist approaches also address how asymmetrical relationships shape, maintain and dominate social spheres (e.g. Conkey & Gero 1997, Engelstad 2007, Geller 2009, Meskell 2002).

Scholars in the 19<sup>th</sup> and early 20<sup>th</sup> century portrayed other cultures and religions as primitive in various degrees (e.g. Lubbock 1870, Tylor 1871, Frazer 1922, Shetelig 1922), and perhaps it is symptomatic that it was a blatant, militant atheist like Durkheim (Morris 1987:106-107), who pointed out what is obvious today: 'In reality, then, there are no religions which are false. All are true in their own fashion; all answer, though in different ways, to the given conditions of human existence. It is undeniably possible to arrange them in a hierarchy ... [but] All are religions equally, just as all living beings are equally alive, from the most humble plastids up to man,' Durkheim writes in *The Elementary Forms of Religious Life*: 'So when we turn to primitive religions it is not with

the idea of depreciating religion in general, for these religions are no less respectable than the others. They respond to the same needs, they play the same role, they depend upon the same causes; they can also well serve to show the nature of the religious life, and consequently to resolve the problem which we wish to study' (Durkheim 1915:3).

Nevertheless, there is an inherent asymmetry in archaeological interpretations. Ideally, knowledge in one culture in time and space sheds light on another, but it is inevitably problematic when modern-day communities (often poor communities in the Third World) are used as a frame of reference for understanding societies several thousand years ago. When a white middle-aged researcher sets out to study black women, it further adds to the asymmetries. The criticism of ethno-archaeology is from this perspective legitimate, but it should really include all archaeology. In practice, when it comes to understanding societies, the terminology and intellectual apparatus of interpretative archaeology are largely anthropological. They are still based on analogies, but often concealed in sophisticated theory – or just bypassed in silence. A title like Elman Service's *Primitive social organization: an evolutionary perspective* (1962) is highly problematic today, still most archaeologists use a terminology like band, tribes and chiefdoms without hesitation, and without explicitly referring to the complex theories behind studies of social evolution (Sahlins & Service 1960, Service 1975, Trigger 1998). Similarly, archaeologists use the terms reciprocity, redistribution or other terms describing pre-industrial exchange (Mauss 1990, Godelier 1999).

In practice, it is early 20<sup>th</sup>-century anthropology – or the grandparent-generation of people living today – who are used as references framing prehistoric societies. One way archaeologists usually have overcome this challenge is by *not* referring to the original context (ethnographic) or scholar (for instance an anthropologist) and thereby the knowledge becomes 'archaeological' and seemingly unproblematic. As an example, Zoe Todd, a Métis anthropologist and scholar of indigenous studies, argues that 'ontology' is just another word for colonialism (2016:7-8). Her argument is worth referring to at length:

'it appeared that another Euro-Western academic narrative, in this case the trendy and dominant Ontological Turn (and/or post-humanism, and/or cosmopolitics—all three of which share tangled roots, and can be mobilised distinctly or collectively, depending on who you ask), and discourses of how to organise ourselves around and communicate with the

constituents of complex and contested world(s) (or multiverses, if you're into the whole brevity thing) - was spinning itself on the backs of non-European thinkers. And again, the ones we credited for these incredible insights into the "more-than-human", sentience and agency, and the ways through which to imagine our "common cosmopolitical concerns" were not the people who built and maintain the knowledge systems that European and North American anthropologists and philosophers have been studying for well over a hundred years, and predicating many of their current "aha" ontological moments (or re-imaginings of the discipline) upon. No, here we were celebrating and worshipping a European thinker for "discovering", or newly articulating by drawing on a European intellectual heritage, what many an Indigenous thinker around the world could have told you for millennia.'

One of her arguments is that scholars should refer to the first scholar or the geographic origin of the knowledge to credit indigenous people and thoughts. Archaeology has a long history of dressing up in French fashion, instead of referring to original publications. This has been called archaeological 'whitewashing' of anthropology (Østigård 2000b, 2000c).

As archaeologists, we do this all the time, often unconsciously, because it is hard to avoid, at least in a stringent theoretical and mythological way. On a basic level, any kind of unconditional interpretation is impossible. Collectively as well as individually, we are always affected by our environment. Even our most personal thoughts occur in relation to something. Hence, if we do not consciously choose good analogies, we unconsciously use our own assumptions and own time as an analogy, without reflection (Kaliff 2005:133-135, 2007:33-36).

"The problem is that this particular analogy is usually bad for archaeologists. We critically examine consciously chosen analogies, especially when they are taken from modern-day (or older) "exotic" contexts (ethnographic analogies), but pay less attention to what the alternative might be. The belief that unconditional interpretations are possible rests on an illusion, namely, that our own powers of deduction function like a closed system, free of impressions from the surrounding world. For better or worse, we can never liberate ourselves from our

own unconscious analogies, but we supplement them with consciously chosen analogies' (Kaliff 2007:35).

This is a relevant clarification for the emergence of all forms of archaeological interpretations, even those that are not usually regarded as being based on analogies. In this book, we will mainly apply an ethnographic and ethnological approach, but not in the classical form of ethnoarchaeology.

In Scandinavian archaeology, ethnology has been largely omitted as a frame of reference, although for instance Troels Fredrik Troels-Lund's *Att dö i Norden. Föreställningar om livets slut på 1500-talet* (1984) and Olaus Magnus' *Historia om de nordiska folken* (2001[1555]) are often referred to in Nordic archaeology. Still, this largely unexplored ethnological potential may open numerous new doors to understanding Norse and Scandinavian prehistory (Østigård & Kaliff 2020). To give direction to further study, we highlight a number of works that are possibly more important than what is mentioned above;

- from Denmark Axel Olrik and Hans Ellekilde (1926-1951, 1951) and Troels-Lund's studies should include *Dagligt Liv i Norden i det sekstende Aarhundrede I-XIV* (1879-1901, and 1900);
- from Sweden Louis Hagberg (2016[1937]) and Carl-Herman Tillhagen (1977, 1981, 1983, 1984, 1985, 1989, 1991a, 1991b, 1997), and
- from Norway, among others, *Ingjald Reichborn-Kjennerud* (1922, 1928, 1933, 1934, 1940, 1944, 1947).

Ethnography and ethnology will form the basis for our ideal-type of the horse sacrifice when interpreting past rituals and practices. The empirical material is vast but scant and diverse. There are many voluminous Vedic texts. These religious texts and this mythology represent one aspect of reality, which is difficult to correlate to real archaeological material. The size of the *ashwamedha* presented in the Mahabharata is a divine description of a ritual that could not have been performed by humans on that scale, though the historic examples that have been documented will be discussed. The ethnological documentation of the *skeid*, on the other hand, is very scarce. As it was forbidden in 1820, it is difficult to know to what extent the participants in the ritual knew about the rationale behind the rite. The tradition around St. Stephan and the life-giving waters in the wells has a more recent history and both memories and practices can be traced to the 20<sup>th</sup> century. From around 1900 AD, there are scattered written evidences

across Scandinavia going back to the Viking period, but before 1000 AD, archaeological remains are our only source for interpreting the prehistoric societies and their horse sacrifices.

In other words, following Weber in his definition of the ideal-type, it does not correspond to the empirical reality in the archaeological world we investigate, but it serves as a model for generating knowledge and testing hypotheses as we proceed in the analysis. The written sources that document horse sacrifices such as the *ashwamedha* and the *skeid* provide a few glimpses of a lost world. It represents enough material to enable an ideal-type, which can be used as a heuristic tool when analysing the past.

Ethnographic and ethnological documentation of past societies have a historic relevance in themselves. It is up to others to evaluate whether our interpretations make sense or not. Peacocke pointed out the interpretative procedure, which fits well with using the horse sacrifice as an ideal-type when analysing and approaching the past:

‘Firstly, an explanatory suggestion is proposed which would explain certain phenomena; and second, the hypothesis is accepted as true on the basis on further experiment, evidence or reasoning. The method consists not just of thinking up a simple hypothesis to explain the data: it also compromises a policy of not accepting the hypothesis as true unless one has a sufficient range of evidences which, in the circumstances, ensures that if the hypothesis was not true, one would not believe it’ (Peacocke 1986:140).

Thus, the hypothesis and interpretations we put forward here are not cross-cultural generalisations, but can be tested and evaluated. An ethnological archaeology may therefore overcome some of the previously discussed problems, while at the same time new challenges emerge. This bring us to aDNA-analysis and studies of Indo-European religion, ideology and mythology. We will start with a short presentation of the history of Indo-European studies.

## 4. The meaning of the concept Indo-European: Use and misuse

*'I have declared again and again that if I say Aryas, I mean neither blood nor bones, nor hair nor skull; I mean simply those who speak an Aryan language ... To me an ethnologist who speaks of Aryan race, Aryan blood, Aryan eyes and hair, is as great a sinner as a linguist who speaks of a dolichocephalic dictionary or a brachycephalic grammar. It is worse than a Babylonian confusion of tongues – it is downright theft.'*

Friedrich Max Müller

*Biographies of Words and the Home of the Aryas* (1888:120).

### Introduction to the Indo-European questions

The term Indo-European is most frequently used in a linguistic sense. In linguistics, the distinctive Indo-European character is evident, and hardly questioned, at least not at its core. The Indo-European language family comprises about three billion of the world's population, distributed over more than 400 different languages and dialects. Most European languages belong to this family: Latin, Germanic, Slavic and Baltic as well as the now rare Celtic languages. However, the Indo-European languages are also present beyond Europe: Russian and the languages spoken in India, Pakistan, Nepal and Sri Lanka. Hindi and Bengali are the largest, with hundreds of millions of native speakers each, but Urdu, Nepali and Sinhalese are also all descendants of the ancient Indian language Sanskrit. The Iranian languages, which includes Persian, but also Tajik, Ossetic, Pashto, Kurdish and Dari, also belong to the same family. Thus, some of the world's most widely spoken languages are part of the Indo-European language family, such as English, Spanish, Russian and Hindi. Of the truly great world languages, only Chinese (Mandarin) belongs to a completely different language group.

Indo-European religion is – just like Indo-European languages – a traditional scholarly concept, which was first used in the 19<sup>th</sup> century with the comparative study of the history of religion. Fundamental similarities were observed in different religions practised by populations who spoke Indo-European languages. Parallel to the language itself, important religious beliefs, myths and rituals also seem to have been preserved over time. In some cases, like in the sacred language of Hinduism, Sanskrit, language and religious rituals have been closely connected. Just as Latin evolved into modern French, Spanish and Italian, Sanskrit gave rise to several modern Indian languages. Like Latin, the original language is no longer used in everyday life and is only mastered by a few scholars and members of the clergy – the Brahmins. It has become a purely ritual language.

The rituals are transmitted orally from father to son in a bound verse form, which has allowed both the language and the rituals to be preserved with great precision. It is more common for religious conceptions and rituals to develop over time, as does the language, and for them to gradually change into different ‘dialects’. Both internal change and external influence can be the driving force behind this. In this case, language myths and rituals are similar and often closely interlinked. It is more unusual for everyday words and concepts, such as stories without bound verse form, to be preserved unchanged over time. But important basic features can still survive for a long time. More important and emotionally charged parts of the message tend to be more resistant to change.

While it is difficult to question similarities in languages, the mechanisms behind their kinship have been highly disputed. One key question is whether a special Indo-European culture ever existed, with features not only in language but also in social structure, mythology, ritual and religion. Language and culture are intimately connected for several reasons. With the help of language, traditions and stories are transmitted between generations and a common language is linked to shared, identity-creating stories. Meaning-bearing and basic mythology and religious conceptions are therefore closely linked to the language.

Since Indo-European languages have spread to many different geographical areas and have been preserved in a recognisable way for millennia, one may assume that this also applies to other parts of the cultural heritage, especially since this is closely related to languages. Researchers in literature and linguistics have suggested that, in addition to myths, a number of well-known folktales may have a very ancient



Indo-European origin. The results are based on a comparative analysis of variants of stories, which can provide the youngest dating for a common origin. One study suggests that the root of at least one such story – probably several – commonly called ‘The Blacksmith and the Devil’, can be derived from the Bronze Age (Graça da Silva & Tehrani 2016).

Through the rapid spread of English as a world language, Indo-European languages are today gaining ground globally. Besides the historical background of the British colonial past, this spread has, more recently, been closely connected to technological developments which have sped up communications and media. The spread of languages in older periods has long been the subject of discussion, specifically the question of how Indo-European languages became dominant in such widely varied geographical areas from the Atlantic coast in Western Europe to the Ganges plain in India. Researchers have debated this from the late 18<sup>th</sup> century when the relationship between the languages began to be properly documented. It was already clear then that the similarities were so fundamental that languages must have a common origin.

In this chapter, we aim to give a brief historical background of the research on Indo-Europeans, as well as the specific problems that have come to cast a shadow on this research. In Chapter 5, we will briefly present the general state of research on Indo-Europeans today, with special emphasis on the rapid development of aDNA research in recent years. This development has been key to putting the issue of ancient Indo-Europeans back on the archaeological map. The earlier research history on the subject is extensive, and is described in several contexts and from different perspectives (among others, Mallory 1989, 1997; Mallory & Adams (eds.) 1997, Mallory & Adams 2006; Anthony 2007; West 2009; Fortson 2011, Pereltsvaig & Lewis 2015; Olander 2019). The intention here is therefore not to give a complete overview of this large field of research, but only a clear summary (for a slightly more detailed description, however, in Swedish, see Kaliff 2018).

There is no clear indication that language and genetics go hand in hand throughout history. However, a close kinship, usually the closest family, is the unit where most of the cultural heritage is transmitted, especially language. Therefore, in the vast majority of cases, it is clear that genetic kinship closely follows language. There are of course exceptions and different conditions can play a role.

An anecdote of interest in this context comes from fieldwork performed by the authors in Nepal in 2002. We were travelling in the Kathmandu Valley and came to one of the small towns there. The aim of the visit was to study a famous temple, so we engaged a boy from the town as a guide. The boy had learnt good English and was interested in talking to us about cultural and ethnic matters. We then got on to questions of language. It turned out that the boy's grandparents, who were still alive, only spoke the old Tibeto-Burmese language that dominated the area up to modern times. His father, however, had also learned Nepali, the Indo-European language spoken by the country's elite, which was steadily gaining ground. The boy himself only spoke Nepali (and English). Here we were thus eyewitnesses to a linguistic 'Indo-Europeanisation' that was taking place over the course of just three modern generations. The tragic consequence was that the boy and his grandparents could scarcely communicate. The benefits of speaking the language of the country's rulers and cultural elite was perceived as such an important factor for personal success that the boy's father had chosen to learn it and to pass on the new language, instead of his mother tongue, to his children. The same situation may have arisen in earlier periods in many areas where there was an elite that spoke an Indo-European language. Moreover, there has indeed been a recent immigration of the Indo-European elite, from northern India to Nepal, which shows that at least this Indo-Europeanisation process involves both physical migration of people as well as language transfer between people who are not biologically related.

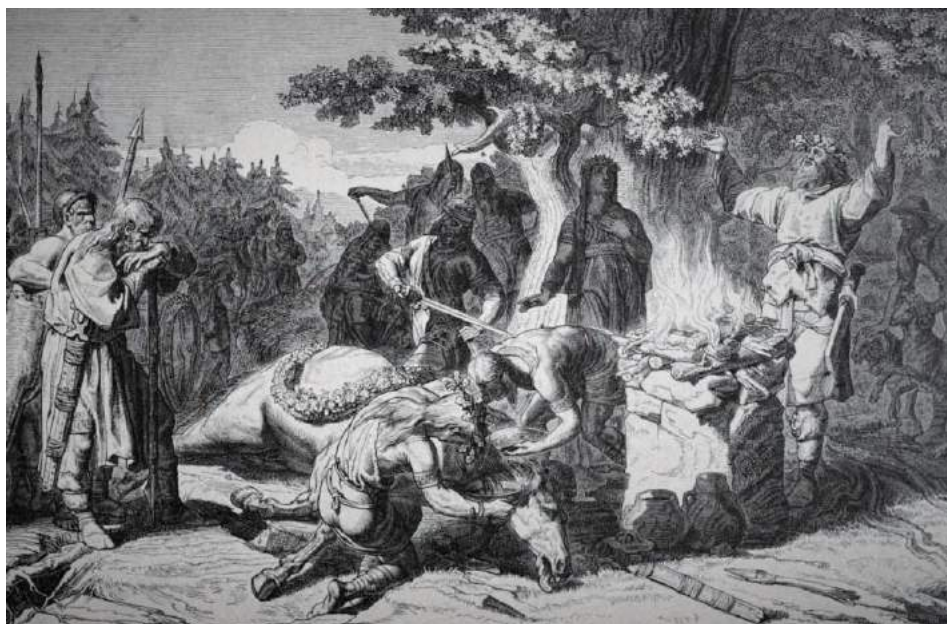
### **The Indo-European homeland problem**

Where then did the first people who spoke an Indo-European language live; why did its various branches spread so widely; and when did this happen? These questions have occupied scholars for more than 200 years, since the British colonial official and researcher William Jones (1746-1794) convincingly demonstrated that the ancient Indian language Sanskrit was closely related to Greek and Latin, but also to Germanic and Baltic languages. Jones is today known for his observations about relationships between the Indo-European languages. However, he was not the first. Already during the 16<sup>th</sup> century, visitors – missionaries and merchants – to India observed similarities in language between Europe and India. The Florentine

merchant Filippo Sassetti (1540–1588) was among the first Europeans to study the ancient Indian language Sanskrit. He noted certain similarities in Sanskrit and Italian words. However, it was only with William Jones' work that the idea of the common origin of languages aroused interest and had an impact (Rocher 2001:1156-1163). In 1653, the Dutch scholar Marcus Zuerius van Boxhorn (1612–1653) was the first to publish a theory about an ancient proto-language that lay at the root of Germanic, Latin, Greek, Baltic, Slavic, Celtic and Iranian languages. He called this hypothetic language 'Scythian'. Finally, in 1767, the French Jesuit Gaston-Laurent Coeurdoux specifically showed the existing analogy between Sanskrit and European languages (Godfrey 1967:57-59; Blench 2004:52-74).

Nevertheless, Jones' presentation before the Asiatic Society, which he had founded in 1784 in Calcutta, is generally considered to mark the beginning of comparative linguistics and Indo-European studies. He suggested a common ancestor for Sanskrit, Greek and Latin, and furthermore that they may be related to Gothic and Celtic, as well as to Persian languages (Jones 1824). Extensive research has since been done to reconstruct this common root or proto-language. Over time, this hypothetical ancient language has come to be referred to as Proto-Indo-European (PIE). As can be seen, the term originally refers to the reconstructed language, but the concept has been broadened on this basis and is therefore also used in other disciplines that study issues of Indo-Europeans. Concepts such as Proto-Indo-European religion and ritual are also used, as well as Proto-Indo-European culture in general, which refers to a hypothetical, reconstructed, ancient culture, as it does in linguistics.

By the mid-19<sup>th</sup> century, Indo-European studies were firmly established. A marker of the advance of time is the work of German linguist August Schleicher (1821-1868). Apart from systematising the comparative evidence, he also elucidated the basic form of the different Indo-European languages by working back through the history of each language individually. He was a pioneer in trying to reconstruct the earliest Indo-European form of each word. Whether or not the reconstruction really represents any original language has ever since been a source of debate. Some scholars believe that this is the case, that the reconstructed language would really be understandable if it were used in ancient society, while others prefer to view the reconstructions as merely convenient scholarly expressions of a theoretical development (Mallory 1989:14-16).



**Fig. 9. Horse sacrifice. From William Zimmermann (1875) *Illustrierte Geschichte des deutschen Volkes*, Vol 2.**

One of Schleicher's most memorable efforts was his attempt to write a folktale in the reconstructed Indo-European language, published in 1868, to show how Indo-European might have looked and how aspects of Indo-European society can be inferred from it. Since the story is about a horse and therefore fits our theme (Fig. 9), we want to present it as an example of how (possibly) the proto-Indo-European language can be reconstructed. It also gives an indication of how, through the analysis of the language, one can approach important phenomena in proto-Indo-European society, in this case, among others, the presence of the horse, sheep, wool and wagons on the steppe.

Later, various scholars published revised versions of Schleicher's fable, and the fable may therefore also serve as an illustration of the significant changes that the reconstructed language has gone through during the last 150 years of scholarly efforts. Here, however, we only reproduce Schleicher's original version (1868:206-208), as well as an English translation of this (Beekes 2011:287). The fable is entitled *Avis akvāsas ka* ('The Sheep and the Horses').

Scheicher's (1868) reconstruction:

‘Avis, jasmin varnā na ā ast, dadarka akvams, tam, vāgham garum vaghantam, tam, bhāram magham, tam, manum āku bharantam. Avis akvabhjams ā vavakat: kard aghnutai mai vidanti manum akvams agantam. Akvāsas ā vavakant: krudhi avai, kard aghnutai vividvant-svas: manus patis varnām avisāms karnauti svabhjam gharmam vastram avibhjams ka varnā na asti. Tat kukruvants avis agram ā bhugat.’

Beekes' (2011) English translation:

‘[On a hill,] a sheep that had no wool saw horses, one of them pulling a heavy wagon, one carrying a big load, and one carrying a man quickly. The sheep said to the horses: “My heart pains me, seeing a man driving horses.” The horses said: “Listen, sheep, our hearts pain us when we see this: a man, the master, makes the wool of the sheep into a warm garment for himself. And the sheep has no wool.” Having heard this, the sheep fled into the plain.’

The reconstruction of language is one thing, but another question is how and from where it spread to different parts of the old world, in order to gradually develop into today's different linguistic variants. Hence, the kinship of the Indo-European languages is in itself an irrefutable fact, doubted by few, though there are many theories about how they were spread. In addition to the question of the mechanisms behind the spread of Indo-European languages, the other big question has been the geographical location of the common predecessor, the proto-Indo-European language and the people who spoke it. Linguists have for a long time been interested in this so-called ‘Homeland question’ (updated summary in Olander 2019). On the basis of various common words and concepts that are present in different Indo-European languages, attempts have been made to find the area where all these phenomena existed simultaneously.

When scholars first tried to tackle the question of an Indo-European homeland, soon after William Jones' discoveries were presented, they essentially only had linguistic evidence. Rough localisations were suggested, based on reconstructions of names of, for instance, plants and animals. Language does not change at random but according to certain patterns. It allows you to scale layers from layers of

change, and make a close reconstruction of how a language has evolved over time. The comparative method allows linguists to reconstruct words and the roots of words in a proto-language, and when doing this it is also possible to reconstruct what the ancient Indo-Europeans talked about and thereby triangulate geographical areas where some phenomena exist, but others may not. This is known as linguistic palaeontology, and we will give one example concerning one of the ancient languages snapped off from the Proto-Indo-European, namely Proto-Germanic (from Olander 2019:18):

‘For instance we can assume that the speakers of Proto-Germanic may have known mice, house, lice and the color brown. Since we cannot reconstruct the word for tuna in Proto-Germanic, we can only conclude, on that basis, that we do not know if the speakers of Proto-Germanic knew tuna fish or not: we cannot exclude that there was a word for tuna in Proto-Germanic that just happened to disappear in the prehistory of the attested language, and therefore we cannot conclude that these people did not know tuna fish.’

In addition to the possibility of reconstructing words and meaning, linguists have long considered that language is most effectively spread through migration (for overview, see Olander 2019:7-34), which was for a long time completely out of line with cultural-relativistic theories that dominated archaeology. When a large – and influential – group of people moves to a new place, they may persuade even locals to change languages. Though there are exceptions, this is a general rule. Moreover, when the immigrants are people of power and influence, language transfer to the local population takes place more effectively. Although the newcomers do not constitute a majority, there may still be grounds for an earlier local population to acquire the new language, as it offers benefits. This is shown by historical examples, where the indigenous peoples’ languages have been suppressed and sometimes even ceased to exist, even though there were few newcomers.

The scholar of African history and historical linguistics Christopher Ehret is especially known for his efforts to correlate linguistic reconstruction with the archeological record. He underlines the relative ease with which ethnicity and language shift in small societies. The influencing/intruding group may initially be much smaller than those of the pre-existing culture, but they may be influential in other ways. The new, combined ethnic group may then initiate an expansionist

process of ethnic and language shift. The material record of such shifts is visible only in the adoption of new prestige equipment or animals, such as for instance the horse (Ehret 1988:564-574). A similar view is expressed by the archaeologist David Anthony:

‘Language shift can be understood best as a social strategy through which individuals and groups compete for positions of prestige, power, and domestic security ... What is important, then, is not just dominance, but vertical social mobility and a linkage between language and access to positions of prestige and power ... A relatively small immigrant elite population can encourage widespread language shift among numerically dominant indigenes in a non-state or pre-state context if the elite employs a specific combination of encouragements and punishments. Ethnohistorical cases ... demonstrate that small elite groups have successfully imposed their languages in non-state situations’ (Anthony, quoted in Witzel 2001:27).

The fact that cultural phenomena besides languages can be transmitted in similar contexts – and together with the language – should hardly be surprising. Important myths and stories, especially religious ones, as well as rituals associated with them, are clear examples (Fig. 10).



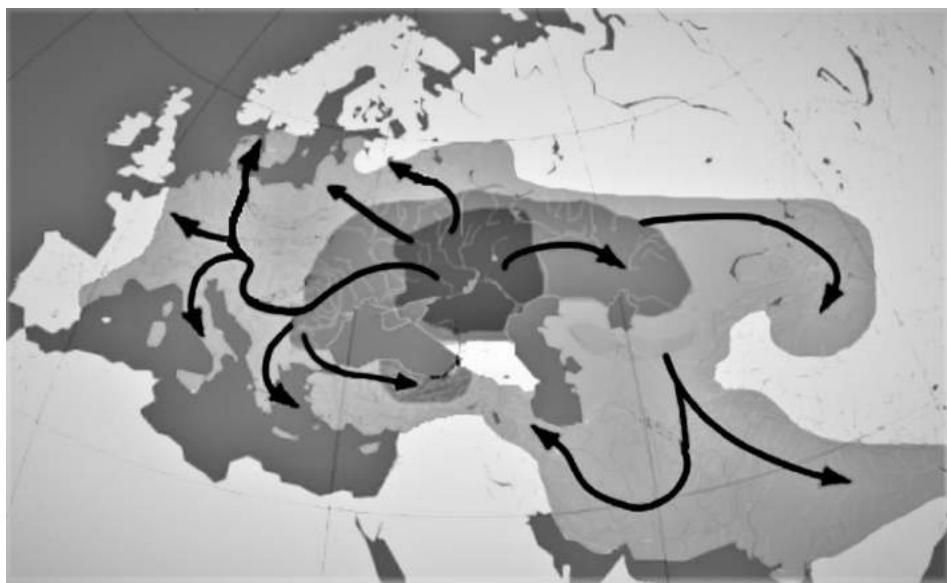
**Fig. 10. Frigga spinning the clouds. In Guerber (1909, facepage 42).**

Hence, linguistics is still of great importance, even in the era of genetics, in order to be able to provide a reasonable model for how different Indo-European cultural groups emanated from each other. A theory that does not match current models for the kinship of languages should therefore be viewed with great skepticism. Of course, it is not the same as the linguists having reached any consensus, but one of the primary tests of the validity of any model of Indo-European origin is whether a solution can account for the phylogeny of the Indo-European languages (Mallory 1997:103; 2013:146). At the same time, it is a fact that the lack of consensus among linguists can often be perceived as confusing, not least for archaeologists who lack real insight into linguistic debates:

‘In general, archaeologists have been given almost a free hand here because of the lack of agreement among linguists as to the precise shape of the Indo-European family tree and how it should be modeled in space and time. While Indo-Iranian may certainly be seen as a valid subgrouping and Balto-Slavic is certainly a concept embraced by the overwhelming majority of linguists, Graeco-Armenian or Italo-Celtic are areas of considerable debate. So also are some of the broader constructs such as Graeco-Indo-Iranian (with or without Armenian). The position of Tokharian with respect to any other language is similarly a major battleground between those who see it as an orphan, peripheral to the rest of Indo-European, and those who wish to associate it with any number of European (Greek to Germanic) branches. But by and large linguists are agreed on the relative position of one branch: Anatolian was the first language to separate, either within the framework of Proto-Indo-European or as the co-ordinate half of Indo-Hittite’ (Mallory 2013:146-147).

There are two main models for understanding the origin of Indo-European languages. The steppe model, favoured by most linguists, and, in the aftermath of the advances in aDNA, also by more and more archaeologists, suggests that Indo-European originated in pastoralist societies on the so-called Pontic-Caspian steppe, north of the Black and Caspian Seas, around 4500 BC. From there, these pastoralists, who had learned to breed horses and build wheeled vehicles, spread in different directions, both west and east (Anthony & Ringe 2015:199-219).





**Fig. 11. The Kurgan hypothesis.**



**Fig. 12. Prof. Dr. Marija Gimbutas, 1993. Photo: Monica Boirar.**

The Anatolian model was developed and made known by the archaeologist Colin Renfrew in the 1980s. He suggested a significant earlier stage and other geographical area. According to Renfrew (1987), Proto-Indo-European was spoken 3000 years earlier, in Anatolia, and spread into Europe with the initial diffusion of agriculture.

The Anatolian hypothesis, in changed form, still has the support of some researchers. However, 'there are decisive arguments against it, coming from the Indo-European languages themselves: the reconstruction of words for certain concepts in the Indo-European proto-language is incompatible with correlation of the spread of farming and the spread of Indo-European languages' (Olander 2019:16). In essence, the combined research results from genetics, archeology and linguistics, clearly show that the steppe hypothesis is correct. Below, we will therefore only describe the background and current state of this explanatory model.

The Kurgan – or steppe – hypothesis, is by far the most widely accepted theory today, and is moreover backed up by the latest years of evidence from aDNA (see Chapter 5). From the beginning, the theory, which was proposed by the archaeologist Marija Gimbutas (1921-1994) in 1956, rested on linguistic as well as archaeological evidence. The name of the theory originates from the typical burial mounds – kurgans – of the Eurasian steppes, and suggests an origin in the Pontic-Caspian steppe, areas in today's eastern Ukraine and southern Russia (Figs. 11-12). From there, it expanded in several waves during the 3<sup>rd</sup> millennium BC. Gimbutas linked the expansion to the domestication of the horse and a patrilinear and dominant conquest culture, that subjugated the European Neolithic farmers of what she called 'Old Europe'. According to Gimbutas' hypothesis, the invaders were sharply contrasted with the supposedly egalitarian, possibly matrilinear agricultural culture of Old Europe. She believed the expansions of the Kurgan culture to be a series of essentially hostile military incursions where a new warrior culture imposed itself on the peaceful and more egalitarian cultures of 'Old Europe', replacing it with a patriarchal warrior society (Gimbutas 1974, 1994).

Colin Renfrew is one of the archaeologists who has criticised both Dumézil's and Gimbutas' interpretations of Indo-European migrations. Unlike other critics, however, Renfrew did not dismiss the possibility that Indo-European languages had spread through migration. The scenario he wanted to see, however, deviated both from the traditional image and the one that has emerged today from the interpretation of

aDNA analysis. In his much-debated book *Archaeology and language* (1987) he argued that the Indo-European languages accompanied the process of Neolithisation (see above on Anatolian hypothesis) and that fundamental similarities in ideology and social structure, for example Dumézil's *idéologie tripartite*, are instead due to parallel developments. However, Renfrew has completely accepted the change caused by the DNA studies, and made it clear that the criticism he made earlier against Gimbutas proved to be incorrect (Renfrew, lecture 8 Nov. 2017).

A modified form of the steppe theory was proposed by J.P. Mallory, though he criticised and modified the scenario of military invasion. He also dated the migrations somewhat earlier than Gimbutas and he put less weight on their violent nature. This modified Kurgan hypothesis remains today the most widely accepted view of the Proto-Indo-European expansion, greatly enhanced by recent breakthroughs in aDNA-research (Mallory 1989; Anthony & Ringe 2015:199-219; Olander 2019). A quote from a recent publication by American linguist Allan R. Bomhard, in *Journal of Indo-European Studies* (2019), pretty much sums up the overall consensus among the majority of scholars that the results from various fields of research, together, clearly point to the steppe model being by far the most compelling, in terms of locating the homeland of proto-Indo-Europeans. He concludes that the steppe theory 'is supported not only by linguistic evidence, but also by a growing body of archeological and genetic evidence. The Indo-Europeans have been identified with several cultural complexes existing in that area between 4,500—3,500 BCE. The literature supporting such a homeland is both extensive and persuasive ... Consequently, other scenarios regarding the possible Indo-European homeland, such as Anatolia, have now been mostly abandoned' (Bomhard 2019:2).

A very important factor behind the spread of Indo-European peoples and culture according to the steppe model, is the domestication of the horse. From the very beginning, ideas about the early expansion of Indo-Europeans have been linked to the hypothesis that it was closely associated with the horse as a domestic animal. Although theories about the location and timing of this innovation have varied throughout research history, the connection between the horse and Indo-Europeans has remained strong. By taming the horse and using it as a draft animal and above all an equestrian, man procured a formidable tool for rapid movement and the ability to master larger territories. The archaeological record places the first horse domestication around 4000-3500 BC by the ancient Central Asian Botai culture. The horse first

seems to have been tamed for use as a slaughter animal – for food. Further evidence consists of archaeological traces of symbolic and ritual use of the horse. Early such findings consist of depictions of horses as a symbol of power in artifacts, and the appearance of horse bones in human graves (e.g. Anthony 2007; Outram, Stear, & Bendrey et al. 2009; Machugh, Larson & Orlando 2016). Horse burials are of special importance for the main theme of this book, as ritual deposits of horse bones – along with human remains in graves or deposited separately – are likely traces of the horse’s role as an important sacrificial animal. We will return to the evidence of the connection between the horse and the early Indo-Europeans in Chapter 5.

### **The concept of Aryan and its specific problems**

During the 19<sup>th</sup> and early 20<sup>th</sup> centuries, the term Aryan was commonly used to refer to the Proto-Indo-Europeans and their descendants. However, Aryan more properly applies only to Indo-Iranians, as only Indic and Iranian languages contain this word used by the Indo-Europeans to describe themselves as an ethnic group. Despite this, the term was also frequently used as a synonym for what we today call proto-Indo-Europeans, and continued to be used in that way in many contexts until the mid-20<sup>th</sup> century. The term could still have been used in this way, if not for the tragic abuse of this research, since the question of Indo-Europeans came to be intimately associated with Nazi racial ideology, which in turn had an influence on the events that led to Germany’s conquest war and the Holocaust.

Due to misinterpreted references to the *Rig Veda* by Western scholars during the 19<sup>th</sup> century, the term ‘Aryan’ was adopted as a racial category. Translating the sacred Indian texts of the *Rig Veda* in the 1840s, Friedrich Max Müller found evidence of an ancient invasion of India by a group he described as ‘the Arya’. Müller himself was very careful, especially in later works (e.g. 1888), to point out that he referred to Aryan as a linguistic, not a racial, category. Nonetheless, others used his invasion theory to propose their own visions. The term Aryan strongly affected the work of Arthur de Gobineau (1816-1882), known for helping to legitimise racism through the use of scientific racist theory and for developing the theory of the Aryan master race. His ideology of race was based on an idea of blonde northern Europeans, who he believed had migrated across the world, founding essentially all major

civilisations (de Gobineau 1853-55). By the early 20<sup>th</sup> century, the term Aryan had become widely used also in race-biological and racist context. It was then mainly used to describe a hypothesised white, blonde and blue-eyed master race – in Gobineau’s spirit, not as Müller had originally intended – and very far from its original meaning.

Like linguists and historians of religion, archaeologists also became interested in Indo-Europeans early on. The relatively new archeological science of the late 19<sup>th</sup> century tried to identify material remains of various peoples who spoke Indo-European languages with the aim of detecting geographical areas of origin and migration routes. Inevitably, the question thus became linked to the emerging interest in dividing humanity into races. The ancient Indo-Europeans were largely identified with the ancestors of the European peoples, who were considered most prominent. The people who spoke Germanic languages, in particular, were considered to have a special heritage from ancient times. The possible kinship between the ancient Indo-Europeans and modern-day peoples was therefore strongly emphasised by nationalist overtones. A prominent figure in this regard was the German archaeologist Gustaf Kossinna (1858-1931) who in several works (e.g. 1911) wanted to locate the home of the ancient Indo-Europeans in the northern part of Europe, especially parts of what was then Germany.

Through race biology, research on Indo-Europeans became tragically linked to ideology, politics and, by extension, genocide during the 20<sup>th</sup> century. The infamous concept of ‘Aryans’ – of the Sanskrit word Arya, became synonymous with Indo-Europeans. The word was used by linguists, religious historians and archaeologists alike, with the famous Australian archaeologist Gordon Childe (1892-1957) as an example. As mentioned, in 1926 he wrote a groundbreaking work on the origins of Indo-Europeans, entitled *The Aryans: A Study of Indo-European Origins*, in which he was one of the first to anticipate some of today’s interpretations. However, unlike Kossinna, Childe was not in favour of nationalist interpretations, but opposed to this approach (see Ch. 3).

The abuse of research on Indo-Europeans was not limited to a scholarly context. Gobineau’s thoughts were also adopted by another notorious ideologue of race theories, Houston Stewart Chamberlain. As a result, at a later stage they came to strongly influence the Nazi racial ideology, which saw ‘Aryan peoples’ as superior to all other putative racial groups. Because of the speculations that the Aryan homeland was located in northern Europe, the word developed a racialist connotation. Unsurprisingly, after the Second World War, the concept of Aryans had

fallen into total disrepute. Subsequently, Aryans as a general term for Indo-Europeans has been largely abandoned by scholars: the atrocities committed in the name of racial ideology led academics to generally avoid the term 'Aryan', even if it still occurs regularly when discussing its original meaning of the Vedic period in Ancient India. But even in that context, it has in some cases been replaced by 'Indo-Iranian' (Witzel 2001; Fortson 2011: 209; Anthony 2007:9-11). This scholarly distancing, however, did not only leave out the concept of Aryans. To a large extent, the whole Indo-European issue was so closely associated with the concept of Aryans that it was altogether avoided in scholarly contexts. All research on Indo-Europeans came to be associated with research abuse and its close relation to Nazism and racial ideology. As discussed in Chapter 2, it was only from the early 1980s on that it became possible to discuss the topic again, although many archaeologists remain reluctant to engage with Indo-European studies – with or without aDNA.

A clear example of how the criticism of a – real or projected – unholy alliance between research results and ideology has affected scholars, is the criticism of the French scholar George Dumézil, one of the most famous spokesmen for the close kinship of Indo-European religions. The foundation of Dumézil's theories was that the Indo-Europeans had developed a special social and cosmological ideology – *idéologie tripartite* (Dumézil 1940) – reflected, for example, in the Vedic caste system. A similar social structure and functional division could also be detected in the Norse evidence, he claimed, particularly in the Eddic poem *Rígsþula* (Dumézil 1958).

Dumézil's ambition was to create more comprehensive and coherent explanatory models, but he was often criticised for simplifying and only wanting to generate a more elegant interpretation. The more recent criticism presented by Bruce Lincoln, a pupil of Dumézil, is more serious, though it focuses rather on Dumézil's political views than on his scientific work. Criticism of Dumézil is mainly based on his ideological and political stance (e.g. Momigliano 1984; Lincoln 1991, 1999; Arvidsson 2006).

Part of the critique is that the idea of a common Indo-European heritage is an intellectual construction, spiced up with nationalist and racist overtones, that emerged in the 19<sup>th</sup> and early 20<sup>th</sup> century. The argumentation behind this view is convincing only as regards some ideological interpretation. The critique is hardly of such a character that Dumézil's interpretations could be dismissed. That would require the

premises of the interpretations to be completely wrong, which is hardly the case (cf. Kaliff & Sundqvist 2004:19-20). When it comes to the fundamental question of Indo-European connections, it adds little concrete evidence. The critique of Dumézil's interpretations voiced by Bruce Lincoln (1991, 1999), partly proceeds from the same starting point but also stresses certain weaknesses he recognises in Dumézil's arguments. Through his great influence as a scholar, Dumézil's views have thereby tinged contemporary and subsequent research, Lincoln (1999) claims. The most devastating criticism is, however, with regards to Dumézil's personal political views.

Bruce Lincoln, among others (e.g. Arnaldo Momigliano 1984:312-20), has accused Dumézil of fascism, and of being in favour of a traditional hierarchical order in Europe, which would then also be reflected in his scientific work. In the 1930s, Dumézil is thought to have supported the far-right, anti-democratic *Action française*. In this view, his Indo-European dualism and tripartite ideology was thought to be related to Italian and French fascist ideas (Lincoln 1999:121-37; see also Arvidsson 2006:2-3, 241-3). To what extent Dumézil's early position before the Second World War had a bearing on his scientific work is more questionable. Furthermore, this possible ideological luggage does not necessarily disprove the obvious Indo-European connections. Lincoln himself, in his most frequently cited work (1986), proceeds from parallels between myths and cosmology in different Indo-European contexts.

However, the criticism of Dumézil has also been questioned, and colleagues have also come to his defense, for instance the philosopher and historian of French intellectual life Didier Eribon (1992). Eribon and others see a great danger in colleagues dismissing research solely on the grounds that they believe the scholar who presented the results has unsympathetic personality traits. In essence, no human being is free from the influence of his own feelings and ideological convictions. What is thus sympathetic or unsympathetic lies in the eye of the beholder, and differs from person to person. Nor does it mean that personal ideology should influence a scientific work more than any other ideology. A quote by historian Dean A. Miller (2000), in which he also commented on Eribon, summarises well both the criticism of Dumézil and why this criticism must be viewed from an equally critical perspective:

‘The essential corruption spreading from the French scholar’s suspect political past, and specifically his “aryan” notions, is taken to be a counterpart to Richard Wagner’s original nineteenth-century inventions. There are several points to be noted in this essay. For one thing, Dumézil can be attached to this “aryan mythology” only if Eribon is either ignored or misread, for Dumézil never read “aryan” as equaling “Indo-European” and, in fact, was anti-German to the point that his supposed pro-fascist enthusiasms, his pro-Mussolini bent, for example, was evidently based on the Italian dictator’s anti-Nazi posture at one time ... These attacks will probably continue until the key question is answered, if it can be answered: how do political opinions and personal attitudes affect the final importance of schemes of thought, theories and constructed systems, especially when the generators of these systems are not themselves “political”, of the Left or Right? Eventually, this question must be answered. At its least malignant, these fads of “revisionism” anachronistically ignore the past, and specifically the complex play of ideas in the thought world of Europe and its embattled and fractured intelligentsias between the world wars. At its worst, the effort tries to remove the importance of whole theoretical constructions on the basis of some adduced or invented political flaw found in the past, often the remote past, of their creator. This derogation is not simple-minded “political correctness”. It is, again in my opinion, the blindest intellectual self-mutilation’ (Miller 2000:36).

In the former Eastern-bloc countries, particularly the Soviet Union, archaeological research on Indo-Europeans never went out of fashion. However, most researchers published in Russian, and were long neglected by researchers in the West. An important archaeologist was Victor Sarianidis (1929-2013) whose research results from sites found today in the former Soviet states of Kazakhstan, Uzbekistan and Tajikistan are again of great interest. He made important work on the so-called Sintashta culture in today’s southern Russia (3300-2500 BC), where the earliest traces of chariots have been documented, as well as the earliest evidence of the Great Indo-European horse sacrifice. We will return to this later.

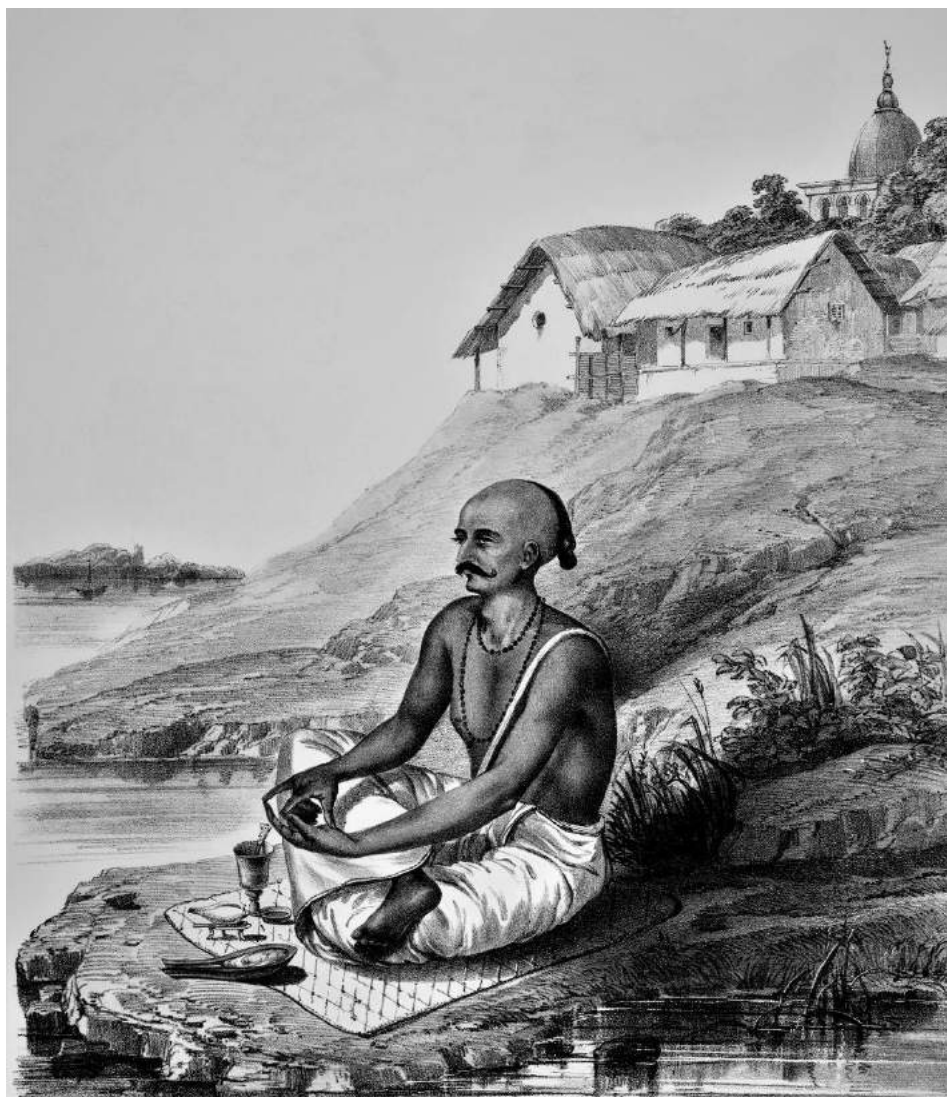


## Indian heritage, Gandhi and Ambedkar

While the Indo-European discourse has mainly focused on the European part with regards to use and abuse, at least in Europe, the Indo-part and its impact in India has received less attention, in particular since the living tradition constitutes caste and cosmology. As pointed out in Chapter 2, Hindu nationalism is gaining ground, and current aDNA may be abused for political purposes as Brahmins are genetically more closely related to each other than other groups (see Chapter 5). As we will discuss in Chapter 6, the *ashwamedha* ritual was also about creating and maintaining purity. Such concepts about purity and impurity have had long-lasting consequences, and while castes are usually described in social and cosmological terms, in practice many of these categorisations display similarities with vague definitions of race, at least seen from the position of the disadvantaged.

If the Mahabharata, the Ramayana and all other Vedic scriptures are part of Hindu legacy and heritage, they may also have a murky past and certainly have consequences for the caste system today. '[H]umans walk into the future facing backwards ... history provides a potent social weapon. People use history to posit themselves with respect to others: to entitle some individuals and to deny others rights to resources, citizenship, and social status ... People without history are unable to identify themselves for others. Conversely, people use history to identify their common interests and to enter into effective political coalitions' (Brumfiel 2003:207). Returning to Hindu nationalism and the post-colonial discourse, this Vedic and Brahmanical ideology favours one particular group and system; the Brahmins and their position in the caste structure (Fig. 13).

In India, Mahatma Gandhi is celebrated as a national hero, but prior to this liberation movement, he was a civil rights activist in South-Africa from 1893-1914. Today, there are huge anti-Gandhi campaigns across parts of Southern Africa (Kambon 2018), because he clearly fought for division and differences between people, which also included words and phrases that are today considered to be racist. This shows how deeply rooted the ideas surrounding the caste system have remained, even in a figure who is portrayed as a man of peace. In South Africa, he organised stretcher-bearing services for the British colonials who died or were wounded during their violent attacks on Africans (Desai & Vahed 2016).



**Fig. 13. The daily prayers of the Brahmins (1851) by Sophie Charlotte Belnos (1795–1865).**

Gandhi argued that, although all coloured people suffered discrimination, each group should fight its own battles albeit supporting each other. ‘They have little in common regarding the points of view from which each section can urge its claim,’ he said: ‘The Indian and the non-Indian sections of the coloured communities should and do remain apart, and have their separate organisations’ (Meer 1996:1027). Gandhi also emphasised the Indians’ Aryan heritage. In an

‘Open Letter’ to the Natal Parliament on 19 December 1893, he wrote: ‘I venture to point out that both the English and the Indians spring from a common stock, called the Indo-Aryan ... A general belief seems to prevail in the Colony that the Indians are a little better, if at all, than savages or the Natives of Africa. Even the children are taught to believe in that manner, with the result that the Indian is being dragged down to the position of the raw Kaffir ... The Indians were, and are, in no way inferior to their Anglo-Saxon brethren...’ (Desai & Vahed 2016:44).

In India, the main criticism of Gandhi was that he could not liberate himself from the ideology of caste and the glorious mythology that upheld these discriminating structures. Dr. B.R. Ambedkar – the revolutionary Untouchable – converted to Buddhism in 1956, which set in motion a movement that was to encompass three million people (Zelliot 1998:91). According to Ambedkar, historically the Brahmans have aimed to remain in control and maintain the caste hierarchy (Ambedkar 1948). By converting to Buddhism, the deprived castes attempted to rid themselves of the Untouchable status, as the caste system and untouchability are strictly speaking only Hindu phenomena. By converting to Christianity, Islam or Buddhism one ceases to be Untouchable (Dushkin 1998:167-168). Nevertheless, Untouchables have remained a separate category within the caste hierarchy (Fiske 1998). This belief remains surprisingly tenacious and widespread. Even in a predominantly Muslim country like Bangladesh, in villages with hardly any Brahmins, caste structures may persist just as the ideas around Untouchables are kept alive (Asaduzzaman 1990, 1996, 2001, Oestigaard 2005a, Chapter 6). It is therefore no wonder that Ambedkar was highly critical of this ideology:

‘[...] The religion of the Vedic Aryans was full of barbaric and obscene observances. Human sacrifice formed a part of their religion ... The worship of genitals or what is called Phallus worship was quite prevalent among the ancient Aryans. The cult of the phallus ... Another instance of obscenity which disfigured the religion of the Ancient Aryans is connected with the Ashvamedha Yajna or the horse sacrifice. A necessary part of the Ashvamedha was the introduction of the Sepas (penis) of the Medha (dead horse) into the Yoni (vagina) of the chief wife of the Yajamana (the sacrificer) ... there used to be a competition among the queens as to who was to receive this high honour of being served by the horse’ (Ambedkar 1987:294-295).

It is clear that this ideology established elite structures of dominance that claimed to have divine origins. As one of the most enduring social institutions in the world, the caste system remains one of the most visible consequences of this structure.

### **From a troublesome past to a future field of research**

Today, similarities between languages are acknowledged as simple facts, with obvious cultural-historical origins. In retrospect, it seems strange that the similarities between the Indo-European languages were ever regarded as merely coincidental. The fact that important words have for millennia been preserved in various Indo-European languages is well established. When it comes to cosmology, mythology and ritual practice, one can also identify clear patterns. This is an important starting point for our view of horse sacrifice in this book.

The main reasons why the Indo-European heritage was for so long considered taboo in scholarly circles is the unfortunate confusion between ideology and scholarship, and the abuse of research caused by this. This has been most evident in archaeology. Furthermore, mistrust has been so strong that it still lives on to some extent. Due to this fear of abuse, there was for a long time a far-reaching scepticism towards everything that had to do with Indo-Europeans, especially the notion that the spread of language and culture could be ascribed to the migration of populations. The development of aDNA as an analysis tool, and the 2015 breakthrough (Haak et al. 2015; Allentoft et al. 2015) have brought the question back to the archeological agenda, giving a fresh start to interdisciplinary research in the field.

Importantly, this means that research on the original geographical residence of the Proto-Europeans has again gained a central position. Much of what is said today corresponds with the results of serious research from more than 100 years ago. The issue of ‘The Homeland’, and where the research stands today, is summarised in a comprehensive and accurate way in an article by linguist Thomas Olander, in the collection volume *Tracing the Indoeuropeans. New evidence from archeology and historical linguistics* (Olsen, Olander & Kristiansen, eds. 2019). We choose here to quote the final passage of his concluding remarks, which summarise the most reasonable picture we can present today:

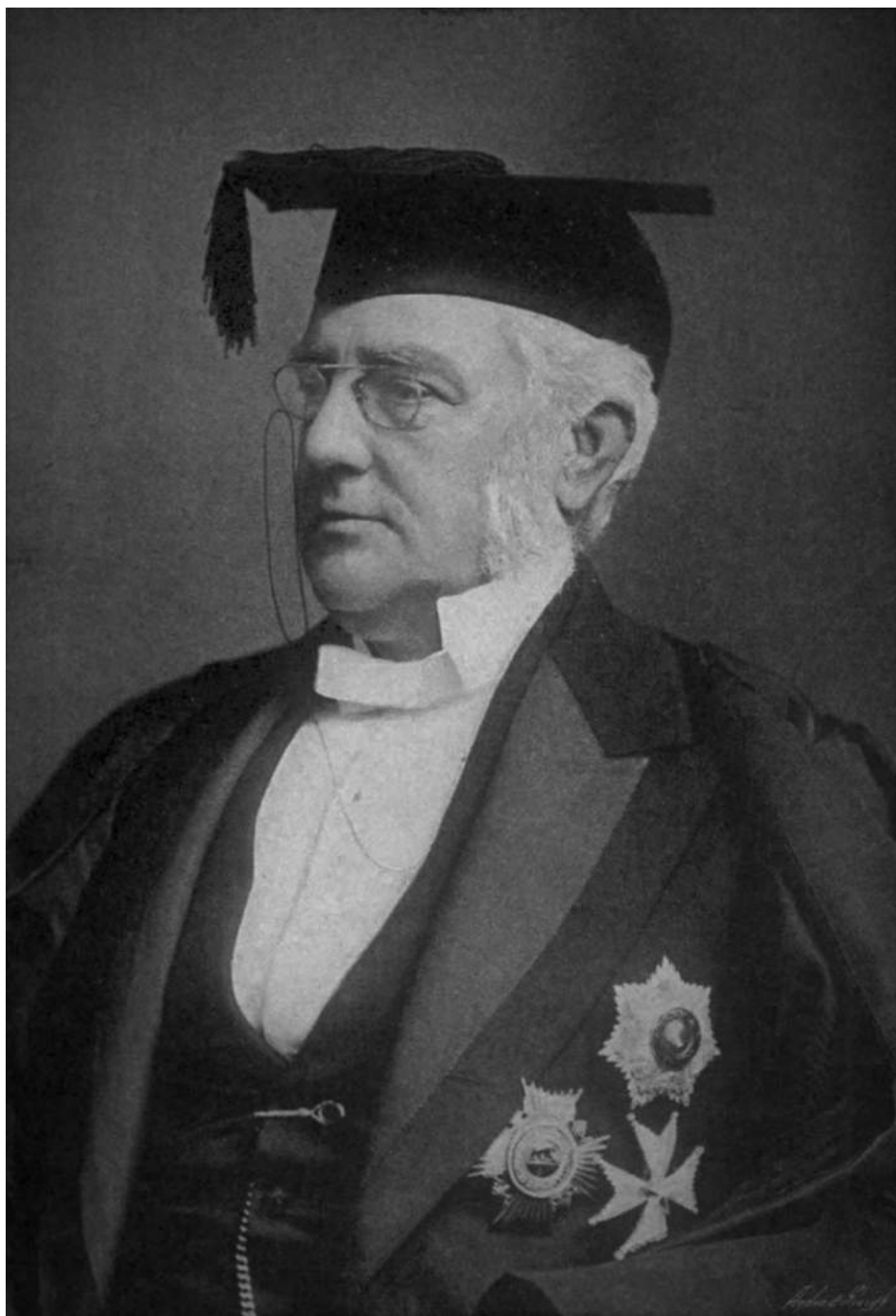


Fig. 14. Friedrich Max Müller (before 1895). Source: W. Forshaw, Cassell's universal portrait gallery.

‘Based on that we inspected some terms that may be dated archaeologically and arrived at a probable time frame for the Indo-European proto-language: around 4500-2500 BC. That time frame led us to the steppe hypothesis: the Indo-European proto language was spoken on the Ukrainian and south Russian steppes around 4000 BC; during the following millennia it spread south-westwards over Balkan to Anatolia, eastward towards China, west- and northwards into Europe and south-eastwards towards Iran and India. We may say that several facts speak in favour of the steppe hypothesis, and that, by now, not so much speaks against it: a homeland on the steppes square well with the ramification of the Indo-European vocabulary and with the bulk of the less direct evidence. In sum, the hunt for a place of origin of the English language brought us to the steppes in southern Russia and Ukraine’ (Olander 2019:27-28).

Although there is now a relatively large consensus regarding the overall picture of where the early Indo-Europeans existed and how they spread from there geographically, there are still many uncertainties and research gaps. This applies, for example, to the relationship between various early branches of the Indo-European languages – how these relate to each other and how they can be linked to archeology and genetics. However, many of these questions are of minor importance for the overall notion of the validity of the steppe theory. It can be stated that, overall, there is today a broadly coherent picture of the Caspian-Pontic steppe as the most likely site of the proto-Indo-European homeland.

To conclude the discussion about the abuse of research on Indo-Europeans, we think it is important to emphasise that early researchers were actually aware of the risks. This is especially true of one of the more influential researchers in the field, Friedrich Max Müller (Fig. 14). The fact that the contemporary community did not listen to these warnings is another matter. We therefore consider it appropriate to conclude this section, following the quote at the beginning of this chapter, with a longer quote by Müller (from 1888:120) and to repeat what he said:

‘I have declared again and again that if I say Aryas, I mean neither blood nor bones, nor hair nor skull; I mean simply those who speak an Aryan language. The same applies to Hindus, Greeks, Romans, Germans, Celts and Slaves. When I speak of them I commit myself to no anatomical

characteristics. The blue-eyed and fair-haired Scandinavians may have been conquerors or conquered, they may have adopted the language of their darker lords or their subjects, or vice versa. I assert nothing beyond their language when I call them Hindus, Greeks, Romans, Germans, Celts, and Slaves; and in that sense, and in that sense only, do I say that even the blackest Hindus represent an earlier stage of Aryan speech and thought than the fairest Scandinavians. This may seem strong language but in matters of such importance we cannot be too decided in our language. To me an ethnologist who speaks of Aryan race, Aryan blood, Aryan eyes and hair, is as great a sinner as a linguist who speaks of a dolichocephalic dictionary or a brachycephalic grammar. It is worse than a Babylonian confusion of tongues – it is downright theft.'





## 5. The spread of Indo-Europeans: The clues of genetics – a return to the classical

*‘A massive migration from the steppe brought Indo-European languages to Europe. 4,500 years ago, humans migrated from the Eurasian steppe to Central Europe and thus may have contributed to the spread of the Indo-European languages.’*

The Max Planck Institute, headline, March 12, 2015.

### Archaeology and ancient DNA

The question of the Indo-Europeans’ existence or non-existence as an archaeologically traceable cultural group is a question that has generated fierce debate in the history of archaeology as a science. The similarities between the languages themselves have not been questioned, but when it came to the archaeological traces of their bearers, the situation looked completely different for a long time. This went hand-in-hand with the general view of archaeology’s interpretative possibilities and choice of focus.

As mentioned several times, recent breakthroughs in aDNA research have resulted in a total reversal of the general view of and interest in Indo-Europeans in archaeology. Two independent studies (Haak et al. 2015; Allentoft et al. 2015), simultaneously presented by two of the most prominent research groups in the field of aDNA, were able to clearly identify in late 2014 and early 2015 the migration of significant groups of people from the Caspian-Pontic steppe to Europe at the beginning of the third millennium BC. For the first time in the history of archaeology, it was now possible to use DNA to clarify how the Corded Ware culture originated: through a rapid and fairly massive migration, from the steppe to Central and Northern Europe, beginning about 2950 BC.

DNA from the Corded Ware people shows very close relationships with the Yamnaya culture, and has genetic traits that were not present in the former population of Europe. The first generations of immigrants

differ most from the old population, which indicates a relatively large and rapid migration, with old and new groups living separately at first. Analysis of bones from graves shows that people from the first generations of the Corded Ware culture in eastern Germany share as much as 75% of their genetic heritage with the people of Yamnaya culture, 2600 km further east. Over time, genes are merged between the descendants of the immigrant nomad people and former residents, which in turn carried a mix of genes from immigrant farmers and hunter-gatherers. Today's Europeans carry genetic traces of all these immigration waves, with different distribution in the various geographical regions (Günther et al. 2015).

As a research field, aDNA is a very new branch of genetics. In 1984, Russ Higuchi and colleagues at the University of Berkeley reported that traces of DNA from a museum specimen of a quagga, an extinct subspecies of the steppe zebra could be extracted and sequenced 150 years after its death. Over the next two years, through surveys of Egyptian mummies, the Swedish researcher Svante Pääbo confirmed that the method could also be used on significantly older samples. The lengthy process of sequencing DNA long delayed development, but through so-called Polymerase Chain Reaction (PCR), a few copies of a particular DNA sequence could generate thousands or even millions of copies of a single DNA sequence. Further refinement of the methods has taken place in recent years, with new discoveries being made all the time. An important recent development was the ability to study the entire genome of the cell nucleus, so-called autosomal DNA. The cell nucleus contains most of the cell's genetic material, but DNA is also found in the mitochondria, with an important role for cell metabolism. Unlike in the cell nucleus, mitochondrial DNA (mtDNA) follows unchanged from mother to child. Similarly, sons also receive a copy of the father's DNA in the male Y chromosome. As the capacity to study ever-increasing amounts of data is rapidly developing, it has become possible to analyse the total genetic inheritance in the cell nucleus. In this way, an individual's entire inheritance can be analysed in detail. Individual inheritance lines are not as clearly traced here, but when it comes to populations it can say more (e.g. Reich 2018).

Many archaeologists were initially sceptical about the research on aDNA, if not outright critical. In addition to a simple lack of understanding of the scientific methods used, some of the criticism can be linked to the fact that questions about the relationship between physical kinship, cultural affiliation and ethnicity have become

extremely sensitive in our time, which in turn goes back to older research abuse and its consequences (see Chapter 4).

Many archaeologists are still sceptical, even if that means denying facts. This may partly be due to the postmodern tradition that has dominated the humanities for several decades, which emphasises a relative view of knowledge and so-called deconstruction of established ‘truths’. One notion that is prevalent is that aDNA research provides, if not an erroneous, then at least a too simplified image. Exactly where the simplification would lie is rarely specified and one easily gets the impression that this claim is based rather on general unease than on a deeper analysis of the facts. In fact, aDNA research shows hardly any simplified picture of ancient people’s migrations; on the contrary, it presents a different picture than many archaeologists previously thought possible (cf. Kristiansen et al. 2017 in dialogue with Heyd 2017).

Kristian Kristiansen’s (2014b:68) reply to the general fear of aDNA studies as expressed by some colleagues in archaeology was that ‘we can never let new, basic research be directed by fear of misuse’. This shows, in a nutshell, why old abuse of a research question should not stand in the way of serious new research. Hopefully, mistrust will increasingly fade away in favour of a healthy critical discussion. Putting the lid on a question and not touching it, just because it was misunderstood and abused, would be like refusing to open one’s eyes because one does not like the view. It would not only be blind to facts; it would be intellectually dishonest.

Before the aDNA breakthrough, there was a strong emphasis in archaeology on contacts during the early Bronze Age of Europe, but usually from very different perspectives. The interpretation of the mechanisms behind the contacts varied, but did not include extensive migration. Exchanges between elite groups were especially emphasised, and comparisons with the Greek Bronze Age (for example, the Iliad and the Odyssey as ideals for the Bronze Age elite) became very common. In fact, the contact routes emphasised were partly similar to those now documented by aDNA, but the interpretation model was very different. The focus lay on the establishment of chiefdoms in Early Scandinavian Bronze Age society, and how this process was influenced by long-distance contacts and exchange (e.g. Kristiansen 1998, 2004, 2007; Larsson 1997).

As mentioned in Chapter 2, Kristian Kristiansen was one of the few researchers who took an early interest in a renewed view of Indo-Europeans. He has also been a driving force behind some of the aDNA

analyses that revolutionised the Indo-European issue. Thus, Kristiansen's works provided a useful starting point for renewed comparative Indo-European studies also in Scandinavian archaeology, clarifying the picture of a Proto-Indo-European context as one probable basis for the emergence of the south Scandinavian Bronze Age culture (e.g. Kristiansen 1999, 2004, 2009; Kristiansen & Larsson 2005). He actually presented part of his interpretations already before the breakthrough in aDNA research. The increased mobility was believed to be connected with deforestation (evident in the history of vegetation, and the establishment of large continuous areas of pasture land), and new techniques of warfare and transport, including the development of two-wheeled horse-drawn chariots. An early part of this development was even associated with the origin of the Corded Ware culture, which was then believed to continue in different waves of contact.

Recent studies (Racimo et al. 2020) of human aDNA correlated with vegetation data show that the spread of Yamnaya-related people from the steppe occurred much faster, at least twice as fast, than the earlier migration wave from the Middle East, associated with neolithisation. In addition, the Yamnaya expansion had a stronger association with vegetational landscape changes than the Neolithic farmer expansion, and coincided with a reduction in forest and an increase in pasture and grasslands. The change of landscape to an environment reminiscent of the pastures on the steppes eastwards thus seems to have been an important factor.

A traditional image of the Indo-European expansion is the idea of an aggressive expansion in certain areas where Indo-European cultural elements were spread. It is once again a very relevant interpretation, although other mechanisms are also possible. The rapid course of events and the change in landscape through deforestation, as seen on Jutland for example, make aggressive and warlike scenarios likely, even if for instance famines resulting from the spread of plagues could have been other decisive factors. The transformation from a life as nomadic herdsmen on the steppes of Russia and Central Asia to a successful, expanding warrior people probably took place together with the bronze technology and the introduction of the two-wheeled war chariot. The domestication of the horse, occurring in approximately the same area as where the Yamnaya culture exists in its early stages, is another crucial factor.

Admittedly, there is no obvious link between genetics and language. At the same time, it would be naive to deny that the links

between physical kinship, language, cultural heritage and religious community have historically been significant factors for identity and cohesion between people. Language is intimately associated with how you become part of the family, group and society in which you are born. Language is also the main tool for transferring cultural identity. People do not easily change their language. No specific explanation is required as to why people who are closely related speak the same language; it is the opposite that requires a reasonable explanation (see Benjamin & Fortson 2004).

It can be stated very simply: there are no specific genes for cultural, linguistic or religious identity; however, there is usually a close link between physical kinship and the transfer of cultural, linguistic and religious traits between generations. It is therefore perfectly reasonable to assume that this relationship is more common than the opposite, since people usually grow up and get their cultural heritage from previous generations in the same family. Most commonly, therefore, people identify culturally with people they are related to, share language with, and live in close physical and social community with. This is hardly surprising or complicated.

For larger groups of people to move from their home areas, there need to be strong reasons for breaking up, but also opportunities to move and settle down elsewhere. This is hardly something one would do without clear reasons, especially not in an ancient society with significantly greater obstacles to travel than in our day. War, repression, epidemics or natural disasters are push-factors that can make it difficult for people to remain in the area where they were born and raised, making other geographical areas appear more attractive. At the same time, there can be many pull-factors that attract people to a new area: more land, better soils, important raw materials etc. It was easier for a moving, partially nomadic and horse-borne population than many other groups to travel over long distances, and they also had reason to expand. Mobility and seasonal movements were probably part of life, and undertaking long-distance travel was not as dramatic a step as for a more settled population (see Anthony & Ringe 2015).

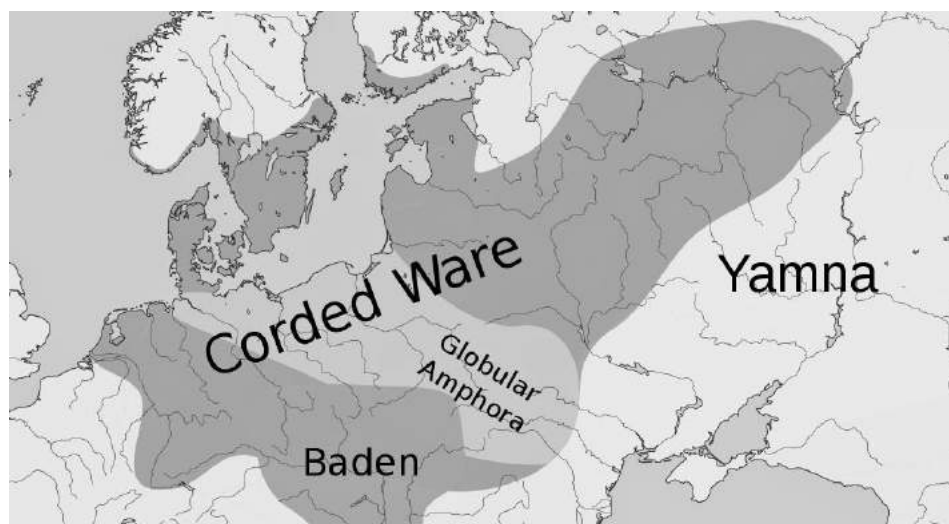
The expansion of the Yamnaya culture coincides with one of the great technological leaps in human cultural history, the emergence of metal technology, which then spread within the mobile steppe cultures north of the Black and Caspian Sea. There was easy access to copper deposits here, and during the oldest phase, substances other than tin were often used as alloys, substances contained in the copper ore as well

as those added. Arsenic was also used here. However, one of the most important innovations, which contributed most to the mobility, was the domestication of the horse, which was briefly mentioned in Chapter 4. At the time of the Yamnaya culture's expansion, the horse had already been tamed and was used as a riding and pulling animal. The ability to use horses as a riding animal fundamentally changed living conditions for livestock nomads. You could control much larger herds, and use more extensive pastures. An example presented by David W. Anthony (2007) clearly shows this: A man on a horse can, on average, control and care for a herd of about 500 sheep, while a man on foot, even with a trained herd, can take care of 200 animals. With the horse as an equestrian, there was the opportunity to support more people, and the population consequently increased. That in itself may have been a reason for trying to find new land in new geographical areas.

The exact mechanisms cannot yet be determined, but it is clear that relatively large groups of people from the steppes did move. Disease may have reduced the populations in parts of Central Europe, creating space for migration. It may also have been about conquest with warlike signs, which has tragic parallels throughout human history. The latter is also the explanation that most often dominated interpretations of the spread of Indo-Europeans during the 19<sup>th</sup> and early 20<sup>th</sup> centuries, and which later also had renowned advocates (e.g. Gimbutas 1956, 1974, 1994).

### **The horse, the plague and human migration**

The haplogroups R1b and R1a (on the male Y-chromosome), now the most common in Europe, are significant traces of the expansion of the Yamnaya culture from the steppes in the east. An autosomal component, present in modern Europeans but not present in the Neolithic population, was also detected. This genetic inheritance would have been introduced together with the paternal lineages R1b and R1a. Data so far from the R1a group indicate that its area of highest frequency in Europe is in the eastern part, around Poland and the Russian core. Ancient human remains in areas of Western Europe, like Ireland and Portugal, suggest that R1b instead was introduced in these places along with autosomal DNA from the Eastern European steppes (Cassidy et al. 2016; Martiniano et al. 2017).



**Fig. 15. Corded Ware culture.**



**Fig. 16. Ceramics.**  
**From Montelius 1917.**

The question is, what drove expansion so far west? Why didn't it stop in Eastern Central Europe? The Danube area was at that time a rich and prosperous area, probably attractive to newcomers from the east as well. In this area there was an advanced agricultural culture, the one that Marija Gimbutas (1974) called 'Old Europe'. It was possibly the need for bronze technology that pushed contacts further westward, which in turn may have given birth to further migration and expansion. On the Atlantic coast of the Iberian Peninsula, as well as on the British Isles, there are deposits of tin, which is crucial for producing high-quality bronze. Of course, several factors may have affected the event. A decisive factor was surely the partially nomadic way of life, with extensive livestock management. The early Indo-Europeans seem to have sought larger land areas for grazing (Figs. 15 & 16). On Jutland, the vegetation history shows that the arrival of the Corded Ware culture was followed by rapid deforestation and clearing, possibly with the intention of creating new space for good pasture (Andersen 1993; Kristiansen 2007).

The haplogroup R1a is completely dominant within the Corded Ware culture. The closely related haplogroup R1b, instead, formed the basis of the first continental European Bronze Age culture, the Únětice culture (c. 2400-1800 BC). The people who carried R1b appear to have had a slower journey west, across other geographical areas. This is probably a separate migration of a southern part of the Yamnaya culture that is not entirely identical to the one that spread R1a and created the Corded Ware culture. Around 2800 BC, when the R1a people had already reached Eastern Europe and Scandinavia, the R1b had 'only' expanded to the area that now forms Hungary. They reached Germany and the western parts of Europe around 2500 BC, but by then these people's inheritance had then been mixed with that of other local people. This is not surprising after spending more than a millennium around the lower Danube and in the Hungarian plain. However, with regard to the male Y chromosome lineages, these have been largely retained, and R1b continues to dominate despite merging with other peoples, visible in the female mitochondrial lineages. This may indicate a strong patriarchal structure, at least within the elite, though one cannot jump to conclusions. Marija Gimbutas (e.g. 1974, 1994) may also have been right in this regard, when she said that the Indo-Europeans were a people characterised by a patriarchal culture.

In any event, we can see that the male lineages survive – so much so that they dominate much of Europe to this day – and that the Indo-



European language is likely to follow the bearers of these. The results of a DNA study show that as many as 64 percent of men in Europe today, on their straight ancestral line, are descended from only three men who lived during the initial phase of the European Bronze Age. The research group concludes that a few influential men managed to have such a large, long-term successful offspring that it is still reflected in the genes of a majority of men in Europe today (Batini, Hallast & Zadik et al. 2015).

The overall impact of new genes from the east in Central Europe seems to be stronger over time, and not only through straight male and female lines, but also in the form of autosomal DNA. Analyses from the Bell Beaker culture in Germany show that those belonging to the Y-chromosome line R1b also generally have about 50% autosomal DNA that is consistent with the Yamnaya culture. It is a high proportion, which indicates a great influence, not just single male ancestors. Over time, the influx of people increases further. DNA samples taken from the Únětice culture show even greater conformity with the Yamnaya culture for autosomal DNA, totalling 60-65%. In addition, along with the male Y chromosomes, there are also lines of mitochondrial DNA of the same origin in Yamnaya, which shows that women also immigrated (Brotherton & Haak et al. 2013). This indicates that whole families came from the east. From having started with a kind of male front troops, now much larger groups come. This is a decisive influence, which greatly contributes to the development of the European Bronze Age culture.

The genetic evidence also fits well with the archaeological picture of the introduction of the Bronze Age as a time of great geographical mobility (overview in Kristiansen & Larsson 2005), but also of changes in, for example, settlement and farming patterns. Clear evidence comes from, for example, a study conducted in today's western Poland (Polkutta 2013), based on isotope analyses of human remains from about 50 graves from the period about 2200-1600 BC. The results gave clear indications of the large geographical mobility, with immigration from areas that currently make up Germany, the Czech Republic, Hungary and even Scandinavia. They also show major changes in agriculture around 2000 BC. One of the most discussed examples regarding mobility during the Bronze Age is perhaps the 16-18-year-old woman from Egtved in Jutland – though a later example – buried around 1370 BC. Strontium analyses show that she probably came from southern Germany and moved to Denmark, about 800 km north. She stayed there for about nine months, after which she returned to southern Germany. Finally, she returned to Denmark and Egtved shortly before her death.

She thus made two trips between southern Germany and Denmark during the last two years of her life (Frei, Mannering & Kristiansen et al. 2015, but also see Bergerbrant 2019).

Different Indo-European languages clearly show that the people in the Yamnaya culture knew the wheel and that they had horses as domestic animals, which is confirmed by the archaeological finds. Domestication and use of the horse is probably a decisive factor behind the Indo-European expansion. In addition to the advantages of the herding of the animals, you travel faster on horseback. The carriage in turn facilitates the transport of goods as well as implements and household goods. Last but not least, man and horse together create a military tool that has often been decisive for world history up to the 20<sup>th</sup> century. Not surprisingly, there are also great similarities when it comes to the word 'horse' in various Indo-European languages: *Equus* in Latin, *ech* in the old Irish, Celtic language, *aihwa* in Gothic, *ásùwa* in the equally extinct Hittite, *ásvaḥ* in Sanskrit, *aspa* in Old Persian and in Lithuanian, the very similar *ašva*. The reconstructed proto-Indo-European word for horse is *\*ékwos*. (see, e.g., Pokorny 1959; Watkins 2000).

It has long been suspected that the horse was domesticated precisely in the areas where the Yamnaya culture originated. The so-called Przewalski's horse is probably about the closest we can get to the early horses that man tamed. This ancient horse breed is named after a Russian officer and research traveller who described it in 1879. In the wild, these horses are aggressive and combative, unlike other horse breeds who have a stronger flight instinct. The wild population became extinct in the 1960s, but today there are free-living herds that were bred from animals that grew up in captivity.

The archaeological culture where the first domesticated horse can be located is the so-called Botai Culture, circa 3600-3100 BC, in the area north of the Caspian Sea. The horse was kept for its meat initially, and domestication allowed the animals to be kept in captivity so that populations had access to meat in winter. Another reason to tame horses was probably that they could be used to attract wild horses. The vast majority of the bones found on the Botai settlements are made up of horses, up to 90%. The large amount of bones shows that they were slaughtered at the settlements and in the field. Traces of ammonia in the ground show that horses were kept at the place of residence. Traces of horse milk have also been detected in clay vessels, which shows that the mares were milked, which would be impossible with wild horses.

Among the bones, spinal vertebrae with injuries likely to occur during riding were also found, as well as traces of bridles on teeth. The latter is an important evidence that the horse was used as either equestrian or draft animal (Anthony 2007).

DNA studies have shown that today's domestic horses on the maternal lines – mitochondrial DNA – come from a wide variety of ancestors. Thus, it seems that wild mares were crossed with domestic horses in many different contexts. When it comes to the lineage of the stallions – the Y chromosome – things are different (Lindgren et al. 2004; Warmuth, et al. 2012). The variation is much more limited. Taming wild stallions is quite different to taming mares. It is considered almost impossible, as the stallion is both aggressive and independent and does not have the ability to follow a herd in the way that the mares usually do. A recent study also shows that the horses domesticated at Botai are not the main source of the domesticated horses that have survived until today. Nor do the people of Botai appear to have been closely related to the people of the Yamnaya culture. Rather, it seems that the domestication of horses occurred more or less independently on two or more occasions, in different contexts, but probably in roughly the same geographical area on the Eurasian steppe (de Barros Damgaard et al. 2018).

According to David W. Anthony (2007), the use of the horse was in all events a decisive factor behind the Indo-European expansion in both the short and the long term, first as a riding animal and then in combination with the carriage. Over time, different types of carts were developed for all sorts of purposes. They were of great importance for heavy and bulky transport, but also gained military importance over time, as a sophisticated and fearful tool of war, designed for the lowest possible weight but still stable and durable. The oldest locations for two-wheeled carriages in the Middle East date from around 1800 BC. There are older finds in Central Asia, with the oldest known to date found in Sintashta and dating back to about 2100 BC.

Another explanation for the Indo-Europeans' ability to rapidly expand and dominate large parts of the old world is the plague and the ravages it wrought. Not only new languages, religious and social customs and technological innovations followed in the footsteps of immigration from the East: we can also see the first traces of one of the great plagues in world history, namely the plague *Yersinia pestis*. This may be one of the more significant discoveries in aDNA research in terms of explanations behind the expansion of the Yamnaya culture,

namely the oldest evidence of the plague bacterium, which was to be the cause of so many disasters and such great suffering in the history of humanity. In recent years, this hypothesis has attracted growing attention, and the evidence for it has also increased significantly.

The plague caused by *Yersinia Pestis* takes three main forms: pneumonic, septicaemic, and bubonic, all three responsible for high-mortality epidemics throughout human history, dramatically influencing demographics. During 'The Black Death' in the mid-1300s AD and during the 'Plague of Justinian' 800 years earlier, at least a third of the European population died. In the modern era in the mid-1800s, the 'Third Plague' was a bubonic-plague pandemic that started in China and spread to all continents (e.g. Alchon 2003).

aDNA shows that the plague bacterium probably existed in parts of the Eurasian population for 3000 years, before the first historically recorded outbreak of disease. Through DNA analysis it has been possible to identify a number of changes in the bacterial inheritance, which have subsequently made it increasingly deadly. Evidence of the bacteria was found, for example, in the Afanasievo culture – the very eastern group originating from Yamnaya – dating to 2909-2677 BC, as well as in Sintashta culture (2280-2047 BC). Early evidence is also found far west, on the shores of the Baltic Sea in Estonia, where bacteria can be traced to the Corded Ware culture, through a grave dated to 2575-2349 BC. Another example comes from the Únětice culture, dated to 2135-1923 BC. All the finds have a common denominator in the heritage of the Yamnaya culture, which shows in a tangible way how the Indo-European migrations were probably an early contributing cause of the spread of the plague bacteria (Rasmussen et al. 2015).

Although the earliest evidence of *Yersinia pestis* infections in humans has been identified in Late Neolithic/early Bronze Age Eurasia, these strains lack key genetic components, making their mode of transmission and disease presentation in humans unclear. However, a study from 2018 (Spyrou, Tukhbatova & Wang et al. 2018), of the Late Bronze Age period (~1800 BC) in the Samara region of modern-day Russia show clear distinctions between new strains and the Neolithic lineage. The study suggests that the full ability for flea-mediated transmission causing bubonic plague evolved more than 1000 years earlier than previously suggested, and that some of the *Yersinia pestis* lineages established during the Bronze Age, persist to the present day. As the central steppe region seems to have played a significant role as a migration corridor, it likely facilitated the spread of human-associated

pathogens across Eurasia. So the plague and Indo-European expansion moved hand in hand.

It is very likely that the plague was a major contributor to the very rapid expansion and dominance of the Indo-Europeans. Although the evidence is still relatively scarce, there is a strong indication. A groundbreaking 2018 aDNA study (Olalde et al. 2018) based on 400 analysed samples of the population of the British Isles showed that during the last half of the third millennium BC, genetics changed radically and relatively suddenly in up to 90% of the population. What can be observed is in practice an exchange of population, a genetic shift that has subsequently had a lasting impact throughout history, and which is still evident today in the genetic profile of people in the British Isles.

There is no evidence of any violent extinction of people on a large scale, which is why a deadly epidemic disease appears to be a probable cause. The large decline in the number of locals coincides with the time when the Yamnaya culture's descendants were beginning to enter the British Isles on a larger scale. It is likely that they brought the plague to the British Isles, though it remains to be proven that this was the reason for the major demographic change. If so, there is strong reason to believe that the immigrants from the East had over time developed relative immunity to the worst form of the disease. That did not apply to the peasant population they met in the West.

This may have led the newly arrived Indo-Europeans to fill the demographic gap left by the victims of the plague. It is then a demographic takeover, without actual violence (except that they first carried the infection). This may have greatly contributed to the rapid expansion of Indo-Europeans in different geographical areas and explain why they appear to have rapidly gained a dominant position. It could then be compared to another, well-known historical example: the arrival of Europeans on the American continent. The arrival of Europeans also brought many different technologies and lifestyles with them, but along with that also the spread of disease. Native peoples of America had no immunity to the diseases that Europeans brought with them, and diseases such as smallpox, influenza, measles, chicken pox – but of course also the plague – proved deadly to American Indians (Ramenofsky 2003:241-257; Waldman 2009:206). Between 75-90% of the indigenous population may have died from these diseases. This is a scenario that is in line with the study of the Bell Beaker Britain.

## **The Sintashta and Andronovo cultures – origin of the Indo-Iranians**

The Indo-European migrations clearly went in several directions. We have seen how people originating from the Yamnaya culture on the steppe shaped the Corded Ware culture in Europe and played a significant role in the emergence of Bronze-Age societies. Similarly, people with Yamnaya culture heritage moved from the southeast to Iran, northern India and areas that are currently located in Afghanistan and Pakistan. This migration can also be traced through DNA, although the details of the course of events are still partially uncertain.

The archaeological culture that has come to be associated primarily with the early Indo-Iranian peoples and their spread, before one branch came to India and another to Iran, is the so-called Andronovo culture. It is a collective designation for a number of similar local Bronze-Age cultures that flourished around 2000-900 BC in western Siberia, parts of Central Asia and the Eurasian steppe. The forerunner of Andronovo culture – called Sintashta culture (2100-1800 BC) – is one of the most exciting links between East and West. This culture is also crucial for the main theme of this book – the ritual significance of the horse in Indo-European cultures. Some of the earliest documented evidence derive from here.

A particularly interesting aspect of the Sintashta culture is that the genetic heritage can apparently not be traced directly from the Yamnaya culture, but that the ancestors were first part of the Corded Ware culture in Europe – descendants of Yamnaya themselves. DNA analyses have shown clear similarities in genetic heritage, between the Corded Ware culture and the Sintashta culture. In both cases, there was a higher proportion of heritage from the early peasants in Central Europe compared to the population of the Yamnaya culture. Results from one of the aDNA studies published in 2015 (Allentoft et al. 2015) suggest that the Sintashta culture emerged as a result of an eastward migration of peoples from the Corded Ware culture. This means that part of the eastern movement of the Yamnaya's descendants first took a trip to the west to Eastern and Central Europe, received new genetic additions there from the former peasant population, and only then migrated east. Indo-European migrations, therefore, appear to have taken place in a somewhat complicated way, which highlights the extensive contacts between East and West, even over long distances. This shows that the

people of the Sintashta culture are also carriers of a genetic heritage from Europe.

The development of the Sintashta culture from its local predecessors, Abashevo and Poltavka cultures, through an influx of cultural impulses from the West, was presented as a hypothesis even before refined aDNA analyses were available. The assumption was then made on purely archaeological grounds. In her book *The Prehistory of the Silk route* (2008), Elena Kuzmina writes (referring to the site Novy Kumak) that ‘we advanced a bold hypothesis of a western influx of people that led to the development ... In conclusion, our opinion was that the founders of the Novy Kumak-type sites were Indo-Iranians, which confirmed the hypothesis we had developed earlier’ (Kuzmina 2008:40-41). In addition to the value of this conclusion in itself, it clearly shows how aDNA and archaeology complement and confirm each other, instead of speaking completely different languages, as sceptics sometimes argue.

The Sintashta culture is named after the archaeological site with the same name – Sintashta – in Chelyabinsk Oblast, in the steppe just east of the Ural Mountains in Russia, just north of the Kazakh border. It dates to the Bronze Age, c. 2800–1600 BC, with the majority of dating’s in the span 2100–1800 BC, consistent with other settlements and cemeteries of the Sintashta culture. The site has been characterised as a fortified settlement but also a metallurgical centre, with evidence of copper and bronze metallurgy in every house excavated at the site (Genning 1979). The Bronze Age culture in this part of the steppe, mainly the area between Magnitogorsk and Orensborg, where fortified urban-like settlements of this type are located, is often referred to as ‘the country of towns’, a term invented by the principal investigator of this area, Gennady Zdanovich (Zdanovich & Zdanovich 2002).

The settlements are located 40-70 km apart, in an area that probably held small ancient copper mines, not far from the largest mines of the Urals (Kuzmina 2008:43). This should have been an important reason for the area’s prosperity, organisation and, of course, its need for defences. The importance of metal production is also shown by evidence of copper and bronze metallurgy in every house excavated at Sintashta, an unprecedented intensity of metallurgical production for the steppe.



**Fig. 17. The archaeological site of Arkaim, Russia.**

The Sintashta settlement is arranged within a circular, timber-reinforced earthen wall with gate towers, 140 m in diameter. Together with similar settlements, such as Arkaim (Figs. 17 & 18), also in Russia, and Petrovka, in Kazakhstan (the terms Sintashta-Arkaim culture or Sintashta-Petrovka culture are also frequently used), it is of unprecedented scale for the steppe region during this period. Cemeteries connected to the Sintashta settlement are of special interest, with regards to the ritual importance of the horse. The largest, known as Sintashta Mogila, consists of 40 documented burials, and a minor cemetery with another 10 graves. Some of the graves contain remains of the oldest-known chariots in the world, and others include clear traces of horse sacrifices, with up to eight animals in a single grave. It has been noted that the funerary sacrifices have strong similarities to rituals described in the *Rig Veda* (Anthony 2007:371-375; Kuzmina 2008:3). The mortuary practices were elaborate and suggest that new systems of prestige, social ranking and beliefs had been established, based on communal rites, but with symbolic emphasis on certain individuals. Animal sacrifices, mostly of cattle and horses, formed an essential part of these burial rites, and many of them seem to have been associated with specific individuals (Koryakova 1997).





**Fig. 18. Arkaim from the air.**

‘The central role of horse in Sintashta funeral sacrifices was unprecedented in the steppes. Horse bone had appeared in EBA and earlier MBA graves but not in great numbers, and not as frequent as those of sheep or cattle. The animal bones from the Sintashta and Arkaim settlement refuse middens were 60% cattle, 26% sheep-goat, and 13% horse. Although beef supplied the preponderance of the meat diet, the funeral sacrifices in the cemeteries contained just 23% cattle, 37% sheep-goat, and 39% horse. Horses were sacrificed more than any other animal, and horse bones were three times more frequent in funeral sacrifices than in settlement middens’ (Anthony 2007:406).

Traditionally, most scholars have associated the invention of chariots with Near Eastern societies, something that has been disproved in recent decades. The oldest evidence ever found, in the graves of Sintashta, has shown that wheels with spokes and high-speed chariots were invented in this culture. Chariots were invented earliest in the steppes, where they were used in warfare. They were introduced to the Near East through Central Asia, with steppe horses and studded disk cheekpieces. This innovation took place around 2100 BC, and represents an important technological leap for humanity. Two-wheeled carts are

known from the same area a thousand years before, but they had massive wheels then, and were probably drawn mainly by oxen. The spoked wheel, together with the use of the horse as a draft animal, increased the speed of transport, and was crucial for the development of the light, fast wagons that eventually came to revolutionise warfare. Although invented in the Sintashta culture, the chariot was spread by the subsequent and far more extensive Andronovo culture.

Both metallurgy and the functional and ritual importance of the horse can be clearly linked to the spread of the early Indo-Europeans. However, the planning of the settlements in themselves can also reveal profound cosmological beliefs typical of Indo-European Bronze-Age societies. At Sintashta, two rows of walls form a circle 140 m in diameter, partitioned into compartments by radial walls. Together with the somewhat larger settlement at Arkaim, the two are representative of the style of settlement plans that have double concentric circles of walls divided by radial streets (Kuzmina 2008:42). All this indicates a well-organised society as well as a common ideology and religious conceptions behind the construction of these settlements.

A reasonable interpretation of the concentric circle pattern in the settlement plan is that it represents the sun, more precisely a sun-wheel. This is also how concentric and spiral patterns in Bronze-Age iconography are generally interpreted. However, it has also been noticed that the archaeological traces of materials and burial practices of the Sintashta-Arkaim culture find specific parallels with activities related in the hymns of *Rig Veda* and *Avesta* (Anthony 2007:408-411) – the holy scripture of the ancient Persians. Accordingly, the basis of Zoroastrianism could also be associated with this cultural context.

‘In the opinion of many specialists, Arkaim and similar sites could have been established by the earliest Indo-Iranians long before their separation and their migrations along the Eurasian steppe corridor and the southward movement into Persia and India. Some scholars draw parallels between circular fortified settlements of the type of Arkaim and the city of the legendary King Yima, reproducing the model of the universe described in the *Avesta*’ (Shnirelman 1998:35).

Elements of the Sintashta culture gradually spread, leading to the development of Andronovo culture, which in itself is a collective name for culturally related groups in a large geographical area. Most scholars today associate the Andronovo culture with people who spoke the origin

of the Indo-native languages. The name Andronovo refers to a village of this name, where the Russian archaeologist Arkadi Tugarinov discovered the first remains of the culture in 1914. The Andronovo culture covers a large geographical area and finds were made in several different countries besides Russia, including Turkmenistan, Tajikistan and Kyrgyzstan. Already in 2009, a DNA analysis of 26 ancient burials was published in the Krasnoyarsk region of Russia. It shows that the people of Andronovo culture, at least in that location, were almost entirely carriers of a variant of the haplogroup R1a on the male Y chromosome (Keyser et al. 2009; Allentoft et al. 2015). In the southern part of the Ural area, the area partly overlaps with the somewhat older Afanasievo culture (c. 3300-2500 BC), which are contemporary with and – despite their eastern location – have very close links to the Yamnaya culture (Mallory 1989, Mallory & Adams 1997; Baumer 2012:97; cf. Allentoft et al. 2015).

Genetical studies have found that the Afanasievo were genetically indistinguishable from the Yamnaya culture, and the results indicate that the expansion of the ancestors of the Afanasievo people into the Altai occurred through large-scale migrations without admixture with local populations. The Afanasievo people were also found to be closely related to the Poltavka culture, the predecessor of the Sintashta culture, which flourished on the Volga-Ural steppe and the forest steppe in 2700—2100 BC. The Poltavka culture emerged as an eastern outgrowth of the Yamnaya culture, neighbouring the Catacomb culture, another Yamnaya successor. The Andronovo culture, however, is genetically closely related to the Sintashta peoples but clearly distinct from both Yamnaya and Afanasievo, and therefore represents a geographical extension of the Sintashta gene pool (Allentoft et al. 2015; Mathieson et al. 2015; Mathieson et al. 2018).

Another genetic study of the Afanasievo culture found that the large majority of Y-DNA extracted belonged to different subclads of R1a, clear evidence that the culture emerged as a result of migration from the Pontic-Caspian steppe (Narasimhan et al. 2019). Not only because of genetics, but also before these analyses, the Afanasevans were believed to be Indo-European-speakers. Numerous traits attributed to the early Indo-Europeans, like metal use, horses and wheeled vehicles testify to this. The early and far-reaching spread of the Indo-Europeans, their language, rituals and technologies, in the Eurasian steppes, could be compared to the interconnections during other periods in the same area, and analogous to the later-documented Silk Road.

The Andronovo culture was largely mobile and livestock-based, but there were villages where agriculture also played an important role for the economy. Such settlements are found mainly in the Central Asian parts of the culture. Their livestock included cattle, horses, sheep, goats and camels. The horse was used for both riding and traction. The Andronovo culture is also associated with the development of bronze metallurgy, as testified by a large number of bronze objects. The dead were buried in chambers of stone or timber, covered by mounds commonly referred to as Kurgans. These graves gave rise to the name Kurgan culture, which has long been associated with the Indo-Europeans and was made known by Marija Gimbutas (1956).

The people of the Andronovo culture gradually interacted with the inhabitants of the so-called Oxus civilisation, often referred to as the Bactria-Margiana Archaeological Complex (usually abbreviated BMAC). It was a resident, agricultural culture in the oases of Central Asia, south of the Andronovo culture, in areas that are presently located in northern Afghanistan, eastern Turkmenistan, southern Uzbekistan and western Tajikistan. Much of Sintashta metal production was exported to the settlements of the BMAC, and this trade for the first time connected the people of the steppe with the urban civilisations to the south, which provided an almost bottomless market for metals. The same trade routes became the vehicle through which horses and chariots entered these areas. When horse-drawn chariots appeared in the Near East, they quickly came to dominate the battlefields, reaching their full potential as war machines, serving as swiftly moving platforms for archers (Anthony 2007:391-397).

The settlements are centred on the upper course of the Amu Daryas (Oxus River). It was a civilisation that erected large and often monumental buildings, in the form of palaces, defences and, notably, temple structures. In addition to horse sacrifices, another typical feature of the Indo-European ritual tradition was present, namely fire rituals and fire altars and libation sacrifices, as well as traces of ingredients – ephedra – for the sacred drink known in Vedic as *Soma* and in Old Persian (Avesta) *Haoma*. Here we can see elements from the cult that shaped Vedic religion in India and forms the background to the ancient Persian religion, which eventually developed into Zoroastrianism (e.g. Sarianidi 1990, 2005: cf. Dubova 2019).

The most famous site is Gonur Depe, consisting of a large early Bronze-Age settlement and probably a major settlement within the BMAC, dated from 2400-1600 BC. The site was discovered by the

Russian-Greek archaeologist Viktor I Sarianidi (1929-2013), the scholar who uncovered the culture of Margiana. The city had a central palace protected by fortified walls, with the earliest known Fire temple discovered outside. There were also temples and two large adjacent pools, speculatively interpreted as an indication that the population of Gonur may have had a cult including not only worship of fire but also water. The latter, together with fire altars, is an interesting feature pointing to important common Indo-European conceptions, which we return to in chapters 9-11, regarding Scandinavian counterparts. Beside Gonur Depe, one of the most striking sites is a place called Togolok 21, located only 10–15 km to the south. Sarianidi writes:

‘If Togolok 21 was a temple connected with cultic libations and a fire cult, we can assume a connection with the milieu from which Zoroastrianism might have sprung ... In Zoroastrianism, we see continuations not only of the fire cult but of the haoma [a divine plant] cult. The evidence from Togolok 21 indicates that during his reform of old Indo-Iranian religious practices, Zoroaster could not ignore the traditions connected with cultic libation’ (Sarianidi 1990:165).

The primary BMAC population largely derived from earlier local Copper-Age peoples who were, in turn, closely related to people from the Iranian plateau and had little of the steppe ancestry that is ubiquitous in South Asia today. The main population of the BMAC carried no ancestry from steppe pastoralists and did not contribute substantially to later South Asians. However, steppe pastoralist ancestry appeared in outlier individuals at BMAC sites by the turn of the second millennium BC around the same time as it appeared on the southern steppe (Narasimhan et al. 2019).

The migration from Andronovo to BMAC was filtered through a membrane of agricultural, resident civilisation, which in turn absorbed cultural traits of the steppe people. The mixed culture that first emerged in Central Asia is called the Tazabagyab culture, and within it has been found, among other things, clear traces of firecrackers and burnt offerings, typical elements of the great Indo-European ritual tradition, especially Vedic and Ancient Roman. The Tazabagyab culture transitions into the Ancient Renaissance via another archaeological finds group called the Khwarezm culture, named after one of the great oases in the Amu-Darja River delta. It became the centre of several great

kingdoms, which eventually formed the basis of the Persian Empire (Mallory & Adams 1997:73; West 2010:402-405).

When Indo-European peoples penetrated north-west India, the earlier high cultures in the area, Harappā and Mohenjo-daro, were in decline, probably for other, more complex reasons (including changes in the rivers' courses). Here the Indo-Europeans encountered the remains of a high culture that was more advanced than their own. It is natural that they brought their language to the new area where they settled, but the extent of the impact may be surprising. This may be because the Indo-European immigrants had a highly developed linguistic culture, with advanced poetry and narrative technique, especially connected to myth and ritual. In addition to the military strength of the Vedic people, this would have given them a prominent ritual and religious position vis-à-vis other peoples. There are indications that it was at least partly a military conquest, for instance in the Vedas (Staal 2001:92-95).

## **The rise of Vedic India and its rituals**

aDNA strongly confirms the older picture – traditional if you will – of how the Indo-Europeans came to India, just as genetics confirmed the migration to and expansion into other geographical regions:

‘The traditional picture of how Vedic culture and religion emerged is that it was born in the encounter between immigrating Indo-European tribes and earlier indigenous cultures in north-west India (today’s Pakistan or eastern Afghanistan), c. 2000–1500 BC. Before about 2000 BC there were semi-nomadic tribes who spoke Indo-European languages on the steppes in a geographical area somewhere between Eastern Europe and Central Asia’ (Kaliff 2007:40-41).

Genetic studies indicate that this traditional scenario of Indo-European invasion of the Indian subcontinent is very accurate. The ancient texts speak of a military conquest, in which horses and chariots play a major role (see the *ashwamedha* ritual, Chapter 6). DNA also strongly suggests that it was men who were mainly responsible for the expansion in present India, in a way that corresponds to the results of the Corded Ware culture in Europe. R1a is also very common in South Asia, not least among men belonging to the higher caste in India, especially the

Brahmins. R1a is also generally more prevalent in modern-day populations in northern India – the area primarily affected by the Vedic/Indo-European immigration – than in southern India. In 2018, ancient DNA from over 500 individuals from Central and South Asia shed new light on this issue (Narasimhan et al. 2019). Data from this study reveal a southward spread of genetic ancestry from the Eurasian Steppe, correlating with the archaeologically known expansion of steppe pastoralists in the Middle Bronze Age (2300-1500 BC). The steppe people then mixed with peoples of the so-called Bactria Margiana Archaeological Complex (BMAC). However, there is no evidence that the main BMAC population contributed genetically to later South Asians. Instead, the steppe people migrated further south during the 2<sup>nd</sup> millennium BC, and there mixed with southern populations.

Recent data from ancient individuals from the Swat Valley in the northernmost part of South Asia have shown that steppe ancestry integrated further south in the first half of the second millennium BC, and still today contributed up to 30% of the ancestry of modern groups in South Asia. The steppe ancestry in South Asia has the same profile as that in Bronze Age Eastern Europe, tracking a movement of people that affected both regions and that likely spread unique Indo-European features. Of special interest is the relatively close links between Indo-Iranian and Balto-Slavic languages, where genetic data now supports a close relationship (Narasimhan et al. 2019).

Vedic rituals are among the best-documented early ritual systems in the world. The documentation covers a tradition lasting more than 3000 years. With the Vedic ritual, we have a genuine tradition, which arose at the same time as the Scandinavian Bronze Age but is still alive. What makes Indo-Iranian traditions interesting for the interpretation of ritual and cosmology in prehistoric Scandinavia are the general cosmological and mythological similarities, which can in turn be linked to a common Proto-Indo-European background. The similarities between Indo-European traditions, for instance as regards cosmology, the perception of death, and the properties of certain divinities has also been well documented long before the breakthrough in aDNA research (cf. de Vries 1956–1957; Eliade 1958; Dumézil 1958; Ström 1975; Lincoln 1986).

It may of course be questioned whether Southern Scandinavia actually displayed continuity in cosmology and religion throughout the very long time span we discuss here, but the horse is the clue, as we will show in Chapters 7-12. Moreover, the archaeological record argues more

for continuity than for any breaks in tradition, although the focus in archaeology has often been on possible signs of the latter.

Since today's Hindu rituals, through their Vedic background, in many ways reflect a ritual tradition that began already during the Bronze Age, we will here give a brief account of some basic features and show how Vedic religion developed into Hinduism. What is normally called the Vedic period in India, c. 1500–500 BC (the dating varies), should not be immediately interpreted in images of today's Hinduism, which would give a misleading picture. Of course, Hinduism is a descendant of Vedic religion, but one with many added features, both from the earlier Indian high cultures and later influences, and through change over time (cf. Flood 1998:23–50; Staal 2001:60). One can easily get an erroneous picture of original Vedic ritual if one does not bear this clearly in mind. An aspect that can illustrate this is that anthropomorphic images of the Hindu gods did not occur until the early Common Era (Eck 1998:16–21). Thus, Peter Jackson says:

‘Before turning to the description of the religious heritage we must also consider how its transmission was conceptualized. Instances of poetic self-reflexivity in the orally transmitted poetry of Vedic India offer interesting insights in this respect. They may help us explain the mutually diverse and consistent character of the surviving materials. Metaphoric references to the poet's task and the character poetic speech were not only another means of expressing one's genius and versatility; such metaphors were also modes of inference regarding already established ritual conventions, the preferred basis of which was observations made in daily life’ (Jackson 2002:65).

The multifaceted religion that is called Hinduism today dominates among the inhabitants of India and its northern neighbour Nepal. Hindus can also be found in Sri Lanka, and the island of Bali in Indonesia, once a powerful Hindu kingdom. A large number of Hindus are furthermore spread across the world, with a long history in Southern and Eastern Africa, but now also in Europe and the United States. The vast majority of the world's Hindus, however, live in India, which is where the religion originated, and where most of the holy places are located. Although the Vedic religion was a predecessor of the Hinduism that developed in India during historical times, Vedism in itself cannot be simply identified with Hinduism.





**Fig. 19. Chaurasi – ritual celebrated when a person is a thousand full moons old (84 years). Argal village, Baglung, Nepal.**

This does not contradict the fact that many fundamental Vedic rituals have been handed down more or less unchanged in Hindu ritual tradition until today. Vedic texts and rituals are thriving and are still practised today (Fig. 19). When we make comparisons in the present work, it may therefore seem as though we are partly mixing Vedic religion and Hinduism. The traditions merge, however, and those who practice Vedic traditions today would regard themselves as Hindus (Jacobsen 2003:19-31).

In Scandinavian archaeology – like in India – several types of features have a very long continuity, in some cases at least from the early Bronze Age right up to the end of the pre-Christian era. In the Vedic tradition, this tenacity is not a result of the rituals having been recorded in manuals; on the contrary, the knowledge was passed on orally. Writing a manual for the ritual was considered impure and inappropriate. There is a traditional, built-in aversion to writing in the Vedic tradition. The *Rig Veda* should not be recited from a written version, and it is even perceived as impure to recite Vedic text after having read anything written. The aversion to written text can partly be explained by the fact that by preserving the texts as oral tradition, they could be reserved as exclusive knowledge for ritual specialists. Learning

from a written text was not considered correct. The right learning had to be conveyed by a teacher, who could also give supplementary explanations. Another possible explanation for the aversion to written sacred text is that the Vedic immigrants who created the first Vedas did not have a written language. In the society in which the oldest Vedic texts were composed, writing was completely unknown (Staal 2001:29-40). Thus,

‘The Vedic texts were orally composed and transmitted, without the use of script, in an unbroken line of transmission from teacher to student that was formalized early on. This ensured an impeccable textual transmission superior to the classical texts of other cultures; it is, in fact, something like a tape-recording of ca. 1500–500 BC. Not just the actual words, but even the long-lost musical (tonal) accent (as in old Greek or in Japanese) has been preserved up to the present. On the other hand, the Vedas have been written down only during the early second millennium CE, while some sections such as a collection of the Upanishads were perhaps written down at the middle of the first millennium, while some early, unsuccessful attempts (indicated by certain Smriti rules forbidding to write down the Vedas) may have been made around the end of the first millennium BCE’ (Witzel 2003:68-69).

Hence, we are back to the classic dilemma of what we date; texts or traditions. A rich oral tradition is also more adapted to a pastoral, nomadic lifestyle on horseback.

‘The people who were custodians of the Indo-European language and culture were the ones with relatively more steppe ancestry, and because of the extraordinary strength of the caste system in preserving ancestry and social roles over generations, the ancient substructure in the ANI [Ancient North Indians: authors’ note] is evident in some of today’s Brahmins even after thousands of years. This finding provides yet another line of evidence for the steppe hypothesis, showing that not just Indo-European language, but also Indo-European culture as reflected in the religion preserved over thousands of years by Brahmin priests, was likely spread by peoples whose ancestors originated in the steppe’ (Reich 2018:152).

It is characteristic that for many Hindus Hinduism is just a set of acts, a ritual custom, something one does. Hinduism is a way of life, a customary practice, and, in large measure, a collection of knowledge. Without exaggerating conformity, this scenario may also be relevant to the interpretation of ancient Scandinavia. Although there is no religious continuity from the earliest times, in the way that today still characterises India with its Hinduism, there are indications that the Scandinavian societies of prehistory may have had an equally strong tradition of oral recitation. The same goes for the ritual tradition.

‘A religious tradition that is integrated with both a world-view and a way of life has a great capacity to be preserved over time and place. With this outlook, every act, whether profane or sacred, becomes a part of the religious world-view, confirming and sustaining it. It would be realistic to assume that an essentially similar scenario also existed in ancient Scandinavia, as regards the preservation of traditions, with ritual practice based on an oral tradition and with religion and ritual as integral elements of culture. The ancient Scandinavian use of the term “custom” (Old Norse *siðr*) for what we often define as religion may suggest a similar situation, with religious expression being integrated with lifeways. Religion and cosmology, like the ritual tradition that built on these, were then a part of both the collective and the individual identity, without which the society would have been incomprehensible. This, combined with an oral narrative and ritual tradition, means that a chronological perspective from the Bronze Age to the Early Iron Age is not unreasonable to assume for the preservation of many rituals. It is therefore significant that the Norse evidence, written down in the Early Iron Age and the Early Middle Ages, seems to reflect a tradition in which oral transmission and recitation were very important’ (Kaliff 2007: 53-54).

## **The eastern limits of the Indo-Europeans**

Although we do not intend here to discuss the Indo-European migration in general, we shall nevertheless briefly mention its most extreme eastern outpost. The Afanasievo culture (3300-2500 BC), mentioned above, is located in southern Siberia, occupying the Minusinsk Basin

and the Altai Mountains. However, it is not the only early Indo-European settlement located that far to the east.

In the south-eastern corner of the Taklamakan desert, in the Tarim basin of Zinijang in present-day China, an area formerly known as East Turkestan, a number of unique finds have been made. They consist of a number of very special burial sites, with very good preservation conditions characterised by well-preserved mummies with western features, most clearly so in the oldest graves.

The first European to discover the graves was the Russian geographer Nikolaj Mihailovich Przhevalsky (1839-1888), a famous explorer of Central and East Asia, the same man who named the Przewalski's horse (Mallory & Mair 2000:62), a rare and endangered horse native to the steppes of central Asia. During research expeditions, he encountered strange, well-preserved mummies in a place called Cherchen. Later, several spectacular finds were made at this and other places in Tarim. To give an idea of how well-preserved these mummies are and how distinctly Western they look: Przhevalski first thought that the mummies came from a Russian population that had settled in the Tarim basin in the early 1800s, an assumption which turned out to be completely wrong.

The oldest bodies today date to about 2000 BC, and the burials then continue for two millennia. In the same area, documents and inscriptions in the extinct Indo-European language Tocharian (or Tokharian), which is often linked to the graves, have been preserved. However, the written evidence in Tocharian is later than the tombs, from the first millennium of our era, but it is still reasonable to assume that the early tombs may have a connection with the language, which differs from the other Indo-European languages in Asia, the Indo-Iranian branch. However, this is still disputed (Mallory & Mair 2000:181-182).

Although Przhevalsky was the first, the archaeological finds in Taklamakan are intimately associated with Swedish researchers, most notably with the geographer and explorer Sven Hedin (1865-1952) and the archaeologist Folke Bergman (1902-46). Hedin made several expeditions to Central Asia in the late 1800s and early 1900s, mapping large areas that no one had previously documented. His fourth and final expedition in 1926-35 became the largest, with some fifty Swedish, Chinese and German researchers. One of the participants was Folke Bergman who, in 1934, documented and partly excavated the so-called 'Ördeks necropolis', in Chinese called Xiaohe (Kaliff 2018:165-182).

The necropolis consisted of an eight-foot-tall hill, covered by 140 upright poplar piles that marked various graves, and many more piles that had fallen over. Bergman opened several graves, and found both skeletal remains and more well-preserved mummies. He too was fascinated by the distinct European features of the mummies. The uncertainty about the mummies has persisted until recent years. However, in the years 2002-2003, archaeologists from the Xinjiang Academy of Sciences conducted a comprehensive survey of Xiaohe, a total of 167 graves (Mair 2006: 373-318).

A large number of DNA samples from 92 burials was analysed. Mitochondrial DNA shows a genetic mix of inheritance, with parallels in both Eastern Europe and Siberia, as well as in East and South Asia. As for the Y chromosomes, the relationship is different and very clear. The lineage from father to son via the DNA of the Y chromosomes originates with one single exception from the west. They belong to the haplogroup R1a, i.e. the same as in Yamnaya culture (Li, Li & Cui et al. 2010; Li, Ning & Hagelberg et al. 2015), which also dominated the Corded Ware culture of Europe. Analyses thus provide strong support for the theory that the Tarim people are the result of an Indo-European migration, which reached very far east indeed. Even though it was previously considered a reasonable assumption (as the two easternmost likely Indo-European outposts), genetic studies reveal there is no direct link between Afanasievo and the Tarim mummies. The Afanasievo culture was at a later stage replaced by a second wave of Indo-European migrations from the Andronovo culture, and the Tarim mummies were found to be genetically closer to the Andronovo culture than to the Yamnaya culture or Afanasevo culture (Allentoft et al. 2015; Haak et al. 2015).

## **Old conclusions and new confirmations**

aDNA thus conveys a fairly traditional picture of the Indo-European homeland and spread across the old world. It turns out that linguistic analyses, as well as a traditional cultural-historical archaeology, have been significantly more accurate in this regard, than the archaeology of the last 70 years until 2015. Much of what today can be confirmed by aDNA regarding ancient migration of significance for the spread of Indo-European language and culture, was already noticed 100 years ago and more. This, of course, may be perceived as highly ironic, but at the same time gives a very optimistic view of the possibility of inter-

pretations also with traditional methods, not just aDNA. It provides a very strong support for the opportunity to draw good conclusions from thorough analyses of source material, both linguistic and archaeological and from the history of religion. On the other hand, it should be significantly more disappointing for all those who would like to quickly catch up on every new social trend projected on archaeological science. If you want to simplify a little and be drastic, you can therefore summarise the results of genetics with regard to the migrations of Indo-Europeans in the following five words: nothing new under the sun.

‘Although it is a traditional image, the idea that there was a partly aggressive expansion in certain areas where Indo-European cultural elements were spread is still relevant. The transformation from a life as nomadic herdsmen on the steppes of Russia and Central Asia to a successful, expanding warrior people has been believed to be closely connected to bronze technology and the introduction of the two-wheeled war chariot’ (Kaliff 2007:9-40).

The theme of expanding warriors and war chariots is central to classic horse-sacrificing rituals and tradition, of which the Indian *ashwamedha* is the best known and greatest on a cosmic scale. This is also elaborated in the many Vedic and Hindu sacred scriptures.

## 6. Ashwamedha

*'[...] do thou begin the sacrifice. The time for it has come. The moment for commencing the rite is at hand ... Let the sacrifice be performed in such a way that no limb may become defective. In consequence of the very large quantity of gold that is required for this sacrifice, it has come to be called the sacrifice of profuse gold ... Attaining to the merits then of three Horse-sacrifices, each with profuse presents, thou shalt be freed, O king, from the sin of having slain thy kinsmen. The bath that one performs upon completion of the Horse sacrifice, O monarch, is highly cleaning and productive of the highest merit.'*

*The Mahabharata Vol XII:151.*

### **Hindu heritage and interpretative challenges**

Today, Sanskrit holds a position in relation to modern languages in India quite similar to Latin in Western Europe (Brough 1968:12). Approaching Vedic and Hindu sacred scriptures is an immense task. The texts are fundamental to Indian identity and social organisation, though Western scholars and philosophers have often regarded them with disdain, using colonial stereotypes to describe them. The Orientalist philologist F. Max Müller, for instance, was unambiguous in his criticism:

*'However interesting the Brahmanas may be to students of Indian literature, they are of small interest to the general reader. The greater portion of them is simply twaddle, and what is worse, theological twaddle. No person who is not acquainted beforehand with the place which the Brahmanas fill in the history of the Indian mind, could read more than ten pages without being disgusted' (op. cit. Mahajan 2016:81).*

Arthur Schopenhauer had similar contempt for the texts, as, in his opinion 'the Upaniṣads were the only portion of the Veda which

deserved our study, and that all the rest was priestly rubbish' (op. cit. Tull 1989:15).

Saying that great religious thinkers only wrote nonsense is not only offensive, but also degrades Vedic cosmology and Hindu religion, and suggests that the Indian civilisation is somehow culturally inferior to the West. Also, many of the English translations that date back to the British colonial period show apparent bias in the translation of passages describing sexual characters, which are seldom explicit or elaborate. In a similar vein, but for very different reasons, Hindu scholars, particularly those with Hindu nationalist allegiances, do not highlight these ritual practices, as it does not depict a glorious religion.

The *Mahabharata* is the world's longest epic poem comprising almost 100,000 stanzas, making it 'admittedly the longest, and perhaps the greatest, epic poem in any language' (Narasimhan 1996:xv). Where the *Ramayana* can be described as a tale of the 'good' family where two brothers cooperate to preserve and support the family, the *Mahabharata* is a tale of the 'bad' family where lust for power ultimately causes the destruction of the family (Lochtefeld 2001:399). There are many different versions and translations of the *Mahabharata* based on selected verses (e.g. Narasimhan 1996, Rajagopalachari 1996). Described as the 'Iliad of India', the *Mahabharata* tells the story of the Great War between two families descended from King Bharata. The epic probably evolved from a cycle of popular hero songs, but once it took on the form of an epic, the Brahmins started using it as religious propaganda. The warriors were represented as sons of gods or allies of various demons. The *Ramayana*, on the other hand, is often referred to as 'the Odyssey of India' because it tells the story of exiled prince Rama and his adventures. The *Mahabharata* is about seven times as long as the *Iliad* and *Odyssey* combined, if we refer to the 12-volume translation by Kisari Mohan Ganguli (*The Mahabharata of Krishna-Dwaipayana Vyasa. Vol. I-XII*, 1990-1999). Another translation is by Manmatha Nath Dutt (1895-1905). The translations vary with regards to interpretations, which obviously forms a challenge for foreigners and persons not specialised in Sanskrit. Also, as Ganguli (1998:ix) pointed out, certain verses in the *Mahabharata* are very difficult to construe, creating multiple interpretative challenges.

The two great Hindu epics *Mahabharata* – of which the *Bhagavad Gita* forms a part – and *Ramayana* were written during the Epic and Classical Period in India between 400 BC and 600 AD (Kinsley 1993:15-17). While the *Ramayana* may slightly predate the *Mahabharata*, the



formative period for both runs from the 4<sup>th</sup> century BC to the 3<sup>rd</sup> century AD. It has also been suggested that the oldest parts of the *Ramayana* are a bit older, dating to some time between 750 and 500 BC, but it is more likely that the first stage is from about the 5<sup>th</sup> to the 4<sup>th</sup> century BC (Brockington 1998:379). The *Mahabharata* has probably taken shape over the period from the 3<sup>rd</sup> century BC to the 3<sup>rd</sup> century AD, with the appendix or supplement *Harivamsa* (see below) being completed in the 3<sup>rd</sup> century or thereabout (Austin 2019:21). The *Brahmana*, ‘Belonging to Brahmans’, are works composed by and for Brahmans that are intended as guidance and for ritual use, which is why they are more recent. The *Puranas*, on the other hand, (meaning ‘old’) refer to tales and legends of ancient times. The *Satapatha-Brahmana*, which details the *ashwamedha*, is ‘seen as the most complete and systematic as well as the most important of all Brahmanas’ (Dowson 1888:286). It is probably a couple of centuries older than the *Mahabharata* and the *Ramayana* (Witzel 1995b).

It is a great theoretical and methodological challenge to date and translate texts such as these, because the traditions they document have long historic trajectories, which often predate the texts and which have also evolved over time and spread across cultures. It is beyond the scope of this study to provide a detailed overview of these literary monuments and we will instead focus on specific themes related to the *ashwamedha* sacrifice that are important in an Indo-European comparative cosmological context. With this note on the textual challenges, we may turn to the supreme symbol of the victorious Indo-Europeans: the horse. It is interesting to note in this context that many of the Vedic gods are presented as horses – Indra, Agni, Soma and others (Doniger 1994:85).

## The horse sacrifice

The *ashwamedha* was a divine ritual used by ancient kings to prove their imperial sovereignty (Fig. 20). Broadly, the horse sacrifice was performed for two reasons: the atonement of sin (*Mahabharata*) and fertility (*Ramayana*). The two are in fact connected, as the atonement of sin involves purification, purity is perfection, and perfection enhances fertility. The sacrificial horse is a deity and should be a white stallion. Throughout history, the white horse has been the ultimate symbol of divine purity, particularly if it has distinguishing features like a yellow tail or a black ear.



Fig. 20. *Ashwamedha*. From Dutt, R. C. 1906. *History of India*. Vol. 1, p. 23.

On this subject, it is interesting to look at the work of Tacitus, a contemporary from another geographical part of the Indo-European cultural area, who described how Germanic tribes used special white horses for divination: 'These are nourished by the State in the same sacred woods and groves, all milk-white and employed in no earthly labour. These yoked in the holy chariot, are accompanied by the Priest and the King, or the Chief of the Community, who both carefully observed his actions and neighing. Nor in any sort of augury is more faith and assurance reposed, not by the populace only, but even by the nobles, even by the Priests. These account themselves the ministers of the Gods, and the horses privy to his will' (*Germania* 10, Transl. Thomas Gordon).

The first Vedic horse sacrifice we will refer to (from the *Mahabharata*) took place after the Great War – a legendary and cosmological event documented in mythology. However, in practice, as a historic event, the sacrifice was most probably part of extended purificatory death rituals linked to successive funerals of war casualties and an atonement for the slaying of kinsmen. The Vedic scriptures give

an idea of the rituals' importance and show how they structured society. It is difficult for us to grasp how exclusive and holy the performing of the horse sacrifice was. This rite could only be conducted by a powerful monarch. Only the sovereign king was allowed to perform this sacrifice, and the only way he could prove his strength was to conquer all the kingdoms the horse had roamed in over the course of the year. The reason for this trial of strength is the divine consequences of the sacrifice.

The horse sacrifice removes all sin. The symbolic role and religious significance of the horse sacrifice had a great impact on the gods, and could even challenge their powers. A king might, for instance, acquire the power to depose the king of the gods Indra by performing 100 horse sacrifices. The ritual therefore allows the king to prove his divine strength. It is a kingly ritual only, and the power invoked in the performance aimed to influence and define the cosmological order. The enormous importance of this ritual is witnessed by the participation of all the other kings and princes, and even some of the gods. The audience were ranked according to their status, with royal guests in the stately pavilions and the humbler places for the Brahmins.

Before the horse was sacrificed, other animals were slain. There are various accounts, but one source reckoned 636 animals were sacrificed, creating a unique hierarchy of sacrificial animals and elements, as the other animal offerings lead up to the actual slaughter. In the *Rig Veda*, a goat accompanied the horse to heaven, and 'This goat for all the gods is led forward with the race-horse as the share for Pusan. When they lead forth the welcome offering with the charger, Tvastr urges him on to great fame. When, as the ritual law ordains, the men circle three times, leading the horse that is to be the oblation on the path to gods, the goat who is the share for Pusan goes first, announcing the sacrifice to the gods' (*Rig Veda* 1.162, 3-4). As we will see, there were also greater accompanying sacrifices.

It will be important to keep this multitude of sacrificial animals (Fig. 21), of varying numbers and with different statuses and meanings, in mind when we discuss archaeological finds of sacrificed horses and other animals in Scandinavia in Chapters 8-9. The amount of a particular species sacrificed is not proportionally linked to its sacred status. Rather, rare occurrence may speak to exclusivity. In other words, the fact that fewer physical remains of horses may have been found on an archaeological site, may not indicate that the horse was less important, but rather more important.



**Fig. 21. Sacrifice of buffalo, Argal village, Baglung, Nepal.**

The sacrifice of other animals announced the ritual to the gods, but before the horse sacrifice all the rajahs and their wives were given splendid gifts before the eyes of the gods and the rest of the audience. Archaeologically, we will pursue this ritual scenario with special regards to certain Bronze Age burials (see Chapter 9). Also from an archaeological point of view, the use of the scimitar is of importance (see below). This ritual object was used for sacrificial purposes, but its qualities were altered through the sacrifice. The scimitar ‘immediately ascended unto heaven and vanished from before the eyes of all’ (see Mackenzie 1998:312-319). The scimitar moved from the worldly context into the divine sphere. The object itself was transformed by the act of sacrifice and was transferred from the human to the divine sphere.

The horse was prepared on the altar for consumption. Everyone participated in the holy meal, and even the gods, including Indra, appeared. The wider audience were not served meat from the horse sacrifice. Instead the king distributed balls of ground herbs to each guest. The cosmological order was manifested in the sharing of this holy meal. Of special interest is also the marriage of maidens as part of the ritual. The horse sacrifice was performed as an atonement for sin after war and the death of kinsmen. An integral part of this ritual was the forging of new alliances through marriage. After these weddings, the kings distributed more gifts. Thus, this sacrifice functioned as a kind of a redistributive system. The king bestowed upon the Brahmans who officiated many animals, pearls and slaves, and he gave war elephants, money and steeds to the rajahs.

## **Mahabharata**

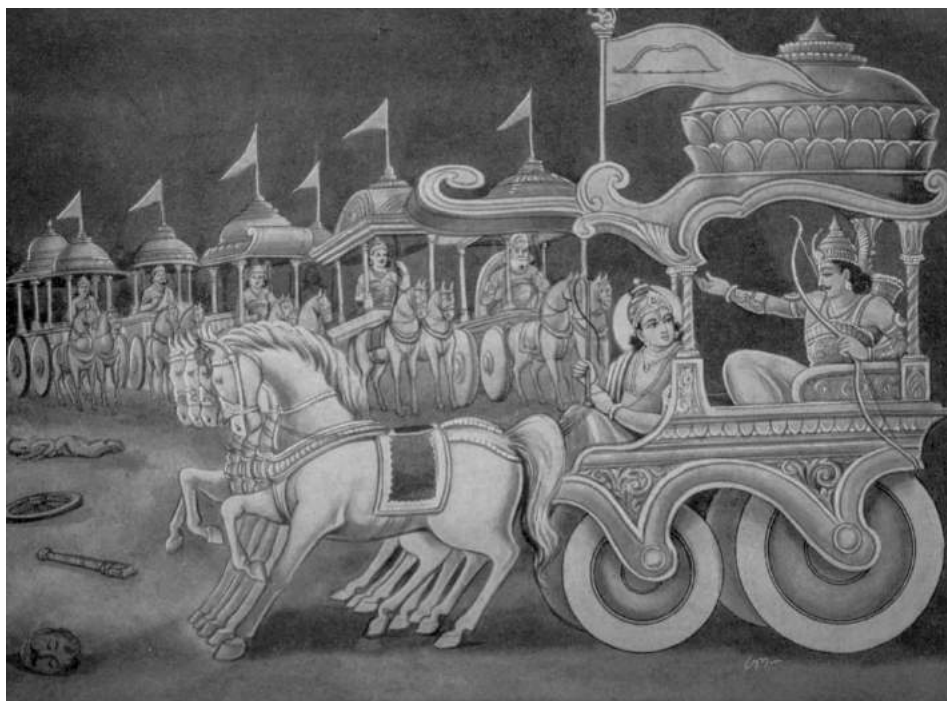
In the following sections, we will refer to the text and translation of the original sources. The reason for performing sacrifice is explained: ‘O king, O foremost of men, sinful people are purified by sacrifice, austerities and charity. The high-souled celestials and Asuras perform sacrifices for securing religious merit; and therefore sacrifices are of supreme importance’ and the *ashwamedha* involved making ‘super-human arrangements for the performance of his sacrifice’ (The Mahabharata Vol XII:3, 11).

It is difficult to comprehend the cosmic proportions described in the epic. ‘In that great battle of the Kurus came hundreds of thousands of monarchs for fighting against one another. The names of the

innumerable host I am unable to recount even in ten thousand years. I have named, however, the principle ones who have been mentioned in this history' (The Mahabharata Vol I:129). If there were 'hundreds of thousands of monarchs', there must have been an equal number of kingdoms, which, as the sage says, would take ten thousand years to name. However, as pointed out, 'All of them were heroes and great car-warriors, and skilled in the art of warfare. Besides, all of them were versed in the Vedas, and, O king, all of them had got through the scriptures. All of them were mighty in attack and defence, and all were graced with learning' (The Mahabharata Vol I:143). It was not simple warfare, but a cosmic battle. Also, 'Truth is more meritorious than a hundred sons. A hundred horse-sacrifices had once been weighted against Truth, and Truth was found heavier than a hundred horse-sacrifices' (The Mahabharata Vol I:162).

Preceding the actual sacrifice of the horse, but part of the *ashwamedha* as a cosmic ritual, other offerings of divine proportions were presented to the gods. One cannot conceive of a greater cosmogonic ritual, at least if one interprets the data as actual and not as epic exaggerations: 'There were sixty thousands of camels and a hundred and twenty thousand horses, and of elephants, O monarch, there were one hundred thousand. Of cars there were as many, and of carts too as many, and of she-elephants as many. Of mules and men the number was untold. Sixteen thousand coins were placed on the back of each camel; eight thousand on each car; four and twenty thousand on each elephant; (while proportionate loads were placed on horses and mules and on the backs, shoulders and head of men)' (The Mahabharata Vol XII:116).

Following the narrative of the Mahabharata (Fig. 22), the horse was prepared: 'Let arrangements be made by thee, O regenerate one, about loosening this horse for enabling it to wander over the Earth at its will [...] Yudhishtira said, "Come, O Arjuna, let the horse, O hero, be protected by thee. Thou alone art competent to protect it, and none else"' (The Mahabharata Vol XII:125). The horse roamed the world at will for one year: 'The horse then roamed, O foremost of men, wherever he liked over the Earth already conquered by Pandavas with the energy of their weapons. In the course of the horse's wanderings, O king, many great and wonderful battles were fought between Arjuna and many kings ... Thus occurred innumerable battles in diverse countries' (The Mahabharata Vol XII:126-127).



**Fig. 22. Mahabharata.** From Ramanarayanadatta astri. Source: [www.archive.org](http://www.archive.org)

When the horse returned after a year and the actual sacrifice approached, the king ordered for a message to be sent to all the great kings of the Earth, who brought with them many female slaves, horses and weapons. All the foremost among men came to witness and participate in the sacrifice. It was said: 'Who else than Arjun could come back after having caused the horse to wander over the whole Earth and having vanquished all the kings in battle. We have not heard of such a feat having been achieved ... Future kings also will never be able to accomplish so difficult a feat' (The Mahabharata Vol XII:150).

The sacrifice is described: 'At the command of the king, Bhima caused some other stakes to be set up ... In that sacrifice of the high-souled son of Kunti, three hundred animals were tied to the stakes set up, including that foremost of steed. That sacrifice looked exceedingly beautiful as if adorned with the celestial Rishis ... At intervals of the sacrificial rites, those Gandharvas, skilled in music and well versed in dancing, used to gladden the Brahmanas who were engaged in the sacrifice' (The Mahabharata Vol XII:153). It follows: 'Having cooked, according to due rites, the other excellent animals that were sacrificed,

the priests then sacrificed, agreeably to the injunctions of the scriptures, that steed (which had wandered over the whole world). After cutting that horse into pieces, conformably to scriptural directions, they caused Draupadi of great intelligence, who was possessed of the three requisites of *mantras*, things and devotions, to sit near the divided animal' (The Mahabharata Vol XII:153). In this text and its translation, the role of the queen in the ritual is not elaborated (see below).

## Ramayana

The *Ramayana* explains that one of the purposes of the horse sacrifice is to secure human offspring and to ensure fertility (Dutt 1891:33-40). Importantly, this is also about human-divine relations and the making of divinities. Nothing is greater than the birth of a god with the associated purifying processes that enable cosmogony (Fig. 23).

'Such a great king, who had everything he could wish for, was not perfectly happy. He had no son to make him happy. The line of the Ikshavakus threatened to terminate with him since he had no one to succeed him ... And, as he grew older, his sorrow increased too. One day, while thinking on this, the king thought: "Why should I not perform the yaga by name Ashvamedha? I have been told that it is a rewarding yaga. Perhaps my prayers may be answered if I perform the horse sacrifice"' (Ramayana 1983:14).

This is world-class literature, and although the quality is easily lost in translation, the beauty of the verses is preserved in some translations, showing that the *ashwamedha* is a ritual of divine glory (*The Ramayan of Valmiki*, transl. Griffith, 1870-1874, Canto XIII. The Sacrifice Finished):

The circling year had filled its course,  
And back was brought the wandering horse:  
Then upon Sarjú's northern strand  
Began the rite the king had planned [...]

They gave the portion Indra's claim,  
And hymned the King whom none can blame.  
The mid-day bathing followed next,  
Observed as bids the holy text.



Then the good priests with utmost care,  
In form that Scripture's rules declare,  
For the third time pure water shed  
On high souled Daśaratha's head.  
Then Rishyaśring and all the rest  
To Indra and the Gods addressed  
Their sweet-toned hymn of praise and prayer,  
And called them in the rite to share.  
With sweetest song and hymn entoned  
They gave the Gods in heaven enthroned,  
As duty bids, the gifts they claim,  
The holy oil that feeds the flame [...]

And strangers there from distant lands,  
And women folk in crowded bands  
The best of food and drink obtained  
At the great rite the king ordained.  
Apart from all, the Brāhmans there,  
Thousands on thousands, took their share  
Of various dainties sweet to taste,  
On plates of gold and silver placed,  
All ready set, as, when they willed,  
The twice-born men their places filled [...]

The sacrificial altar then  
Was raised by skilful twice-born men,  
In shape and figure to behold  
An eagle with his wings of gold,  
With twice nine pits and formed three-fold  
Each for some special God, beside  
The pillars were the victims tied;  
The birds that roam the wood, the air,  
The water, and the land were there,  
And snakes and things of reptile birth,  
And healing herbs that spring from earth:  
As texts prescribe, in Scripture found,  
Three hundred victims there were bound.  
The steed devoted to the host  
Of Gods, the gem they honour most,  
Was duly sprinkled. Then the Queen  
Kauśalyā, with delighted mien,  
With reverent steps around him paced,  
And with sweet wreaths the victim graced;  
Then with three swords in order due  
She smote the steed with joy, and slew.



**Fig. 23. Ashwamedha depicted on coins. Samudragupta circa 335-380 AD.**

That night the queen, a son to gain,  
 With calm and steady heart was fain  
 By the dead charger's side to stay  
 From evening till the break of day.  
 Then came three priests, their care to lead  
 The other queens to touch the steed,  
 Upon Kaśalyá to attend,  
 Their company and aid to lend.  
 As by the horse she still reclined,  
 With happy mien and cheerful mind,  
 With Rishyaśring the twice-born came  
 And praised and blessed the royal dame.  
 The priest who well his duty knew,  
 And every sense could well subdue,  
 From out the bony chambers freed  
 And boiled the marrow of the steed [...]

Then sixteen priests together came  
 And cast into the sacred flame  
 The severed members of the horse,  
 Made ready all in ordered course.  
 On piles of holy Fig-tree raised  
 The meaner victims' bodies blazed:  
 The steed, of all the creatures slain,  
 Alone required a pile of cane.  
 Three days, as is by law decreed,  
 Lasted that Offering of the Steed [...]

## The Satapatha-Brâhmana

The *ashwamedha* ritual is described in depth in the Satapatha-Brahmana. But while the Ramayana contains beautiful poetry and can be classified as world literature along with the *Mahabharata*, the translator of the Satapatha-Brahmana Julius Eggeling warns his readers. In the introduction of the five volumes he spent twenty years translating, he writes:

‘In the whole range of literature few works are probably less calculated to excite the interest of any outside the very limited number of specialists, than the ancient theological writings of the Hindus, known by the name of Brâhmanas, For wearisome prolixity of exposition, characterised by dogmatic assertion and a flimsy symbolism rather than by serious reasoning, these works are perhaps not equalled anywhere; unless, indeed, it be by the speculative vapourings of the Gnostics, than which, in the opinion of the learned translators of Irenæus, “nothing more absurd has probably ever been imagined by rational beings”’ (Eggeling 1993:ix).

Given that much of what we refer to in this book is ‘great’, one can hardly find a worse description of the work done and the translation presented (Satapatha-Brâhmana 1993). Fortunately, not only are the readers of this book most likely specialists, but as authors we find the descriptive explanations of rituals and symbols in the Satapatha-Brâhmana an invaluable source for understanding the *ashwamedha* ritual and elements of Indo-European cosmology more broadly.

The text describes different parts of the ritual and its construction. The sacrificial stake belongs to the divinity: ‘Being about to cut the sacrificial stake, he offers with a verse addressed to Vishnu. For the stake belongs to Vishnu’ (Satapatha-Brâhmana, Book III, 1978:162). ‘Moreover, that chip of the stake is made an ascent to the heavenly world; there is this girdle rope; after the rope the chip of the stake; after the chip of the stake the top-ring; and from the top-ring one reaches the heavenly world’ (Satapatha-Brâhmana, Book III, 1978:173). ‘He then sprinkles the horses with water, either when being led down to be watered, or when brought up after being watered. Now in the beginning the horse was produced from the water; while being produced from the water, it was produced incomplete, for it was indeed produced incomplete ... Thus what then was left behind of it in the water, therewith he now completes

it, and makes it whole: therefore he sprinkles the horses with water' (Satapatha-Brâhmana, Book V, 1989:18-19).

As part of the building of the fire altar, a sacrificial hierarchy is described. 'A man (purusha) he slaughters first, for man is the first of animals; then a horse, for the horse comes after man; then a bull, for the bull (or cow) comes after the horse; then a ram, for the sheep comes after the cow; then a he-goat, for the goat comes after the sheep: thus he slaughters them according to their form, according to their excellence' (Satapatha-Brâhmana, Book VI, 1989:166: Cf. Ch. 9).

It is emphasised in several places that the horse is the sun. 'And in front they lead a white horse ... for that horse is yonder sun'. 'It should be a white (horse), for that is a form of him (the sun) who burns yonder. If he cannot obtain a white one, one that is not white might do; but a horse it should be. If he cannot obtain a horse, even an ox might do, for the ox is of Agni's nature, and Agni is repeller of all evils.' (Satapatha-Brâhmana, Book VII, 1989:359-360). The horse chariot was also the sun. The priest makes an offering on the Head of the Chariot, and it 'is that very rite of consecration, - and by that he is now consecrated [...] And, again, as to why he makes offering on the head of the chariot; - it is because this chariot is yonder sun.' Also, 'the Asvamedha (horse-sacrifice) is yonder sun' (Satapatha-Brâhmana, Book IX, 1972:233-234, 239).

The *ashwamedha* sacrifice was a new and full moon sacrifice. We will now examine some of the passages from the Satapatha-Brâhmana Book XIII in which the sacrifice is described in detail. It is assumed the text was written by specialists who believed in this cosmology, and perhaps even performed the ritual itself. The detailed description of the full sacrifice highlights how the rituals build up over days, with escalating sacrifices of different animals that finally culminate in the great horse sacrifice. *Ashwamedha* 'is the king of sacrifices'. It is important to note the separation of animals as part of the overall ritual as the sacrifices should not be mixed or considered to be identical: '[...] for the horse is the nobility (chieftain), and the other animals are the peasantry (clan); and those who do this [not separating and making differences] really make the peasantry equal and refractory to the nobility; and they also deprive the Sacrificer of his vital power' (Satapatha-Brâhmana, Book VIII, 1988:303). This culture and cosmology were characterised by a divine hierarchy (Babb 1975), which was also applied to the use of water and purification rituals (see below).

‘But, indeed, the horse is also the nobility; and this also – to wit, gold – is a form (symbol) of the nobility: he thus combines the nobility with the nobility’ (Satapatha-Brâhmana, Book VIII, 1988:303-304). ‘The Asvamedha is everything’ and the value of the horse is explicitly described: ‘Verily, the horse is slaughtered for all the deities’ and ‘whosoever performs the Asvamedha sacrifice obtains all his desires, and attains all attainments’. Also, the horse ‘is worth a thousand (cows)’ (Satapatha-Brâhmana, Book VIII, 1988:336, 347, 353).

The scimitar is a prestigious archaeological object. While copper or bronze are more common metals in the real world, mythologically and cosmologically it should be gold: ‘The slaughtering-knife of the horse is made of gold, those of the “paryangyas” of copper, and those of the others of iron; for gold is (shining) light, and the Asvamedha is the royal office: he thus bestows light upon the royal office. And by means of the golden light (or, by the light of the gold), the Sacrificer also goes to the heavenly world; and he, moreover, makes it a gleam of light shining after him, for him to reach the heavenly world’ (Satapatha-Brâhmana, Book VIII, 1988:303). However, different methods and weapons were used to kill the sacrificial animal.

When the horse was sacrificed, it was killed quietly (see below), and cloth and gold were spread out for the horse, and ‘thereon they quiet (slay) it, as (is done) for no other victim and thus they separate it from the other victims. When they quiet a victim they kill it’ (Satapatha-Brâhmana, Book VIII, 1988:321). The next part of the ritual is the most controversial part. Eggeling’s translation states that after the horse was sacrificed, ‘there is no one to lead me – he leads up to (four) wives: he thereby has called upon them (to come), and, indeed, also renders them sacrificially pure’ (Satapatha-Brâhmana, Book VIII, 1988:321-322).

This description in itself conceals a cosmos of practices not fully elaborated according to the sacred scriptures, and Eggeling himself describes the content in a footnote: ‘[the formula which the assistant priest] makes the king’s wives say whilst leading them to the slain horse to cleanse it ... The ceremony of lying near the dead horse being looked upon as assuring fertility to a woman’. Eggeling also refers to another translation which states ‘nobody shall lead me (by force to the horse; but if I do not go), the (wicked) horse will lie near (another woman)...’. Without being explicit, he concludes: ‘This barbarous ceremony was evidently an old and indigenous custom too firmly established in popular practice to be easily excluded from the sacrificial ritual. That it had nothing to do with the Vedic religion and was distasteful to the

author of the Brahmana is evident'. If European and Orientalist translators had trouble translating this passage, it is no surprise it was not emphasised by Hindu scholars studying their national and religious heritage.

### **Ashwamedha Yajna (or Yagna)**

The Ashwamedha Yajna is a ritual performed by Queens and in particular the Chief Queen. The primary function is fertility, but also gaining power and riches in the kingdom. The ritual involved not only the sacrifice of the horse, but also a ritual sequence that has caused much discussions in religious circles, namely the queen engaging in sexual intercourse with the dead horse, after which it is cut into pieces and cooked. There are not only references to the queen having sexual intercourse with the dead horse, but also texts mentioning that the horse releases its semen in the queen's womb. There are various references from different sources.

*Harivamsa* is a Sanskrit text, technically a Purana that purports to be part of the Mahabharata, although it dates from around 300 AD or a bit later, and was perhaps written in the south of India (Dowson 1888:119-120). The *Harivamha Parva* (Bhavishya Parva, 3.5:11-13) states (Schaufelberger 2008): 'After the passage of some time, king Janamejaya, who offers plenty of tributes (in sacrifices) observed the horse sacrifice as ordained. Devi Vapushtama, the daughter of the king of Kashi, went and slept with the slain horse, according to the ritual as prescribed. Seeing the queen with beautiful limbs, Vsava (Indra) desired her. Entering the body of the dead horse, Indra had intercourse with the queen.' In the following line (Bhavishya Parva, 3.5:27-29), the intercourse is described. Indra desired the queen, and by entering the dead horse the horse sacrifice became obsolete and its benefits were terminated:

'Knowing about the (horse) sacrifice, Indra created obstacles for your sacrifice. The one who observed the sacrifice, you, are the best among the Kurus, equal to Vsava in prosperity. O king! Due to the results of the sacrifice (which you are going to get on its completion), Shakra (Indra) is afraid of you O lord! That is why Shakra wrecked your sacrifice. This is an illusion shown by Vsava (Indra), desiring to prevent your sacrifice. Knowing

about the sacrifice, Indra possessed the (dead) horse and had sex with Rambha, whom you consider as Vapushtama.’

In Dutt’s translation of *Harivamsa*, it says: ‘A few days after Janamejaya duly undertook the celebration of a horse sacrifice accompanied with profuse presents. Having controlled herself according to the rites laid down in the scripture the worshipful lady Vapusthumā Kashya, went to the horse slain at Janamejaya’s sacrifice, and sat down near it. Desiring for that perfectly beautiful lady Vāsava entered into the body of the slain horse and knew her’ (Dutt 1897:830-831).

There are also other descriptions, some more elaborate and explicit than others. Among them is the Yajur Veda (Kapoor 2005). Another, more elaborate version of the above-mentioned section by Eggeling (Satapatha Brahmana 13.5.2.1-10) was provided by leading scholar Wendy Doniger (1988:15), who translated the passage as follows:

‘A cloth, an upper cloth, and gold is what they spread out for the horse, and on that they “quiet” him. When the sacrificial animals have been “quieted”, the (king’s) wives come up with water for washing the feet — four wives, and a maiden as the fifth, and four hundred women attendants. When the water for washing the feet is ready, they make the chief queen (Mahishi) lie down next to the horse, and they cover the two of them up with the upper cloth as they say the verse, “Let the two of us cover ourselves in the world of heaven”, for the world of heaven is where they “quiet” the sacrificial animal. Then they draw out the penis of the horse and place it in the vagina of the chief queen, while she says, “May the vigorous virile male, the layer of seed, lay the seed”; this she says for sexual intercourse. While they are lying there, the sacrificer insults the horse by saying, “Lift up her thighs and put it in her rectum.” No one insults (the sacrificer) back, lest there should be someone to act as a rival against the sacrificer.’

Another passage refers to the king copulating with the people, ‘And the slit is the people, and the penis is the royal power, which presses against the people; and so the one who has royal power is hurtful to the people’ (Doniger 1988:17).

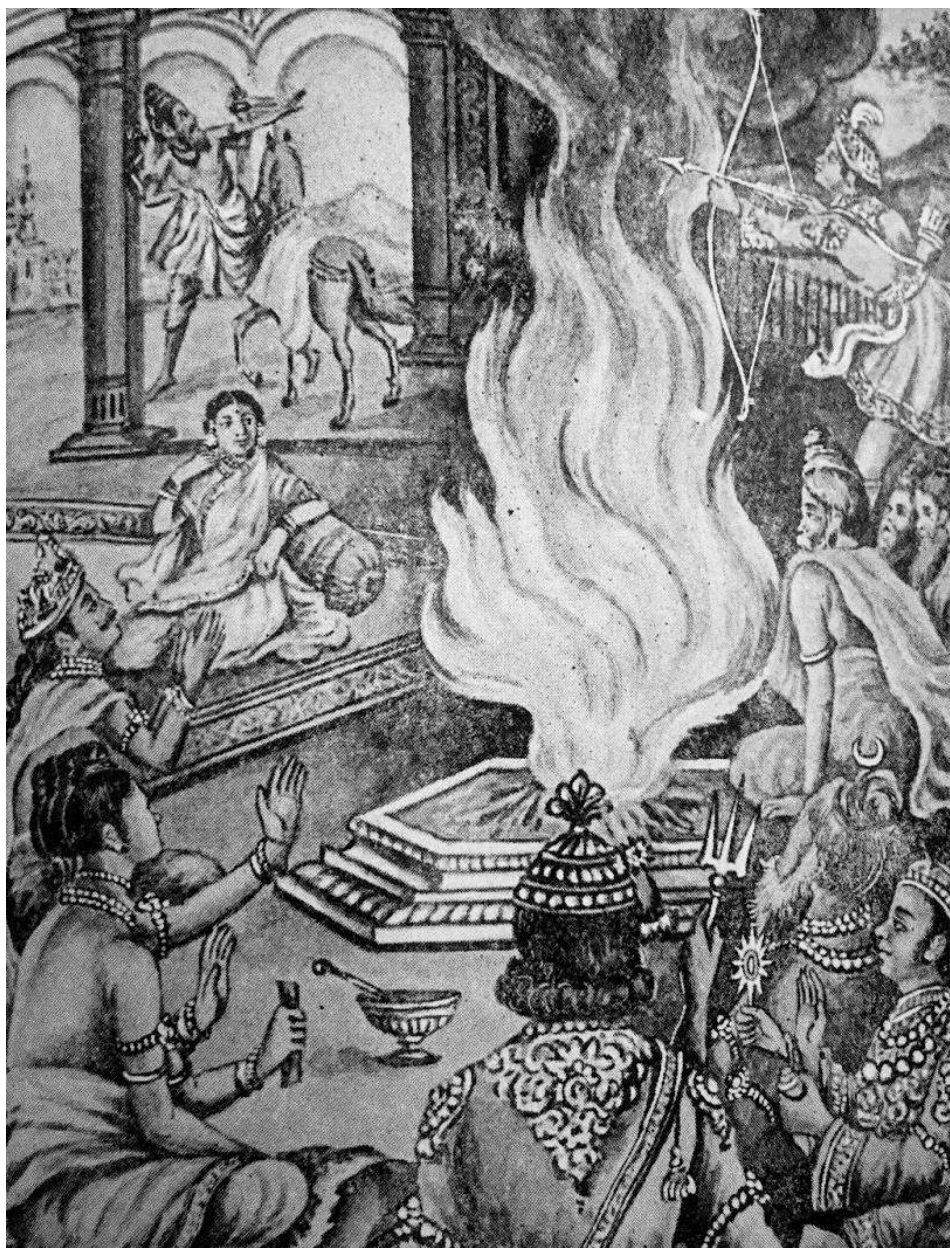


Fig. 24. Indra seizes the Yaga horse. Illustration from 1916.



## The king of gods

In order to better understand the *ashwamedha* and its sexual metaphors, which were most likely not merely symbolic, one may examine the greatness of the god Indra. Indra is much more than an earthly rain god. He is the god of the firmament, personifying the atmosphere, and in the Vedas he stands in the first rank among the gods. He is an ancient Indo-European deity, as evidenced by inscriptions on clay tablets from Boghaz-köi in Asia Minor, dated to about 1400 BC that mention Indra with other deities of the Vedic pantheon. Indra is also found in the Avestan pantheon of Ancient Iran, but then in the shape of a demon, suggesting that this and other Indo-European deities were in vogue at least in the mid-2<sup>nd</sup> millennium BC. (Griswold 1971: 177–178).

Indra has clear Indo-European parallels in other areas as well. With the probable original (reconstructed) name Perkwunos (Proto-Indo-European *Perk<sup>w</sup>unos*), he is the god of rain and thunder and he probably had a female counterpart, who produced grain and cattle after he mated with her. Other cognates are found in Germanic Thor, Celtic Taranis and, notably, the Baltic Perkūnas. The more direct Vedic parallel is Parjanya, according to the Vedas a deity of rain, thunder, and fertilisation of the earth, who is closely related to Indra. This indicates that Indra's characteristics largely emanate from the original Perkwunos, with the Baltic, Germanic and Celtic names as more original.

Peter Jackson (2002) highlights this topic in a source-critical paper that addresses the relationship between common heritages versus other kinds of similarities in various Indo-European contexts. According to Jackson, the western Indo-European gods may be the result of fossilisation of an original version of Perkwunos. 'Provided that the formations of the name were still associated with the same god, we would be dealing with one of the most widely attested Indo-European theonyms' (Jackson 2002: 75–76). In the Vedic context we discuss here, Indra is simply the king of gods (Fig. 24), which has cosmic consequences when this power is incarnated and manifested in a human being and king through sacrifice. Arthur M. Hocart says:

'The sacrificer [sacrifier] is much more than a worshipper ... he represents a god or gods, more particularly Indra ... The King Indra is a double capacity: firstly, because the sacrificer

[sacrifier] is always Indra and the king is a sacrificer [sacrifier]; secondly, because Indra is the god of his caste. Everything he does in the ritual is as representative of Indra, and all that is done to him is done to Indra. Indra is primarily the fighting god ... The king as Indra renews in every sacrifice the contest between the light-bringing gods and the power of darkness' (Hocart 1950:35).

This directly relates to cosmic rituals and sacrifices, since the cosmic rites produce the necessities of life, are acts of creation, and cosmic rites create more of everything man may need (Hocart 1970b). The earthly king is a representation of all the gods, but especially Indra, who may appear as Vishnu in modern Hinduism (Hocart 1954:49). However, in Nepal the king was perceived as an incarnation of Vishnu, sending good rains, which may also be procured through divine sexual activities (Singh 1997:138). The King incarnated as Vishnu also has a profound impact on funerals in which the katto-priest embodies the king and transfers his body to the divine abode through consumption of the 'third eye' (Oestigaard 2004c, Kaliff & Oestigaard 2008). In sacrifice, 'The object of the ritual is to make the macrocosm abound in the objects of men's desires. But the spirit of macrocosm resides in the king, and so prosperity is to be attained by making microcosm prosperous and bountiful. A poor king is a contradiction in terms. All nations like their kings to live in splendour, and to be liberal' (Hocart 1970a:202).

Hence, mythology and cosmology are part of ecology in daily life, legitimising social structures. The sun draws water from the earth for eight months, just as the king should draw taxes from the people. Importantly, this is not a one-way system: while Indra rains down onto the earth for four months, the king must also shower his people with prosperity. These are the functions of Indra and the king, not only metaphorically, but also concretely. It is the king's cosmic duty to collect taxes and rule, but if he does not afford the people's protection, he goes to hell (Hocart 1970a: 212-213). The *Rig Veda* and the *Satapatha Brahmana* explicitly state that the original creation of cosmos was a sacrifice, of which cremation ceremonies are a constant repetition (Hocart 1969:195).

Indra is the Vedic king for two reasons: he is noble and he is a sacrificer. Kings are inevitably connected to justice and truth. The sacred king is known as Lord of Law, a title still used in Bhutan (Hocart 1969:11, 53). It is a moral act to be truthful, because 'either the court must not be entered, or the truth must be spoken; a man who either says nothing or

speaks falsely, becomes sinful' (Manu VIII, 13). The cosmic principles are thus manifested in societal structures, with far-reaching implications in all spheres of life, including caste and gender. The cosmic laws are merciless, particularly for women and low castes.

### **Phallus and fertility – Indra's tyrannical reign of rain**

'The study of phallicism is the study of religion,' George Ryley Scott wrote in 1930, 'The attempt to isolate phallicism and to treat it as the definitive and circumscribed cult of a minority of sexually obsessed or perverted people deceives no one but those hopelessly ignorant of the place of nature worship in sociological evolution ... the life-giving and vivifying principle of nature has been always symbolized by the human organs of generation' (Scott 1996:xvii, xxi, 93). In the Hindu cosmology in particular, '[...] The entire world is based on the Linga. Everything is founded in the Linga. Hence, he who wishes for perfection of the soul shall worship the Linga' (Linga-Purana I, 73:6-7, p. 365). There are twelve Indian *Jyotorlingas* on the Indian subcontinent, one of the most important of which stands at Pashupatinath in Nepal (Majupuria & Majupuria 1990:3, Dangol 1993:52). The Puranas explain the significance of phallic worship in the Shiva cult (Fig. 25), which should comprise these five topics: 1) primary creation, 2) secondary creation, 3) the genealogy of gods and sages, 4) the periods of Manu, and 5) the accounts of royal genealogy (Gangadharan 1984:xvi).

Hinduism is full of sexual metaphors and tales of sex and violence (Doniger 1981a, 1987). Shiva and his linga have a prominent place in many of these violent mythologies (Doniger 1981b, 1983). The linga is not a symbol in the ordinary sense; it is seen as the materialisation of Shiva (Lévy-Bruhl 1966: 100-127). Shiva once said, 'O gods, O sages, you listen to my words with reverence. If my penis is supported in a vaginal passage there will be happiness. Except Parvati, no other woman can hold my penis. Held by her my penis will immediately become quiet' (Siva-Purana III, 12.45-46, p. 1300). Parvati – the Mother of the Universe – held the phallus, and by stabilising the phallus there was welfare throughout the worlds. The Mother Goddess cosmology is intimately connected to water, holy tirthas and female cosmic principles (Eck 1983, Raheja 1988, 2003, Singh & Nath 1995).



**Fig. 25. Phallus or Shiva-linga with purifying water dripping from above, Pashupatinath, Nepal.**

Death and the generation of life form an integral part of this cosmology, and many of the goddesses – Kali, Durga, Chinnamasta – are violent (Obeyesekere 1984, Kinsley 1989, 1997, Benard 1994, Caldwell

1999). Moreover, although presented as harmony between male and female forces and cosmic principles of life, there is also a brutal hierarchy of oppression with regards to castes and gender, which is also depicted on temples.

Certain descriptions of the *ashwamedha* ritual place the ceremony in a broader cosmic context. In the *Gautama*, one of the books of *The Sacred Laws of the Aryas* (Bühler 1992:284), bathing with the priests at the end of a horse-sacrifice is a penance. In *Vasishttha*, another book among the *The Sacred Laws of the Aryas* (Bühler 1984:58), this bathing with priests is also seen as *initiation*.

Furthermore, the laws say that 'He who offers a horse-sacrifice conquers all sin, he destroys the guilt of the murder of a Brahmana' (Bühler 1984:116). Hence, the sacrifice is a penance. As an alternative to conducting a horse-sacrifice as a penalty and penance for the murderer of a learnt Brahmana, for twelve years he shall carry a skull instead of a dish and be dressed in the hide of an ass while staying in the forest making a dead man's skull his flag, among other things (Bühler 1984:211).

While studies analysing the *ashwamedha* have focused on the horse, the ultimate aim of the ritual was to secure water for a successful harvest. As we will see in the next chapter, this was also one of the main purposes of the horse sacrifice ritual in Scandinavian prehistory. If one considers the rationale behind the ritual in a broader cosmological context, one may note that the sacrifice was ultimately a fertility ritual. Throughout the millennia and across different cultures, this is the aspect that was preserved with the greatest continuity. In practice, the sacrifice was most often structured around the relationship between sun and water, which, in cold climates also encompassed winter and snow (see Chapters 10-11).

In the Indian context, the cosmic rituals are interwoven with social life, which includes water for purification. The *Garuda Puranas Part III* (II.22.66) underscores the karmic benefits of communal deeds for the next rebirth: 'He who performs *Aśvamedha* and other sacrifices, makes liberal gifts and builds monasteries, parks, drinking water-sheds and cowpens is never born as a ghost.' As described elsewhere, the ceremony entitles the sacrificer and the horse a place in heaven. *Garuda Purana Part I* (1.83.64) also outlines the holiness of certain places, specifically water bodies: 'By taking the ceremonial bath at Rāmatīrtha a man obtains the benefits of a gift of hundred cows. By taking the bath at Matanga pond he shall get the benefit of the gifts of a thousand cows.' By taking a bath at the holy place named Kanakhala, the devotee goes

to heaven. While purification is an essential part of the Hindu cosmology, performing an *ashwamedha* could also mitigate the sin of killing a Brahman. This puts the sacrifice and the caste system in perspective.

The caste system builds on a moral argument that everyone is reborn according to karma, or the law of moral cause and effect, whereby people's previous actions (in this or former lives) are repaid through their own suffering. The soul is born into *samsara*, the life cycle or the 'round of birth and death', and may go through 8,4 million bodies (or 840,000 incarnations, according to some sources) before it eventually reaches liberation – Nirvana (e.g. Bennett 1983, Gray 1995). Sin becomes a bodily defect (Oestigaard 2009). In general, humans are not only 'less than God', but also 'guilty before God' (Hayes 1992:95). To 'sin', in its simplest definition, is the possibility of acting against God (Hertz 1996), which results in brutal divine penalties. 'The cosmos is a machine for damnation and salvation. Soteriology is cosmology' (Ricoeur 2004:268). God-consciousness involves 'righteousness of the flesh' (Wyman 1994:295), which brings us to the role of purification rituals in sacrifices.

In principle, there are two main ways to mitigate sin: divine mercy and human repentance (Kvanvig 1993: 19). While the former is solely a matter of divine will or whim, the latter highlights what humans do when they seek mercy. In the Hindu context, this mainly relates to sacrifices and water purification rituals. Water is omnipresent, in many cases defining the essence of religions in different ecologies with cosmological eschatologies (Oestigaard 2005c, 2010b, 2011c, 2013c). Holiness defines religion (see Otto 1958, Oxtoby 1987), and 'Healing and holy have an etymological kinship ... If the body is healed, it is said to be whole and its owner hale; and if the soul is healed, it is said to be holy ... we need not wonder that healing wells were, as a rule, reckoned holy wells, and vice versa' (Mackinlay 1893:86).

Holiness and unholiness are not absolute opposites but relative categories: 'uncleanness or dirt is that which must not be included if a pattern is to be maintained' (Douglas 1994:41). Moreover, '[T]here is always the danger that the sacred will invade the profane and the profane invade the sacred. The sacred must be continually protected from the profane by interdictions. Thus, relations with the sacred are always expressed through rituals of separation and demarcation and are reinforced with beliefs in the danger of crossing forbidden boundaries' (Douglas 1993:49).



**Fig. 26. Myth or reality? Rape and ritual depicted on wood-carving at the Bachhaleshwori temple. The phallus god has a triple penis, Pashupatinath, Nepal.**

In Hinduism, water has special purifying capacities (Oestigaard, 2006a, 2008a), with water from rain and rivers having different life-giving aspects (Oestigaard 2006b, 2006c, 2008b). Importantly, not only *things* but also *persons* may be polluted. While different types of water have varying purifying powers (Oestigaard 2017, 2018c), in the caste system some people are so polluted that cleansing water rituals cannot mitigate the inherited sin acquired through birth as a consequence of karma. This cosmological scheme is mainly applied to the lower castes and to women. For such individuals, the purifying water rituals are replaced by various forms of self-sacrifice in which the human body must be used to be purified. This is directly related to the question of whether sexual metaphors are mere symbols or refer to actual practices (Fig. 26).

Together with *ashwamedha*, the other grand sacrifice is *Purushamedha* or human sacrifice. The *Purushamedha* is described as a five-day sacrificial performance (Satapatha-Brâhmana, Book VIII, 1988:405-407). There are few references to this sacrifice, which has led scholars to doubt whether it was ever practised at all. However, the Satapatha Brâhmana clearly states that the human is the best sacrifice of all (Svoboda 1998:30), describing different methods of killing and explaining why, in the *ashwamedha*, horses should be strangled: ‘They then step back (to the altar) and sit down turning towards the Ahavaniya, “lest they should be eye-witnesses to its being quieted (strangled).” They do not slay it on the frontal bone, for that is human manner; nor behind the ear, for that is after the manner of the Fathers. They either choke it by merely keeping its mouth closed, or they make a noose. Therefore he says not, “Slay! kill!” for that is human manner, but, “Quiet it! It has passed away!” for that is after the manner of the gods. For when he says, “It has passed away,” then this one (the Sacrificer) passes away to the gods: therefore he says, “It has passed away.”’ (Satapatha-Brâhmana, Book III, 1978:189-190).

While it is not clear whether humans were historically sacrificed as part of the ‘grand sacrifice’, *sati* or widow-burning is a practice with a long history that was performed until recent times. In India, the practice was forbidden in colonial times, following a decree issued by William Bentinck in 1829 (Michaels & Tandan 1994:19), though the tradition was upheld even afterwards (Wilkins 1990). In Nepal, after the first Mulukin Ain of 1854, a slave wife married to a freeman was legally allowed to practice widow-burning and commit suicide on her husband’s pyre (Höfer 1979:126). Widow burning was only outlawed in 1920.



Throughout history, numerous *satis* have been documented at Pashupatinath on the Bagmati River (Regmi 1966:712-714). The most 'famous' widow-burning in modern times was the murder in the name of sati of the eighteen-year-old Roop Kanwar in Rajasthan in India in 1987. Scriptural pandits tried to defend the murder, even arguing that the ritual had to be performed to ensure timely and sufficient rainfall. The Shankaracharya of Puri argued, 'ever since this anti-sati law was enacted, nature has been revolting. Today, when we should be feeling the heat of summer, it is cold. The monsoons bring no rain. And untimely rainfall has destroyed crops ready for harvest. All because sati has been insulted' (Narasimhan 1998:144).

Indra's tyrannical control of the rains was presented as a legitimate reason to sacrifice widows. Their death was interpreted into the world of waters as a procreative force. This leads us to the elaborate depictions of female sexuality in scriptures, statues and in temple scenes. If there is one theme that still has a strong Orientalist flavour, it is the so-called temple prostitutes or 'brides of the gods'. Many of the descriptions are clearly colonial in tone, although this practice too has continued in various forms until recent times. Religious pandits have presented perversion, abuse and rape as devotional practices that serve a common good – like the claim that divine prostitutes of the Jagannatha sect performed rituals to create rain. 'Although unchastity renders a woman impure, and thus unable to enter the inner sanctum or cook food, the sexuality of the courtesan is powerful for it combats the heart of asceticism. The sexuality of the courtesan insures good rains and thus the prosperity of the realm' (Singh 1997:149, see also Dubois 1906).

These traditions have by and large disappeared today. However, in a historic context, the Great Indo-European horse sacrifice has both a longer history and a much greater geographical distribution than any other ritual institution, because it linked ecology with cosmology. Now that we have looked in depth at the Vedic *ashwamedha* and its Hindu version, we will move about 7000 kilometres west from Varanasi in India to Valle in Norway. Here we will analyse the northernmost remnant of this great tradition, a ritual that was practised until the 19<sup>th</sup> century.



## 7. Skeid, well-water and fertility

*'At Molandsmoen ... there is a level piece of ground where four pointed stones, which marked a square combat-ground in olden times, have stood. Now-a-days it is the scene of a small horsefair on the 14<sup>th</sup> of August, when the horses are ridden to be tested and finally let loose to fight for a mare, which a man holds in the middle of the ground and defends with a pole, until one of the horses has proven victor.'*

Rev. Wille says in 1786 about the tradition in Fyresdal (op. cit Solheim 1956:40).

### Revenge of the old rain gods

In *Horse-fight and horse-race in Norse tradition*, Svale Solheim (1956) has given the most thorough and comprehensive analysis of the skeid tradition (see also Solheim 1952:518-589, 1961). It partly builds on the rich ethnographic tradition documented in Setesdal (Skar 1903, 1907, 1908, 1909, 1911, 1913, 1915, 1916), but also other places. Recently, Frans-Arne Stylegar analysed skeid and its historic sources from an archaeological point of view (Stylegar 2006, 2013). Importantly, almost all recent analyses trace the earliest evidences of skeid to the Migration Period and the horse-fighting scene on the Häggeby stone in Uppland (Fig. 27), Sweden, dated to ca. 500 AD (e.g. Østmo 1998).

As indicated earlier (Chapter 1), archaeologists a century ago believed the skeid tradition went back to the Bronze Age and monumental cairns like Kivik (Chapter 9). In this chapter, we will elaborate on the history of skeid in Scandinavia and present ethnographic information not previously used in the archaeological discourse, which will enable us to trace the historic trajectories back in time to the Iron and Bronze Age with more empirical evidences (Chapters 8-9).

The oldest documentation in recent times is from 1618 in Fyresdal in Telemark County, Norway. Bishop Nils Glostrup says:



**Fig. 27. Horse-fighting scene on the Hägeby stone in Uppland, Sweden.**

‘a crowd of people congregates on St. Bartholomew’s Day with their horses from the districts all round, and the horses are left to bite each other two by two, the notion being that when they bite each other lustily, there will be a good crop and vice versa’ (Solheim 1956:40).

It was also a tradition that the best grains from the best fields were boiled for the skeid, and therefore it was also called the *Skeid’s Field* (Solheim 1956:133). Solheim makes a difference between the mountain dances and the skeid, although they share many similarities. In the 19<sup>th</sup> century, this gathering of cattle-drivers was an important marketplace where horses and cattle were bought and sold (Solheim 1956:25). However, the skeid and other mountain assemblies have a continuity back to the Viking and Middle Ages at least, with obvious economic and social functions. In this context, the Bjørkum site in Norway is a unique case (Ramstad et al. 2011, Loftsgarden, Ramstad & Stylegar 2017). However, as Solheim says,

‘In order to understand more clearly the real nature of the old mountain dances, the market aspect: the purchase, sale and exchange of wares must be disregarded. Petty trade took place

wherever people came together in the old days ... Nor must one ascribe too much importance to all the accounts of wild dancing, rows and fights ... tradition clearly indicates that the core of the institution, from ancient times, must have been the competition. The mountain dances were really great exhibitions of strength – spiritual as well as physical – in the form of the most varied competitions; music, singing, story-telling, dancing, athletics and wrestling' (Solheim 1956:26).

The competitions were not only among men, but also among horses (horse fights) and men on horseback (horse races). Thus, the great mountain assemblies and dances consisted of many parts, which Solheim listed in chronological order (Solheim 1956:26-27):

- 1) The dance, which was a kind of competition, performed by a dancing couple or single individuals.
- 2) Trials of strengths, which included wrestling, but also other competitions (showing strength and manhood, which obviously included both alcohol and knives).
- 3) The mandatory horses attending the meeting, which also related to the custom of arriving on the horseback.
- 4) Horse races.
- 5) Horse fighting.
- 6) Other competitive games, like running and jumping.
- 7) Playing the violin, singing and story-telling.

In many places, the horse race was the main event that attracted most people. The term *skeid* seems in some cases to refer particularly to the horse race (Solheim 1956:29), but fighting and displaying strength and manhood were also central components. One of the famous fighters was Bjørguv Uppstad from Setesdal, apparently a giant: as his leg below the knee was said to measure 18 inches (Solheim 1956:41), one can image the size of his arms and fists.

In summer in Norway, farmers moved their cattle to the woods or the high fells where there were rich pastures. During the last part of this sæter-period, huge annual gatherings were held that were immensely popular and had their roots in old harvest festivals. The feast was often held on the 6<sup>th</sup> or 7<sup>th</sup> Sunday after Midsummer. In the Valdres Valley, around 1800 AD an eye witness recalled that 'there were crowds of people on the open plain, and they were dancing and drinking, fighting and racing. And it had been like this every year from remotest antiquity'

(Solheim 1956:9). Women and men alike attended, dressed in their best festival attire. Coming on horseback and dancing to the fiddler's tunes were essential parts of the celebration. Following the account of one particular gathering, the tradition has it:

'When the young men had had enough of dancing, they got hold of their horses, undid the shackles and jumped into the saddle (when they had any). Then the race began. The race-course went around the dancing-ground along to the point where the Ormhamar bridge now is. It was an honour to have the swiftest and sprightliest animal. Brandy was usually the prize. – Now and then, already at this stage they might fly together in a wild scuffle. They would then ride at each other, lashing wildly with the shackles, so that the blood flowed and bones were broken' (Solheim 1956:14).

At Vaset, the tradition was discontinued around 1890 because there was too much drinking and fighting, which was seen as the work of the Evil One (Solheim 1956:16-18). One source explained that the institution was abolished because of 'the increasing brutality and deterioration of human dignity which was caused principally by the sale of strong alcoholic liquor. The Raudal-dance was characterized as unchristian, and the parish priests began to hold divine services at the meeting place in order to put stop to the traditional dance' (Solheim 1956:20-21). The last dance was held in 1897:

'the last of the wild Raudal fights was held. A man from Hallingdal stole up the strongest man in Sør-Aurdal at the time, and thrust a knife into his back just below the shoulder blade. Had the knife gone a fraction of an inch deeper, it would have reached the heart, and a man would have been dead. The whole people of Valdres, as might be expected, flew into a rage and butted down one Halling after another, until the dancing-ground soon was cleared. There was a general uproar, but at the same time, the lightning flashed, and it started raining as though the heavens would open. It was so awful that everyone was terrified. And that put an end to the Raudal meetings' (Solheim 1956:21).

This was the last annual festival and although it ended in near death and a huge fight between the different villages, it is a twist of irony that the

great Indo-European horse rituals ended with torrential rains. Or perhaps it was a way for the rain gods to say that enough is enough; the rite was no longer necessary, and what could be more appropriate than to conclude an archaic harvest festival structured around rain and sun by drowning the sinful festivalgoers in torrential rains. This is exactly what traditional rain and weather gods have always done: Yahweh with the Deluge; Indra through life-giving rains; Thor with his thunderous hammer that terrifies people as it tears through the skies.

## **The Skeid in Setesdal**

The Skeid in Setesdal and in particular in Valle is the most famous. The oldest description of the event is documented by Rev. Reier Gjellebøl in 1771. The event always took place on the Saturday preceding or following the day of Louisa in August. Rev. Gjellebøl writes:

‘On this day a great number of the common people assemble with their horses on an open piece of ground close to the personage, termed Skeidvollen. When they are gathered, a mare is led onto the open space, and two stallions, which naturally fight for the mare. When the first two are worn out, two more stallions are introduced, and the performance goes on as long as there are any horses left ... Many of these dumb creatures maim each other terribly. They not only strike and kick with fore-and hind legs, but bite each other until the blood streams, not to mention that the poor beasts often tire each other out, so that they are ill for a long time afterwards, or, in many cases, have received lasting injury’ (op. cit. Solheim 1956:30).

After the horse fight, it was time for the horse race, which was held in a strange manner. Although the aim was to win and reach the goal first, it also had to be done in the right, or more correctly, violent manner, ‘because they do not seek to win the race at a regular trot, but all, by constant beating and whipping, force their horses into a wild gallop,’ Gjellebøl writes: ‘This is too bad for the beasts, which sometimes stumble and fall over hummocks and stones, and also for the riders, who are often thrown and maimed, which easily happens as a result of the mad racing...’ (op. cit. Solheim 1956:30).

Both the horse fights and the horse races were brutal performances where the horses' well-being was clearly not a priority: the animals were regularly molested as part of the rituals, and they often suffered lifelong injuries. It may seem incredible that members of a poor peasant community would conceive of wasting their most valuable resource through such reckless behaviour, but it may help to place the races in an Indo-European context. Here, the taming of horses symbolised controlling forces of cosmos that were embodied in these once-divine creatures. This may explain the stallions being whipped and beaten: the wilder they were, the greater the victory.

This ultimate competition between man and beast is also testified by Rev. Johan Nicolai Frantzen, who sent a letter to Jørgen Moe in the final years of the skeid in Valle around 1820 AD. The sexually aroused horses were competing for the mare, and the men and boys were provided with a *skeidstong* – a long rod – to fend off the horses. The *skeidstongs* were usually made of birch or hazel, suitably thick and 6-8 feet long (Solheim 1956:32, 34). Johannes Skar also describes this, and notes that the mare is turned with her back towards the stallions, so it is clear that the stallions were fighting for the mare, and the strong men stood around the mare and defended her chastity with their *skeidstongs* or rods (Skar 1909:204-205):

'The skeid was held ... the first Saturday after the return home from the fells, a fortnight before *Krossmesse* (14<sup>th</sup> of September) ... It took one of the best men present to hold her [the skeid-mare]; he was equipped with a stout *skeidstong*. He held the mare with the tail end towards Frikkshol. Then they stirred the stallions to frenzy and brought them in, two by two, from opposite sides, and pulled off the bits. They came running to the mare snorting and whinnying, both eager to have her. They kicked and turned on their haunches, biting and snapping at each other so that one heard the crack of their jaws all over the farm. As soon as one of the combatants would tear himself away, he would fall on the mare and kick and bite, and tried to chase her off. But then the man who held the mare, would belay him with the rod. Nor could he get away because of the fence of men with their *skeid-stongs* forcing him back again. When one horse was done for, another would be matched against the winner – if anybody risked his own. Thus they went on, egging on the horses until one won, *skeidfole* (the skeid-foal), and the game was ended.'



It has been pointed out that Frikk is undoubtedly identical with the Old Norse god Freyr, who was responsible for the most important things in the world: a prosperous year with good harvest and fertility for humans and animals. The horse was from ancient times closely associated with Freyr and also served as his primary sacrificial animal. Anders Hagen and Aslak Liestøl argue that the original skeid was part of this Freyr cult (Hagen & Liestøl 1947:228-229). It is also said that Frey-faxi (the god Freyr's horse) was once the chosen *skeid horse*. Such accounts of Freyr's 'holy horses' resemble the much later traditions from Setesdal and the grey *huldre-hest* or fairy horse (Solheim 1956:166-167). Mythologically, Freyr was closely associated with the horse cult, and the horse contests may therefore originally have been associated with the cult of Freyr (Ellis Davidson 1976:98, 1993:104). Frey-faxi is also killed in a manner resembling much later Norwegian practices of throwing horses off cliffs (Kuusela 2015). Importantly, also for the later discussion, Frey-faxi, which means Mane of Freyr, was a white stallion. The white horse has been a strong symbol throughout the millennia in Indo-European cosmology.

In some places, specially selected horses were bred for the skeid (Solheim 1956:35). This was obviously a battle of taming and controlling the most extreme powers, because in prehistoric societies there were hardly any forces more powerful than an aroused horse ready for mating a mare, with the only hindrance being a ritual contesteer showing his strength and manhood with a rod. In the bullfights in Spain, the matador had a weapon; in the skeid the strongman or initiate had only a long piece of wood. Although not mentioned in the sources, one can assume people were severely wounded and even killed in these fights.

Johan Nicolai Frantzen also mentioned that at the skeid in Valle, 'Merry-making went on throughout the night, with dancing and drinking' (Solheim 1956:32). In Sandnes, there was a skeid in which a large, fine birch-tree with many branches stood in the middle, known as 'Olav Tårålsson's Bride' (Solheim 1956:39). In Setesdal, a peculiar practice associated with weddings was also reported. Above the fireplace in old farms, the cooking pot hung on an iron rod, which was connected to a solid beam in the roof. Many of these beams above the hearth had a wooden horse's head carved into it. When the newly wed bridegroom came back from the church, he took his axe or sword and chopped three times into the horse's head. According to Gjessing (1943:131), this practice most likely originated in ancient sacrifices, with the bridegroom killing and sacrificing a horse to the god. The

combination of the horse-fire-wedding points to a very archaic fertility cult, which is further stressed by the fact that the very same beams with horse heads often also featured carved sun-wheels.

Thus, at a structural level, the old Indo-European scheme of taming and controlling horses and women were two sides of the same coin, although one may hope that the women were better off in rural Norway, which was not always the case in the old farming communities. There have thus been many similarities with regards to sæter-meetings or more common assemblies and specific skeid-traditions, and obviously they have also merged together in different places in various ways. Still, while at least five characteristics are common customs in both dance-gatherings and the skeid, there are also certain specifics that characterise the skeid (Solheim 1956:45):

- 1) Horse racing.
- 2) Horse fighting.
- 3) Wrestling and various physical tests of strengths.
- 4) Dancing.
- 5) The notion of a skeid-foal having a supernatural origin (*huldrehest*), often perceived as a fairy horse or belonging to the Evil One (but which earlier would have been a deity).
- 6) The horses were allowed to roam around on the night before the skeid-day, which included grazing freely on the fenced-in meadow land.
- 7) Contest among men involving running and jumping.
- 8) A special custom regarding the cornfield on the night before the skeid where the corn was harvested by pulling it up by the roots.
- 9) Selected horses were bred for participating in the skeid.

The differences between the skeid and the dancing gatherings are important, because it directly testifies to the agrarian and harvest rituals with emphasis on fertility. Other descriptions of Indo-European horse rituals and sacrifices also highlight the supernatural character of certain horses and the fact that they are allowed to roam freely before the ritual. Importantly, although not mentioned explicitly, Olrik & Ellekilde argue that it is obvious that the winning stallion would crown his victory by copulating with the mare in front of all spectators (Olrik & Ellekilde 1951:828). This sounds like a reasonable interpretation, because even though the horses were not sacrificial animals, the injuries they suffered as part of the fights can be seen as an offering, not as extreme as a fatal sacrifice, but certainly an involuntarily self-sacrifice.



**Fig. 28. Ploughing and skeid with oxen/cattle? Aspeberget, Tanum, Bohuslän, Sweden. Photo: Bertil Almgren, [www.shfa.se](http://www.shfa.se)**

Intriguingly, in the dense cattle-breeding regions of southern Norway, cow fights were organised until the late 19<sup>th</sup> century (Fig. 28). The farmers had their *bu-skeid* (cow-skeid) and the farmer with the winning cow became that year's *bu-konge* (cow-king). The cows were fed with snake-heads and farmers sought out aggressive cows. If they could not agree upon which cow was the strongest, they fought each other instead to settle the issue (Stylegar 2013).

## **Iceland and Hebrides**

Solheim says that these gatherings must have 'been an institution of exceedingly great age'. They are also documented in the Laws of the Frosta Ting (Court) and the Land Laws of Magnus Lagabøter. Horse fights were called *hestavig*, and are also documented in the Icelandic Code of Laws (Solheim 1956:51-53). In the fierce horse fight described in Njál's Saga (chapters 58-59, Fig. 29), one of the horses was so heavily wounded that they had to kill it by chopping off its head (Njálssoga, p. 96). In the Icelandic descriptions and Norwegian accounts, despite many centuries separating them, 'we find identical spectacles'.

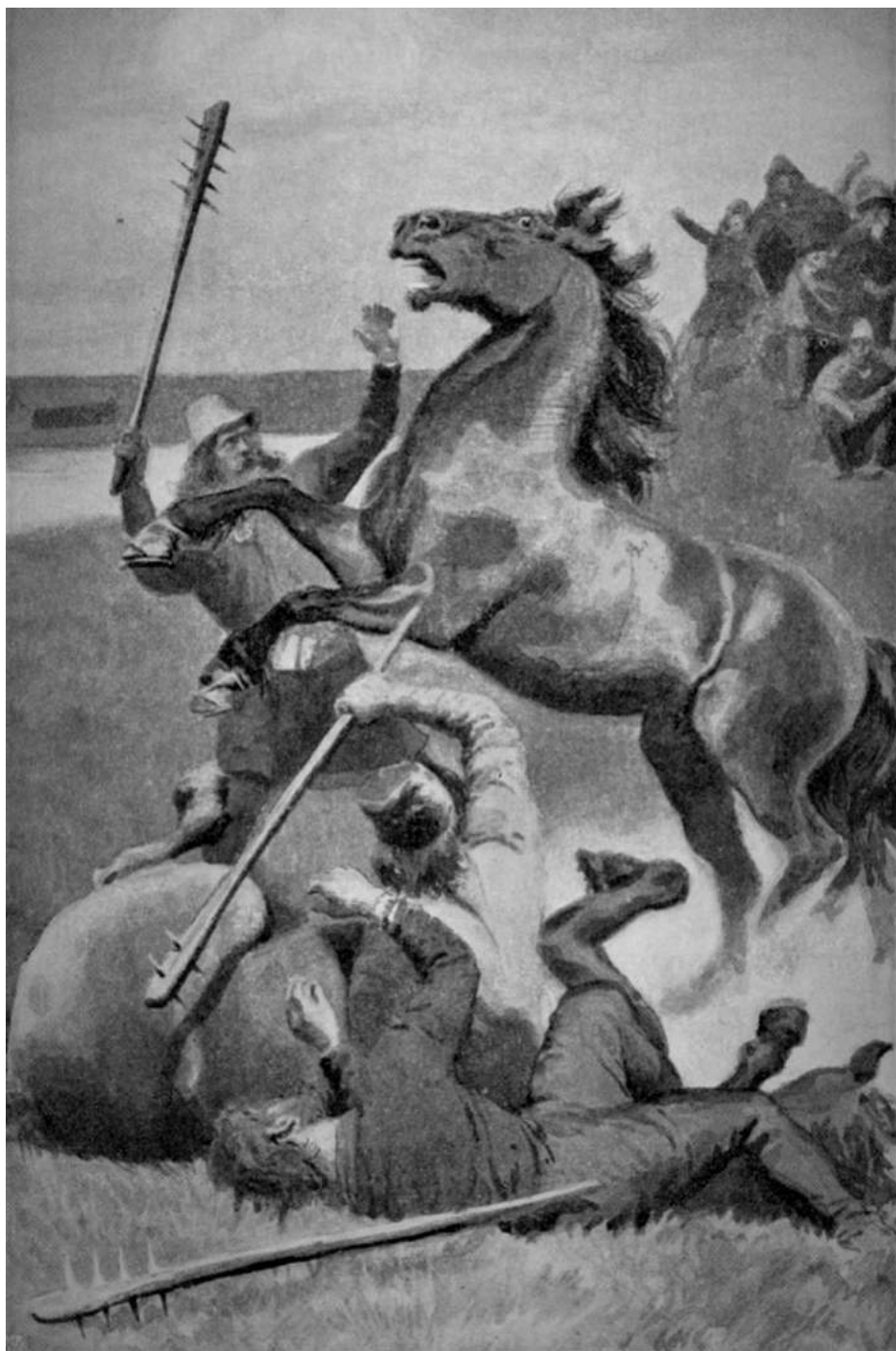


Fig. 29. Hestavig, Iceland. Illustration of Njáls saga from *Vore fædres liv: karakterer og skildringer fra sagatiden*, 1898.

Solheim says: 'It seems unbelievable to discover almost identical methods proceeding in both the over-all picture, as well in number of details, in accounts which are so far apart both geographically and chronologically. Literary connection here is out of the question, so the similarity, then, is a conclusive proof of the historical connection, of the same origin of the customs' (Solheim 1956:62). The last Icelandic horse fight that was documented in detail dates from 1623. The reason why it continued as a more pristine tradition in inner Norway is most likely because of ecology. The way in which agriculture and cattle raising were combined in Norway could not endure in Iceland where sheep were commonly raised alongside horses (Solheim 1956:69-71).

The tradition around the Michaelmas Feast on the Hebrides, with its emphasis on ceremonial riding, and harvest and fertility rites, reveals other aspects of the skeid tradition. A central part of the festival was the offering of a cake baked with grains from the new harvest. Alexander Carmichael says:

'The Eve of St. Michael is the eve of bringing in the carrots..., of killing the lamb, of stealing the horses ... [It is] the day of the pilgrimage to the burial-ground of their fathers, the day of the burial-ground service, the day of the burial-ground circuiting, the day of giving and receiving the carrots with their wishes and acknowledgements, and the day of "oda" - the athletics of the men and the racing horses. And the Night of Michael is the night of the dance and the song, of the merry-making, of the love-making, and of love-gifts' (op. cit. Solheim 1956:91).

It is noteworthy that the intimate connection between death and ancestors, on the one hand, and marriage and fertility rites, on the other, is so explicit, and that skeid or the horse fight is an intrinsic part of the whole harvest festival, where an important part 'was done to prevent the meal (harvest) from being destroyed' and 'the purpose of the horse racing was to win something selected from the produce and crops' (Solheim 1956:100, 142). Importantly, this Norse tradition with strong similarities to the skeid in Setesdal is distinctively different from the Irish prehistoric royal rituals, suggesting that there were at least two parallel developments of these horse rituals and sacrificial traditions. This relates to the main horse ritual that survived the longest, because it became Christianised.

## The second day's skeid and St. Stephan's springs

While it was the Church and local priests that opposed and finally abolished the sinful skeid, in Setesdal and elsewhere another tradition surrounding holy wells proved more durable after it was integrated into Christianity and Christmas traditions. The ritual was conducted early in the morning on 26 December: 'People rode or drove out to water the horses in so-called *fro-brunnar*, special springs or special places at rivers or lakes. These were springs which never froze, or openings in the ice which kept open throughout the winter,' Solheim writes: 'The water in these springs was thought to be especially powerful and health giving. When the horses got to drink this water on the morning of the second Christmas Day, they were supposed to thrive and become especially healthy. People competed to come first to the springs, for then the water was thought to be best. The competitions often turned into fight' (Solheim 1956:153).

Christmas or the pre-Christian *jól* was an important time: the dead returned from their graves to the living, dangerous deities haunted the ground, and this dark and cold season was life threatening and challenged the revival of the sun. In this context, the outcome of rituals could indicate whether the coming years would bring plentiful harvests or suffering (Celandier 1928, 1936, 1955, Gaslander 1774, Nilsson 1936).

The skeid celebration also places an emphasis on fertility and harvest during Christmas, and while the skeid in Valle and Setesdal at large is best known for its horse fights and races during autumn, here too they celebrated the second day's skeid. This was the most important skeid tradition.

In Christian times, the 'Stephan's water' was holy and horses gained great power by drinking it. The first person to reach the spring and drink from it was not drinking water, but wine. During the struggle to get to the well first, people even killed each other. Sources report that someone once fell into the well and drowned (Skar 1909:45).

The ambiguous nature of water in this Christmas period is illustrated in Tysfjord, Norway, where according to tradition all the water in rivers would be transformed into wine that was freely available to everyone at midnight on Christmas Eve. However, in some places the water would also be poisonous, so it was important to choose the right type of water (Lid 1933:18). Thus, even in Norway with its popular tradition of horse races and fights in summer, the most important traditions centred on winter wells.

## St. Stephan and skeid in Sweden

The Stephan's skeid was more popular in Sweden than in Norway, with horse riding across fields and farmlands. Olaus Magnus already mentions Stephan's skeid in 1555 (Book I, Ch. 24) as a competition to find the best horse.

In 1792, it was reported that the farmers from Knivsta Farm in Uppland were particularly superstitious, believing that horses that drank from the St. Stephan's spring would be the finest in the coming year. The water was also believed to cure any diseases affecting the horses. However, although it was a place for fertility, it was also a place for fights; knives were often drawn and terrible excesses took place (Lid 1933:29), though it is not specified whether this involved beer and women, or both.

St. Stephanus (Staffan), the patron saint of horses, has been the subject of special worship in Flistad parish in Östergötland (Figs. 30-31). The church, from the 1100s, was dedicated to him (Broccman 1760). On the medieval altarpiece in the church one can still see the martyr St. Stephanus on horseback. There was also a sculpture in the church until the mid-18<sup>th</sup> century to which people sacrificed coins and other small items for good 'horse luck' ('Häste-lycko'). The sculpture was removed by the vicar of the time, Andreas Duræus, because he objected to the coins he found under the church floor next to the sculpture (Broccman 1760:108). Flistad is a clear example of the cult linked to St. Stephan as the patron saint of the horses (Fig. 32), already in the early medieval period in Sweden, but the cultic significance of the place seems to go further back in time (Fig. 33). Elias Wessén writes (1921:119, in the authors' translation): 'One can hardly avoid the idea that in this intense St. Stephan's worship in Flistad, documented as early as the 1100s and continued to our own time, are hidden memories of an ancient Frey cult in this locality. The assumption is strongly supported by place names in the neighbourhood.'

Another phenomenon that supports the existence of a pre-Christian cultic place is the well-documented practice of worship at a sacrificial well, which was a long-lasting tradition. In addition, this well is located on a farm called Lund, a place name that clearly indicates a pre-Christian cult. In this village, there is also the farm Lekslätt (approx: 'The plain ground for games'), a name that can be associated with 'Lek', an old word for rites, games and festivities, often associated with the big annual folk festivals.



**Fig. 30.** The altar cabinet in Flistad Church, a Lübeck work from around 1500 (possibly from Bernt Notke's workshop), clearly reflects the important horse traditions in this area. When ordering the cabinet, both the priest and the parish farmers had given specific directives: the altar cabinet would honour the memory of St. Staffan and the horse would be clearly featured.



**Fig. 31.** The central figure in the lower section of the altar cabinet is the horse rather than the biblical message.





**Fig. 32. Despite the removal of murals and sculptures during the 18th and 19th centuries, the importance of horse traditions remains clearly visible in the church interior. The round altar-rail has a very clear horseshoe shape.**

According to the local tradition in Flistad, preserved in oral transmissions even today, Lekslätt was once the site of ‘tournaments and horse games’ (pers. comm. Hans Eriksson, Flistad, May 2020). ‘Leikr’ and ‘hestavíg’ are mentioned together in the Icelandic sagas, and the place names ‘Leikvolden’ and ‘skeivolden’ are found close to each other, for example in Valle in Setesdal. Just west of Flistad Church is also the village of Valla (compare Valle in Setesdal), which could have some significance. Place names containing the word ‘Lek’ (Leik) certainly occur in several places in Sweden, as do the Skede names.



Fig. 33. Crucifix from the 1300s, which was used especially between Prayer Sunday and Christ's Ascension Day for processions around the fields to invoke God's blessing on the crop of the year and ward off plagues. This is probably another pre-Christian tradition that was dressed up in a Christian costume in Flistad but also in other parishes.



**Fig. 34.** The owner of Flistad Well, Hans Eriksson, who grew up hearing and practising the various local horse traditions, shows the well-preserved well house at the 18th-century health spa. Note the crutch left by a pilgrim who was miraculously cured a long time ago.



**Fig. 35. The well or frobrunn. According to the story told locally, ancient horse races to the site must have been a serious business. Whoever came first and skimmed water off the surface would have good luck throughout the year, while the rider who came last had to surrender his horse to the winner.**

Another example that Wessén cites is a Skede place not far from Flistad, in Tranås in northern Småland, about 50 km to the south. The oldest part of the small town of Tranås was originally called Hästskede, (Horse Skeid), while a nearby plain, Hässjöslätt (horse race plain), may have been the original site of the ritual horse races (Wessén 1921:103-106). In this case, the place name and the topography of the place allow one to draw conclusions about the ancient significance of the place for horse rituals.

Flistad is a clear example that fits superbly into the traditions of St. Stephan and the horse rituals, with traditions that have been preserved until recent times and a sacred well (Figs. 34-35). This well became well known in the 18<sup>th</sup> century after the priest who removed the sculpture from Flistad church had the sacrificial well cleaned up and turned it into a health resort. This work began in the early 1720s, with the stated aim of ending superstition and the wicked cult at the well. During the 18<sup>th</sup> century, it was said that during ancient times many superstitious rituals were conducted at the well, especially on Midsummer Night (Broocman 1760).

This practice continued even after the well was transformed into a health resort, and Flistad well is said to have remained central to the village's midsummer celebration in the mid-1800s. The people also had a reputation of being extremely superstitious and powerful forces where believed to reside in the parish. During a bishop's visit in 1736 to Flistad Church, the congregation was seriously reminded to stop practising and believing in sorcery, magic and superstition (Wessén 1921:119-121).

There were many horse racing rituals around Christmastime in Scandinavia. The adaptation of the rituals to Christmas and church visits changed the circumstances of the horse races, but the content seems to have remained more or less intact. One of the most frequently mentioned traditions is the race – using horse and carriage, sled or by riding on horseback – home from the church after the service on the morning of Christmas Day. The Christmas morning service, 'julotta', held early on the morning of 25 December to celebrate the birth of Jesus has long been the dominant Christmas service in Sweden. In Sweden in old times, the parishes were often large and many had to travel long distances to church. Most people therefore travelled to church by horse and carriage or sled, depending on the weather. The morning service originally started at 4 a.m., but from the end of the 17<sup>th</sup> century this was moved to 6 a.m. Before the morning service had even come to an end, people started hurrying out. There was no time for the usual chat and

gossip outside the church as many parishioners were rushing to take part in one of the most important Christmas Day rituals – which was in fact not even Christian – namely the horse race home. There are many popular stories about this wild race (e.g. Gaslander 1774; Söderbäck 1921; Celander 1928; Nilsson 1936). While it was highly popular among the peasants participating in the morning service, the priests did not support the ritual. It was frowned upon by the church, not only because parishioners rushed out of the church, but also because they obviously regarded the horse race as more important than the service itself.

In some places, the horses were first lined up for an organised start of the race, but usually the start was wilder. The motive of the race was a very tenacious belief that those who came home first would have the best harvest and that their farm would prosper over the coming year. As soon as one reached home, one had to take a sip of Christmas beer, or the victory would not count (Celander 1928:251-252). Apart from during this wild race, everyone kept quiet on Christmas Day, which was considered the holiest of the Christmas holidays (e.g. Nilsson 1936:260). The custom of the horse race is even more remarkable in this context of religious restriction – observing silence, reading the Bible, not visiting anyone etc. The tradition was continued until the turn of the 20<sup>th</sup> century, and even later in some places. In his book on customs in Kristdala Parish in Småland, Per Söderbäck (1921:78) writes that ‘the custom ceased a few decades ago, but there are still some farmers who make sure that they can get home before the neighbour’.

The horse race from church was also associated with the St. Stephan rituals, as described by Vicar Petrus Gaslander, who recorded popular customs in Västbo härad in Småland in the first half of the 18<sup>th</sup> century (posthumously published in 1774).

‘On returning from the church, which happens faster than otherwise since each one then runs or rides home, as quickly as possible, each household lives in silence for themselves, with reading and singing and other innocent acts. No one is allowed to visit the other, for it is considered bad behaviour. On the day after Christmas Day, “Staffan-Skie” (Skede) is ridden from the church, which, however, as well as the race from Church on Christmas Day, now mostly has ceased to be performed ... Those who first come home from church on Christmas Day believe themselves to be the first to get this year’s harvest salvaged. That is why everyone hurries, by horse and carriage,

riding or running to come home first' (Gaslander 1774:7, 25:  
Transl. from Old Swedish by the authors).

As we can clearly see, the meaning is the same as in Staffan's Skede, with the race to a well and back from the church. It is about fertility and the coming year's crops, where the horse race has remained a central feature, albeit in a different form. His description is even more credible if one takes into account that Gaslander was a priest in the Swedish church who was critical of popular superstition. Gaslander's account from Västbo härad is incidentally among the most authentic depictions of this kind from Sweden, also with regard to other customs.

### **From Valle to the Vikings**

While the (horse fighting) skeid tradition was most common in the Valle Valley in Norway in the 19<sup>th</sup> century, it was present in many different forms and shapes throughout Norway. As mentioned, the oldest documentation dates back to 1618 and comes from Fyresdal in Telemark County.

The tradition surrounding wells and water during winter seems to have a longer continuity (see Chapters 10-11). However, the challenge one faces when moving from historical periods to archaeological times is the absence of written documents so that one must rely only on archaeological material. Most archaeologists have interpreted the Hägeby stone in Uppland, Sweden, (+/- 500 AD) as part of the skeid and horse fighting traditions. However, we will argue – as have many archaeologists before us – that these trajectories go much further back in time.

Although the tradition remained quite violent in 18<sup>th</sup> and 19<sup>th</sup> centuries, it had been reined in by the Church. It is puzzling that the sagas and Icelandic sources are silent about the actual violent practices, because the only other written source shedding light on this practice in pre-Christian times describes a quite different and extremely violent tradition that fits more with the early Indo-European scheme.



## **Ibn Fadlan and a Viking funeral along the Volga**

Stylegar (2006) suggests that it is interesting to include Ibn Fadlan's account of the Viking funeral along the Volga River in Russia in a discussion about the relationship between mortuary practices, fertility and the cult of Freyr, and skeid. Ibn Fadlan was a rare eye-witness to a Viking-Age funeral and while sound source criticism is in place, it does give a unique glimpse into another world. In 922 AD, he witnessed the cremation of a Viking chief in which the rituals preceding the cremation are of great interest. While Ibn Fadlan admitted that

'I have never seen people with a more developed bodily stature than them. They are as tall as date palms ... they are the dirtiest creatures of God. They have no shame in voiding their bowls and bladders, nor do they wash themselves when polluted by emission of semen, nor do they wash their hands after eating. They are then like asses who have gone astray' (Ibn Fadlan, p. 63-64).

The note about the filthiness after sex indicates not only that sex was commonplace and took place in public spheres, but also that there was no shame attached to or associated with carnal activities. He is even more explicit:

'In a house like this ten or twenty people, more or less, live together. Each of them has a couch whereupon he sits, and with them are fair maidens who are destined for sale to the merchants, and they may have intercourse with their girl while their comrades look on. At times a crowd of them may come together, and one does this in the presence of the others. It also happens that a merchant, who comes into the house to buy a girl from one of them, may find him in the very act of having intercourse with her, and he [the Rus] will not let her be until he has fulfilled his intention' (Ibn Fadlan, p. 64-65).

The barbarism Ibn Fadlan documented was certainly shocking. Slave women were raped in public, sometimes even in the presence of the merchant who was to buy them. The everyday brutality described may serve as a backdrop for understanding well-known mortuary rites. While archaeologists often emphasise the religious meaning of funerals, within this overall frame power was also plainly abused by men under



the influence of drugs and alcohol. Certain lives were worthless beyond their value as a commodity. On the other hand, those sacrificed in funerals had some value as they were given to gods as part of the master's funeral. Ibn Fadlan writes:

'They told me that they carry out many ceremonies when their chiefs die, the last whereof is the cremation ... If he is a rich man, they gather his possessions together and divide them in three parts. One third remains for his family; with the second third they cut out garments for him, and with the third part they brew mead for themselves, which they drink on the day when his slave girl kills herself and is cremated with her master. They drink the mead to insensibility, day and night. It often happens that one of them dies with his beaker in his hand' (Ibn Fadlan, p. 66-67).

Ibn Fadlan is explicit that the crowd is not merely mourning, but also feasting. Anger or grief, combined with feelings of injustice, or betrayal due to losses in battle that led to the death would naturally have been a toxic cocktail. Although usually slave girls were killed and sacrificed, Ibn Fadlan writes that even men could face death in funerals. Although keeping one's word was a matter of honour, the 'voluntariness' is questionable.

'When a high chief dies, his family says to his slave girls and servants: "Which one of you wishes to die to with him?" Then one of them answers: "I". When he [or she] has said this he is bound. He can in no way be allowed to withdraw his word. For the most part, this self-sacrifice is made by the maidens. When the above-mentioned man had died, his relatives said to his slave girls: "Who will die with him?" Thereupon one of them answered: "I" ... The relatives of the deceased then began to occupy themselves with the preparations for the funeral ceremonies ... The slave girl meanwhile drank all day long and sang joyfully, and enjoyed herself in view of the future' (Ibn Fadlan, p. 67).

Before the slave girl was killed as part of the funeral, 'they took two horses, drove them until they perspired, then cleft both of them in twain with a sword and laid their flesh in the boat. Then they brought two cows, cut them in two likewise and laid them in the boat. Then they

brought a cock and a hen, killed them and threw both into the ship. The maiden who wished to be put to death went here and there, and entered each of the tents where the head of each of the tent had intercourse with her saying: "Say to thy lord, I have done this out of love of thee" (Ibn Fadlan, p. 69).

The two horses were driven until they were perspiring heavily, suggesting horse racing or horse fighting, whereupon they were sacrificed. It is probably important that this infamous passage, in which a slave was raped again by the chief's men, took place after the apparent horse race and the successive sacrifices. On the boat,

'the men began to beat their shields with their staves so that her shrieks would not be heard, and the other maidens become terrified. Then six men went into her tent, and all had intercourse with the girl. Then they placed her beside her dead lord; two men seized her by the feet and two by the hands. Then the old women [the Angel of Death – an old giantess, fat and grim to behold] placed a rope in which a bight had been made, and gave it to two men to pull at the two ends. Then the old women came to her with her broad-bladed dagger and began to jab it into her ribs and pull it out again, and two men strangled her until she was dead' (Ibn Fadlan, p. 69-70).

Thereafter the Viking ship was put on fire: 'The closest relative of the deceased approached, and took a piece of wood, kindled it and then walked backwards to the boat, keeping his face turned towards the spectators, holding the burning brand in one hand, placing his other on the anus. He was naked and walked backwards until he reached the boat and set fire to wood that had been prepared beneath the boat. Then the people came with kindling and other firewood, each having a brand burning at the end, and laid this stick in the pile of wood' (Ibn Fadlan, p. 70).

Many of these observations may be challenged, but they are so specific that it is hard to imagine how a man from a foreign culture could have invented such scenes, given that he was already shocked by the public rape of women before they were sold. Details like the main mourner igniting the Viking ship by walking naked backwards would be a meticulous description in itself; adding without reason that he placed his hand on the anus does not add meaning unless it happened. In any case, there are many details that do not add meaning, but together it clearly testifies to a sexually violent culture.

The passage in which he states that they ‘drove [the horses] until they perspired’ and then sacrificed them, after which the slave woman was raped by the chief of each tent bears many structural similarities to the ideal type of the horse sacrifice modelled on the *ashwamedha*.

### From written sources to archaeological sacrifices

Before leaving written sources and turning to the archaeology of horse sacrifices and ritual practice in Iron- and Bronze-Age Scandinavia (Fig. 36), one may sum up the essence of the skeid-tradition. Solheim says:

‘In ancient times, the midpoint for these ceremonies was, without doubt, the field itself, where the best of grain had grown and ripened. In all probability it was the custom for people to ride in procession around the field, and, in addition, they held horse racing and horse fighting and other competitions on the field itself, or just besides the field. The activities had the purposes of symbolically separating the quality, the best, from the refuse, the least valuable. At the same time, the ceremonies were an homage to the best of the crop. In connection with these customs a ceremonial gathering was held where this best was eaten in a ritual mealtime, and the scraps were destroyed, i.e. given to the evil powers, in order to ensure good luck and a good year to come’ (Solheim 1956:172).

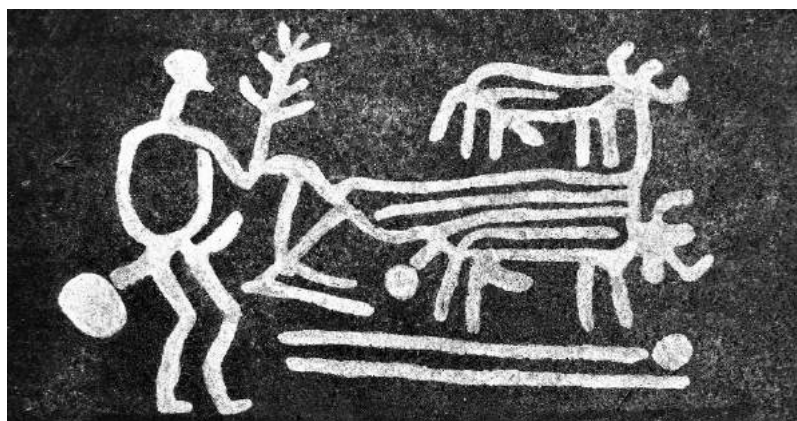


Fig. 36. Fields and fertility. Litsleby 6 Tanum, Bohuslän, Sweden.  
Photo: Milstreu Gerhard, [www.shfa.se](http://www.shfa.se)

If this was the main part of the skeid ceremony, as shown, the great Indo-European horse-sacrificing tradition contained many sequences. We can therefore return to the comparative scheme of the horse sacrifice and include the Norse or Scandinavian tradition ((O) indicates plausibility, which will be discussed below):

	Indian		Irish		Greek	Roman	Norse
	myth	rite	myth	rite			
King mates with mare	X	(X)	X	X	X		O
Mare is killed (set free)		(X)	X	X	X		O
Queen mates with stallion	X	X			(X)	(X)	(O)
Stallion is killed		X			X	X	O
White horse (and/or grey)	X	X		X	X		O
Chariot race	X	X	X		X	X	O
Flesh/seed is eaten	X	X	X	X	X		O
Witch eats/abandons child	X		X		X		
Mutilation of horse/father/son	X	(X)	(X)		X	X	O
Transformation of woman into bird		(X)	X		X		(O)
Sun as bird or horse	X	X			X		O
Goddess mates with mortal	X	(X)	(X)		X		O
Chastity of king		X	(X)		(X)		O
Wicked (step) (split) mother	X	X	X		X		(O)
Hippomorphic twins	X		X		X		O
Brother-sister incest	X		X		X		
Father-daughter incest	X		X		X		
Queen mates with bull	X				X		(O)

The main challenge to discussing this tradition in the north is that we discuss different phenomena within an overall framework of 4000 years of changing continuities. The king – or chief or divinity in whatever form (twin rulers?) – mating with mares is evidently depicted on rock-art going back 2500-3500 years in time. It is no wonder that this explicit tradition changed and took on more symbolic forms over time. One may be more surprised that the tradition persisted apparently unchanged for such a long time in Ireland. As late as the 19<sup>th</sup>- and 20<sup>th</sup>-century, there were descriptions of the skeid in which the horses could

roam and graze freely on the night before the main ceremony. Whether queens mated with stallions is more difficult to say with any certainty, but in Ibn Fadlan's description of the ritual rape one could interpret the chief's men and slave girls as replacing the horse phallus and the queen. Stallions – most likely also white ones (although mythologically the divine horse was grey) – were obviously killed and sacrificed and apparent horse races are depicted on rock-art. Thus, many of the fundamental aspects of the Indo-European horse-sacrificing tradition were present in the North at a structural level, which was given specific cultural expressions through time. Structurally, the Norse skeid tradition is at least on a par with the Roman and Irish traditions as a bearer and transmitter of ancient Indo-European cosmology.

Without elaborate myths, one cannot conclusively prove brother-sister or father-daughter incest, although there are some instances in the cosmological realm, but they are not directly connected to horses and horse sacrifices. Mutilation of horses did take place, as evidenced by the skeid horse fights as part of which many animals were severely wounded. This was not accidental: letting the animals suffer seems to have been part of the public spectacle.

Regarding the last aspects of the schematic ideal type, these can probably be found in the Bronze-Age material (Chapter 9). Bird symbolism is omnipresent and it seems plausible that some women were symbolised by birds. Sun symbolism dominates all others, also in combination with horses and boats. Hippomorphic twins are also common, as well as many horse-shaped figures. Many rock-art motifs can be interpreted as goddesses mating with mortals, possibly even including queens mating with bulls, but one should be cautious when writing culture history and identifying mythologies based on rock-art alone.

Lastly, in all examples from India to Italy and Ireland – and from Valle in Setesdal to the Volga in Russia: horse rituals and sacrifices – whether skeid in rural villages or sacrifices in Rome – were among the grandest ceremonies in cosmos and community. Taking place on an annual basis or, more rarely, as part of funerals, it was the highlight among other grandiose rituals. Socially, it was the place to be if you wanted to be somebody. It was about rituals and religion, but it was also about feasting and fighting – if there were any differences. As the above examples show, excessive drinking was an integral part of the ritual, making proper performance of the ritual all the more difficult. Still, it was a performance; archaeology clearly testifies to this.

## Farms, fields, fertility – and festivities

In order to better understand not only the complexity of the ritual horse-sacrificing tradition, but also the continuities through time, one may highlight some aspects of the totality it defined in culture and cosmology, from cradle to grave, and for farmers on the fields through famines and festivities.

The fertility aspect is obvious but we will focus on agricultural fertility and not the sexual aspects of humans and horses. Following Wessen (1922:17), it was believed that those who won the race to the wells on the second day of Christmas would have the earliest and best harvest in the coming season. By winning, they were allowed to let their horses drink first from the rushing waters and were also the first to return home to the farm. It was also believed that those who had the strongest horses would have a prosperous year. Similarly, in several places in Norway, farmers believed that the first to get their animals out in the fields on 26 December would have a prosperous year. The cattle had to be in the fields early in the morning, preferably before 6 a.m., and they had to eat and drink (Lid 1933:17-18).

This parallels the above-discussed cow-skeid and shows that it was above all a fertility rite that was not restricted to horses. Rather, the millennia-long Indo-European heritage had developed particular cultural practices and traditions around the horses. However, as we have already seen in the oldest records from Sintashta culture on the steppe from 2000 BC, the ritual tradition is likely to have included other animals than the horse at an early stage, though the horse had a special position from the beginning (see Chapter 5).

While we have focused on horse fights, horse races, and even horse phalluses and procreation – whether solely between horses or ritually involving humans – other traditions may have been of equal or greater importance for commoners and farmers. In the *ashwamedha* ritual, the horse roamed around for a year before the sacrifice, and the king had to conquer all the kingdoms the horse entered during its wanderings. In other words, the horse had a demarcating function that defined the forthcoming kingdom. Moving from mythology to ecology and back to Scandinavia and skeid, the Stephan-skeid on 26 December also had a demarcating function. It was not only about horse races and competitions, but also riding together in groups.



**Fig. 37. Excavation of the Royal Hall in 2017, Old Uppsala, Sweden.**

In Sweden, sources point out that originally the horse riding should take place across fields, but this was later often replaced with a horse race back from the church (Lid 1933:27), a custom that goes back hundreds of years as we have seen (Gaslander 1774).

In *Jolesveinar og Grøderikdomsgudar*, Nils Lid gives a detailed account of the second day's skeid tradition (Lid 1933), which was common all over Norway and Sweden. In rural areas in Norway, including Setesdal, this collective riding took yet different forms. Young men in particular rode together from farm to farm, and everywhere they came they demanded beer or other alcoholic drinks from the farmer. There are also many reports that they actually rode *into* the farm building itself (Lid 1933:9-11). Although impossible to prove, it is interesting to note that similar practices may have taken place during the Viking and Vendel periods, but also before, with people riding into great manors. The wide doors certainly allowed for such indoor riding (Ekerø Eriksen 2018:170), which was revealed during the excavation of the large hall on the plateau north of the church in Old Uppsala (Ljungkvist in print, Fig. 37).

Bringing horses indoors and into a farm's living room was obviously disruptive. The riders were progressively drunker as they went from farm to farm. In Setesdal, it is reported that the group of riders could comprise 30 to 40 men, meaning not all of them would have been able to ride into the farm house. While the tradition was mainly a form of entertainment among young men, sometimes unmarried women were also 'kidnapped' and taken along in the procession. There was also a long-held belief, based on a very ancient tradition, that the procession should be led by the legendary Guro Ryserova (Skar 1908: 5-20, Lid 1933:15). This is a very important ethnographic description, because it connects a mythological era to the actual practice of the skeid-tradition.

Guro Ryserova is a mythological character and a kind of goddess. In Setesdal and Telemark in Norway she was believed to lead 'Oskoreien' as late as the 18<sup>th</sup> century (Olrik & Ellekilde 1951:947-948). 'Odin's Hunt', known as 'Oskoreien', 'Åsgårdsreien' or 'Julereien' in Norway, and 'Odens jakt' or 'Hinjakta' in Sweden, was the mighty cosmological spectacle around *jól* or the pre-Christian Christmas, when Odin charged across the sky on his horse followed by hordes of dead souls, haunting farms and families as they marauded from one area to another (Figs. 38-39). Odin was followed by the dead; murderers, drunkards and other bad spirits, and they went from farm to farm. It was a dangerous time when the dead returned, and it was a time when death could collect people to the realm of the dead (Østigård & Kaliff 2020:265-277). This tradition and the associated beliefs continued in both rural Norway and Sweden up to early 20<sup>th</sup> century (see Schager 2018).





Fig. 38. 'Odin's Hunt' or Åsgårdsreien (1872) by Peter Nicolai Arbo.



Fig. 39. 'Julereia' (1922) by Nils Bergslien.

In Norway it seems that this great Norse mythology was played out in the second-day skeid when groups of drunken peasants rode from farm to farm and even into the very buildings. Thus, the Norse world was not only a spiritual world; it was very concrete and embodied, which took many forms. Throughout the Norwegian landscape, trolls, ancestors and other beings were believed to live in nature (Bø & Hodne 1974). But natural phenomena could also embody themselves and become beings – bad spirits and wights (vættir, vetter, associated to witches). During the cold and dark nights around Christmas, in particular in Setesdal, Telemark and Vest-Agder or the regions with the strongest skeid-tradition, driving storms and lethal winds were evil wights roaming in the dark, posing real danger to humans and animals alike (Olrik & Ellekilde 1951: 945). These forces opposed life and threatened the coming agricultural season and harvest. The aim of the skeid ritual to the wells was to overcome this danger.

## 8. Iron-Age horse sacrifices

*'I certainly could not  
Refrain from  
Thrusting him inside me  
If we were lying alone  
In mutual pleasure.'*

Words of a thrall with a horse phallus, *Völva þáttr* str. 9 (after Price 2019:178).

### Deposited horse bones – finds with many faces

The traditions of sacrifice in the Late Iron Age are well documented in written and comparative material preserved in Icelandic manuscripts from the Early Middle Ages: the *Edda*, the skaldic verses, the early medieval laws and the sagas. These written sources contain information that can be compared with archaeological finds. Early skaldic verses and written laws constitute authentic source material, but the information is very brief. The sagas, which were compiled and written down later are not authentic in the same way, but can still contain information of interest (e.g. Hultgård 1993,1996).

Evidence of horse sacrifices in archaeological contexts from the Late Iron Age are everywhere, and the interpretations are often related to the information provided in written sources. We can only discuss a few relevant cases and will not refer to all scholars who have worked on horses and artefacts related to horses in graves and other ritual contexts (e.g. Gräslund 1980; Sundquist 2001; Pedersen 2014, Leifsson 2018; Nistelberger et al. 2019; Ljungkvist in print). Interpretations of settlement remains from periods earlier than the Late Iron Age have seldom included traces of cult activities and cult places, probably due to a corresponding lack of comparable written sources. Hence, interpretations of earlier periods have depended on the material remains and conclusions based on analogies. For a long time, field archaeologists commonly assumed – though rarely explicitly stated – that structures were by definition profane, thus opting for the simplest

interpretation and ruling out ritual and sacrificial interpretations (Kaliff 2001:445).

Horses occur especially in high-status burials from the Vendel and Viking times (Fig. 40). The boat burials at Valsgärde and Vendel in Uppland and the well-known Norwegian ship-graves – such as Borre, Gokstad and Oseberg – are classic examples. But evidences of horses are not limited to these contexts. Deposits not only consist of ordinary butcher's waste containing horse bones, but also finds in high-status contexts from settlements and cemeteries. Although the number of finds is limited, the horse is one of the relatively few animal species, along with dogs and to some extent cattle, which were given their own burials and graves during the Iron Age in Southern Scandinavia. In other words, the horse resembled humans.

There are several examples of horse burials. One often-mentioned Swedish example – dated to the Migration Period (375-550 AD), was found at Ölands Skogsbys, Torslunda Parish on Öland. A young stallion was buried on its stomach, head facing to the south-west and legs splayed out to the sides. It was located at the edge of a somewhat older cemetery, dated to the Roman Iron Age. Another older horse grave was found at Slusegård Cemetery on Bornholm in Denmark, dated to the Roman Iron Age. This horse was buried on its side with its head to the north-east, its forelegs raised and its hind legs extended. Yet another horse grave, dated to the Late Roman Iron Age (200-375 AD), was excavated at Skovgård Cemetery on Zealand. This grave contained a large powerful stallion – larger than most other contemporary horses – buried with its hind legs bent in an unnatural position (Jennbert 2002:107-111).

In eastern Middle Sweden – particularly the Lake Mälaren Region, with Old Uppsala as a significant example (e.g. Magnell et al. 2017; Wikborg & Magnell 2017), horses often occur both in burials and other ritual contexts. These features are interpreted as, for example, sacrifices, grave gifts to the dead, or as special slaughter places, possibly to provide special food for ritual meals. However, horses are not the only animals found in graves, with much more frequent finds of pigs and dogs, for example, and during certain periods also sheep and goats (Magnell et al. 2017:214, fig. 90). In addition, a large number of other species are represented, both domesticated and wild. However, this does not lessen the importance of the horse. Even in the context of the most famous Indo-European horse sacrifice, the *ashwamedha*, the vast majority of sacrificial animals are other species (see Chapter 6).

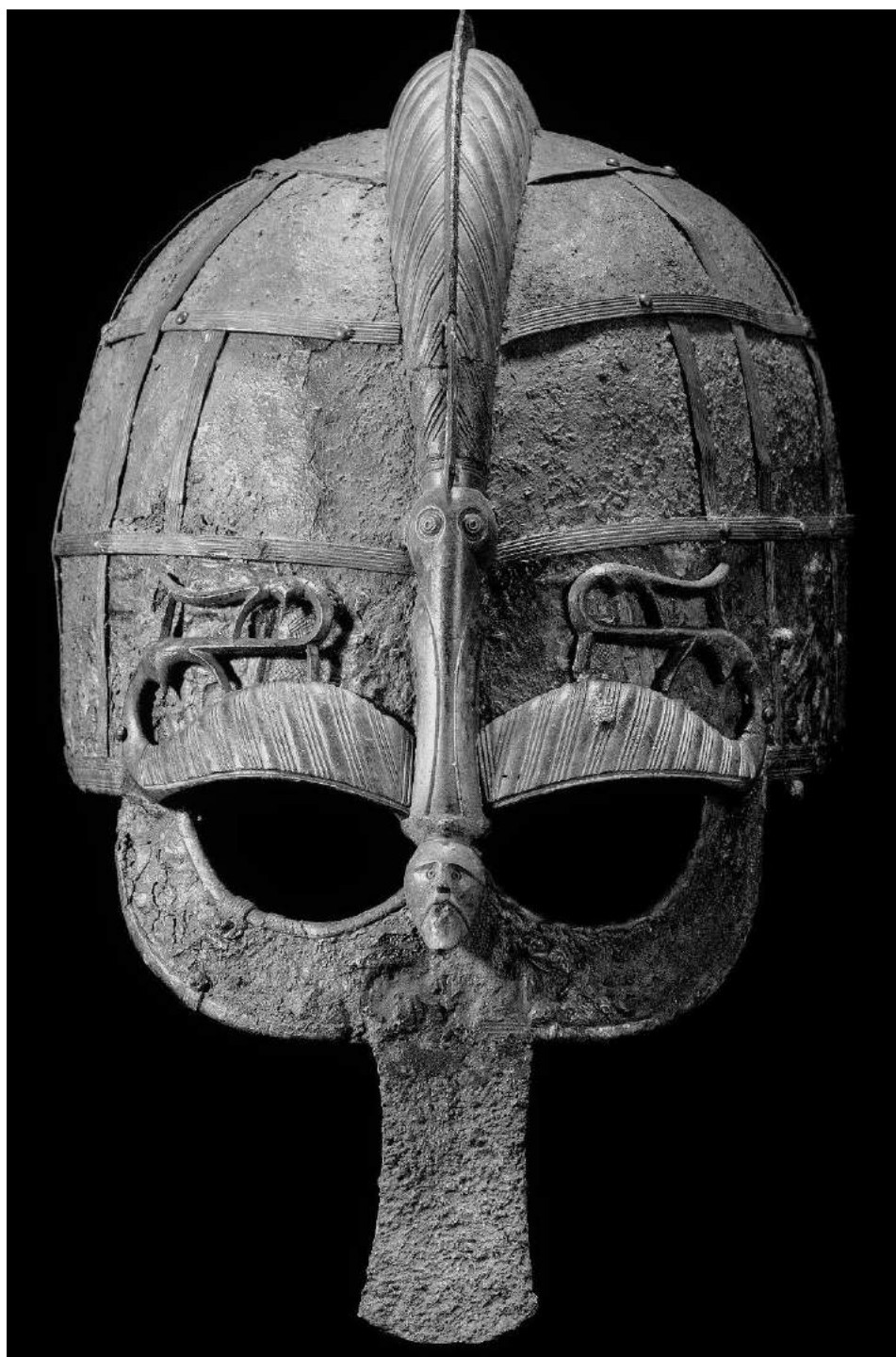


Fig. 40. The iconic helmet from Vendel. Swedish History Museum.

The horse is exclusive, which is why it is quite natural for there to be few traces of sacrificed horses. The proportion of horses in graves and sacrificial places should therefore not be decisive for interpretation. On the contrary, the small amount of bones may say more about the importance of the horse. Still, the context is of paramount importance for the interpretation of the horse as a particularly significant sacred animal.

Skeletal remains from horses form a dominant feature in many of the known sacrificial finds from wetlands, such as the Swedish examples Röekillorna at Hagestad in Skåne (Stjernquist 1997), Skedemosse (Hagberg 1967) and Eketorp (Backe et al. 1993) in Öland. Skedemosse in particular is a central place for interpretation of the importance of extensive rituals that included the horse as a sacred animal – in the form of ritual horse races and, specifically, grand sacrifices during the Roman Iron Age. Skedemosse was thoroughly analysed by Ulf Erik Hagberg in his classic thesis (1967). We shall therefore only briefly mention the place here, even though it is a constantly recurring and relevant reference object in archaeological studies.

The meaning of the name Skedemosse together with the finds makes this place particularly interesting. The first part of the name – skede – obviously refers to the Old Norse word for horse racing or other horse rituals. Besides connecting the name with the archaeological finds, Ulf Erik Hagberg is one of the few archaeologists who refers to the late Norwegian traditions of skeid and the ‘Staffansskede’ – the horse races to a special well on the day after Christmas. A buried horse with a long pole resembling a skeidstong was even found (Hagberg 1961). Therefore, based on the context, Hagberg interpreted Skedemosse as an important regional site of broad significance: ‘Probably Skedemosse can be considered as a cult site, perhaps common to a large district, where the cattle were rounded up, where practical affairs were discussed, competitions and games were arranged, and offerings were made to the gods’ (Hagberg 1967:80)

Hagberg’s description of the ancient significance of Skedemosse and the ritual meeting place there – with a combination of horse fighting, horse racing, business and cult activities, is very similar to the descriptions of Norwegian skeid traditions from Setesdal, which continued until the 19<sup>th</sup> century. In the latter tradition, too, it was a popular festival with multi-layered significance. Although the interpretation of Skedemosse was partly inspired by the Norwegian skeid tradition, creating a risk of circular evidence, it is nevertheless

compelling that the archaeological finds and the much later tradition show clear similarities. We see this as a further indication of the deep significance and long continuity of the various horse rituals in Scandinavia.

An ongoing project, run by archaeologist Jan-Henrik Fallgren, based on Skedemosse and the finds there, aims to broaden the perspective, and study how ritual horse races and horse fights in Scandinavia and North-Western Europe spatially manifested themselves in the landscape and topography. The Skedemosse area, as well as other places in Scandinavia with 'skede' names and places where horse offerings have been found, will be studied through detailed spatial mapping, with a focus on place names, ancient monuments and topographical features (Fallgren Homepage, Uppsala University 2020.03.23).

Special and very prestigious horse equipment was also found in sacrificial finds from the Migration Period, including at Sösdala and Fulltofta in Skåne (e.g. Fabech 2017:17-41) and Finnestorp in Västergötland (Nordqvist 2017:237-256). At Sösdala, the finds have been linked to close contact with eastern equestrian people during the Migration Period. The findings may give the impression that the role of the horse ritual gained importance during this period due to external influences. 'The practice is found among mounted nomads such as Sarmatians, Huns and Alans as well as later Nomadic groups. The Fulltofta and Sösdala finds can reflect similar ritual activities. Perhaps Scandinavian warriors attended funerary rituals according to nomadic customs in south-eastern Europe or at least heard about such rituals' (Fabech & Näsman 2017:341). Although the equipment deposited at these sites indicates external influences, it need not diminish the long-standing status and ritual role of the horse in Scandinavian society. This shared tradition may have been an important reason for strengthened contacts, since it was already a deep-rooted part of Scandinavian culture.

Pits with specially arranged horse bones have been documented in a number of settlements, and have been discussed in different contexts since the investigations at Sorte Muld on Bornholm in the 1940s. At Sorte Muld, researchers found what was interpreted as a sacrificial pit, barely 1 m in size, with a rich array of sacrificed domestic animals. On top, there was a horse skull as well as the lower extremities of a horse. The interpretation as a sacrificial pit was made mainly on the basis of the unusual composition of the horse bones – skull and extremities – a

combination that has also been documented on several sacrificial sites located in wetland environments. In this context, the then-frequently cited analogy with historically known horse sacrifices from Siberia was launched. In those examples, the head of the horse, as well as the skin with the extremities, had been placed on an erected wooden stake (Klindt-Jensen 1957:59, 83-86). A very clear find of ritually deposited horse bones of a similar kind, also from the Migration Period is from Vikhem near Lund in Skåne, excavated in 2016. The horses' skulls were found neatly placed alongside the animals' extremities in a way that is consistent with several of the findings mentioned above, here clearly showing a ritual disruption of the bodies. They have been interpreted as deposits after ritual sacrificial meals, during which some parts were given to the gods (Magnell, lecture, Nov. 2017).

However, the majority of horse bones documented have not emerged in clear sacred environments, but in archaeological investigations of more ordinary sites. Despite this, the use of horse sacrifice in places of residence and in connection with house building during prehistoric times, unlike wetland sacrifices of horses, is much less explored. Special pits with horse bones occur at places of residence, particularly horse skulls in the foundation of houses or in post holes. In addition, the tradition of placing horse craniums in the foundation of houses has a long continuity in Sweden and Denmark, almost up to the present (Carlie 2004:124-129).

Although interpretations of sacrifices have become more common in recent years, there has for a long time been a great reluctance to interpret rituals and religious features in Scandinavian archaeology, particularly when it comes to different types of 'butcher's waste' (cf. Kaliff 2001:449-451). There are several possible reasons for this, one being that traces of cult activity can be difficult to separate from other remains, another that settlement archaeology for a long time did not focus on documenting traces of ritual activities, and researchers have not been well-enough prepared to observe and interpret such activities. At the same time, there need not be any real contradiction between slaughter and sacrifice, in any case not in a society in which beliefs were completely different from those of our own times. In traditional societies, slaughter is often conducted according to special rituals, rooted in prevailing beliefs:

'Both butcher's waste and other types of deposited material can be seen from a perspective of religious-ritual perspective as well



as an everyday-functional perspective. On the one hand, the waste could encompass remains from sacrificial meals or it could consist of ritually deposited waste from ordinary butchering ... In traditional societies, it is common for all butchering to take place under more or less ritually established rules. This is not to say that butchering as such is a ritual activity, or a sacrifice, but that it takes place according to ritual patterns that originate in religious and/or magical perceptions. The presence of places for butchering and butcher's waste in a prehistoric settlement site could thus indicate a place of special importance either for the individual farm unit or for the village community' (Kaliff 2001:450-451).

This of course applies to the interpretation of archaeological sites with deposited bones from horses. At the same time, horses were hardly the most common slaughter animal when it comes to food production, which in itself means that the presence of horse in the osteological find-material indicates something more special. Accordingly, deposits of horse bones have sometimes been interpreted more vaguely as special slaughter places, although with ritual connotations (e.g. Fagerlund & Lucas & 2009), possibly as a result of a lingering caution in interpretation – a certain reluctance for a clear interpretation as a ritual site – though all signs indicate that it is a sacrifice. This is also evident from the summary of the interpretation:

'The absence of butcher marks on the horse bones indicates that this meat had not been intended for food consumption to the same degree as beef. This could mean that horse meat had not been included in the basic diet of the farmsteads, but rather consumed at ritual occasions only. However, the difference between the handling of the two species does not explain why large portions of the meat were left lying on the slaughter site. The interpretation is that this was meat for special sacrificial meals. The sacrificial animals were to be consumed on specific occasions, and meat not eaten was for a time left to lie in the open before simply being covered over ... A problem with this interpretation is that there were almost no traces of the actual meals or preparation of meals. The amulet ring with a Thor's hammer does however imply a ritual interpretation of the site' (Fagerlund & Lucas & 2009:73).

In recent years, however, the more refined interpretations as sacrificial sites have returned to Scandinavian archaeology, and here it is not uncommon to see a development over time among the same archaeologists and interpreters. Malin and Robin Lucas (2013) make a very interesting updated interpretation of such a finding from Fyrislund, on the eastern outskirts of today's Uppsala. Here, at a Viking-Age settlement, a horse burial was found inside a house. The excavators conclude that the existence of a whole buried horse inside a house can only be interpreted as a sacrifice. The fact that the horse was young and in relatively good condition strengthens the interpretation, since this is not an old horse that was buried simply to get rid of the dead body. The dates of the house and the bones further indicate that the burial was part of a closing ritual, when the house stopped being used (e.g. Lucas & Lucas 2013: 99-107).

In addition to the various ritual contexts discussed above, horse bones are also abundant at other ritual sites, though there are also often a number of other species present. Even in those cases, the finds are often associated with ritual activities undertaken near special cult buildings, dating to the Vendel and Viking periods. One such place, which can definitely be interpreted as a cultic place where animal sacrifice took place during the Vendel and Viking periods, is Borg on the outskirts of today's Norrköping in Östergötland County, Sweden. This archaeological site is best known for the well-preserved remains of a small cult building, about 6 x 7,5 m in surface, from the Viking Age and the first truly convincing example of its kind (Lindeblad & Nielsen 1996). For a long period of time, prior to the discovery of the building at Borg – especially after Olaf Olsen's (1966) influential publication on the subject – the question of whether any special cult buildings existed at all during the Iron Age was hotly debated (for overview see Kaliff & Mattes 2017).

The sacred significance of the building was reflected particularly in the presence of so-called amulet rings, almost 100 altogether: small wrought-iron rings, often in the shape of a fire steel or two miniature sickles put together. Miniature pendants hang on the rings, often in the shape of a hammer, sickle, ring or spearhead – possibly linked to different deities. Similar objects had previously been found, including at Helgö in Lake Mälaren, but at the time of the excavation, the discovery of amulet rings from Borg was the largest of its kind in Sweden. Following the discovery of Borg, some other large depots have been documented, among others in Gamla Uppsala and Ullevi in

Upplands Bro. The largest such discovery to date was made at Hjulsta in Spånga, Uppland, with almost 200 amulet rings (Harrysson 2017).

In a paved courtyard in front of the cult building in Borg, a large amount of unburned animal bones was found, totalling 75 kg. A large proportion was made up of skull and jaw parts, which shows that this does not involve ordinary food waste. In the bone material, besides bones from cattle, sheep and pigs, there were copious amounts of bones from horses and dogs. The archaeologists who conducted the excavation and interpreted the material tentatively linked the existence of certain animal species to various deities: the cat to the goddess Freya (who had a cart drawn by cats) and the pig to her brother, the god of fertility Frey (with the boar Gullinborsti as his special animal). The spread of bones from pigs shows that it is not random. All the bones from the sow, except for a single fragment, are adjacent to the amulet rings, while bones from the pigs (boars) were adjacent to iron-smelting ovens, probably also connected to the cultic activities (Lindeblad & Nielsen 1996: 31-35; Nielsen 1997:381-387).

From the 17<sup>th</sup> century onward, Borg was a manor, while documentation from the Middle Ages suggests it was then a royal estate for the Swedish king. The remains from Vendel and the Viking period also show a large prosperous farm – possibly a chieftain's seat. Both the cult house and the remains of large animal sacrifices fit well into such an environment, and probably it was the site of large public sacrifice rituals. Not least the large proportion of horses here is of interest, with the horse as an animal especially associated with prestigious sacrifices performed by high-ranking persons.

## **The Norse horse sacrifice as depicted in the written sources**

The oldest written account of the sacred importance of horses among the Germanic tribes can, like many others, be found in Tacitus' *Germania* (98 AD). He describes how white horses are kept in special sacred groves, for ritual purposes, including divination (Ch. 10). Written sources that relate more specifically to Scandinavia are, of course, of much later date, but also in some cases, more content rich. The significance of the sacrifice, especially the consumption of the horse's meat in sacred meals, is clear.

We must move almost a millennium forward from Tacitus' story of the Germanic tribes to have some depictions of sacrificial events from

Scandinavia itself. Even then, however, these are widely debated and controversial sources. For instance, Adam of Bremen's texts on the rituals that were carried out in the temple in Old Uppsala describe the sacrifices of horses and other species including humans. Adam reports that sacrificed bodies were hung up in a grove near the temple and that 'dogs and horses hang with people as well'. Chapter 17 of the *Chronicon* of Thietmar of Merseburg (Warner (ed.) 2001), from the early 11<sup>th</sup> century, describes similar scenes, which took place in Lejre on Zealand in January every ninth year. In front of all the people, 99 horses and as many men, dogs and cocks were sacrificed to the gods. Although these sacrifices cannot have taken place in Thietmar's own time, as they had ceased to be performed half a century earlier, the story still gives an indication of the horse's special significance. The eating of horse flesh at religious festivals was considered the most important evidence of belonging to the religious community, and thus also to society at large.

An interesting source that describes a sacrifice (blót), including a spectacular horse sacrifice, is the *Hervarar Saga*. Chapter 22 describes how the last pagan king of Uppsala, Blót-Sweyn ('Sweyn, the performer of sacrifice') c. 1080, arranged a blót after having driven away his Christian brother-in-law Inge who refused to administer the pagan sacrifices at Uppsala. In the part describing Sweyn's inauguration as king, the *Hervarar Saga* features a rare written description of the ancient Indo-European ritual of horse sacrifice: a horse was brought forward, cut into pieces and the meat was distributed to eat. The ritual is described as a bloody sacrifice in which the body of the horse is dismembered before being eaten. It also mentions that the blood of the sacrificed animal was sprinkled on the sacred tree at the cultic place in Uppsala. Admittedly, this source has been considered unreliable due to the lack of strong parallels among other descriptions of sacrifices in the Old Norse literature (Hultgård 1993:237).

It has also been pointed out that *Hervarar Saga* is often regarded as a late text, and could therefore be seen as an unreliable source on pre-Christian religion (Sundquist 2017:286, with references). However, the later date does not automatically make the information inaccurate or invented (Fig. 41). The description of Blót-Sweyn's sacrifice may very well reflect the fact, particularly if one looks at the archaeological finds, where traces of horse sacrifice occur in numerous cases. There are archaeological parallels to this particular passage of the *Hervarar Saga* in that the horse's bones in many finds from wetland sacrifices bear traces of being cut to pieces.



**Fig. 41. The death of Hervor (by Peter Nicolai Arbo).**

The fact that the horse was cut is reminiscent of the slaughter method in the Danish finds from Illerup Ådal and Nydam, but in these places there are no direct traces of the horses being eaten. In the finds from Eketorp on Öland, however, there is clear evidence that horses were eaten, after being decapitated and cut into pieces.

While the Church strongly opposed 'pagan' horse practices, horses were a symbol of power in the Roman Church. One of the Pope's most powerful symbols was the white horse, which represented the almighty power and its divine empire (Lawe 2019). However, this symbolism was very different from that in the pre-Christian cult. An important part of the pagan ritual seems to have been that participants in the blót ate some of the meat of the sacrificed horse. The most famous account in this context is probably the Saga of Haakon the Good, which describes a blót that the Christian King Haakon does not want to participate in. It also clearly shows the connection between the rituals associated with the horse sacrifice and royal powers. The blót was held at the beginning of winter, i.e. in mid-October. In the same way as the Irish sacrifice described by Gerald of Wales (Giraldus Cambrensis) in the 12<sup>th</sup> century, the horse sacrifice and the ritual eating of the horse's flesh appear to have been a religious act that forged special bonds between the king and his people. This is clearly described in the Saga of Haakon the Good (Ch.

18-19), in which the Christian king is reluctant to carry out key parts of the rituals.

The most famous passage describes a blót and a Yule feast at Mære in Trøndelag, to which King Haakon travelled to fulfil his cultic obligations to his Norwegian subjects. The story emphasises the great significance of eating horse meat. It is said that those present at the blót

‘pressed the king strongly to eat of horse-flesh; and as he would on no account do so, they wanted him to drink of the soup; and as he would not do this, they insisted he should at least taste the gravy; and on his refusal they were going to lay hands on him. Earl Sigurd came and made peace among them, by asking the king to hold his mouth over the handle of the kettle, upon which the fat smoke of the boiled horse-flesh had settled itself; and the king first laid a linen cloth over the handle, and then gaped over it, and returned to the high-seat; but neither party was satisfied with this ... The winter thereafter the king prepared a Yule feast ... on the first day of the feast, the bondes [farmers] insisted hard with the king that he should offer sacrifice, and threatened him with violence if he refused. Earl Sigurd tried to make peace between them, and brought it so far that the king took some bits of horse-liver...’

The Old Norse sagas have been extensively criticised regarding source value, particularly regarding the description of sacrificial acts (e.g. Olsen, O. 1966; Düwel 1985). Unlike the *Edda* and skaldic verses, they do not constitute direct sources, but are more or less independently created works by various authors. However, this does not mean that they do not contain genuine information. The blót described by Snorri in the *Saga of Haakon the Good* is also mentioned in two previous sources; the historical works of *Ágrip* (the oldest work about the kings of Norway in the Norse language) from the late 1100s and *Fagrskinna*, written around 1220, containing histories of Norwegian kings from the 9<sup>th</sup> to 12<sup>th</sup> centuries, as well as a skaldic verse. Although Snorri’s portrayal must be regarded as a reconstruction, not a preserved coherent description, it is likely to contain genuine parts. Anders Hultgård (e.g., 1993, 1996), for example, argues that there is no doubt a core of historical reality behind Snorri’s vivid portrayal. Hultgård says that the ritual eating of meat from sacrificial animals need not be questioned. Earlier sources also address that point in the description of the conflict between the king and the people. *Fagrskinna* mentions that the king’s friends

asked him to take a small piece of the sacrificed meat to appease the participants. *Ágrip* also mentions that Haakon's participation in the sacrifice was crucial to his position as king. He adds that Haakon bites into the sacrificial meat, but that he wrapped a cloth around a piece of horse liver so that he only would bite into it indirectly. Through the coherence with older sources, in at least this case, Hultgård continues, we can follow the details of a cult practice back in time through several sources (Hultgård 1996:40-41).

In addition, place name and archaeological evidence show that rituals around the horse took place in Mære in Trøndelag. Ulf Erik Hagberg (1967:82) cites these circumstances as evidence of the saga's credibility regarding the horse sacrifice: 'In 1966 excavations were carried out under the church at Maeren, by Hans Emil Lidén, of the Riksantikvariat, Oslo. Several layers were found. Hearths containing animal bones (including horse bones) were encountered ... The findings indicate that the church was built on the site of a pagan temple, where the events related in Håkon den godes saga took place. The place-name Maeren may mean "the horse' (or the mares') meadow" ... The archaeological evidence probably also argues the name in favor of the trustworthiness of the saga in this case.'

The special ritual significance of the horse did not limit itself to the role of sacrificial animal in grand royal sacrifices. Among the few written sources that specifically describe cult activities in which the horse has a pronounced role, there is a famous one with quite different content, which instead highlights the horse's symbolic meaning for fertility and sexuality. In addition to the connection to elite environments and grandiose sacrificial rites, it is the link to fertility that is central to the ritual significance of the horse. 'The most well-known metaphorical connection between the phallus and fertility is a horse penis named Volsi that was worshipped as a cult object' (Hedeager 2011: 106).

Remarkably, though, in this story there is a royal link, although it seems to be of secondary importance. Although there is a Norwegian king present, he is only a spectator, not the main character. *Volsa þáttr* is a short story found in a chapter of the Saga of St. Olaf (*Óláfs saga Helga*, 265-266) in the *Flateyjarbók*. It is believed to have been mainly written in the 14<sup>th</sup> century but takes place in 1029, and appears to preserve traditions of a pagan phallos cult, namely the cult of the horse phallus, called the *volsi*.

Interestingly, the name *volsi* has a broader meaning. It also emerges in the line of kings and heroes descended from the eponymous ancestor

Volsunge, Odin's grandchild. Vølsi is the family name of Odin's offspring, but at the same time it is the Old Norse word for penis, both of horse and man. Lotte Hedeager believes this touches upon the delicate question of a 'relationship between humans and animals (horses) and a phallus cult as integral part of rituals and rulership in Early Scandinavia' (Hedeager 2011: 108). This may suggest that the royal presence in this saga has a deeper meaning, though we can only speculate on this.

The story from *Flateyjarbók* runs as follows: an old man and woman lived with their son and daughter on a promontory far from other people, together with a male and a female slave. In the autumn when the draught horse was slaughtered, the family ate the meat and preserved the horse's phallus. The son in the house took the phallus and teased the slave woman, telling her the organ would not be dull between her legs, whereupon the slave woman laughed. His sister asked him to discard this disgusting object, but her mother declared it was useful and should not be thrown away. The farmer's son brandished it in front of his mother, sister and the female slave, after which he gave it to his mother. She carefully dried the phallus, wrapped it in a linen cloth and preserved it in a coffer with leeks, or onions and herbs to prevent putrefaction. Every evening in the autumn, she unwrapped the linen and read a verse over the phallus. It is also said that she placed her faith in the phallus and held it as her god, and that it could grow in size and stand up beside her when she wished.

It is only now that King Olaf enters the scene. While fleeing King Canute the Great of Denmark, he heard of a pagan worship and wanted to convert the performers to the Christian faith instead. He went to their abode with a small following. They all tried to hide their identities. They entered the house and met the daughter. She recognised King Olaf, who asked her not to reveal his identity. They then met the rest of the household and were invited for dinner. The evening ritual that involved the horse phallus started after the king and his men were seated. The house-wife carried the phallus – vølsi – putting it into her husband's lap while she read a poem. Then he recited the same phrase, passing vølsi on to the next person, continuing until everybody in the company, except for the king, had read this phrase. The king then revealed himself and preached about Christianity, eventually convincing them all to be baptised by the king's chaplain.

The powerful formulation of the verses that describe the ritual contain obvious erotic elements, for example when the female slave says



she is ‘thrusting him’ inside her (*Vǫlsa þáttr* str. 9, after Price 2019:178). In the early research, the *Vǫlsa þáttr* was often seen as a very ancient text, but this has been questioned in recent decades. The most clearly described passages of the story seem most genuine. In this context, Neil Price cites the example of the ritual horse sacrifice, although it is mentioned in the saga as primarily a common slaughter, after which the phallus is taken care of. Also, the mention of the linen in which the phallus is wrapped, together with onions/leeks may be old features. Price concludes:

‘The phrase *lina laukar* – “linen and onions/leeks” – is mentioned in one of the strophes as well as in the saga prose, and the same formula has also been found as a runic inscription on a meat scraper found in a fifth-century female grave at Fløktstad in Norway ... Although obscured by the medieval saga-writer’s filter, there seems little doubt that *Vǫlsa þáttr* does contain early elements, and indeed offers us a rare detailed glimpse of the explicit sexual realities of everyday Viking-Age ritual’ (Price 2019:179).

The horse maintained an important position in the Scandinavian farming community until the beginning of the 20<sup>th</sup> century (Fig. 42). The horse had a high status and was the most valuable among the domestic animals. In 19<sup>th</sup>-century and early 20<sup>th</sup>-century photographs of peasant families in the Swedish countryside, the horse is often portrayed alongside the family and farm hands – the only animal to be included in the photo. There are also later popular customs that may reflect the horse’s ritual role in pre-Christian Scandinavian peasant society. We include an example of this here, even if there is no written evidence. It is about the so-called Dala horses, painted wooden miniature horses, typical of the Swedish Dalarna region, but also a well-known Swedish national symbol since the 1930 World Exhibition in New York.

The oldest evidence of a Dala horse is a worn wooden horse from Malung in Dalarna, which was manufactured around 1560, according to C14-dating. Until its discovery in the 1950s, the horse was stored in an 18<sup>th</sup>-century coffin, along with a double-edged wooden rod and other objects, including textile fragments, which were unfortunately thrown away. The rod found next to the horse can speak in favour of magical contexts, something that could be reminiscent of the pre-Christian *seiðr* or *vǫlva* staffs that exist both in sagas and in archaeological finds (cf. Price 2019: 132-133).

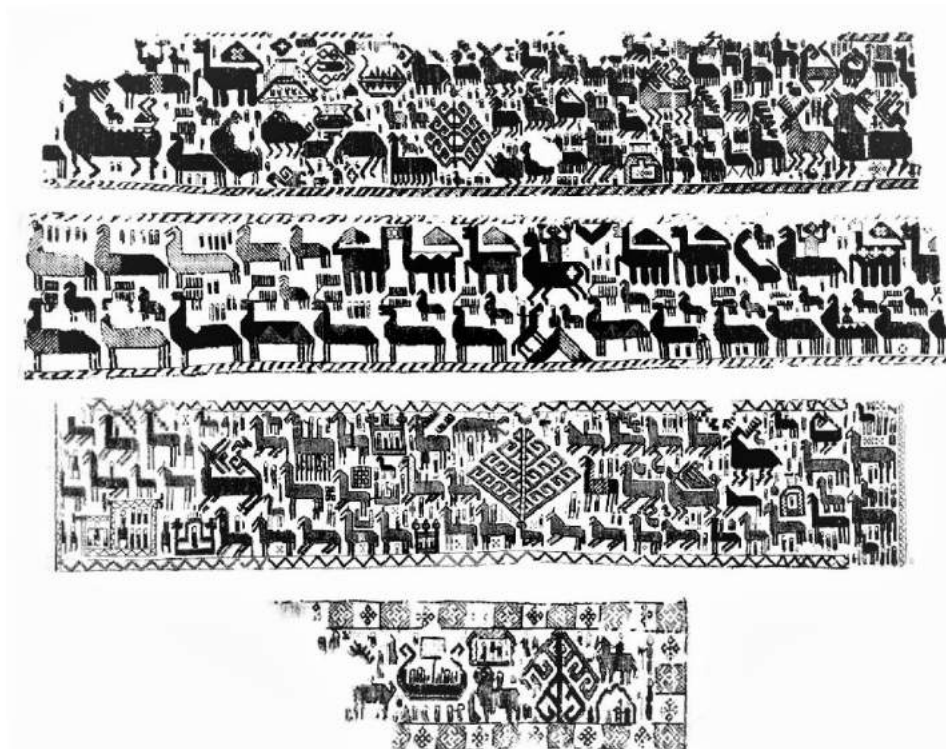


Fig. 42. Överhogdal tapestries, Sweden, from late Viking Age or early Middle Age.

There are also other examples of unusually shaped wooden sticks from later periods, and also wooden horses that have been associated with popular magic. Although many later wooden horses were used as toys, this need not have been their original purpose, but rather a transferred use in recent times. The fact that the Malung horse was placed in a coffin along with a special wooden rod – possibly of magic use – may suggest a different interpretation. The horse tradition in Dalarna has long been strong, as in the Norwegian regions to the west. The widespread aversion to eating horse meat during the Christian era is well known, and survives until our time. It is very likely a reflection of the sacred importance of the horse in the ancient religion – as a sacrificial animal – and the subsequent efforts of Christian priests to ban horse meat. In some parts of Scandinavia this ban was more difficult to enforce, and in parts of Dalarna it never succeeded. People continued to eat horse meat, not for religious reasons, but because the meat was at hand and it was seen as wasteful not to eat it (Harrison 2013).

Irrespective of the source criticism expressed by scholars against using the Sagas and other written texts, archaeology clearly highlights the importance of animal sacrifice during pre-Christian times in Scandinavia. In particular, the special significance of the horse is evident in the archaeological finds, most notably in archaeological sites that can be associated with status and royal power. Although the source value of the written material itself may be uncertain, its consistency with recent archaeological finds has definitely increased its credibility. This applies to both the osteological and archaeological finds themselves, as well as to the places where they have been found. Old Uppsala is one of the places that is particularly relevant, both with regards to written sources and archaeology (Fig. 43).

### **Old Uppsala defining cosmology**

During the latter part of the Iron Age, Old Uppsala is a place of special importance for the ancient Scandinavian religion, particularly with regards to the interpretation of its more elitist and high-status parts. It is definitely a place that – based on our interpretative perspective in this study – would have been the stage for prestigious royal rituals featuring horses as well as horse sacrifice. Extensive archaeological investigations carried out in the 2010s have confirmed this interpretation with important new evidence (Beronius-Jörpeland et al. 2017).

Nevertheless, the significance of Old Uppsala is not solely dependent on the ancient remains of the site and the archaeological finds. It is also the most tradition-bound of all the places that figure in Old Norse written sources, with a mythical appearance and connection to the royal power, both in Sweden and Norway. The skaldic poem *Ynglingatal* from around 800 AD, and Snorri Sturlusson's *Ynglinga saga*, which is based on this poem, both focus on Old Uppsala and its early royal dynasty, the Ynglings.

In Snorri's story in *Ynglinga saga*, he writes about King Adil, who loved good horses and once attended the *disa blót* (Disa sacrifice) in Uppsala. He rode around the Disa Hall on his horse *Hrafn*, but the horse stumbled and fell. The king was thrown off the horse and landed on his head, splitting his skull so that his brain spilt out onto the stone. Adil was buried in Uppsala and became known among the Swedes as a 'Great King'. Even when the horse killed a clumsy king and somehow offered him to the gods (instead of the other way round), the king was great.



**Fig. 43. Old Uppsala, Sweden.**

Thus, on the one hand, horses and the ideology that went with them were closely linked to the royal dynasties and their genealogy, but on the other hand, it was thoroughly embedded in local cultures and cosmologies among farmers, which testifies to the centrality of the fertility cult that was manifested in life and death. The archaeological finds from Old Uppsala include remains after seemingly lavish public rituals including horse sacrifices (Magnell & Wikborg 2017), as well as the sacrifice and deposition of horses as an important ritual element in burials of varying status. Horses are frequently found in graves, also in graves from the same period in other parts of eastern central Sweden.

Analyses of the material from the large archaeological surveys in Old Uppsala from 2013-2014 show that the number of horses held as part of the livestock in farms is proportional to the horse bones found in the burials. The horse is the third most common animal in graves and the fourth most common in the material from farms. Of 124 burials, 80% contained animals. However, while the proportion of horses increases slightly on the farms from the Vendel period to the Viking Age, the opposite happens in the graves. Horses are present in 31% of the Vendel-

period graves, while the proportion during the Viking period falls to 17%. In the absolute majority of the graves, entire horses have been cremated, a ritual that seems to be common throughout the Lake Mälaren Valley at this time (Magnell et al. 2017:211; cf. Sigvallius 1994a: 113).

While horses have been deposited in about 7% of Viking-Age burials in Norway, in Iceland this figure increases to about 40%. Overall, 175 remains of horses were found in 148 burial contexts out of a total of 355 Icelandic Viking-Age burials (Leifsson 2018:35, 229). Intriguingly, in these Icelandic Viking-Age burials (late 9th to early 11th century) stallions are dominant, with a male-to-female ratio of 18:1. In addition to the buried horses, three more were found outside graves, all of which were female. These horses had not been ceremonially buried and were likely eaten, indicating that male and female animals had a different status.

Rúnar Leifsson from the Cultural Heritage Agency of Iceland, gave a powerful interpretation of why this relationship has prevailed: 'It is natural to imagine that the slaughter of the virile and to some extent aggressive male animals must have been part of a burial ritual that was intended to convey status and power' (after Røsjø 2018). In Sweden, male horses are also dominant, with a 3:1 ratio in Ultuna, and five horses and one mare were found in the fortified village Eketorp (500-11 AD). In Vendel, there was a bias towards stallions, but not as strong as elsewhere. Also, it was mainly animals in their prime that were sacrificed (5-15 years), followed by immature horses (less than 5 years) (Nistelberger et al. 2019:119-120).

Horses were sacrificed for kings and commoners, queens and female combatants. The famous female Viking warrior from Birka, for instance, was buried with two horses (Hedenstierna-Jonson et al. 2017). This should not come as a surprise, as it shows the omnipresence of the horse ideology embedded in the ritual context of fertility and cosmic regeneration. As Clifford Geertz sums up the essence of political rituals: 'A royal cremation was not an echo of a politics taking place somewhere else. It was an intensification of a politics taking place everywhere else' (Geertz 1980:120). Given the role of Old Uppsala in Scandinavian religion and during Iron Age, it seems reasonable to see this as the core of cosmos-defining sacrifices which are so widely recorded (Fig. 44). Importantly, the cosmological development in the Iron Age also built on religious continuities from the Bronze Age, with its emphasis on the relationship between the sun, horses, and boats.



**Fig. 44.** Skeid depicted on picture stone? Etelhem, 8<sup>th</sup>-9<sup>th</sup> century. Gotland, Sweden.

## Heroes, horses and sea-horses

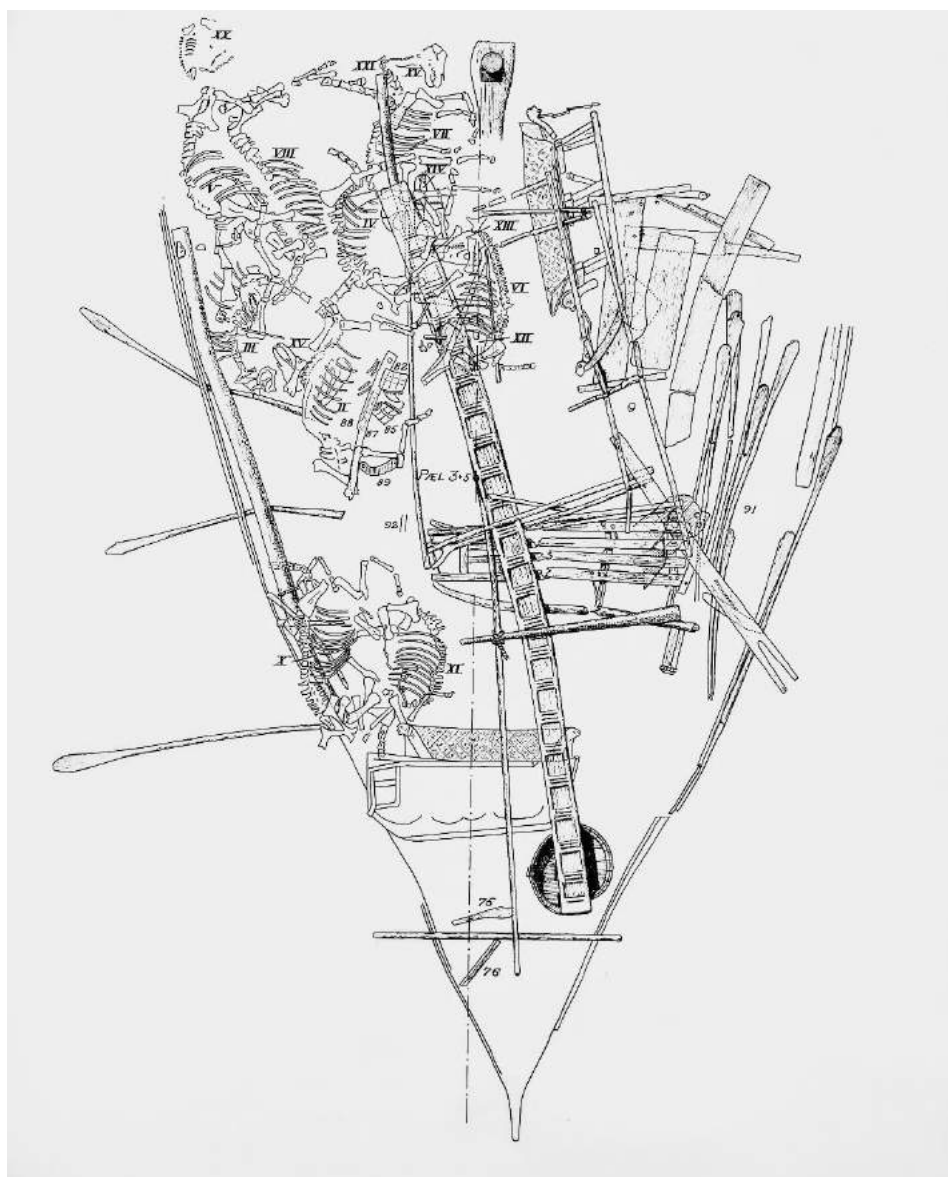
The extremely close and anthropomorphic relationship between horses and boats is well known from Bronze-Age rock art, also linking the horse and the boat to the sun and (fresh) water. Moreover, horses and ships were a fundamental part of royal funerals in the Borre ship burial in Vestfold, Norway, which revealed the world's first excavated Viking ship in 1852 (Nicolaysen 1854, Myhre 1992, Myhre & Gansum 2003, Østigård & Gansum 2009). Not only did the ornaments on the gilded harnesses and saddle fragments give their name to the 'Borre style' of ornamentation, but in recent years three large buildings, measuring between 33 m and 63 m in length, were found and documented in this cemetery. These are probably royal halls (Tonning et al. 2020). Following Snorri and the *Ynglinga Saga*, A. W. Brøgger (1916) connected the specific Viking graves to literary persons and the royal genealogy going back to Old Uppsala.

The Gokstad ship was excavated in 1880 (Nicolaysen 1882). The deceased was a Viking strong-man in his 40s who was killed in battle with a sharp blade (Holck 2009). In the grave, there were remains of 12 horses, 8 dogs, 2 goshawks and singular bones from ducks and sheep or goats (Bill 2013). The most famous horse sacrifices are from Oseberg,

excavated in 1904 (Brøgger 1917a). In this burial, 15 horses were sacrificed, probably all stallions (Fig. 45). The blow marks to the forehead indicate the manner of death, with further marks at the back of the skull and on the neck vertebrae. 'The marks indicate that the horses were killed by poleaxing and that some, perhaps all of them, were decapitated as well' (Hufthammer 2014:55). Brøgger identified the chief lady in the Oseberg grave as Queen Åsa, who was King Harald Fairhair's grandmother. He was the founder of the Norwegian royal dynasty and the unifier of the kingdom, although this is of course speculative (see also Gansum & Østigård 1999, 2004). The double burial has raised questions as to whether there was a practice comparable to the Indian widow-burning or like the one described by Ibn Fadlan, where a slave woman was raped as part of the funeral and offered to her master (Schetelig 1910).

Mythologically, since *Ynglingatal* and even more since Snorri's *Ynglinga saga*, all arrows point to Old Uppsala. *Ynglingatal* refers to Yngling, which is another name of Yngve-Frey or Freyr. Therefore when Snorri connects the Viking kings and the royal genealogy in Norway to the Yngling dynasty of Old Uppsala, the royals become demi-gods. This is truly cosmology in the making. Ships and horses were considered obvious grave-gifts for kings and demi-gods, since if anyone were worthy of such wealth in death, it would be these mighty rulers. Still, before continuing with the analyses, it might be worth examining whether other religious structures exist that combine horses and ships, kings and commoners, and deities and identities.

As shown in Chapter 7, the skeid and St. Stephan tradition with its horse race to the sacred spring was part of a fertility cult. In the Norse world, the main protagonists were Freyr and his twin sister Freya, both children of Njörðr and his unnamed sister-wife. Freya and Frey are also connected, though more tenuously, to more distant and vague divine characters like Nerthus and Ull (see Näsström 1995, Sundqvist 2002, 2007). Hervor in the *Hervarar Saga* says, for instance, that she 'will go ... to the wave-horses', which is the 'sea-horse', or in other words, the ship (Tolkien 1960:18). Snorri describes the large Viking ship or warship as skeið (Snorri, p. 26). The most famous god to own a divine ship in Norse mythology is Freyr. His ship Skidbladner or Skíðblaðnir is also owned by Odin in other myths (Näsström 2002:87). Apart from being the ship that transports gods, it may have carried grain as this was one of the most precious gifts bestowed by Freyr and all other fertility gods.



**Fig. 45. Documentation of sacrificed horses on the Oseberg ship. From Oseberg Vol.1, PlancheXIII.**

In 19<sup>th</sup>-century Setesdal, there was a local cult around Fakse Brokke, a kind of corn god with many similarities to Freyr. The god was portrayed by a man-shaped wooden pillar with a hat on its head. In farmhouses, the wooden god was placed in the living room and regularly given offerings such as beer, butter and food (Skar 1908:130-131). With



unclear origins, the survival of this pagan god into the 19<sup>th</sup> century sparked controversy. It has been suggested that the Fakse figures originated in the famous Hyllestad stave church in Valle (Bø 1959). Valle in Setesdal lies some 165 km from Kristiansand, the nearest port city from where ships go to Denmark. Before the advent of motor vehicles this was a long journey through the valley. In the 19<sup>th</sup> century, people in Valle recalled a distant tradition referring to the ‘corn-ship from Denmark’.

In 1862, Henrik Ibsen published his famous poem *Terje Vigen*. In 1809, during the Napoleonic Wars, the nearly starving sailor Terje Vigen sets off to Denmark in a small rowing boat. He buys three barrels of barley to save his family and starts rowing back (he was captured by the British and imprisoned for five years). This suggests that transport of grain may have taken place and highlights the fact that the distance from Denmark to Norway was not a barrier – as many archaeological interpretations claim – but a highway, unlike the valleys and remote places like Valle. Given Skar’s otherwise meticulous documentation, it seems strange that farmers were referring to only one specific case some 50 years earlier during the Napoleonic Wars. It seems more likely that it refers to historic connections and trading relations – or a distant cosmological myth. Skar also reports that a common greeting in many places in the valley was: ‘Welcome corn-ship!’ (Skar 1909:136-137).

If the Norwegian and Swedish royal dynasties have a mythological origin in the Ynglings and Frey, the Danish Viking mythology traces its royal origin to the legend of the Skjoldungerne, which refers to the children of the shield. The god Ullr is said to have a ship called Skjoldr (Shield) and is also seen as ‘the god of the shield’: ‘Regarding the famous use of the kenning Ullar skip and Ullar askr “Ullr’s ship” for shield ... one can only imagine that the shield was once considered Ullr’s vehicle, that is the sun itself, probably denoting its journey across the clear-blue ocean sky’ (Molin 2015: 127). The Scyld-Sceaf tradition relates to various harvest festivals, which also may include Harvest Queens and floating grains or sheaves down rivers to invoke plentiful rain and dew for next year’s crops. There is also a story about a dispute between the monks of Abingdon and officials in Oxfordshire, England, during the reign of King Edmund, which was settled in the following manner:

‘The monks floated a round shield in the middle of the river.  
On it they placed a sheaf of corn and above this a lighted taper.  
The shield floated down the river as far as the disputed ground,

then turned up the channel which surrounded the meadows, and having completed the circuit of these returned to the river. The incident was regarded as a miraculous confirmation of the monk's claim' (Chadwick 1909:278).

The belief that the last sheaf was a deity dates back to prehistoric European religion: this sheaf contained all the life-giving forces of last year's harvest, which was crucial for the success of next year's harvest. Thus, shields, sheaves and sailing were intimately connected (Olrik 1903:250, Olsen 1915:226-227). The reference to 'corn-ship' may therefore not be a coincidence, but rather relate to an actual mythology, which links fertility gods and goddesses to ships (like Freyr and Skidbladner) and horses (for powers of fertility). Still, it is not enough to be informed by interpretative mythology, where one may easily find a homology. One must relate it to archaeology and ecology, which brings us to the Oseberg ship burial and actual horse rituals and sacrifices.

### **Oseberg and horse fights?**

Frans-Arne Stylegar concludes his article about skeid with an open question: could the two long poles found together with the majority of the sacrificed horses have been skeid-stongs? (Stylegar 2006). We will analyse the Oseberg material in more depth to show that there are two finds that support such an interpretation; a particular pole, oar or stong with a runic inscription and floor boards of the ship featuring two horses. While the Oseberg burial, in which two women were buried, was concluded in 834 AD (Christensen et al. 1992), the stratigraphy of the mound, and more specifically the presence of apples, suggests that the funeral itself was a lengthy ritual. Half of the ship, from the chamber back, was covered by the partly built mound. The front deck – approximately half of the boat – was not covered, functioning as a ritual platform. The chamber contained a bucket with some apples, and botanical remains of spring flowers were also found, suggesting the grave was open at least from the spring to the autumn (Gansum 2002, 2004a, Gansum & Risan 1999). The intermediary period in funerals is often the most important, allowing time for elaborate rituals and sacrifices (Hertz 1960, Oestigaard 1999b), but also for forging of new alliances and the renegotiation of important social relations among friends and foes (Oestigaard & Goldhahn 2006).



Fig. 46. Runic inscription 'litoluism'. From Oseberg Vol. 2, p. 292.

Although ancestral rituals describe a continuous, asymmetrical relation between man and gods, the most dramatic scenes often take place during the intermediate part, before the concluding rites, which may take on the form of a grand, explosive finale.

In the Oseberg funeral, it seems that the burial and the chamber were hastily closed. The most spectacular rites appear to have taken place in the intermediate period, including the sacrifice of 15 horses. The main concentration of horses was on starboard side next to the mast where about 10 horses were deposited. Brøgger noted that most horses were decapitated, most likely severing the heads in a single stroke (Brøgger 1917a:64). As they are all assumed to have been stallions, this indicates that the sacrificial animals were selected as part of a ritual. This relates to a less spectacular category of finds, namely the oars. All the oars – a total of 30 with a length of 3.7 – 4.03 m – were retrieved. They were all brand new and seven or eight were even unfinished (Schetelig 1917:315-317).

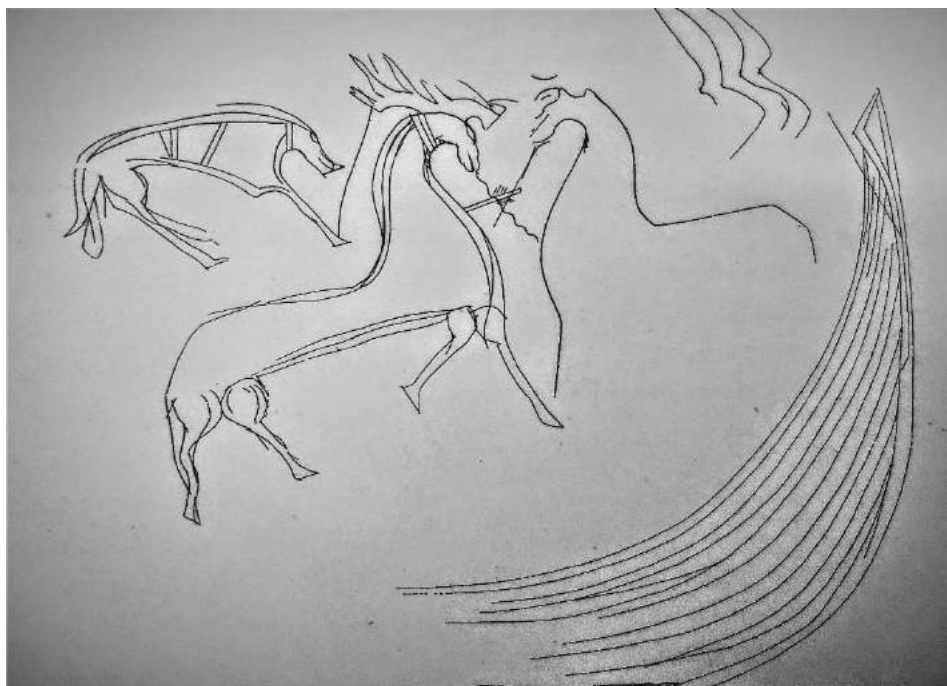


Fig. 47. Engraved horse fight from the Oseberg ship. From Vol. 1, p. 317.

One long wooden pole (2.42 m broken into six parts) in particular drew the excavators' attention. Schetelig thought it was part of the ship's interior, but engineer Johannensen believed it could be part of an oar (Grieg 1928:270-271). Whether it was an oar or not, the runic inscription was what made this artefact so interesting (Fig. 46).

Sophus Bugge presented a preliminary interpretation back in 1904 during the excavation. Bugge suggested that the inscription, which reads 'litoluism' might be read as 'man knows little' ('mennesket vet litet'), but he was not satisfied with this interpretation. Magnus Olsen suggested that it may have something to do with wisdom: '(although) small, I am wise' ('skjønt) liten, er jeg vis'). Olsen's other proposed interpretation, which is of great interest in this context, is that 'litol' may refer to various types of poles, like *stong*, '*stang*', *stokkr* or *stafr*, while *uis* is an Old Norse word for '*helligdom*', or 'shrine/sanctuary'. To Olsen, the interpretation of the runic inscription depends on the function of the wooden pole, and he is also open to the suggestion that it may have been part of an oar (Olsen 1928:291-292). Thus, an interpretation of the pole as a *skeidstong* may seem plausible. If this is the case, it connects horses and ships in a different way if the *skeidstong* was an actual oar.

The runic inscription relates to a remarkable carving probably made by one of the oarsmen (Schetelig 1917:314-315). One of the floor boards on the front deck of the ship features a depiction of a horse fight (Fig. 47), which appears to have taken place on the front deck of the ship on which the decapitated horses were found, i.e. the open part of the mound that served as a ritual platform. The horse to the left is clearly depicted as having been shot by an arrow. If there were actual horse fights in the Oseberg funeral and if they took place on the front deck of the ship, it would have made sense to shoot the animals before striking the final blow to the skull. Using a skeidstong or oar to keep off horses is one thing, but trying to kill a wild stallion incited to fight another with or without a mare in the background, is a potentially lethal challenge, particularly on a boat. Of course, horse fights may also have taken place in front of the ship, since not all horses were found on board.

Regardless of whether the main deceased was Queen Åsa, King Harald Fairhair's grandmother, she was certainly one of the most important people in the kingdom. Professor Schreiner analysed the skeleton material after the excavation, and suggested that the older woman must have been over 50, perhaps 60-70 years of age. The younger was perhaps 30 to 40 years (Schreiner 1927), but Per Holck says that both may have been a bit older; the youngest perhaps around 50-55, so the age difference between the two may not be as significant as anticipated. Both show traces of a good diet, indicating that they may have been of high rank. 'Since the excavation of the Oseberg mound in 1904, it has been widely discussed whether or not the two women buried on board were related ... Were they mother and daughter? Or queen and slave? Is one of them Queen Åsa? An ancient-DNA analysis was, therefore, desirable ... [However] it seems that the samples from the older person (sample A) are, after being handled for more than 100 years, too contaminated with foreign human DNA to yield true sequences', Per Holck writes, but 'from the younger of the two, which profile indicates that her sample falls into the haplogroup U7. This finding is interesting, as this haplogroup is nearly absent in modern Europeans but is common in Iranians. Perhaps this could mean that the young lady's ancestors came from the district around the Black Sea' (Holck 2006:205, 185). Nevertheless, since Holck's study the analytical possibilities of aDNA have significantly improved (e.g. Reich 2018), and a new analysis of bones from both individuals could provide much more comprehensive results.

## The enigmatic Rakne Mound

As the largest mound in Scandinavia, Rakne Mound remains shrouded in mystery (Fig. 48). Anders Hagen even entitled his history of archaeology in Norway *The enigma of King Rakne's grave* (Hagen 1997). The mound plays a central role in Norway's history of archaeological thought, but not in Norway's history, as it is still not fully understood. Anyone attempting to interpret Rakne Mound today builds on previous interpretations, and we certainly will not claim to be able to provide any conclusive interpretation.

When Anders Lorange excavated the mound in 1869-70 at the age of just 21, he was told a myth about the mound: the king was buried in a stone chamber between two white horses under layers of timber. Lorange found a horse skeleton 60 feet from the outer diameter, but it was situated rather high up in the mound and was not part of the central area where the grave would have been (Grieg 1941). Nonetheless, the finds of a horse is positive evidence of a sacrifice (slaughter?). The higher in the mound it is, the more likely it is to have been part of a concluding ritual. Keeping the *ashwamedha* ritual in mind, the cosmological sacrifice involved just one horse. Had the excavators found evidence of the most important horse sacrifice in Norway's prehistory?

Brøgger suggested that the grave was inspired by Theodoric the Great's grave (Brøgger 1917b), and that Rakne was part of what he called Norway's 'golden age' (Brøgger 1937). The grave is a giant. Older assessments estimated the mound at 90 m in diameter and 20 m in height, but the natural topography has been used to make the mound look bigger. Still, it is a staggering 77 m in diameter and 15 m high, with a total estimated volume of 26,200 m<sup>3</sup>, which would have required about 70,000 to 90,000 workdays with a crew of 450 men working full-time during the summer when it was constructed. The workers would have needed food, which would have required about the same number of support staff, meaning that about 1000 people were working on and around the mound. The mound was built during one season, most likely in the decades just before 550 AD. There was a massive timber construction in the middle of the mound. And while its purpose and appearance are unclear, it is estimated that 1 km<sup>2</sup> of forest would have had to be cut down to supply enough timber for this construction. Given the scale of this construction, the 'grave' was a disappointment – though it is not clear whether it was even a grave or whether the remains come from older layers that were already present before the mound was built.



**Fig. 48. Excavation of the Rakne mound in 1939. (Picture CfRo56\_1939. Creative commons license: CC BY-SA 4.0). © Museum of Cultural History, University of Oslo.**

All that was found were 200 fragments of burnt bones – with a total weight of 35 g – including bones of humans, probably birds and (unspecified) mammals (Skre 1997). It is not much to build on, but the mythology of this mound – Scandinavia’s largest – is interesting, particularly if one remembers that all mounds are not necessarily graves (Gansum 2004b). Two threads are worth pursuing in our view, though they both remain speculative.

On the one hand, according to dendrochronology, the timber dates from the period 533-551 AD (Skre 1997:31). The period 540-550 AD coincides with one of the greatest climatic crises in history. In 536 AD, there was a volcanic eruption on an unprecedented scale, and although the precise location is unknown, it had immense global consequences over the next decade. Natural-science data confirm the picture of massive cooling, with summer temperatures dropping 3-4°C. A number of studies have analysed this climate catastrophe in different countries and contexts. The climate crisis also coincided with the Plague of Justinian (541-542 AD), though it is not clear whether it also impacted Scandinavia (e.g. Gräslund 2007, Gräslund & Price 2012, Iversen 2017,

Gundersen 2019). Sources from late antiquity from across Europe testify to the failed summers. The Roman senator Cassiodorus (c. 490-583), for instance, wrote: 'For what will give fertility, if the soil does not grow warm in the summer? ... Out of all the elements, we find those two opposed to us: perpetual frost, and unnatural drought. The seasons have changed by failing to change; and what used to be achieved by mingled rains cannot be gained from dryness alone' (op. cit. Barnish 1992:179). It has been suggested that the Norse concept of the cosmological *Fimbulwinter* comes from this climate event, and that the *Fimbulwinter* that followed the crises of 536 may have reduced the population by up to 50%, as a result of successive failed harvests and extreme famines (Gräslund & Price 2012:433).

On the other hand, the location of the Rakne Mound may provide clues to the rationale behind its construction. Today, it is located 3 km from the southern end of the east runway at Oslo Airport, Gardermoen. The historic name of the place is Hovin in Ullensaker – both names with strong religious meanings in prehistoric religions. The more recent forms *Hov*, *Hove* come from *Hof*, *hofi* and hence Hofvin. Hov refers to a prehistoric 'temple' or open cult place (Olsen 1915:163pp). Ullensaker comes from an earlier *Ullinshof*. In the vicinity there was also a place called Skedsmo (*Skeid*, and *mo* – 'sandy soil'). Elias Wessén has associated the skeid to the god Ullin in this area, arguing that it is precisely in fertile farmlands like these that one would expect cults around the gods Ullin and Njord (Wessén 1921:126-127). Among other things, Ull-Ullin is associated with snow and winter. In mythology, the *Fimbulwinter* is the 'Great winter' before Ragnarök or the end of the world. But are failed summers with little sunlight a warning of the forthcoming Fimbulwinter, or are these two different phenomena?

The Rakne Mound is situated in one of Norway's richest agricultural areas. The construction of the mound would have required a large surplus production and the control of a huge workforce (Fig. 49). Whether it was a grave or not, the mound clearly belongs in the religious domain, though its significance remains uncertain (Gren 1994:95). Theologian Martin Modéus argues that there is always a *situation* that triggers the need to conduct a ritual. The reasons vary, but there is always a situation involved, and as such the ritual should 'not be understood primarily in itself, but as a function of a distinct kind of situation. This special situation will be called *causa* of the ritual' (Modéus 2005: 35.). He continues:





**Fig. 49.** Excavated timber from the mound, 1940. (Photo: Sigurd Grieg, Cfr\_231. Creative commons license: CC BY-SA 4.0). © Museum of Cultural History, University of Oslo.

‘Every ritual performance is an act of ritualization that grows out of a situation, a *causa* ... By *causa* I wish to denote those circumstances, changes or events of nature or culture that are the ultimate reasons making the performances of the ritual desirable or necessary. The *causa* is the very situation that gives birth to the ritual performance, and to such a *causa*, ritualization should be seen as a reaction in deed, not in ideology’ (Modéus 2005:37-38, original emphasis).

Thus, based upon other classificatory schemes, Modéus identifies six *causae*: 1) *causae of the cycles of nature*, 2) *life cycle causae*, 3) *constitutive causae*, 4) *restitutive causae*, 5) *causae of crisis*, and 6) *causae of initiation* (Modéus 2005:47-55). ‘The major point of rituals and symbols is not to communicate a cultural code, shared values or religious information, but, through focusing on the *causa*, to “trigger” that amount of understanding that is necessary to make that *causa* experientially real. The symbol or the ritual is a “loudspeaker” for the

very situation, and hence the symbolic “meaning” is secondary for its *ritual function*’ (Modéus 2005:43).

In a preindustrial and premodern world, successive failed summer seasons would be an obvious reason to turn to the gods. A crisis may also trigger collective actions where everyone supports and even demands extraordinary rituals, even if they come at a high cost, since ‘the people who have contributed the least to the crisis are the ones who are going to be affected the most ... We cannot solve a crisis without treating it as a crisis’, and therefore a crisis needs cathedral thinking: ‘Our house is falling apart. Our leaders need to start acting accordingly ... Everyone and everything needs to change’ (Thunberg 2019:16, 41, 49, 51). If climate change is caused by human action, a specific type of action is necessary to mitigate and adapt to new ecological realities. If, on the other hand, climate change is caused by gods controlling the forces of nature, major collective action is deemed necessary, which may include letting white horses loose before killing stallions in lavish horse sacrifices.

Thus, the absence of any clear grave with the expected wealth of grave-goods suggests that there were other reasons for constructing such a grandiose monument. If the gods were thought to be responsible for the change in weather, it may have been believed that these rituals were the only way of addressing a serious problem like the cycle of nature and successive famines. As shown earlier, the *ashwamedha* ritual was a cosmic ritual structured around fertility and successful harvest. If there was one extraordinary event which would have legitimated the most extravagant rituals ever conducted in Norway, it would have been the climate crises after 536 AD.

## 9. Bronze-Age horse sacrifices

*'Let a human victim be sacrificed at a place of holy worship, or at a cemetery where dead bodies are buried. Let the oblation be performed in the part of the cemetery ... The human victim is to be immolated in the east division which is sacred to Bhairava, the head is to be presented in the south division ... and the blood is to be presented in the west division, which is denominated Heruca. Having immolated a human victim, with all the requisite ceremonies at a cemetery or holy place, let the sacrificer be cautious not to cast eyes upon the victim.'*

Thomas Maurice

*Indian antiquities or Dissertations relative to the ancient geographical divisions, the pure system of primeval theology, the grand code of civil laws, the original form of government and the various and profound literature of Hindostan compared throughout with the religion, laws, government and literature of Persia, Egypt and Greece (1800: 645).*

### Cemetery and sacrifice

As we have seen, horse sacrifice, as well as other types of sacrifices, seem to have been highly significant in different Indo-European traditions, from Bronze-Age Sintashta on the steppe onwards. As such, there is good reason to search for counterparts in the Scandinavian Bronze-Age tradition. Given the way other basic ritual elements of common Indo-European origin quickly gained a stronghold in South Scandinavia during the early Bronze Age, we are justified too search for evidence of important horse rituals, already at this early stage. Below we will discuss different types of find contexts, starting with a number of representative archaeological sites, some of which are commonly used to interpret Bronze-Age religion. Others are less frequently discussed, though they may be of far greater importance than is usually assumed.

Clear traces of horse sacrifices – i.e. physical remains – are less common in the Bronze Age than in the Iron Age, though the oldest

example of deposited horse-riding equipment goes back to the Late Neolithic. As we mentioned earlier, this context is a strong indication that the horse had gained an important status as well as a ritual role already in this period, probably as an integral part of the spread of Indo-European cultural elements. From the Late Bronze Age in Sweden, there are some magnificent finds of horse equipment, notably the well-known finds from Eskelhem in Gotland, as well as a similar object from Tryserum in Östergötland. While the Eskelhem find contains a large number of parts, the find from Tryserum contains only one specific object, also present in Eskelhem: a spoked bronze disc, symbol of the sun wheel, probably intended for decoration on a horse-drawn carriage. Another well-known, and often-depicted finding of bronze horse equipment – of a slightly different type than those mentioned above – comes from Fogdarp in Skåne.

However, finds of horse bones are less common than in the Iron Age, but this may be due to conservation conditions. However, such finds from the Bronze Age have been made, though they have not usually been interpreted as traces of rituals, let alone clear sacrifices. But even though there are relatively few archaeological remains of horse bones, there is other clear evidence of the importance of the horse, specifically its sacred meaning. The iconographic evidence speaks a clear language.

The horse-drawn Trundholm sun chariot is the most iconic image of course, but horses are also very common motifs on rock-carving panels, as previously discussed. Some rock-carving motifs can be interpreted as the sun's horse, where the horse draws something that may represent the sun disk or the sun's chariot. But there are also motifs that are more directly linked to the Great Horse Sacrifice tradition, particularly its connection to fertility and to rituals around death and burial. We will examine three of the most renowned Scandinavian Bronze-Age sites in Sweden: the Kivik Cairn in Skåne, the Sagaholm Mound in Småland, and the Håga Mound in Uppland.

### **Kivik, Sagaholm and Håga**

As seen in Chapter 1, the Kivik grave has long been seen in an Indo-European light with an emphasis on horse-sacrificial traditions that showed parallels to India and Rome, but also continuities to skeid in Scandinavia (e.g. Nordén 1917, Wessen 1921, Almgren 1927).



**Fig. 50. Kivik, slab no. 3. Photo: Catarina Bertilsson, [www.shfa.se](http://www.shfa.se)**

Although this has not been the dominant interpretation over the last decades, there is little doubt that this horse-sacrificing tradition, which included both fights and penetrations, was a central part of funerals and mortuary rituals. We will therefore address only a few aspects of these three burials: Kivik, Sagaholm and Håga.

The Kivik grave in Scania in southern Sweden is one of the most famous Bronze-Age burials in Northern Europe. In Kivik, the stone cist made of stone slabs was about 4 m x 1,5 m, with rock art on the inside of most of the slabs. We will only focus on slab no. 3 and the iconic slab no. 7 (Figs. 50-51).



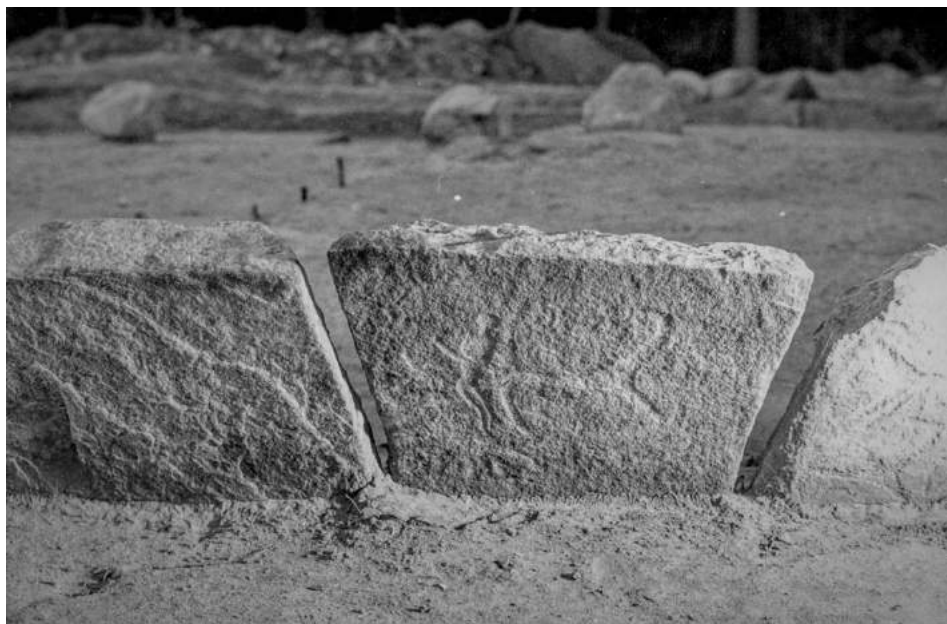
**Fig. 51. Kivik, slab no. 7. Photo: Catarina Bertilsson, [www.shfa.se](http://www.shfa.se)**

The remains of at least five human beings were found in the cist: four adolescents and one adult. Radiocarbon dates from the bones, both cremated and unburnt, indicate at least three eras of deposition ranging from 1400 to 800 BC, while some of the artefacts may go back to approx. 1500 BC (Goldhahn 2005, 2009, 2013). Intriguingly, a fragment of a horse tooth dated to 1610-1210 BC was also found, one of the oldest finds of domesticated horse in Scandinavia (Goldhahn 2013:488).

Sagaholm is located in Jönköping Län, in the central part of southern Sweden (Fig. 52). The Sagaholm grave is dated to period II and III (1500-1100 BC). The most spectacular aspect of this grave, from our perspective, are two lines of kerbs demarcating the central area, with numerous slabs on the inner kerb featuring rock-art motifs. The mound itself had a diameter of ca. 22-24 m with a height of 3-4 m. The diameter of the inner kerb was approx. 17 m. Of the 42 preserved slabs, about 20 feature rock art, and 31 motifs or about 75% can be interpreted as horses.



**Fig. 52. Excavation of the Sagaholm Mound with the kerb. Photo: Anders Franzen (Jönköpings läns museum).**



**Fig. 53. Sagaholm. Slab 30 in situ with depiction of the horse ritual. Photo: Bertil Almgren, [www.shfa.se](http://www.shfa.se)**

Slab 30 clearly depicts a man penetrating a horse from behind (Fig. 53); many other slabs show horses side by side and in different combinations with boats (Goldhahn 1999, 2016).

With regards to the Kivik grave, most researchers agree that slabs nos. 7 and 8 depict part of the actual ceremonies that were conducted (Goldhahn 2013:551). We agree with this premise, which makes the interpretation of the cosmology based on the rock art on these slabs vulnerable if the ritual scenario is different than previously assumed. Klavs Randsborg, for instance, has suggested a cosmology divided in three parts based on the internal panels on slabs 7 and 8 where the upper part corresponds to the sky or heaven with the sun's daily movement, the part in the middle represents the world of the living, and the lower section the underworld where the souls of the deceased are reborn (Randsborg 1993:117-122).

Given that there are finds of the sacrifice of one of Scandinavia's earliest domesticated horses and that the rock-art depicts what seems to be horse fights and possible horse races, an interpretation favouring a skeid-tradition seems more plausible than one constructing a sun cosmology (see Chapter 10). If we follow the premise that the rock art on the slabs depicts part of the rituals that were conducted – and there is no reason why this should be the case at Kivik but not at Sagaholm – the explicit horse rituals are intriguing.

In Sagaholm, the depiction on slab 30 of a person penetrating a horse has been described as a 'bestiality scene' (Goldhahn 2016:46). 'Bestiality' was also the word used to describe the Irish ritual, which we may repeat: '[...] When the whole people of that land has been gathered together in one place, a white mare is brought forward into the middle of the assembly. He who is to be inaugurated, not as a chief, but as an outlaw, has bestial intercourse with her before all, professing himself to be a beast also. The mare is then killed immediately, cut up in pieces, and boiled in water. A bath is prepared for the man afterwards in the same water. He sits in the bath surrounded by all his people, and all, he and they, eat of the meat of the mare which is brought to them' (O'Meara 1982:109-110). The kerb demarcating an area of 15-17 m in diameter would have created a perfect setting for public rituals, not only horse fights, but also royal rituals like the one described in Ireland, where it happened in front of an audience.

As indicated, it has been suggested that an earlier 'prototype' of the historic *ashwamedha* ritual did not only involve a queen having sexual intercourse with the horse's phallus, but a male or the king having



intercourse with the horse. If this was chiefly a royal initiation rite (e.g. van Gennep 1960), then it would have worked in line with Bourdieu's thesis that the main aim of the ritual was to separate those who had done it from those who had not, or could not, perform the rite (Bourdieu 1996). Having sexual intercourse with a divinity and taming cosmic forces would definitely have separated those who did it from those who could not do it, and if it was a royal initiation rite, it would also legitimate divine kingship. Moreover, from the perspective of 'death as doing', it would be an extreme rite to perform in front of others (Kaliff & Oestigaard 2017), thereby institutionalising and legitimising extreme powers. The bodies buried at Kivik may even fit into this picture. The adult was dated to the 9<sup>th</sup> century, much later than the rock art. The others were adolescents aged 13-15 years (Goldhahn 2009). If they were male, they were not too young for this ritual, rather the contrary; in many cultures this is the age for violent *rite de passages*. If some were female, this would be the age of their first menstruation, making them fertile and allowing them to become part of the overall cosmic scheme that the whole horse sacrifice institutionalised. But did they die naturally or were they sacrificed (killed quietly)?

This also reminds us of *Volsa þáttur*, the short story from *Flateyjarbók* that centres on a horse's phallus. There is every reason to see this story as a reminiscence of a tradition similar to *ashwamedha* – where the horse is slaughtered and at the same time the sexual connection between the stallion and women is central. The story as preserved in the saga retains only hints of prehistoric rites and practices. However, both Hedeager (2006) and Price (2019) believe that worship – also in the form presented in the saga – may have included masturbation, which is implied in the verses read by the women participating in the ritual. In any case, Hedeager writes, also referring to Price: 'Whatever the explanation may be, it is obvious from the *Volsa þáttur* that the phallus and fertility were closely associated in a cult, which was clearly related to the farm and presided over by women' (Hedeager 2006: 107).

Thus, given the size and the spectacular character of both Kivik and Sagaholm, as well as the early dates, it seems reasonable to interpret these graves and rituals as having a fundamental institutionalising role manifesting this particular Indo-European horse-sacrificing ideology. These were royal rituals, and contrary to the early descriptions of the Indian *ashwamedha* as part of mythology and written narratives, these were most likely manifested in flesh and blood.



**Fig. 54. Håga Mound, Uppsala, Sweden.**

The other rock-art motifs give similar indications that this was a widespread, and in today's world perverse, practice, but in the Early Bronze Age it defined royal funerals and cosmos.

A third, equally iconic archaeological site with a Bronze-Age mound is Håga outside Uppsala (Almgren 1905). At Håga, there are no rock carvings of horses, but there are a few physical traces of horses, which may indicate grand rituals in the context of burial ceremonies. Based on the empirical and theoretical understanding of the Vedic sacrifices, the different rituals conducted at Håga have previously been analysed and interpreted in cosmological terms of common Indo-European origin (Kaliff & Oestigaard 2018:155-175). The burial at the Håga Mound is dated to approximately 1100-900 BC (Fig. 54). However, the site was a ritual centre for a much longer period of time – from the early Bronze Age up to the Iron Age.

The mound itself was excavated in 1902-03, revealing a magnificent grave with rich grave gifts, one of the most outstanding Bronze-Age grave finds in Sweden. The funeral probably took place in a wooden

burial chamber, covered by the mound and its inner cairn. The deceased – a man – had been cremated, but the bones were probably placed in an oak-log coffin, similar to the well-known inhumation graves found in Danish mounds (Almgren 1905, Kaliff & Oestigaard 2018).

The unburnt bones of animals and three humans were discovered in different parts of the Håga Mound, from the upper part of the filling down to the burnt layer at the bottom. Among the bones, cattle dominated, but sheep/goats, pigs, dogs and fragments of a horse were also found, as were deer, foxes, other small game and fish (Almgren 1905:31-34). Although Almgren believed that the unburned human bones in the filling of the mound originated from rituals that took place at the same time as the grand burial ritual, new dating shows that, unlike the animal bones, they are older, with a total dating range from 1700–1330 BC, but most probably all three finds are from the 14<sup>th</sup> century BC. The 14C results for animal bones indeed span over a longer period, from the 15<sup>th</sup> century BC to the 7<sup>th</sup> century BC, but the combined dating indicates that they were probably killed in connection with the construction of the mound (Ullén & Drenzel 2018: 126-129). Given the very lavish burial and the Håga Mound being an unprecedented monument in this part of Scandinavia, it is perfectly reasonable to imagine grandiose sacrificial rituals as part of the funeral rites.

Horse bones were found in the Håga Mound, though there was only one clear example: 'In the deeper layers of Shaft VIII remains of a horse, and more specifically the first toe phalanx of the front leg (...), were found. This is positive evidence of a horse in the Håga Mound, which was probably sacrificed. The relation between horse and cattle is intriguing, since there are fewer horse remains. According to the analysis above, 6–7 cattle and at least one horse were killed, either on the mound or elsewhere' (Kaliff & Oestigaard 2018:174).

Although the Håga Mound contains only limited fragments of horse bones, this should not be interpreted as a sign of insignificance. The relatively small presence – combined with a much larger amount of other sacrificial animals – may instead signify exclusivity. This would be in line with other find contexts. It would also fit well with the comparative Indo-European perspective, particularly the *ashwamedha* sacrifice. Given the general importance of horse sacrifices in Indo-European traditions, as well as their exclusivity, the dominance of other species – particularly sheep and cattle – is hardly surprising. Sacrifices of horse – as well as of humans – are very prestigious. This makes the presence of a much larger amount of bones from other species

compared to horse and human hardly surprising. In sacrificial hierarchies, sacrifices of large animals – particularly horses – often have a special cosmological importance, and the presence of such sacrifices indicate the stakes involved.

### **Burnt mounds as sacrificial sites – comparative evidence**

Having briefly touched upon some outstanding burial contexts, we shall now approach the question of what other kind of archaeological remains may constitute traces of animal sacrifice, particularly those which included horse. There are a few different contexts, which directly show traces of animal sacrifices, but also other forms of ritual slaughter. A comparative approach is necessary here, as the remains which may be assumed to form such traces often appear anonymous. The Vedic analogy is of great value here, both as a very old Indo-European ritual tradition and because it is well documented.

‘The Vedic analogy shows us the presence of advanced collective rites, which require great effort, resources, and time. They also leave physical traces that should be possible to detect by archaeological methods: altars, hearths, pits for ritual waste, post-holes from the burnt-down ritual structures and buildings. With a purely archaeological interpretation, however, without any pre-understanding of how the ritual was performed, these edifices could give a very confusing impression. With a “normal” Scandinavian interpretative model they would probably be interpreted as “settlement site remains”, since remains of buildings or fireplaces and pits do not say anything explicit about sacred or secular origin’ (Kaliff 2007:102-103).

One of the most advanced Vedic sacrificial rituals is *agnicayana*, which itself has similarities in cosmological meaning to *ashwamedha*. For the *agnicayana* ceremony, the people of a community built a large altar in the shape of a bird symbolising Purusa, the cosmological first sacrifice. The sophisticated construction had deep cosmological symbolism. The building ritual takes a whole year, like the performance of the *ashwamedha*. The entire performance of the complex ritual signifies a recreation of cosmos, but the exact meaning of the different elements of the ritual remains partly obscure. However, it is clear that the

performance of *agnicayana* contains a complex cosmological symbolism which can also be traced back to the creation myth, with the altar itself symbolising the sacrificed primordial being. The altar is built of clay brick in five layers, which correspond to different body parts – marrow, bone, flesh, skin, and hair – and material is taken from each part of creation for its construction (Fig. 55). Before the building of the altar, the ground is prepared first by ploughing and sowing, then with the symbolic burial of five heads – human, horse, bull, ram, and goat – together with other ritual objects, including pots. Besides the main altar, other altars and ritual buildings are also built for the ceremony. The buildings are deliberately burnt down after the ritual is completed (Staal 2001:59-72, 118).

There are similarities between *ashwamedha* and *agnicayana*, through the cosmological background, but also in the form of the physical archaeological remains. Of great comparative importance here is Frits Staal's (2001) famous study of *agnicayana*, where in a unique documentation in 1975 he was able to follow the whole ceremonial construction of the altar and the execution of the elaborate ritual. Although it was not an *ashwamedha* sacrifice, Staal's study shows a ritual of corresponding complexity that is closely related to *ashwamedha*. This ritual has not been performed in modern times, and could therefore not be documented like *agnicayana*, but instead there is archaeological documentation. Important archaeological examples, of altars used for *ashwamedha*, were excavated by the Archaeological Survey of India, 1952-54. Three fire altars were documented, dated to the 3<sup>rd</sup> century AD, where horse sacrifices have been performed. Apart from the preserved altars, this was evident from inscriptions on bricks, which explicitly describe them as being used for the Great Horse Sacrifice (Ramachandran 1953:1-31, 1954:100; Thapar 2001:4 and plate 6).

Archaeological remains of this kind, from Vedic sacrificial altars, show similarities in the material manifestations that exist between different rituals. They can also provide a clue to which archaeological remains should be given a similar interpretation in other geographical areas. If we again turn to the archaeological finds from Scandinavia, there are tangible similarities with the finds of Vedic altars, as well as some common features. One important such category consists of so-called burnt mounds – also known as heaps of fire-cracked stone (Sv. skärvstenshög). These structures are particularly common in east central Sweden. The majority of the dated examples are from the Late Bronze Age, though they have a much longer time span in total.



**Fig. 55. The three-headed rakshasa Trishiras facing a fire altar.**

‘As much as 95% of total amount of mounds of fire cracked stone in Sweden (c. 6550) are to be found in the Baltic provinces. About 3550 mounds are found in Uppsala County, accounting for 54 % of the national total. The largest concentration is in Börje and the surrounding parishes. In the Mälaren Basin, these mounds began to be erected during Early Bronze Age, mainly Period II, and have often been used for a very long time’ (Victor 2007:254).

Some burnt mounds seem at first glance to be random deposits of burnt stone and other residual material. A closer examination, however, often reveals complex structures and elements such as inner circles of stones, stone foundations under the filling, and deposits of bones and artefacts, often separated in different layers. In many cases there are deposits of pottery, objects connected to metal production as well as slag products, and especially burnt and unburnt bones of both animals and humans. These seemingly disorganised and contradictory residual products, however, can be closely related, provided they are interpreted on the basis of different religious beliefs than the contemporary Western ones:

‘Just like the human life force, this hot, liquid metal could be reshaped and take up residence in various tools or liturgical objects. It therefore seems highly probable that the treatment of the human body and the treatment of metal have structural similarities, based on a cosmology in which the dismembered body of the creation myth gave rise to the alloforms of all life’ (Kaliff 2007:173-174).

This mix of different activities has similarities with the oldest archaeological site that has so far been interpreted to show clear traces of typical Indo-European fire and water offerings. The site is Gonur Depe within the Bactria-Margiana Archaeological Complex (BMAC) in Turkmenistan (c. 2400-1600 BC), (see Chapter 5). Nadezhda A. Dubova, who became the head of excavations after Viktor Sarianidi’s death in 2013, writes of the archaeological remains belonging to the Fire Temple and its altars:

‘On the south side of the large basin there was a Temple of Water (Sarianidi 2005:167–181), identified on the basis of some open rooms with several ritual double ovens facing the water. On the north-western bank of the same water pool, a workshop for smelting bronze, where many moulds, melting pots, tools, and other appropriate artefacts, including ritual ones, were found’ (Dubova 2019:31).

Historically, most burnt mounds have been interpreted as secular, for instance as indications of settlement sites (e.g. Hyenstrand 1979; Jaanusson 1981; Wigren 1987; Jensen 1989), though there are early examples of interpretations as sacrificial sites (Nordén 1925; Bellander 1938). However, provided one has good knowledge of the Vedic

sacrificial tradition, one can see the mounds as ritual features, particularly altar constructions (Kaliff 2005, 2007). The Vedic analogy shows the presence of advanced collective rites, which require great effort, resources and time. These also leave physical traces that can be detected by archaeological methods: altars, hearths, pits for ritual waste, post-holes from burnt-down ritual structures and buildings. These features are also common in archaeological material from Scandinavia.

In addition to burnt mounds, other interesting structures consist of certain stone settings, as well as features interpreted as cult houses. Structures that have been interpreted as ritual buildings from the Bronze Age are mainly of two kinds: one of these types is a rectangular stone frame, usually called a 'house of Broby type' after the site of a find at Broby in Uppland. They are interpreted as ritual enclosures, symbolising houses, with a function for mortuary rituals, but also more polyvalent rites. Fire-cracked stone is often part of the structure, as are hearths and layers of soot and charcoal (Victor 2002:186). Another interesting type of feature consists of small post-hole structures from the Late Bronze Age and the Early Iron Age, interpreted as cult houses or sepulchral houses (Kaliff 1995a, 1997:55-57).

Features designated by the non-committal umbrella term 'burnt mounds' occur in very different contexts, often together with the houses and stone frames mentioned above. They do not represent a uniform category, and there is a relatively broad variation. Typically, however, they contain a large amount of fire-cracked stone, usually together with soot and charcoal. Some examples though, include special find material as well as complex inner structures: circles of stones, stone foundations and deposits of bones and artefacts in different layers. In many cases there are deposits of pottery, objects connected to metal production, and especially bones – unburnt and burnt – of both animals and humans. They are found on sites designated as cemeteries as well as on settlement sites, sometimes in central locations.

The animal bones found in the burnt mounds – often the largest find category – consist of both burnt and unburnt bones. Different species occur, where cattle are generally the most common, followed by sheep/goat and pig. However, horse bones are also very well represented. According to one interpretation of certain burnt mounds in eastern central Sweden, they could be butchering sites and places for treating hides and leather (Elfstrand 1995). This interpretation is interesting, also with regard to the question of remnants after sacrificial rituals, although it has focused mainly on secular, 'ordinary' slaughter.



An important aspect to keep in mind when considering the interpretation as a place of slaughter is the fact that physical remains after secular slaughter, ritual slaughter or more pronounced sacrifice, are very difficult to clearly distinguish, something that has also been noted earlier in this context.

‘Yet this interpretation of functional activities connected to burnt mounds does not rule out a ritual explanation; if anything it reinforces it. Butchering must have been an important activity performed at special places and based on traditional rules. It is a widespread feature of traditional societies that butchering is undertaken according to ritual rules. This means that the dividing line between butchering site and sacrificial site is not particularly clear, and perhaps it is not meaningful to try to draw any such line. If there was a distinction at all, it is difficult to detect by archaeological methods, since the residual material is easily confused’ (Kaliff 2007:110).

What is historically known about ancient Scandinavian sacrifices, at least at the close of the pre-Christian period, is that they must have primarily involved slaughtering animals and having sacrificial meals (Hultgård 1991, 1996:44). There is no reason to assume that this type of offering was not common in earlier times as well. Lack of significant archaeological evidence could possibly contradict this, but on the other hand, animal sacrifices and offerings of food and drink scarcely leave any clear traces.

### **Butcher’s waste or sacred deposits?**

Despite the overwhelming potential evidence of large and complex sacrificial sites, caution has characterised the interpretation in many cases. A secular interpretation seems to have been considered more credible, with the risk that instead it is our own time’s values that are interpreted in the archaeological finds. An illustrative example comes from the large and complicated burnt mounds at Sneden in Uppland, the largest of which was almost 15 m in diameter, interpreted as possible large-scale butchering places. The deposited bones consisted mainly of parts of skulls and teeth. Bones from cattle were by far the most common find, but horses also appeared in most of the burnt mounds,

in addition to bones from pigs as well as humans. The latter should in itself constitute a clear indication that this is hardly an ordinary slaughter place. In addition to horse bones, a horse beetle was also found in one of the burnt mounds (Fagerlund 1998).

Although Sneden was interpreted as primarily a place for slaughter and the use of slaughtered bodies, ritual and religious connotations were not ruled out. Regarding the deposited bone material, the excavation report states: 'These and other parts deposited in the mounds, possibly as sacrifices, have been utilized optimally before being deposited. Countless slaughter marks verify this. It is unlikely that horns, skins, brains, meats, tongues and all marrow were collected from an animal part that was to be sacrificed solely or primarily. Thus, it would also not be reasonable to believe that the site was used solely as a sacrificial or cult site' (Fagerlund 1998:83; authors' transl.).

In this quote, one can see a certain ambivalence in the interpretation, in many ways typical of its time – the late 1990s. Although the ritual elements of the site are emphasised – deposited cranium parts, grave-like stone structures, crushed burnt bones etc. – the conclusion still remains that Sneden is a place of mainly secular function, but the interpretation remains open to the possibility that the deposition of burnt and unburned animal bones could have been some form of sacrifice. It was considered a logical conclusion that heads of animals were sacrificed, while the other parts were taken care of in other ways (Fagerlund 1998:43, 83-85).

## **Water, wells and 'Vedic' alters**

If Sneden had been excavated 20 years later, the ritual elements would probably have been more clearly emphasised. The ritual aspect becomes especially clear when Sneden is compared to sites that were excavated later, with burnt mounds in contexts that have received a clear ritual interpretation (Fig. 56); for example the nearby Nibble in the Tillinge Parish and Skeke in the Rasbo Parish (Artursson, Karlenby & Larsson (eds.) 2011; Artursson, Kaliff, & Larsson (eds.) 2017), the latter about 40 km north-east of Sneden. When comparing Sneden with later investigated sites, it becomes clear that it could be interpreted as an outstanding example of grand animal sacrifices, carried out in continuity for almost a millennium, about from 500 BC to 400 AD.



**Fig. 56. Burnt Mound, Skeke in Rasbo Parish. Photo: Torbjörn Jakobsson Holback, National Heritage Board, Sweden (From Larsson et al. 2014).**

At the nearby and previously excavated site Ängesvallen, several burnt mounds were also found, of which one stands out – measuring 14 m in diameter and 1.7 m in height. The filling contained large quantities of unburned animal bones, also here mainly skull parts and cattle teeth. Covered by the filling, was a ship-shaped stone structure interpreted as an inhumation grave. The most interesting feature, however, is the well that was found at the bottom of the mound. It appeared in the form of a large and very deep pit, which was positioned centrally beneath the filling of the mound. The well had been filled with material, similar to the filling of the burnt mound itself. The complex mound with its well is estimated to have been in use around 400-200 BC (Fagerlund 1998:80 with ref.).

Another example of a well with similar filling was discovered on the Bronze-Age settlement site of Apalle in Uppland, excavated in 1988. The finds around the well were dominated by animal bone and pottery, while the well itself contained human and animal bones. A total of roughly 200 identifiable bones were retrieved, and included jaws and

skulls from cattle and pigs, but also from a human. Remains of parts both rich and poor in flesh occurred, which means that the bones cannot be regarded solely as butchering waste. In the report on the excavation, these finds were discussed in terms of sacrifices (Ullén 2003:239).

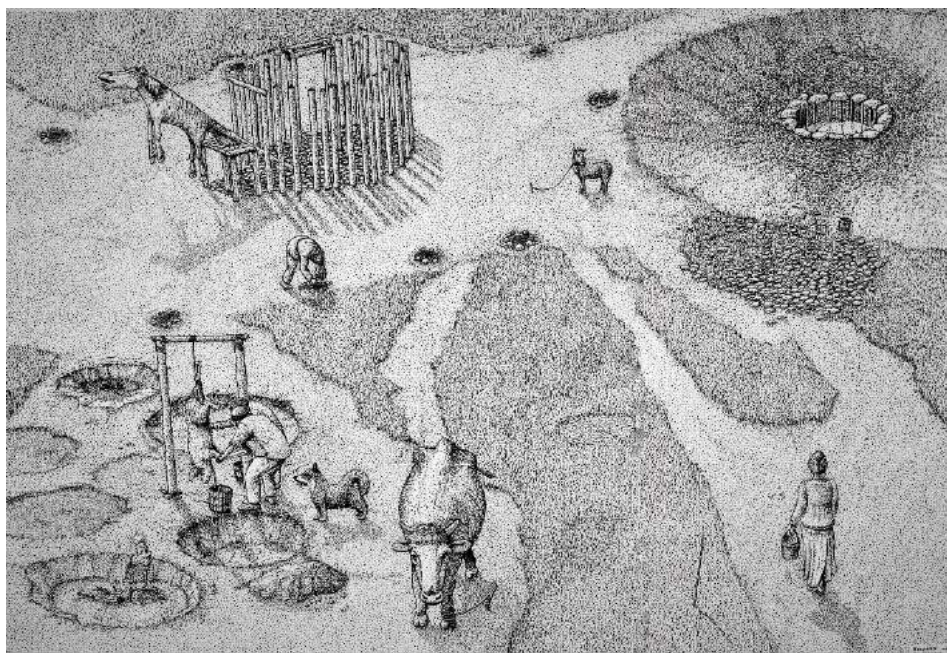
Yet another site of special interest, although mainly dated to the early Iron Age, was investigated at Hulje near Mjölby in Östergötland in 1995 (Kaliff 2001). C<sub>14</sub>-datings found the activities there took place periodically over a relatively long period, mainly during the late Pre-Roman and early Roman Iron Age (c. 250 BC-300 AD). Close to a wetland, in the vicinity of a large settlement area, a pit system was discovered with several interlinked pits, the whole system c. 11-13 m in diameter, with a depth up to 1.40 m. All pits had similar fillings of a fat greyish material covered in thin layers of fine sand, pieces of coal and small fire-cracked stones. The largest find category consisted of burnt and unburnt bones, totalling c. 5.3 kg. Several types of animal bones were found, mostly from cattle but also from sheep, pigs, domestic birds as well as several horse bones, mainly teeth. Most of the bones are well preserved, though some were partly dissolved and there were many traces of almost completely dissolved unburnt bone, indicating the original amount to have been considerably larger.

Close to the pit system a well was discovered, with a funnel-shaped upper part filled with a packing of fire-cracked stones. In its upper part, there was a deposit of burnt and crushed bones closely laid together, in a shape that suggested a burial. However, analysis of the bones revealed that all were animal bones, probably from sheep or goat, but treated as in a traditional cremation grave. In the area between the pit system and the well, another noteworthy construction was found, consisting of a triangular stone setting with closely placed post-holes on the edges, c. 7.5 m long, with a width of 3.5 m. Both the well and the stone floor with its post-hole construction were surrounded by hearths, 13 in total. The hearths stretched out towards the well into two rows, with the stone floor and palisade located between the two (Fig. 57). The find material was limited to unburnt bones in one of the hearths and millstones in two of the others. It is difficult to apply a simple functionalistic interpretation to the stone floor and the post construction, which was too irregular to form a house. The scattered bones on the surface of the construction suggest a deposit of material of similar content as in the pit system, where the classified bones show a presence of horse and sheep/goat (Kaliff 2001:449-458).



**Fig. 57. The triangular stone setting with postholes and scattered bones on the surface. Hulje, Sweden (1995).**





**Fig. 58. Possible interpretation of activities near the wetland in the northern part of the Hulje site. The reconstruction has been made on the basis of finds from Hulje and other Iron Age sites. Illustration: Richard Holmgren, ARCD OC, from Kaliff (ed) 1999b, Fig. 26.**

The interpretation of a place for both animal sacrifices – with a relatively large element of horse – and ritual deposits near the wetland is very reasonable for the finds at Hulje (Fig. 58). The presence of the well with the filling of fire-cracked stones and a clearly significant burial of cremated animal bones makes the interpretation even clearer. Sacred wells – Frobrunn – are a very important feature in connection with horse rituals – skeid. There are numerous historical evidences of the enduring tradition of horse cults at sacred wells, especially around Christmas time like the St Stephen's Ride ('Staffansskede'). These wells have a very special cosmological significance (see Chapters 10-11).

Wells with similar features as the ones at Ängesvalle, Hulje and Apalle have been interpreted as ritual deposits, both in Scandinavia and on the continent. Both the deposition of butchery material together with fire-cracked stone in the mound at Hulje, and the combination of burnt material and the underlying well are phenomena with distinct cosmological connotations. There are links here not only between remains of animal bodies and fire, but also connections with water and earth – other important elements in Vedic and other Indo-European

traditions (Lincoln 1986) – in which the material was deposited. If one thinks in terms of elements and considers body parts and natural phenomena as alloforms, the ritual expression seems obvious. Bodies were cut up, parts were burnt and parts were deposited together with stone, earth and water in different combinations (Kaliff 2007: 99-134).

The burnt mounds at Apalle in Uppland are another example, though they initially also received a mainly secular interpretation, as places for collective handling of certain types of waste. These mounds were later problematised in interpretations as places for depositing bones from certain domesticated animals, and the interpretation as offerings also occurs in more recent studies (Ullén 1995, 1996, 2003: 238-239). The special and apparently selected bone material, however, may suggest a more pronounced religious ritual – a sacrifice: ‘The occurrence of certain types of selected “waste” strengthens the hypothesis of the burnt mounds as sacrificial sites. Remains of an offering could thus appear archaeologically as waste, although of partly selected and special character. Once again, the interpretation one chooses depends in large measure on one’s pre-understanding and on the contextual interpretation given to a particular site’ (Kaliff 2007: 113).

One clear example of burnt mounds in a ritual context, dated to the Late Bronze Age and earliest Iron Age (ca 1000-400 BC) is found at the burial and cultic site of Ringeby in Kvillinge Parish, Östergötland (Fig. 59), excavated in 1993-94 under the direction of one of the authors (Kaliff 1995b). This was a site with a very clear focus on religious cult and burial rites. Four burnt mounds were discovered, distributed in pairs. Beside these two groups of burnt mounds there were also extensive traces of other ritual activities: deposits of burnt human bones, cremation sites, hearth pits and a small cultic building. Beside one of the pairs of burnt mounds, located in the south-western part of the site, a squarish stone block with sides of 2m had been placed. The block, that weighted several tonnes, was partly cracked by fire, and had been moved and placed over a large hearth pit, a phenomenon with parallels, among others, on the aforementioned site Nibble in Uppland. Close to the block, remains of at least five pots were discovered, deliberately smashed with fist-sized rounded stones, still in situ. The whole context of the stone blocks, burnt mounds and ritual deposits of ceramics, gave a very altar-like impression. The smashed pots, among other features, may have belonged to a stage in the construction of an altar, comparable to the symbolic deposits described by Staal (2001) in the construction of the Vedic *agnicayana* altar.

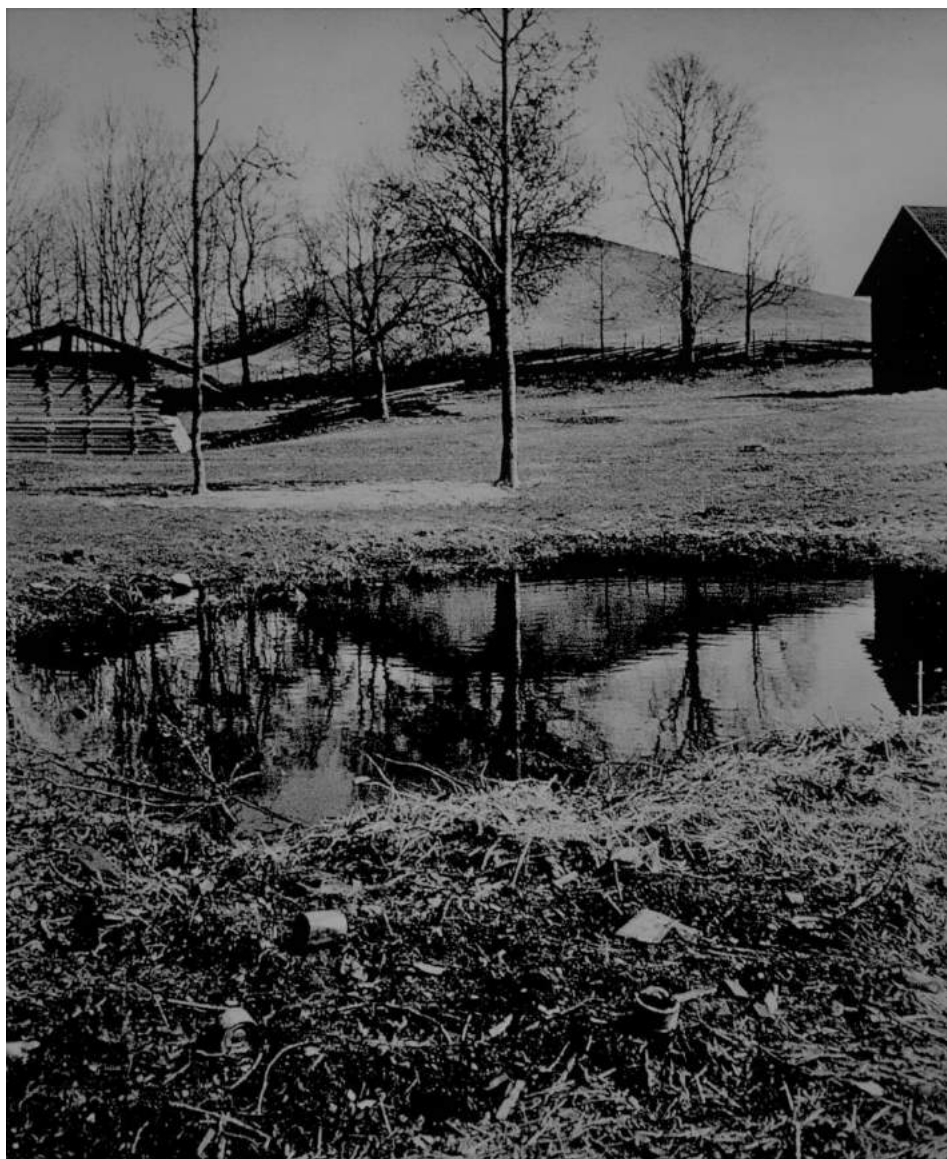


**Fig. 59. Burnt mound, Ringeby, Sweden.**

Bones that could certainly be identified as horse were found in only one feature, one of the burnt mounds next to the stone block. It also contained unburned bones from other species: beside horse, cattle and sheep/goat bones could also be determined. The latter two were also the species that, in addition to a few fragments of pig bones, were found in other facilities in Ringeby (Sigvallius 1994b). However, the most common find from Ringeby was burnt human bones, which clearly shows that the burnt mounds are in this case integrated in a ritual context.

Similar complexes of burnt mounds, stone blocks, and ceramic deposits have been found on other sites besides Nibble and Skeke mentioned above. One of just a few examples mentioned here, excavated already in the 1960s is Igelstaberget in Östertälje Parish, Södermanland (Hyenstrand 1966:79) and the ritual enclosure at Odensala in Uppland, with deposits of deliberately smashed pots, interpreted as offerings of food or drink (Olausson 1995: 216-217). A clear example was also the complex burnt mound found at Ullevi outside Linköping in Östergötland in 1988, also containing either a cult house or an altar (Karlenby, Knape & Klockhoff 1991).





**Fig. 6o. The mythological Mimer's well? Old Uppsala in the 1930s. Photo: Gustavianum, Uppsala University.**

In the latter case, the name Ullevi is also of special interest, with this site interpreted as an important sacred place in the area, and later excavations revealed more traces of the rituals performed in the area (Nielsen 2005; Strid 2005). Also, one of the other investigated sites with similar remains, the large cultic place at Nibble in Uppland is located very close to an Ullevi (Artursson et al. 2011). The relationship between

horse rituals, the cult of sun and fertility and gods like Ull, Frey and Freya is discussed in more detail in Chapter 10.

The construction of the burnt mound itself may have included a powerful ritual expression – already mentioned above in connection with the deposited animal skulls – completely in line with the complex construction of a Vedic altar. The combination of water, fire and stone could also have a strong audiovisual effect during the creation of fire-cracked stone, when water was poured on heated stone. The significant role of water as one of the original elements may also have been physically expressed in the location of certain burnt mounds in the landscape, in the meeting point between different geographical zones. It has been observed that burnt mounds are often placed on ridges close to water, where they can be said to combine different landscape elements. The mounds are then associated with cosmological and symbolic beliefs, although previously not usually associated with underlying Indo-European conceptions (e.g. Runcis 1999; Hauptman Wahlgren 2002; Thedéen 2004; cf. Kaliff 2007: 127-134).

If one can see sufficiently clear evidence for a doctrine associated with this, then this is itself a highly valuable support for a connection to other Indo-European contexts and a common Proto-Indo-European background. The ritual use of burnt mounds – their location in the landscape, the effect of fire and water on the stone as well as the deposition of ritual objects and sacrificial remains – can be interpreted in terms of the creation myth found in different Indo-European contexts, where different elements are enclosed in each other and converted into other forms. Moreover, cult continuity is clearly seen in rituals structured around water and wells (Fig. 6o).

## 10. The sun and its relation to water, weather and winter

*'...the axe has from time immemorial been considered, both in Greece and elsewhere, a symbol of the thunder or sun god. It soon becomes evident that the god of the sun and the god of thunder have originally been one and the same deity, although the ancients had not learnt to understand as we have the intimate connection which exists between the thunder and the sun.'*

Oscar Montelius, *The Sun God's Axe and Thor's Hammer* (1910), p. 60-61.

### Sun and rain gods

The sun has been central to most Indo-European comparative studies since the 19<sup>th</sup> century. In his study of research traditions on prehistoric religion, Andreas Nordberg (2013) starts his analysis (and criticism) with a quote from 1892 by J.P. Allen: 'When an archaeologist is in doubt he always falls back on the sun-god' (Allen 1892:71), which he believes can be ascribed to the empirical material from Bronze Age Scandinavia: 'The characteristic symbol of the Bronze Age is the wheel with four spokes, and in some cases the ship seems to be intended for a symbol. Many attempts have been made to explain the meaning of these symbols, the favourite theory being that they have to do with sun-worship.' Moreover, while maritime connections have been highlighted in recent years, this interpretation is almost as old as archaeology itself: 'By far the most interesting fact disclosed by the Swedish rock sculptures is that even in the Bronze Age the Scandinavians were already a maritime people' (Allen 1892:71).

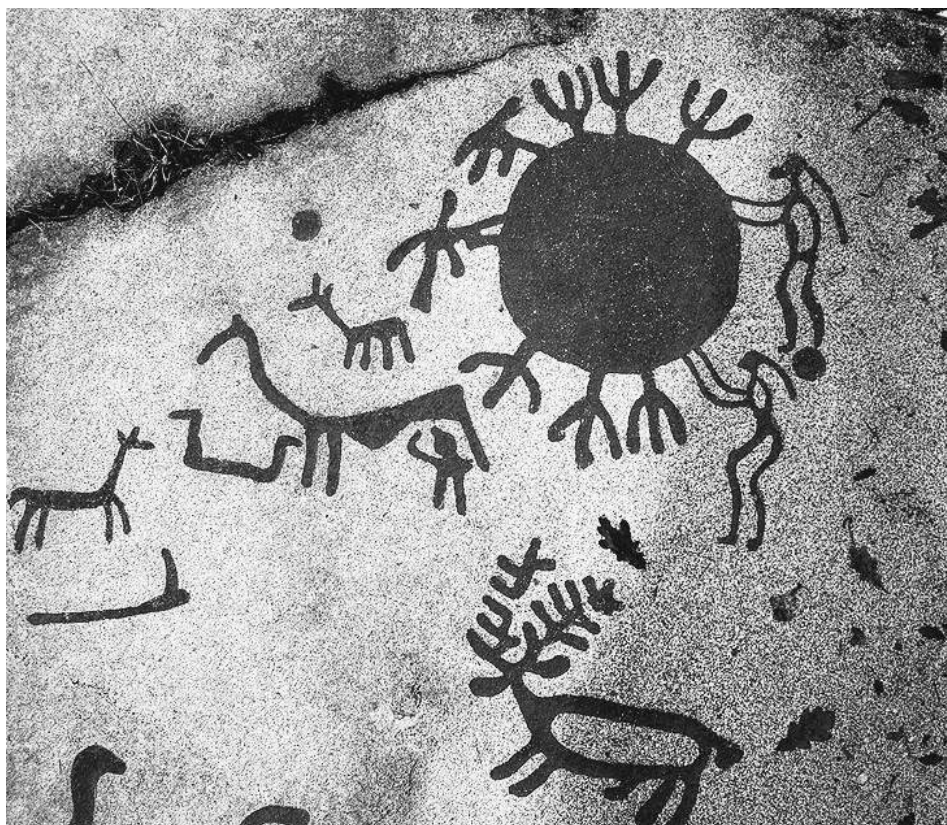
Allen's critical remark, which Nordberg elaborates on, is that the sun has been uncritically used as a self-explanatory framework. Paradoxically, a century ago archaeological interpretations were more scientific and embedded in ecology as part of culture history than many

similar interpretations are today. Thus, the sun has to be contextualised in relation to for instance death (cremation) or rain (or water in its many forms) – procreative and fertile sources in various forms. An interpretation that only highlights the fact that the sun circumnavigates the Earth is tantamount to a non-explanation, because the sun rises and sets today as it has done since time immemorial. The reason is simple and important: the qualities of the sun are fundamentally different in a desert in Africa than they are in December in Old Uppsala. Throughout history, no people have simply worshiped the sun *per se*, as this would be meaningless, but the sun has embodied many different powers, movements and life-giving forces, which have taken on widely different cultural expressions in changing ecological environments (Fig. 61).

The founding fathers of archaeology, themselves very familiar with the agricultural year, often favoured down-to-earth interpretations, and although largely dismissed or forgotten today, they may prove to be more accurate than many of the more recent interpretations framed in post-modernist perspectives.

As an example and introduction to the discussion in this chapter, we will cite to Oscar Montelius' short article from 1910: 'The Sun God's Axe and Thor's Hammer', which also reflects comparative Indo-European mythology at that time. Montelius writes:

'Amongst the Aryan peoples of India we find a god whose favourite weapon in his fight against the demons is the thunderbolt. This god, glorified above all others in the Rigveda hymns, was Indra, that fabulously strong deity who corresponds to the Thor of the Scandinavians. His original weapon was the "heavenly stone" which the primeval smiths had sharpened for him; it was thus a kind of stone axe. Then a bolt was prepared for him which, according to some hymns, was made out of the skull of a horse, while others describe it as being made of bronze. Strictly speaking, it was made of "ayas," the same word as the Latin "aes," which word in the earlier Indian language signifies copper or bronze, but which in later times, after iron became known, means this new metal. From the fact that one of the Rigveda hymns gives to the lightning the name of the axe of heaven, we may rightly infer that Indra's axe is really the lightning' (Montelius 1910:61).



**Fig. 61.** One of Scandinavia's most famous rock-art panels depicting the combination of the sun and horses (and other animals). Aspeberget 7, Tanum, Sweden. Photo: Milstreu Gerhard, [www.shfa.se](http://www.shfa.se)

Montelius continues to connect the rain and thunder-god to the sun. Throughout known history these two have been a pair – either as qualities incorporated in one god or as a cosmological pair, sometimes also twins (Fig. 62):

‘It is true that Thor is now-a-days thought of merely as the god of thunder, but that he, like other gods of thunder, really was a sun god, we gather partly from the fact that he was called upon, as Adam tells us, when famine was threatening,—(it belonged to the sun god to grant a good harvest),—and partly from the peculiarly important part he played at Yule, that great festival of midwinter. The buck, Thor’s sacred animal, is still of great significance at Christmastide. Many a Christmas cake, or *julkuse*, has even now the shape of a buck, and most of us have



Fig. 62. Thor. From Bradish, S. P. (1900). *Old Norse Stories*. American Books Co. New York.

seen as children the fur-clad *jule-buck* on Christmas Eve. Formerly it was dressed up in a real buck's head, and in some parts of Scandinavia it carried a wooden hammer (!), whereby its connection with Thor becomes still more obvious' (Montelius 1910:74).

Montelius follows the historical development, which is linked to Nordic ethnography and ethnology and relates to how Christianity incorporated the contents of the gods, because religion was not merely about theology, but function (see below), and the sustenance of farming communities.

‘The fact that the worship of Saint Olaf [the Norwegian king killed in 1030 AD] was not, like that of the Swedish Saint Erik, limited principally to his own country, shows that there must have been some special reason for the prominent position he occupied within the northern Church ... If the Christian Scandinavians looked upon him in the same way as their heathen ancestors had looked upon Thor, we can easily understand why it was so. Just as people in old days believed that Thor could grant good harvests, so even in the nineteenth century they have supposed Olaf to be in possession of the same power. Stories from the south of Sweden and from Denmark tell how the peasants were wont to drag the image of Saint Olaf round the fields after the sowing. The image of Saint Olaf in Vånga church in Västergötland was carried round in that way, in spite of vigorous protests from the clergy. The peasants had given it the name of the “corn god” (Montelius 1910:75).

Farming communities that depended on precarious harvests needed a god to protect them, particularly in harsh climates. Farmers may have been superstitious, with good reason, but they were not fools; if there was one thing they could do without in their daily struggles, it was indifferent gods. Malevolent beings and divinities who threatened life and well-being were omnipresent:

‘Writing about Wärend, that old part of Småland where so much of the belief and customs of former ages still remains, Mr. Hyltén-Cavallius says, - “They still look upon the thunder as a person whom they call alternately “Thor” or “Thore-Gud,” “Gofar,” and “Gobonden” [The Good Farmer]. He is an old red-bearded man. In 1629 a peasant from Wärend was summoned for blasphemy against God. He had said about the rain,— “If I had the old man down here I would pull him by the hair on account of this continual raining.” Thus it is Thor that gives the summer rain, which therefore in Wärend is called “Gofar-rain,” “Gobonda-rain” [The Good Farmer rain] or “As-rain.” The rumbling of the thunder is produced by Thor’s driving in his chariot through the clouds. It is therefore called *Thordön* after him. People also say that “Gofar is driving,” “Gobonden is driving,” “The Thunder is driving.” Thor drives not only in the air but also on earth. Then they say that “he is earth-driving.” ... The most noticeable trace of our country’s older worship of

Thor is that “Thor’s day” (Thursday) was still in the nineteenth century considered as a sacred day, almost as a Sunday’ (Montelius 1910:76-77).

Thus, Montelius concludes: ‘the examples I have given will probably suffice to show that the god of the sun and that of thunder were originally one and the same god, that from time out of mind and by widely different peoples the axe has been considered as the sun-god’s weapon, and that amongst certain peoples it became a hammer. The idea of Thor’s hammer is therefore not peculiar to the Scandinavians’ (Montelius 1910:75). Our focus here is not the hammer as such, or many of the other interpretations, but the important linkage between mythology and ecology. In 1882, J.J.A. Worsaae wrote: ‘As far back as written accounts extend, the struggle between Light and Darkness, Summer and Winter, Good and Evil, has formed the principal foundation of the religious belief of the people of the North’ (Worsaae 1882:177-178).

The horse and the sun, like the Trundholm sun chariot, can be identified far back in prehistorical mythology. In the *Edda*, Sol (the sun) drives the sun’s wagon across the sky and is the brother of Måne (the moon). His wagon Alfrödull – a possible connection to the god Ull – lights up the worlds, but Sol or the sun is also occasionally called Alfrödull (Kaliff 2018:41-42). Building on this and older research by Worsaae and Montelius among others, if the sun god is paired with a rain or water god, one may consider winter, the most prominent season in the north.

Ull was once the mightiest god in the ancient Svea kingdom (today’s Sweden) (Vikstrand 2001:188). There are different interpretations of the etymology of the name Ull (Ullr). One hypothesis is that the name means ‘the lordly’, ‘the majestic’. Both Folke Ström (1961:105) and Per Vikstrand (2001:166) have suggested that it must have originally meant ‘splendour’ or ‘radiance’, with Ström claiming the god to have been a manifestation of the radiant sky. This is in line with the interpretation of Åke Ohlmarks (1963: 47), who believed Ull to be intrinsically related to the sun, suggesting the meaning of the word to be ‘the radiance of the sun’. ‘More specifically, Ullr has been thought by some to have been a Swedish and Norwegian sun god of the Bronze Age, a god who, by the time of the Viking Age and the first Nordic literary sources, had faded only into the distant cultural memories of the descendants of those who had known his former cult’ (Molin 2015:124).





Fig. 63. Ull. From 18<sup>th</sup> century Icelandic manuscript (SÁM 66, Árni Magnússon Institute, Iceland).

An interesting but less well-founded theory is that Ull's name instead refers to water, namely a spring-well, an interpretation presented by Eric Elgqvist (1955:73). There are objections to this interpretation, which we will comment upon below, because the water connection is worth pursuing. However, one of the most widely accepted interpretations of the name Ull is that it stems from the Gothic word *wulpus* 'splendour'. Ull's former importance before giving place to other gods – or other names of the same god – is testified by many place names, in particular in Sweden. Mythologically, Ull was a stepson of Thor, born by Thor's wife Sif, but with an unknown father. As an

excellent bowman who was associated with war (Fig. 63), he was known as the 'Snow-shoe-god,' 'Bow-god,' 'Hunting-god,' and 'Shield-god'. These are not typical characteristics of a sun god (MacCulloch 1930:156-158).

Still, some of Ull's other features, including his ring, his shield and the ship, are more fitting for a sun god. It has been argued that the sun and Ull's ring were actually identical; Ull's 'ring' being the glorious sun-disc at its highest point in the sky, or at least an allusion to the sun itself. Furthermore, there is another connection between the ring and the sun, which applies to the ring as an allusion to the ship as a sun symbol or as the sun's vessel. The shape of the ring and the shields' association with Ull constitute a very powerful symbol for the sun. This makes it is easy to see Ull in association with well-known Bronze-Age finds. In addition to the famous sun disc on the Trundholm chariot from period II (Fig. 64), there are the period IV. Herzprung shields from Fröslunda at Lake Vänern. Moreover, there are probable depictions of such shields/sun symbols for example at Ekensberg near Norrköping.



**Fig. 64. Horse carrying the sun wagon: The Trundholm sun chariot (probably from 1800–1600 BC). Photo: The National Museum of Denmark, Copenhagen.**

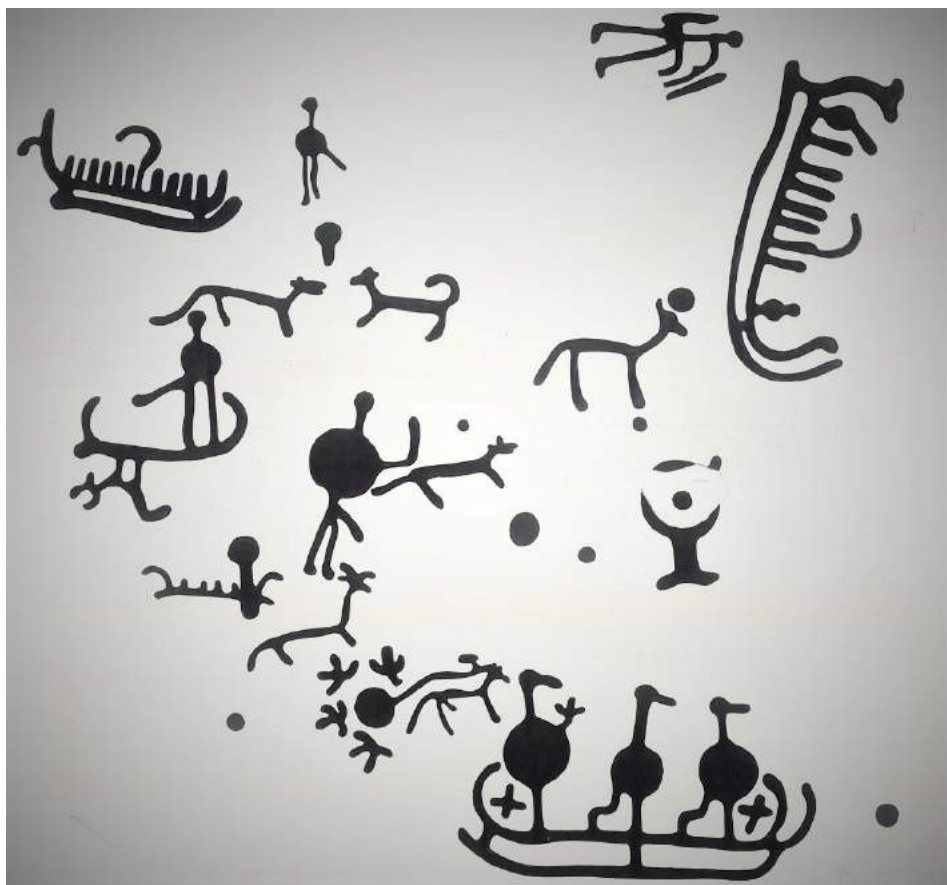


Fig. 65. Ships, shields and skeid. Lilla Arendal, Tanum, Sweden. Image: Torsten Högberg. Source: [www.shfa.se](http://www.shfa.se)

Of course, even more frequent and clear are depictions of the ship both in Bronze Age rock carvings and in grave symbolism. Overall, a lot points to Ullr as the original sun god, as this quote from John Julian Molin's *Ullr: A God on the Edge of Memory* (2015:127-128) underscores (Fig. 65):

‘Who else could the “shining god” with the shield be, than Ullr, “the radiant one”, who is regularly connected with shields? ... One might imagine the sun god as wielding the sun itself as a shield, thus the explicit mention of the shield standing before the shining god, as the shield stood before the warrior ... The oldest picture stones from Gotland also depict not only the characteristic sun wheels in conjunction with the two horses,

but also the primitive ships themselves, similar in kind to those presented on the rock images ... With the association between Ullr, shields, ships, and the sun firmly established, it is interesting to consider the ship burials and settings so prominently found in Nordic culture and in archaeological remains.'

If Ull was originally what we may label a 'sun' god, it is important to move beyond the terminology and see if we can identify other qualities and aspects of the divinity. Indeed, cross-culturally the sun god is often closely related to rain gods or other weather gods like Thor thundering in the sky. Worsaae was right that the winter shaped the religious people of the north and formed a principle foundation of their beliefs. The short summers were a challenge to cultivation and agriculture. Following Montelius, the god Thor united the sun and rain. If one emphasised Scandinavia's seasonality, the sun's movement and daily rebirth were important, but the yearly cycle was more fundamental to farmers.

The right combination of rain (water), sun and temperature produced bountiful harvests, but it was a double-edged sword: then as now, a late snowfall or drop in spring temperatures could destroy the whole harvest. Moreover, a long cold spring could be as devastating as a short summer. The role of the sun has to be understood in its intimate relation to changes in the water world. As has been said in a different ecological context, but is equally true for the cold north:

'... disastrous droughts, epidemics and epizootics are not only hearsay and phantoms in the minds of the people but well-known facts of life. Life is precarious. Threatened by destruction through famine, sickness and death, life is always at risk. To stay alive is an achievement, something to work for incessantly through the whole array of technological, organizational and ideological means offered by culture and society: through cultivation and livestock-rearing, through cooperation with kin and neighbours and through the veneration of the ancestors' (Brandström 1990:168).

## **Weather, winter and a water perspective**

Adaptation aims to secure control of the environment and is always both creative and conservative (Harding 1988:45). There is therefore not an inherent environmental reductionism in emphasising ecology – rather the opposite. Yet for a long time in post-processual archaeology, it was a heresy to address climate as a relevant variable. Those who did were ostracised as academics. It was only rather late that archaeology, for instance, was problematised as part of the Anthropocene (Solli et al 2011). It is a particular paradox that even in the Arctic and at a university like Tromsø, the winter and snow have been seen as largely irrelevant (Fig. 66) – except in Sami studies and with significant exceptions like the location and seasonality of rock-art in relation to the tidal-area during the winter (Gjerde 2010). Still, it is safe to conclude that the winter and the cold have never been properly interpreted in cosmology and religion. Hydrologically, snow is water in different frozen forms, which again highlights the relation between sun and water: the fundamental axis in any farming community.

In most cases, water is a useful approach in comparative studies, because ‘water is particular and universal, the one and the many, nature and culture, physical and ideological. With water these oppositions are dependent upon each other and consequently unite and separate at the very same time: at a universal level, all water is the same, but at a particular level there are numerous and different types of water bodies’ (Tvedt & Oestigaard 2010:13).

Throughout history, all societies at all times have adapted to their waters and managed them. All water systems can be understood to consist of three interconnected, but not hierarchical layers. The first layer is the physical form and behaviour of actual waterscapes, which includes precipitation, evaporation, how rivers run and in this case: snow and ice. The second analytical layer addresses human modifications and adaptations to the water worlds, which includes dams and channels, irrigation and dykes, etc. In prehistoric Scandinavia, there were limited means to control the water ways; in most cases one was fundamentally dependent on the physical variation of water itself, which brings the natural landscape in intimate connection with the divine waterscape. The third analytical layer addresses cultural concepts and ideas of water and water systems, and here a particular focus will be on religious beliefs (Tvedt 2010a, 2010b, 2010c, 2011). As Tvedt says:



**Fig. 66. Two Birkebeiner skiers carried the king's son Håkon Håkonsson in safety across the mountains in 1206. Painting by Knud Bergslien (1869).**

'Systematic comparisons of the role of water in different religions has therefore a great untapped potential: (a) water is an absolutely essential resource in all societies, (b) most religions give water a central place in texts and rituals, (c) the paradoxical natures of water – it is a life-giver and life-taker, alluring and fearsome, creator and destroyer, terribly strong and very weak, always existing and always disappearing – mean that it easily can be, and often has been, ascribed all sorts of different and conflicting symbolic meanings of fundamental importance at a number of shifting levels [...]' (Tvedt 2016:65).

In traditional farming societies, health and wealth depend on unpredictable rains:

'If it is one thing that characterizes statistical averages concerning precipitation, it is that the actual rainfall in a given year is hardly ever the average: more often than not it is extreme one way or another. In other words, there is hardly

ever a “normal” year; the erratic and unpredictable rainfall patterns become “the norm”. Moreover, the total inter-annual amount of precipitation is not always the most relevant measure ... what matters fundamentally for agriculturalists is that the right amount of water comes at the right time. In particular, rain-fed agriculture is highly vulnerable to erratic precipitation patterns. If the rains fail, or are abundant at the wrong time for the cultivation season, it may have devastating consequences’ (Tvedt & Oestigaard 2016:9-10).

If this is a general condition in warmer and more temperate areas, in northern regions this is even more precarious as in addition to the unpredictable variations in timing, amount and intensity of rain, the winter and the melting of snow in the spring determine the seasonal variations.

This relates directly to the ritual of ecology and the ritualisation of economy (e.g. Rappaport 1979). In the archaeological world, the word ‘function’ still has negative connotations after the different types of functionalisms, which have rightly been critiqued. In religion in general and the archaeology of religion in particular, however, this has again resulted in the baby being thrown out with the bathwater. In a cosmological world, it is much better to have functional gods than dysfunctional gods, and if they are functional, they should preferably be benevolent instead of malevolent. The reality was different, though, at least seen from the perspective of farmers. There were dangers everywhere. Not only were there numerous malignant waters and deities that used water to inflict all kinds of evil and death upon people (Oestigaard 2003b, 2010a, 2010b), but dying a natural death from old age was highly unlikely in the prehistoric world. Most deaths were caused by evil spirits or ancestors killing the living (Østigård & Kaliff 2020).

Although there is no generally accepted definition of what religion is, the question of defining religion has had an important function in developing the sociology of religion as a discipline, because constructive discussions enhance knowledge (Parsons 1944). One way to study and define religion has been to approach religion from a functional or substantive perspective. Functional or pragmatic approaches identify certain cultural phenomena as religious when these are created or belonging to gods, or possibly solved by the very same gods. Angry weather gods are clearly in this category, like Thor, but also God Almighty or Yahweh who punished his people with the Deluge. If worshipped properly, however, God may bless the devotee, which brings

us to the other approach, namely the substantive approach, focusing on the ontological reality of certain phenomena, like the existence of gods, divinities and ancestors, and how rituals and sacrifice define interaction between this and the other world (Schilbrack 2010, 2012, 2013a, 2013b). Importantly, there is no inherent contradiction between these two approaches, because in order for gods to function, they must exist as (divine) substance, but in all religions god(s) work in mysterious ways, and any function mainly depends on the whim of gods despite all human prayers and sacrifices. These are conditions that fundamentally affect how we as archaeologists should regard categories such as 'functional' or 'ritual'. Religious beliefs and ritual customs can thus intervene in activities that are regarded as purely functional in our time and culture:

'Farming and agricultural techniques can in themselves be regarded as a system of "rituals" to improve and steer life and regrowth in nature ... Death and life presuppose each other, and the new life is born from the old, just as next year's harvest comes from this year's. The rebirth of the earth when the sun returns in the spring is thus also the foundation for ideas that the dead acquire strength to be reborn through both the earth and the sun/fire. When the year approaches the winter solstice, the realm of the dead, it is simultaneously very close to the new year and the time when all growing things regain new life. The sun, the life-giver, gradually returns and revives nature after it appeared to be dead. Rites performed at the winter solstice can thereby take on a reinforced significance, simultaneously dedicated to the dead and intended to help the resting soil back to a new life. Fire sacrifice in particular takes on a profound symbolic meaning in this connection, since fire has often been regarded as an aspect of the sun, with a share of the sun's energy. Ritual fires and fire sacrifices can thus be rituals which convey fire/the sun as an element to the new life, creation' (Kaliff 2007:163-164).

Given that terms like 'animist' religion distracts the attention from the function and substance (sic) of religion, a central aspect in all religions and cosmologies is power. While transcendental religions portray their main gods as good (Yahweh, God, Allah), in cosmogonic religions the very same sources of power (divinities) can be good *and* bad. 'Power is both spiritual and material and often explicitly so. Spiritual power is



believed to lead to material power – political influence and wealth ... Overall, spirit power is assumed to permeate the material world, which makes this world both something to be wary of and something that can be used in interaction with the spirits' (Włodarczyk 2013:157). Importantly, this power, or more correctly powers, not only in plural but always as infinite powers, are everywhere in different shapes, presences, visualisations and manifestations. The powers are sometimes and in certain places accessible to humans, but they mainly roam around by themselves, causing death and havoc, but also bestowing life and fertility. Also, there are numerous examples of gods who do not really care about humans; they are still supreme beings, but human matters are left for lesser divinities to deal with (Tanner 1956a, 1956b, 1958, 1959). After all, why should humans be in the centre of cosmos where gods rule?

The fact that gods function, work and have powers has been fundamental in all religions irrespective of whether they are transcendental or more traditional. In the Old Testament, rainmaking was the ultimate proof of the powers of the gods. The religious battle in the desert between the Jews and the Baal worshippers of Mount Carmel (1 Kings 18:16–45) is famous in this context. The superior god proved his strength by sending rain, and whereas the rain failed despite all the Baal-worshippers' sacrifices, Yawheh let the precious waters fall from heaven when Elijah prayed and sacrificed (Tvedt 1997). The role of rainmaking relates directly to food production, and, as a supreme deity, god may also bypass the hydrological cycle and provide food miraculously, as in the New Testament when Jesus fed the hungry with two fish and five breads (John 6:1–14).

The question then is how to control these immanent powers – positively called fertility and negatively death. Throughout history the easiest way to gain such control is to manipulate water and the weather, because if one controls water one controls the harvest.

A fruitful approach is to turn to the original meaning of religion, namely that *religio* is derived from either *legere*, 'to gather together' or 'arrange', or *ligere*, 'to tie together' or 'bind' (Saler 1987), which brings us to the social aspect of gods and humans, and among humans in collective rituals and sacrifices. While the ancestors are primarily individual or family based, the gods are communal and collective. Since all gods are obviously substantive in an ontological sense, it is worth focusing on the *qualities* and *functions* of the gods. The gods' genealogies, lives and works, or love and war, are fascinating stories, but

narrating them as histories may conceal the ways they really worked in the past as active deities with specific powers, personhoods and possibilities.

It seems curious that there are no 'winter' or 'snow' gods in the Norse prehistoric tradition. Skade seems to be a kind of 'winter-goddess' but the sources are vague. She is married to Njord, a deity who has been the subject of a vast scholarly debate, often connecting him to the much earlier Germanic goddess Nerthus. The name Njord (Njörðr) corresponds to that of the goddess Nerthus, mentioned by Tacitus (Germania). Both derive from the Proto-Germanic \*Nerþuz. It has been suggested that the deity has changed from female Nerthus to male Njord either due to changes in Germanic language or an evolution of religious beliefs (Hellquist 1922:519). In *Gylvaginning* (Chapter 24), it says that Njord had two children, a son, Freyr, and a daughter, Frey, but most likely this was with another wife. Again, mythologies and genealogies like these are unclear. Moreover, having a winter god or goddess married to a summer god or goddess would look nice on paper, but it would be too easy; such divinities could not have functioned properly in prehistory.

As seen, the mighty god Thor was a complex combination of both sun and rain (weather) qualities, and rather than having specific winter gods as such, the emphasis lies on seasonality (see Motz 1984). That is why divinities take on the role of mover, transformer and transferor of powers. Religious water in relation to weather and seasonality is fundamental, since weather and seasonality mainly comprise changes in the water world and its temperatures: summer and winters with rain or snow, flowing or frozen waters in rivers and lakes, etc. (Tvedt & Oestigaard 2006).

Thus, before considering snow and ice, one may take a closer look at the sun, since the sun not only shines during the summer, but also during the winter. However, the sun's qualities are distinctively different during the various seasons. In many regions in the north, during winter even the light disappears and the sun is weak, spreading no heat. In the freezing cold northern winters, it is milder when it is snowy and cloudy; the coldest days in January are when the sun is shining in a clear blue sky. How does one explain that religiously within a sun cult and cosmology?

## Sun and sunshine in Sahara and Scandinavia

Fleming Kaul says that throughout the Bronze Age, 'the minds of people of Scandinavia were almost obsessed with the religious ideas involving the voyage of the sun ... Everything suggests that the sun was the most significant power which was worshipped' (Kaul 1998:251, see also 2004). One may challenge the statement that prehistoric Scandinavians were obsessed with the sun – it seems more likely that archaeologists were obsessed with interpreting the sun and its voyage. Still, this interpretation represents more problematic challenges in archaeology, namely the relation between passive diffusion and creative construction in historic developments. In other words, the transmission of knowledge, which also lies at the heart of the Indo-European question(s) and the mechanisms of cultural exchange, diffusionism as a process and consequences of migration, on the one hand, and mobility, trade and networks, on the other hand.

While academics may create islands of history (Sahlins 1985), the past (and the present) are a conglomerate of interactions and transactions, constantly changing creating continuities and traditions. Innovations take place in all cultures, and all cultures adapt to and incorporate other peoples' ideas and innovations to various degrees. Thus, 'World-making, as we know it, always starts from worlds already on hand; the making is remaking' (Goodman 1978:6), but if everything was a re-making, innovation would not occur. Being-in-the-world is a building block on which new innovations take place, which directs the attention to how gods are perceived, since the sculpture of the god 'is not a portrait whose purpose is to make it easier to realize how the god looks; rather, it is a work that lets the god himself be present and thus is the god himself...' (Heidegger 1997:120).

There is a fundamental difference between goods and gods. Egyptian and Mesopotamian glass beads have been found in Danish graves (Varberg et al. 2014) and Mycenaean contacts and influences are clearly visible (Kaul 2013). Folding stools belonging to period II of the Nordic Bronze Age (1500–1300 BC) are another example, specifically an intact stool that was found in an oak-coffin burial at Guldhøj, in South Jutland. 'Similar stools are known from the same period in Egypt, and they appear in frescoes from the palaces of Pylos and Knossos, where they are depicted in use. It was not the stools themselves that were imported, but the concept and design that were transmitted from the eastern Mediterranean to Northern Europe' (Kaul 2015:210).

Transmitting the concept and the design of a stool, for instance, is learning craftsmanship in practice; a clever cultural and conceptual way of maximising social and economic status and profit, because once learnt one does not need to trade and exchange commodities for the same return; one may not only build one stool, but many.

The crucial question is then whether concepts of gods and cosmologies are transmitted in the same way. It has been argued explicitly that one may also include concepts of the soul from Egypt when analysing the Nordic Bronze-Age, because there is allegedly a basic similarity between certain structuring cosmological perceptions (Kaul 2005:276-277). True, the interpretation of the 'Nordic' sun cosmology where the soul travels on a boat during the day in the sky among gods and the living, and in the netherworld during the night among deities and the dead, not only bears many similarities to the ancient Egyptian cosmology (e.g. Assmann 1995, 2001, 2002, 2005, Faulkner 1969, Hornung 1982), but the original references to Egypt are most often omitted in such Scandinavian studies.

The fundamental questions are: in Egypt, 'why worship the sun in a desert environment where temperatures reach 50°C in the summer months' (Oestigaard 2011c, 2018), and why did it allegedly make sense to incorporate concepts of the sun from the Sahara in Scandinavia during the Bronze (Sun) Age? The answer to both questions is that it did not make sense and that the questions are deceptive, because the sun was much more than just a burning disk in the sky.

Originally, in Egypt, Seth was a rain and storm god – 'a god of the blessed yet dangerous storms' (Bell 1971:24), but as the rains became rarer and disappeared due to climate change, and the whole civilisation depended upon the river Nile (e.g. Bell 1970, 1975), there was a change in the cosmology. Seth as former and impotent rain-god was replaced by Horus – a god identified with the rising sun and the solar complex. The Solar Eye contained the rejuvenating powers which gave Osiris life (e.g. Antelme 1998, Lindsay 1968, Mojsov 2005). The pharaoh's realm has been described as 'that which the sun encircles', i.e. the Earth (Frankfort 1948:19), where the name Ra probably means 'the sun disc' (Anthes 1959:180).

A dysfunctional rain god who does not provide rains is a death-giver, and it was precisely death that became Seth's sphere (te Velde 1967). Water was relegated to Horus' realm or the sun. 'Osiris is manifest in the life-giving waters rising from earth when land and people need them most' (Frankfort 1948:191). The source of life came from death, and

the ultimate outcome of the mortuary cult was 'The utilitarian provision of rain, a "Nile in the sky", to sustain those people who do not have a share in the terrestrial Nile' (Assmann 2001:59). The Nile has its origin in Horus' Eye whereas heat and power, which we usually associate with the sun, are qualities ascribed to Seth (Griffiths 1960:125): 'Your tomb(?), O Osiris, your shade which is over you, O Osiris, which repels your striking power, O Seth' [Pyr. 1487]. Anthes thus argues that Seth's character as his brother's murderer 'appears closely correlated with the hostility of the desert and its murderous heat, and the destruction of the testicles of Seth may recall the sterility of the desert' (Anthes 1959:199). Qualities that we normally associate with the sun – warmth and heat – were actually qualities associated with Seth and not the sun disc. Thus, our normal conception of the sun's rays as heat-giving were not seen as an intrinsic quality of the sun; however, sun rays brought forth the life-giving waters, with the Nile originating in Horus' Eye – the sun disk.

Thus, there was obviously a 'sun-cult' in Egypt and the sun was 'worshipped', but not as a burning disc in the sky; these were the qualities of death and Seth. Moreover, nobody 'worships' a thing – a stone, tree or the sun – that is meaningless idolatry: the inherent and embodied powers and qualities are the essence. In Egypt, the sun was intimately connected to the rejuvenating forces and the river Nile. Moreover, the close relation with death exists precisely because there is no stronger source than life arising from death; this is fertility in practice, and along the Nile this miracle was witnessed every year during the flood, as the water gave life to people and plants in an otherwise arid desert.

Too much sun was not a blessing, but a curse, and among the rainmakers and pastoralists who depended on seasonal rains along the White Nile in Sudan, prolonged sunshine was seen as the work of a malevolent rainmaker (Seligman 1932:295). The rainmaker was the 'master of disaster' and should work for the welfare of society, but if he (or she) withheld the rain and let the sun burn and destroy the harvest, he could be put to death. The logic was simple: 'He is killing us so why should we not kill him?' (Simonse 1992:199). Moving from Sahara and Sudan to Scandinavia, the sun has different qualities:

*The sun in winter.* In the north, the sun was a very unfaithful friend. The rhythm of night and day was one thing, but the presence or absence of the sun's rays was striking. The sun may have looked the same on a clear day in January and July, but in winter it could be -30°C while summer

temperatures could rise to +30°C. The further north one travels, the darker it becomes, and the more the sun disappears whereas the opposite happens during summer. In fact, the coldest winter days were often the brightest and sunniest. Could the life-giving forces that overpowered winter come from beneath and from the water itself? When did the sun's power and warmth return?

*The sun in spring.* In spring, the sun may give hope and warmth one day before giving way to the cold and snow the next day. If the sun has no power during the coldest months, the change during spring is remarkable when the sun regains its warmth and melts away the snow. The sun is literally 'eating' the snow (see below), which was the ultimate proof of nature's powers. Not only were the sun and rain combined in various deities, like Thor, but a central question is who overpowered the snow and the winter, how and with which divine qualities? The sun must have seemed a very unpredictable divinity, particularly during the early summer months when the harvest depended upon the right combination of rain and sunshine. Thus, it did not make sense to worship the sun as simply the sun, but instead engage in rituals to control these unpredictable cosmic forces, or to tap the right energy at the right moment for a successful harvest.

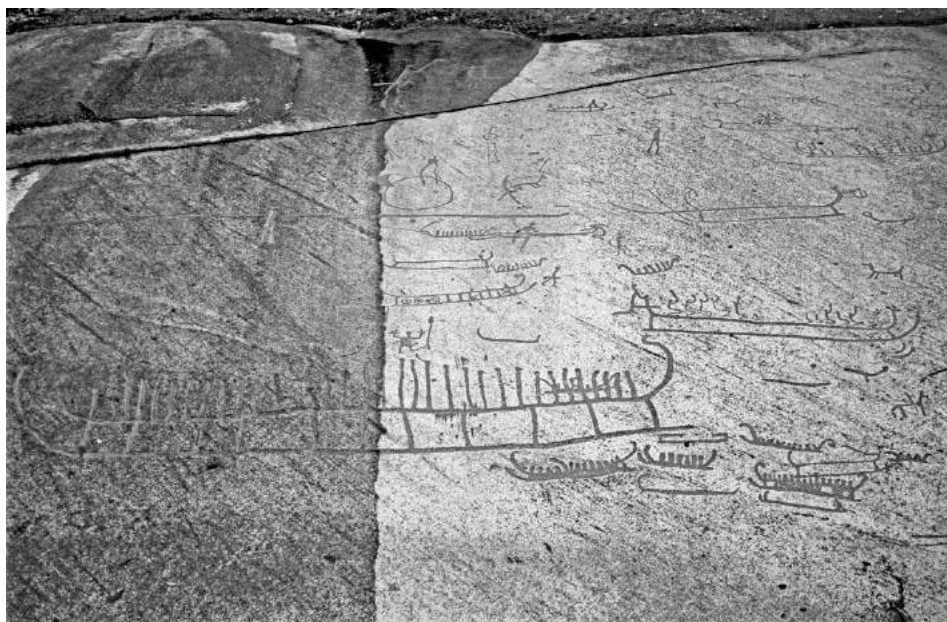
*The sun in summer.* In Scandinavia, it did not make sense to incorporate religious concepts from the Sahara and the Nile, and here too it was not a 'worship' of a neutral sun disc moving in the sky. The relevant questions one must ask concern the qualities of the sun. The prolonged heatwave during the summer of 2018 was a disaster even for modern farmers; it was too hot, with too much sun, and too little rain – the harvests failed. Therefore, attempting to generate rain is as natural as trying to evoke sunshine. The fertility of fields and pastures depends on the alternation between rain and sunshine, and the equilibrium. Nevertheless, throughout history, there has been more need to evoke sunshine in the generally cold and humid Scandinavian climate. Fire is the earthly image of the heat of the sun, and the seasonal fires that are still lit in the Scandinavian countries, at the onset of summer and at Midsummer, originally had such a function (Nilsson 1936:92-93).

*The sun in autumn.* If the sun once gave life and was a symbol of hope and prosperity, the autumn also signalled that challenging times were ahead. As the days became shorter and colder, the sun lost many of its

vital powers. The most remarkable aspect of the sun is precisely its changing qualities throughout the year. It is difficult to affect the sun's rhythm throughout the year, though smaller alterations like prolonged sunshine or thick cloud cover were visible results of sacrifices. However, the latter rituals were weather rituals like rain-making or rain-stopping that could more easily be interpreted as working or failing. In other words, controlling the sun means engaging with other weather phenomena.

If there is one thing that characterises Bronze-Age iconography in Scandinavia, it is the combination of water and sun symbolism. The sun always works in combination with water, and therefore a divine pair of sun- and rain(water) gods is omnipresent in most cultures or cosmologies, or these qualities may be embodied in one divinity. As seen, boats and horses are overlapping phenomena. The horse sacrifice was a cosmic fertility ritual that centred on fresh water, which may have included rainmaking. Although water and waves have been seen in relation to boats and transport, in practice seawater did little to help farmers who depended on rain. Thus, water and wave symbolism are perhaps better understood as referring to fresh water, because, as a universal symbol, water is easily expressed in this way. This interpretation has two advantages. First, Bronze-Age cosmology will relate to Indo-European cosmology (and religions elsewhere) where the sun and rain are intimately connected, and second, the iconography emphasises harmony between water and the sun, allowing for cultivation, but also cosmos.

The pursuit of the perfect cosmological balance between the elements can be seen as a basic Indo-European belief, founded in the cosmological origin myth with the disintegration of the body from the Primordial Being (e.g. Purusa or the giant Ymer). The homology between the body parts of this being and the elements is of fundamental importance (Lincoln 1986). It is this that stipulates, among other things, that fire sacrifice and cremation must be undertaken in a way that causes the sacrifice or the dead body to be transferred to the various elements as proportionally as possible. Similarly, it is this myth that shapes other sacrifices, including horse sacrifice. For instance, the combination of complementary fire and liquid is important in both Vedic and ancient Iranian rituals, both in the form of the divine drink *soma* and in the element of water.



**Fig. 67. Underground (*frobrunn*?) water overflowing rock-art. Vitlycke, Tanum, Sweden. Photo: Torsten Högberg. Source: [www.shfa.se](http://www.shfa.se)**

The significance of fire and liquid in combination is clearly revealed in the Scandinavian finds, not just in the form of fire-cracked stone and the combination of elements in graves and rock carvings. The fire in this regard is often interpreted as a clear representative of the sun, or intended to call forth the sun. The link to water applies in particular to the placing of rock carvings (Fig. 67). These were located beside water and the motifs were often carved so that running water flowed over them on the rock face (cf. Bengtsson 2004; Ling 2005), and much rock art is closely related to water and seaways (Ling 2013, 2014). The archaeologist Lasse Bengtsson, in his research on the rock carvings in Bohuslän, considered the meaning of different elements such as stone, fire and water, specifically with links to Indo-European mythology (Bengtsson 2004).

When it comes to the locations of some rock carvings, when properly exposed to sunlight, they can even provide a powerful snapshot of parts of the basic cosmological belief:

‘The connection of the rock carvings to water may be a very clear illustration of how the combination of different elements was perceived as a cosmological driving force. When water



flows over the rock and the sunlight hits the carved surface, the effect is striking. The images stand out distinctly in a flashing light and are virtually lifted out of the rock. It is easy to imagine how this effect could have been experienced by people embracing a cosmology in which the union of the elements was of the utmost significance. Through the sun's rays, in combination with the water, the motifs inscribed in the rock come to life. These pictures thus combine several of the basic elements in existence ... The fact that rock carvings are often placed in shore zones or close to water gives another possibility for the same combination of elements, albeit not as noticeable today when shoreline displacement has often given the carving a completely different location' (Kaliff 2007:127-128).

### **Frobrunn and fertility**

Water and waterways play a central role at prehistorical sites from the Bronze and Iron Age (e.g. Fredengren 2002, Lund 2008, 2009, 2010, 2017). Christina Fredengren pointed out that most Late-Bronze-Age deposition sites 'have connections with rivers or other waterways' (Fredengren 2011:113). Around the Lakes Mälaren and Hjälmaren in Sweden, Martin Rundkvist found that almost 90% of the depositions are located in watery parts of the settled Bronze-Age landscape, and although all watery contexts are important, in particular river inlets or outlets of lakes, waterfalls or any other type of moving water were particularly important (Rundkvist 2015:30).

The sacrificial site at Lake Bokaren in Stavby Parish, located north-east of Uppsala and dated to the Vendel and Viking periods, is a good example of a wetland sacrifice including horses. The site contains a presumed lake-platform with finds of human and animal remains, particularly horses. The first finds were discovered in 1939 and the area was partly investigated in 1941 by Bengt Lundholm. However, the results were never fully published. In the first archaeological survey carried out at the site no less than six horse skulls were discovered, in addition to two human sacrifices – a man and a woman. During the 2010s, the site was again investigated in more detail by Christina Fredengren with the participation of Andreas Hennius and Susanna Eklund. Their work added several sacrificial findings and reinforced the interpretation of the site's sacred significance. A trial excavation was carried out in 2015 where another human skeleton and several horse bones were found

together with remains of worked wood, which could be a part of the above-mentioned platform (Fredengren 2015; Fredengren, Project Presentation).

In mythology, many of the most important Norse gods were associated with various water bodies, like waters, bays, bridges and bogs. This includes both the god Ull and Thor, and even Odin seems to be connected to flowing waters. Human sacrifices were a seemingly common practice that took place near waterfalls (Fredengren 2011, 2015). Sacrifice to the sun's reflection in stagnant water has also been a way to connect the lower and upper realms, where an offered object given to the underground reaches the sky (Oestigaard 2011b). Waterfalls have been unnatural natural places where divinities have manifested power and enabled access to forces beyond this world (Oestigaard 2020), or perhaps more precisely, forces from the underworld or *beneath* (or within) this world.

The *skeid*-tradition in Setesdal provides essential information for understanding prehistoric concepts of the sun and winter – and their waters. As pointed out, although the horse races and fights during the autumn have gained most attention in Norway, both here and in Sweden it was the Christmastime horse races, more specifically those on 26 December, that were most important. This horse race was about reaching specific wells and the person who would first water their horse.

The name of such a spring or well was *frobrunn*, literally 'froth well' or a frothing spring. Johannes Skar writes that this water 'frothed' throughout the winter. The power and health benefits contained in these waters were seen as 'holy' (Skar 1909:45). It is worth quoting Solheim again: 'These were springs which never froze, or openings in the ice which kept open throughout the winter' (Solheim 1956:153). It is also important to stress that for farmers the essential part of this horse-race was that the *winning horse* should drink this *life-giving* water. Although this water was seen as 'holy' in the Christian St. Stephan tradition, the trajectories of the prehistoric *skeid* and horse-sacrificing tradition is clearly evident. Future fertility and the forthcoming harvest were primarily dependent on waters and their empowering forces to horses.

Also, it seems that there were structural similarities between the powers of water and horses. Nils Lid argues that the aim of the rituals was to incite the water, like the horses were incited during horse fights to compete for the mare. By inciting the water and the underground forces, the aim was to activate the natural processes that had the power

to 'eat' the snow. Around Christmastime or *jól*, there were many free wights roaming around with the power of breaking through the icy grip of the snow and winter and thereby they contained the inherent forces of future fertility of fields and harvests. The powers working beneath the ice and frost were obviously very powerful, since they could 'eat' and overpower even the most enduring winters (Lid 1933:40).

A *frobrunn* was therefore a source of supreme power, because the living waters that survived the hardships of the coldest months obviously had immanent forces from underground. Even if the most stubborn water froze, which would happen during the coldest winters, the powers of the waters were still there, which is particularly visible in waterfalls. Throughout most of the year and even in winter, the water is not only free-flowing, but it has a torrential force. When waterfalls freeze, they do so long after all other water bodies. Their inherent force is absolute when frozen ice cascades turn back into thundering waters (Fig. 68).

The seasonality and sun were fundamental in prehistoric cosmology, but it was sometimes during spring that the sun's power became manifest and gained strength. If the sun melted the snow and released the power of frozen waters, then the sun was a mighty god. If the powers come from underground and lie in the water itself, then it is a different type of deity. In the Norse and prehistoric world, it seems that the latter concept was predominant during the darkest and coldest part of the year. Even during the coldest days and nights, long after the sun had disappeared on its daily journey and long after its heating powers had waned as days became shorter during autumn, the water was still alive in certain wells and waterfalls. The sun was a shadow of itself, but the forces in frothing waters proved the unparalleled forces of nature. The life-giving source was in the waters, but not all types of water. This seems to be the very fundamental concept in all cosmological systems in prehistoric Scandinavia.

Here, too, one finds a possible connection with the god Ull (mentioned above), though this is highly uncertain on etymological grounds. This interpretation was presented by Eric Elgqvist (1955:73), who suggested the word Ull (Ullr) to be identical to a supposed Old West Norse \*ullr, denoting a source of water. The theophoric name Ull was then created from the original meaning 'well-spring'. However, there are objections to this interpretation, both in terms of lack of linguistic evidence, references in the written sources, and in terms of place names (Vikstrand 2001:181; Molin 2015: 21-22).



**Fig. 68. Gullfoss Falls, Iceland.**

Nevertheless, in his survey Elgqvist was able to identify an almost 50% correlation between important Ull-places and local spring-wells in the vicinity (Elgqvist 1955:39-50), although the suggestion that Ull can be interpreted as 'froth', 'foam' or 'bubble' like in boiling has been challenged (Vikstrand 2001:175). This is an interesting correlation, and the question is whether it is coincidental or causal.

Neither Elgqvist nor Vikstrand contextualise this correlation and see it in relation to skeid and horse-sacrifices. Given the above discussion it seems reasonable to interpret these springs as a form of *frobrunn*. Hydrologically, it also makes sense to combine the sun and springs, since they basically represent two sides of the same coin, namely which powers 'eat' the snow and winter at what time of the year. The wells represented supreme powers during the coldest winters, when underground forces conquered the cold and potential death, but as spring emerged and the days became longer and warmer, the sun gained strength and melted away the winter, making space for fields and fertility. The sun god also never works alone, but always together with a water deity. This close relationship may testify to some of the most important powers in the cold northern climate. Archaeology provides further evidences to support such an interpretation.

In 2007, excavations were carried out at the Bronze Age site Nibble in Uppland in Sweden with cult houses dated to ca. 800 BC (Artursson et al. 2011). It revealed unique material indicating an ancestral cult where the deceased were most likely 'dried' or 'smoked' before being buried. This practice that resembles the *lit-de-parade* has to be seen in relation to what seems to be an altar stone found on the site. On an approximately 2 x 1 x 1-m stone slab with flat sides, the upper surface was used as a grinder, with remains of grains, burnt sheep bones and also a fragment of a human skull found in the layers below (Karlenby 2011: 141-143). As one of the largest archaeological Bronze-Age cult sites ever investigated in Sweden, Nibble is unique because of the wealth of finds and funerary context, but the most spectacular is nevertheless another source, namely the spring or well at the site (Fig. 69). The cult houses and the complex were centrally located in relation to a natural spring that was still active when the archaeologists excavated the site 3000 years after this prehistoric cult place was dominant in the region (Hellqvist 2011). The area around Nibble is rich in theophoric place names. North of the village is Ullbro, a name that itself can probably be traced to Ullunda in the east, probably a medieval partition of the village of Ullunda (Vikstrand 2001:177-178).

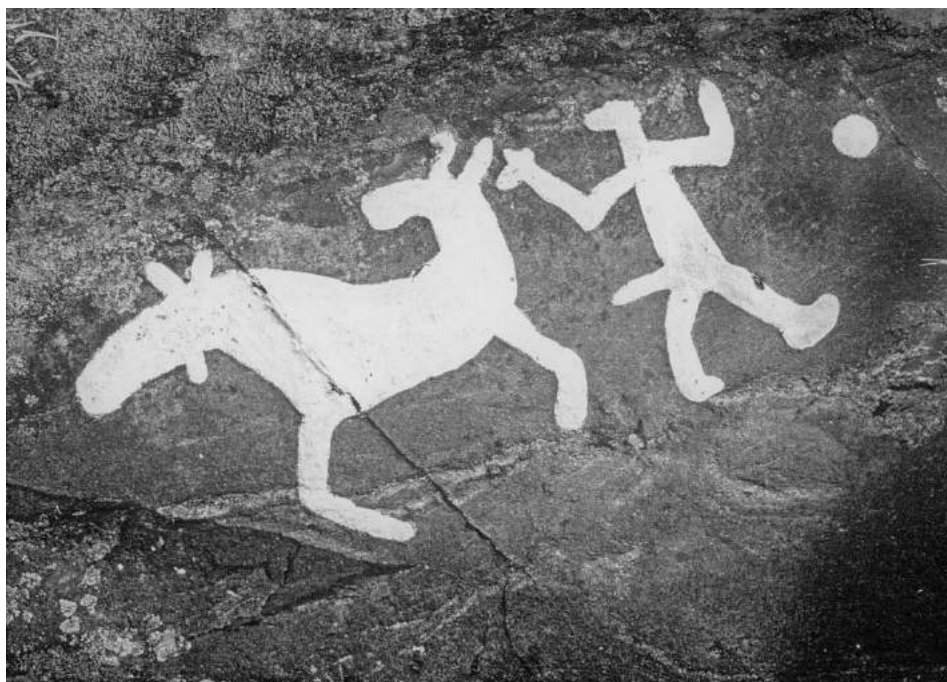


**Fig. 69. Nibble – the sacrificial well during excavation. Photo: Conleth Hanlon, National Heritage Board.**

The name, however, is certainly based on the god Ull. Of course, since the well-spring at Nibble is such a significant feature, a link between this and Ull would fit particularly well in this case. However, the same can be said of several other of the finds made at Nibble, with regard to a corresponding connection to Ull – if we assume that the place is linked to this divinity as the sun god, with the meaning ‘radiance’. This applies to the rock carvings – exposed to the sky – and the traces of ritual fire and the location of the site on an elevation in the landscape. And, as the common Indo-European cosmological notions so clearly show, it is perfectly reasonable to assume that the elements (and thus the powers associated with them) are linked to each other. Sun and fire are thus not something essentially separate from the water in the earth, but a necessary complement. Hence, it is not merely about size, but the powers contained in the waters. Nowhere is this more visible than in waterfalls, where size and power are combined.

Of the approximately 80 known Neolithic hunter-gatherer rock-engraving sites made between 4000-500 BC, 25 are located near flowing waters and waterfalls. The most famous is Nämforsen, Ångermanland, Västernorrlands län, Sweden. The waterfall here originally had a drop of 17 m, and the sound of water crashing down would have been so intense that people would soon have been overwhelmed and reached a state of trance (Goldhahn 2002). The find of more than 1000 images of elks with their ‘life lines’ and inner organs has been interpreted as shamans taking control of the animals’ soul (Gjessing 1936:140-146).

During the cold winters, the waterfalls would freeze and the silence would be in striking contrast to spring and summer. ‘[T]he sounding and roaring rapids ... quickly embrace the visitor ... including the visual effects of the waterfalls, where cascade after cascade transform the water into steam, haze and mist, and occasionally evanescent rainbows. It is therefore conceivable that the river’s “breathing” was considered an important feature,’ Goldhahn says, ‘Metaphorically, the roaring sound of the rapids (voice), the mist and steam from the falls (breath), the different cascades of water drops and splashes (saliva) and the rainbows (soul or magic?), all could be envisaged as if the river were most “accessible” and ‘alive’ at the waterfalls. The rapids may have been perceived as a liminal opening – a roaring threshold to other sounding worlds’ (Goldhahn 2002:49). This is a very precise description, but one could omit the word ‘metaphorically’ – this was cosmogony and the forces of nature, from nature and within nature were visible – and accessible.



**Fig. 70. Skeid ritual with elk? Notön, Nämforsen. Photo: Sven-Gunnar Broström, [www.shfa.se](http://www.shfa.se)**

Intriguingly, while the rock art pictures are located far north in a hunter-gatherer dominated world, they appear to include images of skeid rituals with elks (Fig. 70). Since the skeid ritual is ultimately about fertility, seasonality and forces controlling and overpowering the snow and the winter, is this part of an Indo-Europeanisation process addressing the waterfall's supreme powers?

The transformation of nature and thereby the visualisation of powers at a place like Nämforsen is spectacular, because the powers must come from somewhere; they exist and somebody embodies these forces. The sun might be powerful, but the proofs in nature are clear testimonies that the forces of water are at least as important: the powers can break up a frozen waterfall from within and 'eat' up the winter and thereby release cascades of water from a height of 17 m. It is hard to find mightier powers in the prehistoric world of the north. Waterfalls are there year after year and people may come to the very sources of forces and witness the powers themselves, which makes the water and waterfalls unique (Oestigaard 2019, 2020).



## The sun and water

While it is difficult to connect explicit gods to sites and cults in prehistory, there seems to be a clear thread from the Bronze Age to the Iron Age and Viking period, focusing on the relation between water, the sun and horses, where horses and boats overlap, at least in the Bronze Age, as the numerous rock-art depictions show. From an Indo-European perspective, as seen with the *ashwamedha* ritual, the horse and the sun were in many cases the same – they were two sides of the same coin.

In the Iron Age, the picture stones on Gotland (see back cover photo) also focus on this pair of cosmic qualities. The depictions of horses, most often in pairs, strongly suggest a skeid tradition, which was primarily about fertility and the power of the holy *frobrunn* that could ‘eat’ the winter and snow from below. The sun ‘ate’ from above and later in spring. Thus, while we have partly criticised previous interpretations of the sun and the sun-cult, we have in no way dismissed the role of the sun in cosmology and culture, rather the contrary: it is only from a water perspective that one can fully understand the role of the sun. The powers work from different directions; one from beneath and one from above, which also explains why one may conduct a sacrifice in the sun’s reflection in water. By sacrificing in a well downwards, the sacrifice is given to the sun and raised upwards.



## 11. Cultural history and cosmology – Indo-European and Scandinavian traditions

*‘Many rituals, probably the great majority, are not expensive in terms of the energy or finances required to perform them. Some, such as gestures of greeting or respect, may come so close to being conditioned reflexes that it would cost more effort to hold them back than unthinkingly to execute them. At the other end of the spectrum there are grand rites and ceremonies that occupy the attentions of many people over an extended period. Such complex affairs may demand the commitment of significant material resources. When this occurs, we can be sure that the participants take into account interests that go beyond the expressive. Ritual must then come to terms with economics.’*

Peter Metcalf

Meaning and Materialism: The Ritual Economy of Death (1981),  
p. 563.

### A brief eschatological and ecological exposé

Ritualisation of economy gives collective answers and solutions to ecological challenges. Some rituals were grandiose like the mythological and historical *ashwamedha* ideal-type of horse sacrifice, but many agrarian rituals were apparently small and insignificant. Farmers knew that a good harvest depended on the right combination of rain and sunshine throughout the season. If the forces of water were too powerful, they could be deadly in an agrarian world, since late frost nights or too much rain and early snow would disrupt the harvest and hence cause human misery. That was why all forces needed to be tamed, like horses; the powers were only a useful resource if controlled and culturally adapted to human needs. Water and sun needed to be balanced, since farming is both a craft and an embodied experience, as reflected in the word ‘agriculture’ – from Latin *agricultūra*, from *ager* field, land + *cultūra*, culture. If the forces of nature could be both benevolent and malevolent – too much water or the wrong type of

water; too much or too little sun – in prehistory it was seen as important to engage with these forces in their many manifestations as gods, deities, wights or ancestors (Fig. 71).

A central premise in our analysis is that there is a real world out there and that prehistoric people did not live in a postmodern world of constructions where there was no relation between signs and signifiers. We thus distance ourselves from an academic (and atheist?) stance that posits, for instance, that 'Magic does not exist, nor does religion. What do exist are our definitions of these concepts' (Versnel 1991:177). The real world matters and meaningful constructions are most relevant if they relate to real experiences. As an example, if the harvest fails, one cannot substitute 'magic' and 'religion' with 'starvation' and 'suffering' and say: 'Starvation does not exist, nor does suffering. What does exist are our definitions of these concepts.' These differences between the views that are prevalent today and those that existed in the past continue to form a challenge for interpretations, particularly when it comes to interpreting the meaning of ritual and religion in a society where people perceive them as real.

'Societies where the difference between sacred and profane do not correspond to the contemporary Western one, but are more fluid, I have previously called "genuinely religious societies" ... a society whose cosmological outlook it is meaningless to try to understand on the basis of our own culture with its separation into religious and secular spheres. No activity is wholly disconnected from religion, and at the same time there is no activity that can be considered as solely religious in our modern sense. Even if we cannot fully understand ways of thinking and reasoning in a culture like this, we must nevertheless find means to describe phenomena in a way that is comprehensible to us. Such a description must of necessity contain simplifications and thus run the risk of misunderstanding. Yet it is still the only possible way to arrive at a description in terminology that we can grasp. The very concept of religion would presumably be hard to understand for people who live in a genuinely religious society' (Kalf 2007:21).



**Fig. 71. The Royal Mounds at Old Uppsala with the rain and thunder god Thor striking. From Oscar Montelius (1877) *Sveriges hednatid, samt medeltid, förra skedet, från år 1060 till år 1350*, fig. 325, p. 245.**

In historic times, the Little Ice Age and the Irish famines in the 18<sup>th</sup> and 19<sup>th</sup> century resulted in death and immense suffering (Fagan 2000). Successive failed harvests – the wrong combination of water and rain year after year – can cause massive death and misery. Rituals may aim to mitigate catastrophes, particularly those related to changes in weather, seasons and nature. But to what extent do real events define eschatological and doomsday concepts? In archaeology, there has been a dramatic shift over the last 10-15 years and extreme postmodernist approaches have been abandoned. However, this has not been matched by the necessary theoretical reflection on the relationship between human adaptation and changing climates, and how religious cosmologies are constructed. As Ian Hodder stated in *Reading the Past* (first published in 1986):

‘It is argued by the processual school in archaeology that there are systems so basic in nature that culture and individuals are powerless to divert them. This is a trend towards determinism ... There is a close link between discarding notions of cultural belief and of the individual [...] by materialist approaches [I mean] those that infer cultural meanings from the relationship

between people and their environment. Within such a framework the ideas in people's minds can be predicted from their economy, technology, social and material production' (Hodder 1994:7, 19).

If post-processual archaeology threw the baby out with the bathwater by being too critical of ecology, current trends are also questionable if too much emphasis is placed on direct relations to climate change.

The famous Rök runestone from Östergötland County in central middle Sweden (Fig. 72), one of the most prosperous agricultural areas in the region, is dated to around 800 AD, although some believe the stone and its inscriptions are a bit more recent. The stone features more than 700 runes that have been notoriously difficult to interpret. 'The Rök inscription is too complex and offers too many interpretational possibilities to merely read word by word and from there arrive at the purpose of the text ... it is risky to construct an overall view primarily based on the linguistic interpretation of separate sections and that one must rather externally elucidate the inscription as a whole' (Holmberg et al. 2020:11). The Rök runestone

'is famous, among other things, for a supposed reference to Theodoric the Great, ruler of the Ostrogothic Kingdom of Italy from 493 CE to 526 CE. This study [by Holmberg et al.] proposes instead that the inscription deals with anxiety triggered by a son's death and the fear of a new climate crisis similar to the catastrophic crisis after 536 CE' (Holmberg et al. 2020:7).

When talking about the 536 event, it is important to keep in mind that this volcanic eruption was not an isolated event, as there was most likely another major volcanic eruption in 540 (and probably again in 547), but for simplicity's sake we will refer to this cold period with volcanic eruptions as the 536 event. In recent years, archaeologists and historians have focused on the natural disasters that should have affected the climate just before the middle of the 500s. This has also led to a new interpretation of the Rök stone. 'The impact on the climate of this series of severe volcanic events was dramatic, and is well attested to by data from all over the northern hemisphere, which shows abnormally cold summers for the period 536–50 CE' (Holmberg et al. 2020:7, 13). The authors refer to Charpentier Ljungqvist's (2010) studies of climate change over millennia in Northern Europe.



Fig. 72. The Rök runestone from Östergötland County, Sweden.



Fig. 73. Ragnarök by Johannes Gehrts (1855-1921).

In the Norse apocalypse, the wolf Fenrir swallows the sun (Fig. 73). The relationship between the sun and winter (cold, infertile water, or death) is central here. ‘Before the sun is killed by the wolf Fenrir at the beginning of the Ragnarök (or Ragnarøkkr) battle, she gives birth to a daughter. This dramatic event, possibly related to the return of the sun after 536 CE, is the first step in a cosmological transformation. This world will perish, but the battle between the gods and the destructive forces, including Fenrir, will give rise to a new world where Sól’s daughter will shine’ (Holmberg et al. 2020:25). On the stone itself, some of the descriptions include references to horses, but they are difficult to interpret: ‘Ride the horse did the bold champion, chief of men, over the shores of the Hraïðsea [i.e. over the eastern horizon]. Now he sits armed on his horse, his shield strapped, foremost of the famous... This let us say as twelfth, where the horse of the battle [i.e. the wolf] sees food on the battlefield, where twenty kings lie?’ (Holmberg et al. 2020:20).

How and why do eschatological concepts relate to climate? The study by Charpentier Ljungqvist (2010) argues that it was a



'Roman Warm Period c. AD 1–300, a Dark Age Cold Period c. AD 300–800, a Medieval Warm Period c. AD 800–1300 and a Little Ice Age c. AD 1300–1900 ... The Little Ice Age cooling, especially during the seventeenth century, appears to be more severe than the cooling during the Dark Age Cold Period ... In our reconstruction the amplitude is 0.89°C between the warmest decade (the 950s) and the coldest (the 1690s)' (Charpentier Ljungqvist 2010:343–344).

In other words, the severe cooling around 536–550 AD in fact started around 300 AD, almost 200 years before the supposed triggering natural disaster. Additionally, the decades around 1650 AD were actually much colder compared to the 500s. Also, the Viking Age was part of the Medieval Warm Period, where ca. 800 AD was significantly warmer than ca. 550 AD, with a warm peak around 950 AD. In short, the runes were made in a warm period. Given this climate history, the *fimbulwinter* was never further away.

Neither of the authors of this study have the linguistic competence to question the interpretation of the text itself, which is based on Bo Ralph's 2007 translation. But the Rök stone has a long history of translations, resulting in quite different interpretations of the text. The stone has been the subject of extensive research with interpretations of varying strength by Brate (1919), von Friesen 1920, Agrell (1930), Wessén (1958) and Ohlmarks (1979) among others. The most cited is probably Elias Wessén's 1958 interpretation. He clearly states that þiaurikR ('Tjodrik') is a reference to Theoderik the Great, partly because 'hraiþkutum' ('reidgoter') was used in Ancient Germanic poetry to designate the Ostrogoths. However, beyond the interpretation itself, one must also look at the relationship between eschatology and ecology.

One can commemorate a climate catastrophe that took place several centuries earlier even when the weather is good. Also, written sources are of fundamental value for understanding past concepts of eschatology, precisely because this belongs to a domain that hardly is touched upon in material culture or becomes ritualised in actual practices and sacrifices.

In the history of archaeological and religious studies, interpretations of the Ragnarök myth that emerged relatively late in Scandinavia have also flourished in the past. The dominant argument at the time was that the myth was influenced, in whole or in part, by Christian doctrine, possibly as a reflection of the Christian apocalypse (e.g. Pétursson 2006, Cöllén 2011, Steinsland 2013).

However, there are clear signs that the myth itself is significantly older and more intimately interwoven with a more ancient tradition. Anders Hultgård (2017) has convincingly shown that the Ragnarök myth, including the theme of a cold period – the Fimbulwinter – is an ancient Indo-European myth, with parallels in the ancient Iranian tradition. In reference to Charpentier Ljungqvist (2010) among others, Hultgård correctly points out that the research shows that climatic conditions were complicated, with several cold periods. He writes: 'It seems less likely that the existence of particularly severe winters in areas where people are accustomed to cold climates would give rise to the belief in the Fimbul winter' (Hultgård 2017: 294, the authors' translation). This is an important objection, quite apart from the myth's derivation from much older Indo-European notions.

The Indo-European origin of the Ragnarök myth does not necessarily contradict the fact that events from 536 AD onwards were important and shaped cosmological perceptions in Scandinavia. On the contrary, the earlier existence and significance of this myth may have made it even more relevant, as it probably corresponded to certain real events. In this way, myth and reality may have reinforced each other, and given this particular myth theme it may have been renewed and gained extra relevance in Nordic society during the period after 536 AD.

But despite the fact that people in the Nordic countries were accustomed to cold, beliefs that evil places were linked to icy cold climates may have existed, which is also evident in the Norse narratives. This may correspond to the portrayal of hell as a hot and waterless place in cultures that develop in a warm, dry climate. Less than a century after Snorri (1179-1241) documented and interpreted many of these Norse eschatological concepts, Dante Alighieri (1265-1321) interpreted the Christian ones. The Book of Revelation (Apocalypse of John) has fire and brimstone, and in Christianity the end of the world is a prelude to an eternal existence in heaven or hell. However, in Dante's *The Divine Comedy* (1990), there are also frozen fires and black, torturing fires. In other words, an absolute frozen static eternity where nothing can happen; it is an enduring torturing hell.

The Norse eschatology and conception of the end of the world were nothing like this, though there are vivid descriptions of the end of the world. In the north, cold winters were not unusual and did not pose a problem in traditional agrarian societies. Failed summers and bad weather during the growing season, on the other hand, could be catastrophic (Gräslund 2007).

Thus, the question is how to approach the relation between sun and water (winter) in the most fruitful way corresponding to cultural historic realities? The whole hydrological cycle, with all its variations, may have been manifestations of divine powers. Therefore, it is more constructive to focus on annual and inter-annual variations in the water-world than on long-term climate change, because even one year with the wrong combination of water and sun could cause havoc and lead to famine and death.

If one follows the argument that the 536 AD event led to a dramatic cooling of the climate, and a subsequent 50% reduction of the population (Gräslund & Price 2012:433), it was not the end of the world. This was a new beginning, with a new world for mankind, ruled by the descendants of the ancient gods. If this event was central in the concept of Ragnarök, people in the past were probably not concerned by climate change as such, but rather looked at water, the weather and yearly fluctuations in both. Worries about today and tomorrow are usually more urgent than a fear of doomsday. The question is how one can distinguish between these two partially overlapping worries about future destinies. Fortunately, archaeology itself may provide answers. The destructive forces of the great climate crisis – what may have been experienced as the myth of the Fimbulwinter – were overpowered and ritualised whereby death became the source of life and vitality arose from the grave – and water.

### **The source of everything: Mimir's well and the well of destiny**

In mythology, the *Fimbulwinter* or the 'Great Winter' precedes Ragnarök or the end of the world, in which even gods like Odin, Thor and Freyr die. Although Ragnarök is generally seen as doomsday, in Norse cosmology life returns, starting from the source of life deep down in Mimir's well (Mímisbrunnr). In the renewal of the world after Ragnarök, Mimir's powers contained life, not just in the form of passive water, but as germinating powers inherent in plants and nature. Mimir – also known as Hoddmimer – 'Hill-Mimir' or 'Hoard Mimir' – 'Mimir of the treasure' – was owner of a wood in which a human couple was hidden: Lif and Lífþrasir – 'Life' and 'He who holds fast to life' or 'Vitality'. Since they were hidden in 'Mimir's tree', these humans survived the Fimbulwinter and the end of the world (MacCulloch 1930:168, 346). History continued (Fig. 74).

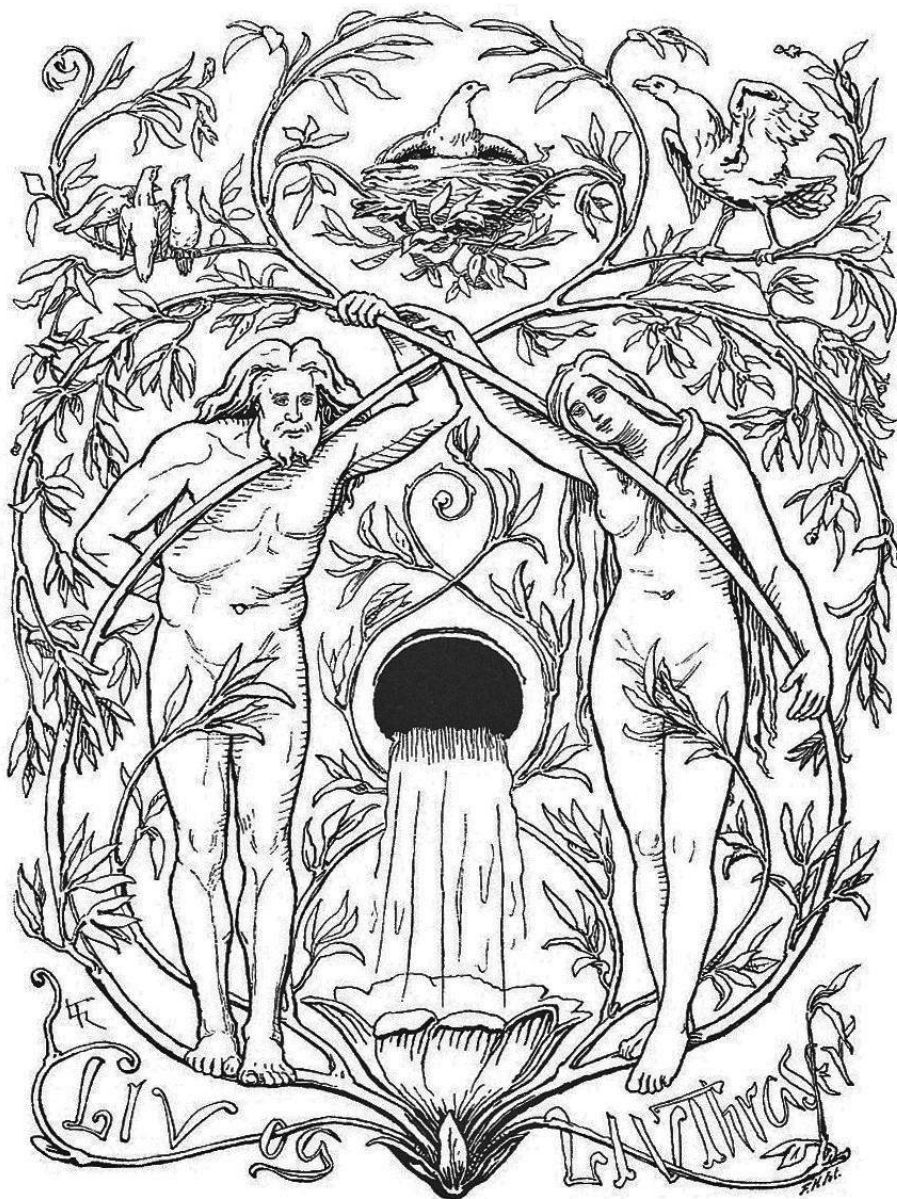


Fig. 74. Líf and Lífþrasir. Illustration by Lorenz Frølich.  
From Karl Gjellerup (1895). *Den ældre Eddas Gudesange*, p. 45.

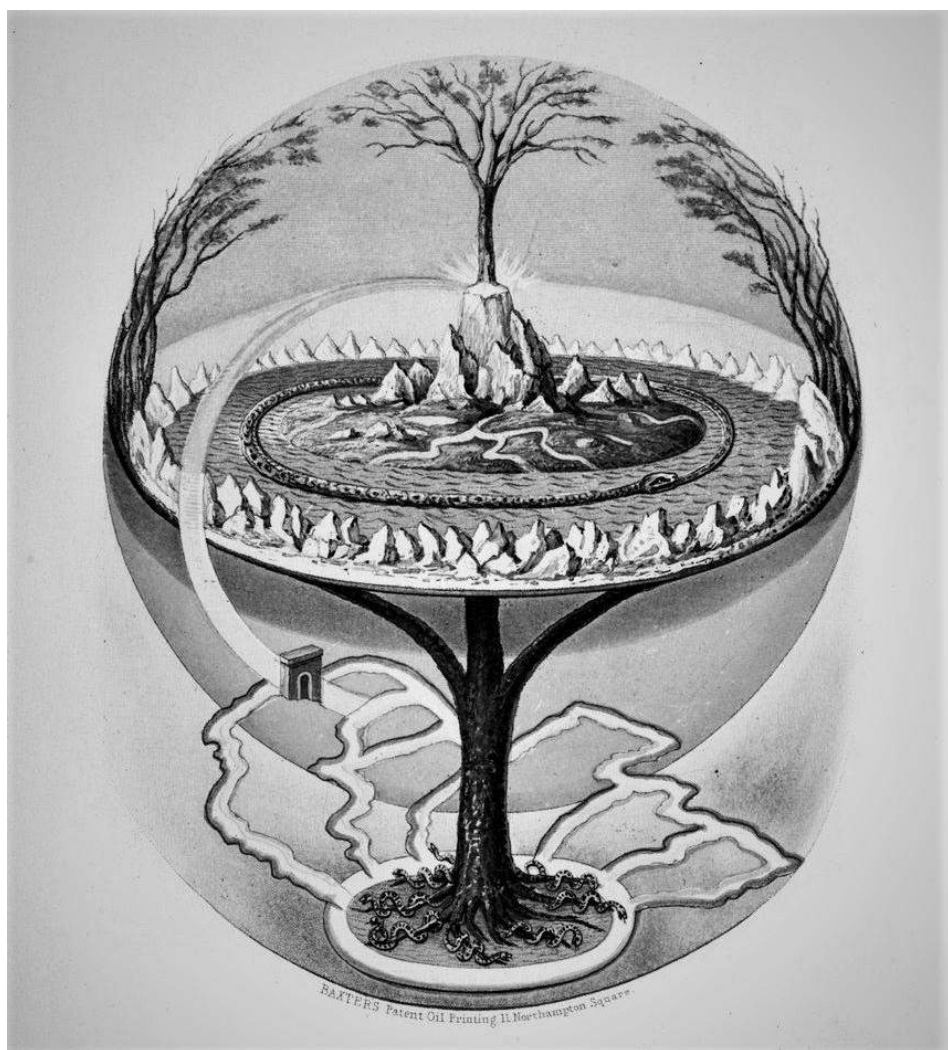


Fig. 75. Yggdrasil. By Oluf Olufsen Bugge (1847).

Hoddmimir features in both the *Poetic Edda* and Snorri's *Prose Edda*. In the poem *Vafþrúðnismál* in the *Poetic Edda*, Odin asks the giant Vafþrúðnir who among mankind will survive the events of Ragnarök. Vafþrúðnir responds that Líf and Lífþrasir will survive the long Fimbulwinter in Hoddmímis holt (Larrington 1999:47). Like the very similarly named Mímameiðr ('Mimirs tree') – which only features in the Old Norse poem *Fjölsvinnsmál* – there are many scholars who consider Hoddmímis holt to be another name for Yggdrasil (Simek 2007:154, 216).

In the *Prose Edda*, Mimir's well is mentioned as one of three wells existing beneath three roots of Yggdrasil – the sources from which the

World Tree retrieves its water and reaching into distant lands of different cosmological importance. Besides Mímisbrunnr, that is located in Jötunheimr (or Jötunheimr) – the land of the jötnar (giants) – there is Hvergelmir, a well located in Niflheim – the realm of primordial ice and cold – and the well Urðarbrunnr. According to some traditions, Urðarbrunnr ('the Well of Urðr') was the only well. Its name referred to a Germanic concept of fate – urðr – or to the Norn of this name (Simek 2007:342), probably meaning 'well of destiny'. This well is described in the *Poetic Edda*, in *Völuspá* (19-20) and *Hávamál*, as well as in Snorri's *Gylfaginning* (15-17) and also in *Skáldskaparmál* (Larrington 1999:6; Faulkes 1995:17-19, 121). Urðarbrunnr is associated with the three goddesses of fate, the Norns, and together with the World Tree itself this constitutes another ancient and probably originally Indo-European myth (Fig. 75).

From a comparative perspective, it has been considered very likely that Proto-Indo-European beliefs featured dangerous water goddesses akin to the Greek nymphs – the naiads. In a similar way, the Vedic Apsarás, also beautiful female beings, are believed to live in forest lakes and rivers. Armenian folklore and Slavonic and Baltic myths also feature water nymphs who are depicted as alluring maidens who, like young men, can do harm if offended. The Iranian Ahuraīnīs and the Norse Huldra are other examples of beings that may reflect an old belief in water nymphs (West 2007:285-291). Thus, the role of Huldra and other mythological water beings in later Scandinavian folk beliefs may reflect older religious concepts. However, the story preserved in Norse mythology concerning the World Tree, the Well of Urðr and the Norns constitutes a much more central and original theme, with very clear cosmological significance.

In mythology, the well of Urðr was guarded by the three goddesses of fate, the Norns – Urðr, Skuld and Verðandi – who represented past, future and present, respectively. In the well, the Norns fetch water and a special sand, with which they nourish the roots of the World Tree so that it does not wither and die. There is also clear evidence that the Norns are central to common Indo-European beliefs (Dillmann 2002:388-394; West 2007: 46; cf. Kaliff 2018:262-271). Following the story of the Well of Urðr and the Norns as goddesses of destiny whose threads of destiny not even the gods can escape, it seems that the significance of the well – the water coming from the earth – had a central cosmological meaning in common Indo-European beliefs. As we have already seen in various presented contexts, there is also clear evidence

of the central ritual significance of wells in the archaeological material from the Bronze Age onward, as well as in later folkloristic records.

These are the very same qualities found in the Frobrunn or the ‘frothing’ wells, including the St. Stephan’s springs. The source of all life and wisdom was found at the bottom of the spring of history and time (Kaliff 2018). Odin did not only sacrifice an eye to the well to gain wisdom, but he is associated with this primordial water in other ways too. The World Tree is closely connected to Odin. He is also known as *Yggr*, the ‘Terrible One’. *Drasilis* is ‘horse’. The best translation of *Yggdrasil* is therefore, perhaps, ‘Powerful-breathing horse of the Terrible One’ (Price 2002:109). Not only is the connection between horses and well water fundamental in the Norse cosmology with clear Indo-European roots, but the source of everything is the life-giving power of the water from deep below. This is the essence of the fertility rituals, the skeid and the St. Stephan tradition with continuity well into the 19<sup>th</sup> century.

Archaeologists have often argued the Norse gods developed during the Migration Period, centring on Odin, Thor and Freyr among others (e.g. Hedeager 1999, 2011, Price 2002, Solli 2002, Andréén 2014). This transition did not take place in the decades 530-550 AD, but earlier, which can be seen in the development of the iconography and the Nordic animal style from a round 400 AD onwards (e.g. Kristofferson 2000a, 2000b, Hedeager 2003, 2004). Are there any empirical and mythological evidences to suggest a structural similarity between an apocalyptic beginning and end of earth and cosmos?

Some interpretations take root in older theories that Odin and perhaps other gods were imported to the Nordic countries at this stage, thereby replacing an older pantheon. However, this is contradicted by numerous religious-historical analyses, which instead point to the basic features that indicate that Odin, Thor and Frey all have a very long history with probable early Indo-European roots (e.g. Dumézil 1939; de Vries 1956-57; Ström & Biezais 1975; Lincoln 1986; Näsström 2001). However, changes may have occurred during this turbulent time (e.g. Kaliff & Sundqvist 2004).

*Gylfaginning* describes the creation of cosmos and the earth. The origin of everything appears from Niflheim or Niflheimr, which means ‘World of Mist’ or literally ‘Home of Mist’. This primeval landscape is characterised by a malevolent water world that is cold, dark and dangerous, or in other words, sunless. One body of water is the frozen river Elivagar and another is the well of Hvergelmir in which serpents

gnaw at Yggdrasil's roots. Nidhogg lived in the well, and it seems that Odin also lived in these murky, lifeless waters in the form of a snake. The world originated only when cold water merged with Muspelheim, and Ymir was born only when the ice from Niflheimr met the flames from Muspelheim (Snorri, *The Prose Edda*).

In *Gylfaginning* it says that Hvergelmir is located in the foggy realm of Niflheim: 'It was many ages before the earth was created that Niflheim was made, and in its midst lies a spring called Hvergelmir, and from it flows the rivers called Svol, Gunnthra, Fiorm, Fimbulthul, Slidr and Hrid, Sylg and Ylg, Vid, Leiptr; Gioll is next to Hell-gates' (Faulkes 1995:9-10). Although different from the descriptions of the Fimbulwinter, the characteristics of a cold sunless winter world are the same. Originally life emerged from these cold and desolate waters, not once but twice, as Lif and Lífþrasir survived in Mimir's well. If the 536 event was the ecological context for partially altered cosmological concepts of an apocalypse, it may have served as an image for a future doomsday, but as the climate data show, the Viking Period was part of the Medieval Warm Period with a temperature peak around 950 AD. In cosmological terms, not only had they survived the challenges, but the ritual solutions proved they were superior: the hostile forces were conquered and the rituals were clearly effective.

Fortunately, cosmology and ecology are not two sides of the same coin, since that would reflect an extreme kind of determinism and vulgar reductionism. The challenge in comparative religion is to understand why certain divinities disappear, while others gain more importance. Assuming that central fertility gods like Nerthus, Njord and Ull became less important although their function was still vital, there was a change, but the challenge is to connect it to other changes in society or cosmology – or ecology. Although certain gods are mentioned less often and thus seem less important, they may not have disappeared. They may have acquired new names but retained their key features. There are clear indications that a large part of both the religious structure and the pantheon have a long continuity back in time. For instance, it has been postulated that the gods Ull and Frey have an intimate historical relationship, and some scholars like Elias Wessén (1929-1930) and Jöran Sahlgren (1932) have even equated the two gods. We choose here to quote Molin (2015), who aptly summarises this:

'Wessén ... suggested that Ullr may have gone under the honorary title Ullr freyr "Ullr the Lord", and argued in various



other studies that the place name material at least indicated that the two gods, if not identical, might have succeeded each other, Freyr being the younger heir to the former Ullr fertility cult. Sahlgren ... followed up on these ideas and argued that Freyr is a noa name for Ullr, suggesting that Ullr and Njård might simply be older variations of what later became Freyr and Freyja ... It might also be valuable to consider the role of Njörðr/Njård/Nerthus with regard to the relationship between Ullr and Freyr. Njörðr is said to be the father of Freyr and Freyja in the literary sources, but it might also be assumed that Njörðr was once perceived as a female deity in Sweden (Njård) in the distant past, perhaps in conjunction with a male god, first Ullr, later Freyr' (Molin 2015: 132-133).

Peter Gelling and Hilda Ellis Davidson (1969:179; cf. Davidson 1990:106-111) have suggested that this is the remnant of a pair of divine twins, and further that there may have been a female Ullin, on the model of divine pairs such as Frey and Freya, Njörðr and Nerthus and also Fjörgyn and Fjörgynn. Thus, without clarifying the chronological or functional connection between different deities, the presence of a divine twin pair indicates a strong link back to a proto-Indo-European belief.

Sahlgren's further development of Wessén's reasoning also links to the old question of the relationship between Njord (Njörðr), Njård and Nerthus (Sahlgren 1932). There appear to be several possible explanations here. Ull's name appears in several Norwegian and Swedish place names, which suggests that at some point in time Ull had a greater religious importance than is suggested in surviving textual references. Furthermore, the place names containing Ull often lie close to places referring to other deities: Njörðr in Sweden and Freyr in Norway, where some of the Norwegian place names have a variant form, Ullinn. An interesting example can be gleaned from the area around the Rakne Mound, Norway's largest burial mound from prehistoric times, which we discussed in previous chapters.

Ull seems to be closely related to the winter or more specifically certain qualities associated with winter, and he also seems to appear in different forms like King Orre, *Torre* or *Porri*. He was supposed to appear with a thick beard and dressed for winter (Ull is Scandinavian for wool), and his powers were associated with clear sky (sun), but also the ability to 'eat' or tear away the snow.



**Fig. 76.** Midvinterblót ('Midwinter Blót/Sacrifice') by Carl Larsson (1853-1919). Swedish National Museum of Fine Arts, Stockholm.

*Torre* or *Porri* was married to *Gjø* or *Góa*. Their names also featured in the ancient calendar, where *Porri* was mainly January and *Góa* was mainly February, depending upon which calendars were used. The *Porrablót* seems to have merged together with the Great Mid-Winter blot (Fig. 76), and the next blot the month after, *góublót*, coincided with Disating (Olsen 1915: 238-239, Lid 1933:92-94). The memory and tradition of these sacrifices have a long continuity at Old Uppsala.

As the most important gods and goddesses controlled the water and weather which all farmers depended upon for a successful harvest, it seems likely that there was a correlation between cosmology and ecology. If this was the case, then harsher ecological conditions would impact the understanding of the ways the gods worked. As seen, there was a Dark Age Cold Period c. AD 300–800 with a cold peak around 550 AD (Charpentier Ljungqvist 2010, 2015, 2017). The texts on the Rök stones were most likely written just as the climate had become more bearable. Returning to religion, from 300 AD onwards people must have experienced the weather gods as being less predictable, as they produced cold winters, rain during summer and extraordinary variations in the sun throughout the seasons. Cosmologies and gods are never replaced after just a few years of misery, but if this was a growing trend that continued for centuries and culminated in the cold snap during the period 536-550 AD, what were the ritual responses?

Although neither the Norse apocalypse – the Ragnarök – nor new gods were entirely newly invented in this context, there is good reason to believe that ritual practice was affected. Since rites largely live their

own lives (e.g. Staal 2001, see also Chapter 2), there is every reason to believe that changed rituals (themselves caused by external factors) can, in the long run, also affect beliefs. A chain of events can thus change the world of belief, even though there were no specific events in the 500s that formed the basis of the Ragnarök myth itself, nor did it create any new gods. However, archaeology has shown significant evidence that both social structure and ritual practice changed at this time. This applies particularly to the elite and was expressed in various high-ranking places. This was the age of great ritual expression, itself based on ancient tradition. Importantly, it also applies to one of the most spectacular of all sacrifices – the great horse sacrifice.

Old Uppsala is a very special archaeological site with many finds of horse and other bones dated to the Late Iron Age. Remains of sacrificed horses, together with other larger animals such as cattle, sheep and pigs, were especially found in pits of remarkable procession monuments excavated in 2013-14. These consisted of two long rows of upright wooden poles, one of them alone nearly 1 km in length, with 144 wooden pillars. The other row was at least 500 m long (Beronius Jörpeland et al. 2018). The proportion of bones from sacrificed horses was remarkably large (Wikborg & Magnell 2017:308-309). However, the horse sacrifice was not the only truly exclusive sacrifice. Human sacrifice also clearly occurred, including sacrifices of kings or leaders.

The great period of intensification took place at Old Uppsala between 550-700 AD. Today, there are more than 200 visible grave mounds and besides the three giant mounds that measure 70-80 m in diameter, there are at least 18 mounds of 10-15 m, two mounds of 15-20 m, and five mounds of 20-40 m (Ljungkvist 2013, Sundqvist et al. 2013 (ed), Ljungkvist Frölund 2015, Beronius Jörpeland et al. (eds.) 2018, Ekero Eriksen 2018). According to the Yngling saga – the first saga of Snorri's *Heimskringla* based on the Skaldic poem Ynglingatal – the kings Aun, Egil and Adils were buried in Old Uppsala. They belonged to the Yngling dynasty, the royal line that established itself in Old Uppsala. The term comes from the fertility god Frey, who was also called Yngve-Frej, from whom the lineage was thought to have originated. Although Snorri first wrote the Ynglinga saga in the 13<sup>th</sup> century, Ynglingatal was probably already written around 900 AD by Thjodolf of Hvinir, the court poet of the Norwegian king Harald Fairhair, who Snorri portrayed as a descendant of the Ynglings (Ynglings saga, ch. 49-50). This tradition of the mounds is unconfirmed, but highlighted by, among others, the archaeologist Birger Nerman (1925). According to another tradition,

which is equally unverified, the three great mounds are named after the main gods Thor, Odin and Freyr.

While the connection between the gods and the mounds has not been verified, there is a definite link between the gods and the practice of religion in Old Uppsala. If we leave the discussion about the historicity of the famous temple in Old Uppsala for the time being (cf. Kaliff & Mattes 2017: 8-14, 197-209), Adam of Bremen has an interesting description of the divine pantheon in Norse religion. Thor, who occupied the central throne, must have been the most important god, which has to be seen in relation to his powers and specific qualities. Adam writes (Book 4, Chapter 26): ‘Thor, they say, presides over the air, which governs the thunder and lightning, the winds and rains, fair weather and crops. The other, Wotan – that is, the Furious – carries on war and imparts to man strength against his enemies. The third is Frikko [Freyr], who bestows peace and pleasure on mortals. His likeness, too, they fashion with an immense phallus.’

As far as one can pinpoint an epicentre of Norse cosmology, it is Old Uppsala, where the gods were powerful and effective. If some of the more ancient gods failed as the climate became colder and harvests failed, these gods may have delivered. Horses were sacrificed, but even more valuable was the sacrifice of a chief or king on behalf of society at large. Snorri writes about Domalde at Old Uppsala (*Heimskringla*, p. 18-19, Fig. 77):

‘Dómalði succeeded his father Vísburr, and ruled his lands. In his time there was famine and hunger in Svíþjóð. Then the Svíar held great sacrifices at Uppsalir. In the first autumn they sacrificed oxen, but even so there was no improvement in the season. The second autumn they held a human sacrifice, but the season was the same or worse. But the third autumn the Svíar came to Uppsalir in great numbers at the time when the sacrifices were to be held. Then the leaders held a council and came to an agreement among themselves that their king, Dómalði, must be the cause of the famine, and moreover, that they should sacrifice him for their prosperity, and attack him and kill him and redden the altars with his blood, and that is what they did ... The son of Dómalði, who ruled the kingdom next, was called Dómarr. He ruled the domains for a long time, and there were good seasons and peace in his day.’



**Fig. 77. The sacrifice of King Domalde at Old Uppsala (from Snorri).**

The rain-making principle that ‘He is killing us so why should we not kill him?’ worked in Sweden as it did in Sudan in the 19<sup>th</sup> century. While in Sudan ‘willing the sun’ was an evil social crime if it meant that life-giving waters were withheld, in prehistoric Scandinavia too much rain and cold weather were deadly. Thus, if one follows the sources and testimonies of the believers, it seems clear that the rituals and sacrifices worked.

Memories of the mythology of Mimir’s well at Uppsala have survived until today. Several Odin wells have been suggested (Olsson 1912), some including human remains (Seiler & Magnell 2018). Given that the Ragnarök mythology partly tells the story of how life re-emerges after the cold darkness caused by the sun’s disappearance from the Earth and all gods being killed, there are two chronological aspects one needs to consider when correlating mythology and archaeology.

First, if the 536 AD event was as intense as interpretations suggest, it may have been equated with the mythology surrounding the apocalypse initiated by the Fimbulwinter. However, surviving the end of the world and being part of cosmogony – the recreation of cosmos and the world – must equally have left a lasting impression. Divinities ‘die’ by fading to the fringes of the cosmology, losing power, or changing names and character, which may have happened at Old Uppsala. While the 536 event was a catastrophe when it happened, it provided people

in later periods with the means to overcome crises, as in the period after 550 AD society flourished and the weather became warmer.

Second, the mythology of Mimir is fundamental to Norse cosmology, including Odin's sacrifice of an eye in exchange for divine wisdom, as well as the deep waters that fed Yggdrasil. In the original creation story, the world appears from the merging of cold ice with Muspelheim – fire or flames – which can be interpreted as a variant of the sun. This corresponds to earlier cosmological schemes stretching back into the Bronze Age. In the Iron Age – possibly in the wake of the dramatic events after 536 – it is not primarily the sun that contains the essence of life, but the deep waters in Mimir's well. If one may interpret actual historic developments in the cosmological scheme as narrated in mythology, one may put forward a hypothesis. Given Odin's role and the mythology of Mimir at Old Uppsala, it seems reasonable to interpret the historic and religious development as happening *after* the Fimbulwinter and Ragnarök. Life re-emerged and the gods were stronger than ever. It is not only cosmology in the making, but prehistoric people were living and partaking in the cosmology on daily, monthly and yearly basis (Barth 1989). From this perspective, Ragnarök was also a creation or re-creation myth. The rituals worked.

## **Dramaturgy of death and dancing**

Despite the continuity, there was a dramatic change with the introduction of Christianity. The Church actively tried to combat the pagan horse sacrifice, and though it could not eradicate the tradition as such, it did manage to break the association with death and funerals. This meant that the most violent expressions of the ritual, such as rape and murder as part of the mortuary cult, were no longer practised.

As Lotte Hedeager argues (Hedeager 2011:109-116), 'the power of penetration' seems to be a central aspect of this Indo-European ideology from the very early cross-cultural *ashwamedha* ideal-type of sacrifice. The sexual aspects were probably much more common than the written texts suggest, since there are many references to obscene practices that were too shameful to record (see also Solli 2002). The explicit sexual references, often in relation to death and killing, forcefully express the reality that the source of life ultimately comes from death.

In the Bronze Age, Sagaholm and Kivik seem to institutionalise the great Indo-European horse-sacrificing tradition structured around

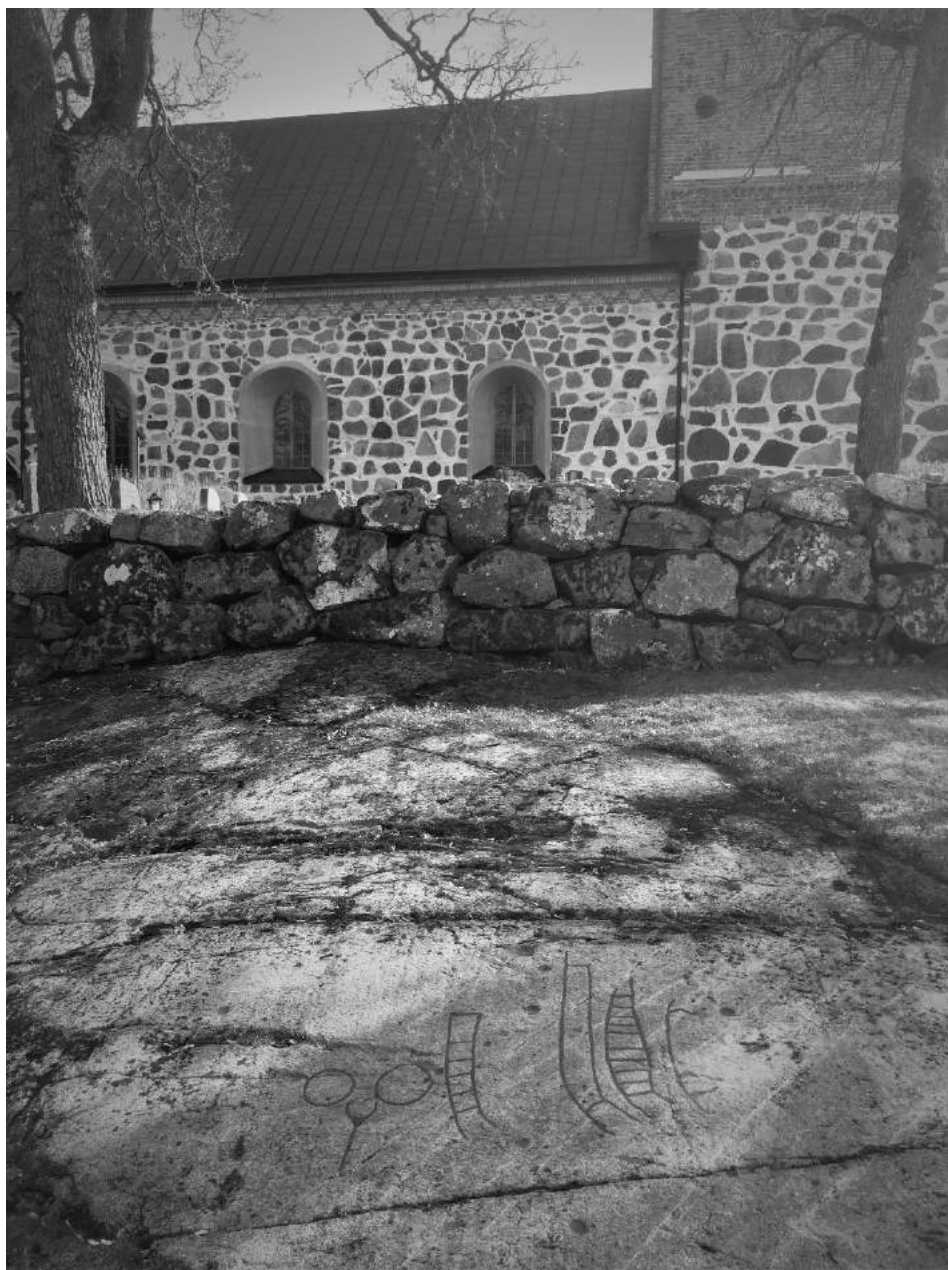
fields and fertility. The collective royal rituals later became common traditions, and practices like the ones Ibn Fadlan describes strengthened the collective awareness of the stakes involved, i.e. wealth and welfare in the form of successful harvests. This perhaps explains the success of the horse-sacrificing tradition: not only did it legitimate the social structure, with the ruler providing wealth and health for the people; it was also the biggest spectacle in prehistory involving great dramas and splendid performances.

In *The Gift of Death*, Jacques Derrida argues that 'a history of secrecy as history of responsibility is tied to a culture of death' and thereby giving life by killing and death:

'How does one give it to oneself in the sense that putting oneself to death means dying while assuming responsibility for one's own death, committing suicide but also sacrificing oneself for another, *dying for the other*, thus perhaps giving one's life by giving oneself death, accepting the gift of death, such as Socrates, Christ and others did in so many different ways' (Derrida 1995:10).

Under the right circumstances, death is goodness, 'What is given – and this would also represent a kind of death – is not some thing, but goodness itself, a giving goodness, the act of giving or the donation of the gift' (Derrida 1995:41). By combining fertility, farming and funerals, a very powerful and persistent frame for construing the world was established, which literally provided the seeds for future harvests. 'Thus dying can never be taken, borrowed, transferred, delivered, promised or transmitted ... Death would be this possibility of *giving and taking*' (Derrida 1995:44). Hence, it was a moral obligation to partake in these rituals at any cost. Objecting would not only be a sacrilege, but would also jeopardise the cosmological order for all. This again resembles the rain-making logic, where the fundamental issue is to balance the cosmic forces between the sun and water (rain, snow, winter). Those who fail or deliberately obstruct this balance are legitimately put to death.

If these assumptions are correct, it may also explain why this cosmological scheme connecting funerals and fertility was fundamentally incompatible with Christianity (Fig. 78), as the latter is built on the premise Jesus died for humanity. Humans cannot take on this religious role and make sacrifices for all of society and humanity. In prehistory, however, this was precisely the function of sacrifices in general and horse sacrifices in particular.



**Fig. 78. Church – and chariot and ships. Cult, continuity and change. Björkstad church, Västmanland, Sweden.**



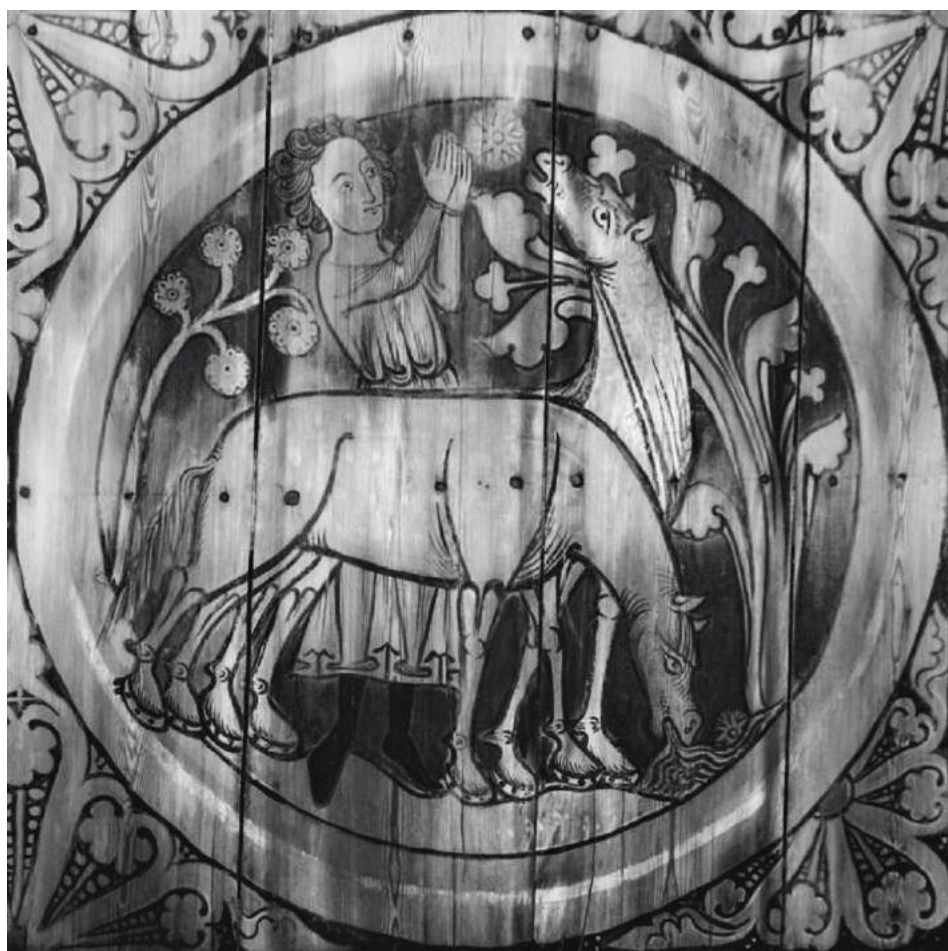


Fig. 79. 'Staffan stalledräng' or 'Stephan Stable Boy'. 13th century, Dädesjö Old Church, Sweden.

Fertility has always been a major concern in pre-industrial and agricultural societies, which may also explain why the tradition of the St. Stephen well and the *frobrunn* continued (Fig. 79). This could be Christianised to be seen as God's work. Throughout Europe and long after the Reformation, such wells were filled with holy water – the source was no longer pagan but Christian. Whether the peasants conceived it this way is another question (Thomas 1971). In practice, lay Christianity worked hand in hand with the official doctrines, and while the form and function of rituals and beliefs were Christianised, in practice they continued the pre-Christian conception. The most fundamental question was whether they worked or not (Oestigaard 2013c).

Importantly, however, as Geertz once pointed out, ‘no one, not even a saint, lives in the world religious symbols formulate all of the time, and the majority of men live in it only at moments’ (Gertz 1973:119). In practice, religious festivals could also be fun, and as time passes, the religious contents may be watered down, even if structure and form remain. On the other hand, with Frits Staal’s (2001) ‘rituals without meaning’ in mind, it is also reasonable to assume that with time the tradition became more fully connected to what one actually experienced as a Christian belief concept. Rituals and traditions live their own lives, and finally a new explanatory model is created for them, sometimes very different from the original form.

If we return to Setesdal for the last time, the continued popularity of the tradition also lies in the participation in itself. As mentioned, Bjørguv Uppstad from Setesdal was a famous fighter and a giant with a leg measuring 18 inches below the knee. When he was once almost killed in a fight, the local sheriff told the other fighter to ‘draw a line at manslaughter’ (Solheim 1956:37, 41). Whether he was almost killed or not, the skeid was the big gathering; the event everyone wanted to attend, the place to be seen. Johannes Skar writes (translated Solheim 1956:35):

‘The *skeid* in Valle was in a class by itself. There was a tremendous commotion. Everything that lived went to skeid. Farm lads and lasses always has this day stipulated as a holiday. All came there who regarded themselves as strapping fellows. Champions will meet, you know. Bjørguv Uppstad looked forward to the skeid so much that he could not sleep.’

The giant fighter was so excited before the event that he could not sleep. Though it sometimes ended with violence, it was more like a great rock festival, with women, dancing, contests – and a lot of alcohol. And although analytically it was about fertility, the *frobrunn*’s water and future harvests, it was also fun, and, as seen in Chapter 7, the historic skeid in recent centuries also featured activities for women. If the pre-Christian horse tradition was closely linked to death and violence, the modern version was a communal festival with a more ‘family-friendly’ character, which has continued up to today. Thus, although the Church aimed to abolish the tradition, it unintentionally enabled a stronger continuity as a Christian tradition and festival once the (extreme) violence was eradicated.



Fig. 8o. Summer (left) vs. Winter (right). From Magnus 1555[2001], p. 679.

In 1555, Olaus Magnus described the communal festival around 1 May as a symbolic horse fight between two riders, Winter and Summer, representing the dual powers of nature (Fig. 8o). The Winter rider was dressed in thick clothes, while Summer was draped in flowers. The symbolic fights always ended with Summer winning, which was followed by a public feast (Magnus 1555[2001]: 679-680 or Book 15, Ch. 8-9). In Denmark and Scania, this had its parallel in the Maj-Greve (May Count), where symbolic weddings took place accompanied by festivities, singing and dancing (Olrik & Ellekilde 1951:629-639). In its many different forms, this tradition has a continuity, but each iteration is also distinct. The Midsummer festival in Sweden features dancing around a pole. In Norway, there are bonfires and in the past boats were also burned, which Almgren, among others, saw as an archaic relic of old Indo-European and Bronze Age practices (Almgren 1927).

But are comparisons of such long historic trajectories relevant as part of Indo-European frameworks? The Swedish Midsummer feast is clearly a culturally and innovative Scandinavian tradition, and celebrating the summer is important in all societies – regardless of whether they have an agricultural base or not. In this case, the historic role of horses has disappeared, though the tradition of visiting, giving small (and symbolic) sacrifices to special springs on Trinity Sunday and especially on Midsummer's Night is a long-standing popular tradition

in Sweden. Thus, the tradition has become Christian and the cult at wells is today at least partly associated with various saints (e.g. Nilsson 1936:109). In short, an Indo-European tradition may have a particular cultural-historic expression as a Scandinavian tradition and cosmology. Although there might be a historic origin in a distant past, throughout the millennia and the centuries quite independent and unique cultural patterns and traditions may evolve.

## 12. Epilogue

*'Antiquity will attempt to summarize and criticize the work of those who are recreating the past. Archaeology is a branch of science which achieves its results by means of excavation, fieldwork and comparative studies; it is founded upon the observation and record of facts. Today, the accumulated riches of years lie to our hand, and the time is ripe for interpretation and synthesis.'*

Osbert Guy Stanhope Crawford  
Editorial in *Antiquity* (1927), p. 1.

### **Archaeology, ethnography and ethnology**

In 1927, the year Oscar Almgren published his famous study of rock art in Scandinavia favouring Indo-European perspectives, *Antiquity* published the first volume of its journal. The editorial notes opened with the lines quoted above, and they remain as valid today as they were almost a century ago. On the one hand, there have never been as many excavations and publications as in archaeology today. Still, the main challenge remains to break out of interpretative frameworks that reproduce the present in the past. One popular way of overcoming this challenge is to theorise so much about things and texts that one forgets about the actual things and texts. This is obviously not the most fruitful approach.

On the other hand, Indo-European studies have suffered for a long time from 1) primitive and proto-nationalist studies, whether focusing on various nationalist or European identities and formative processes, 2) uncritical studies of the sun in comparative perspectives, 3) migration patterns – as if the movement of people could in itself explain historic development patterns or the way knowledge is transmitted and incorporated in culture and cosmology, and last but not least, 4) the backlash of past research in contemporary research, which for a long time made Indo-European studies a non-issue in archaeology – dismissed by many as more or less a fantasy.

With new data and in particular aDNA, it is essential for genetics to be interpreted from archaeological perspectives, because these natural scientific data also open up different plausible interpretations. That is why we have aimed to show that any real advances in Indo-European studies need to focus on interdisciplinary culture history and comparative religion, and that ethnography and ethnology still represent great untapped opportunities for understanding, for instance, a 4000-year tradition in time and space from the horse burials and sacrifices in Sintashta to skeid in Scandinavia.

At the end of this long journey, it may be appropriate to end with a few words of caution, as well as some suggestions for possible future directions. We trust that we have empirically debunked any national identity or formation paradigms as part of Indo-European studies, and hope that this may be a first step towards a reorientation of this comparative approach. Even today, there are scholars who are happy to link the ancient Indo-Europeans to characteristics and phenomena that are reappearing in today's societies – if not at national level, then at a European level. It is important to emphasise, however, that explanations of today's society should not be the focus of archaeological interpretations – neither the impetus for idealising – or demonising – ancient times. Furthermore, reality often turns out to be considerably more complex and multifaceted than it appears in simplified explanatory models. Moreover, apart from the fact that it is empirically wrong to trace current political processes (from the French Revolution onwards) 4000-4500 years back in time, such national or ideological constructs based on Indo-European horizons cannot explain why there are differences between European countries, or between Norway, Denmark or Sweden, for that matter.

Still, there may be historic continuities in traditions, which we find both fascinating and important to highlight: this book is about 4000 years of cosmological continuity in time and space. However, all traditions change. If, broadly speaking, the process of Indo-Europeanisation is like ripples on water spreading concentrically from a core area and becoming vaguer and more diffuse in time and space, when does the Indo-Europeanisation process stop and become something else, and when does it become irrelevant? The spread of language and core elements of religion and mythology can be understood through this metaphor, but a common origin does not explain anything in itself.

However, shared cultural patterns and similarities in the past may help understand specific historic developments and cultural history, but is not suitable for framing contemporary policies or national processes, because that creates a future based on a past that never existed. On the contrary, what this study has shown is that Indo-European perspectives may work as a source of ancient knowledge – as an archaeological Mimir’s well in which the history of archaeological thought is contained. It has also shown that many of the interpretations put forward a century ago by fellow archaeologists may still be relevant, because if one thing survived all the climatic and cosmological changes, it was the well of wisdom.

Metaphorically speaking, the well of wisdom had a continuity over more than four millennia. The ancient Indo-Europeans succeeded in forming an ideological system of language and traditions, which seem to have had an almost unmatched ability to survive in various contexts during a very long time. The Indo-European heritage has provided a very receptive background for regional and local adaptation, which has also enabled unique cultural-specific innovations, but where distinctive original features can still be traced after millennia. Thus, we will conclude with the same quote we started with and let Bruce Lincoln have the last word for the time being (Lincoln 1986:4-5):

‘Ultimately, I will consider these myths of creation as one of the world’s most successful systems of ideology, given that they provided the mystifications and legitimations that sustained an extremely widespread, stable, and durable but also extremely rigid, hierarchic, and exploitative social system.’



**Horse fight (undated), by George Stubbs (1724-1806).**



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