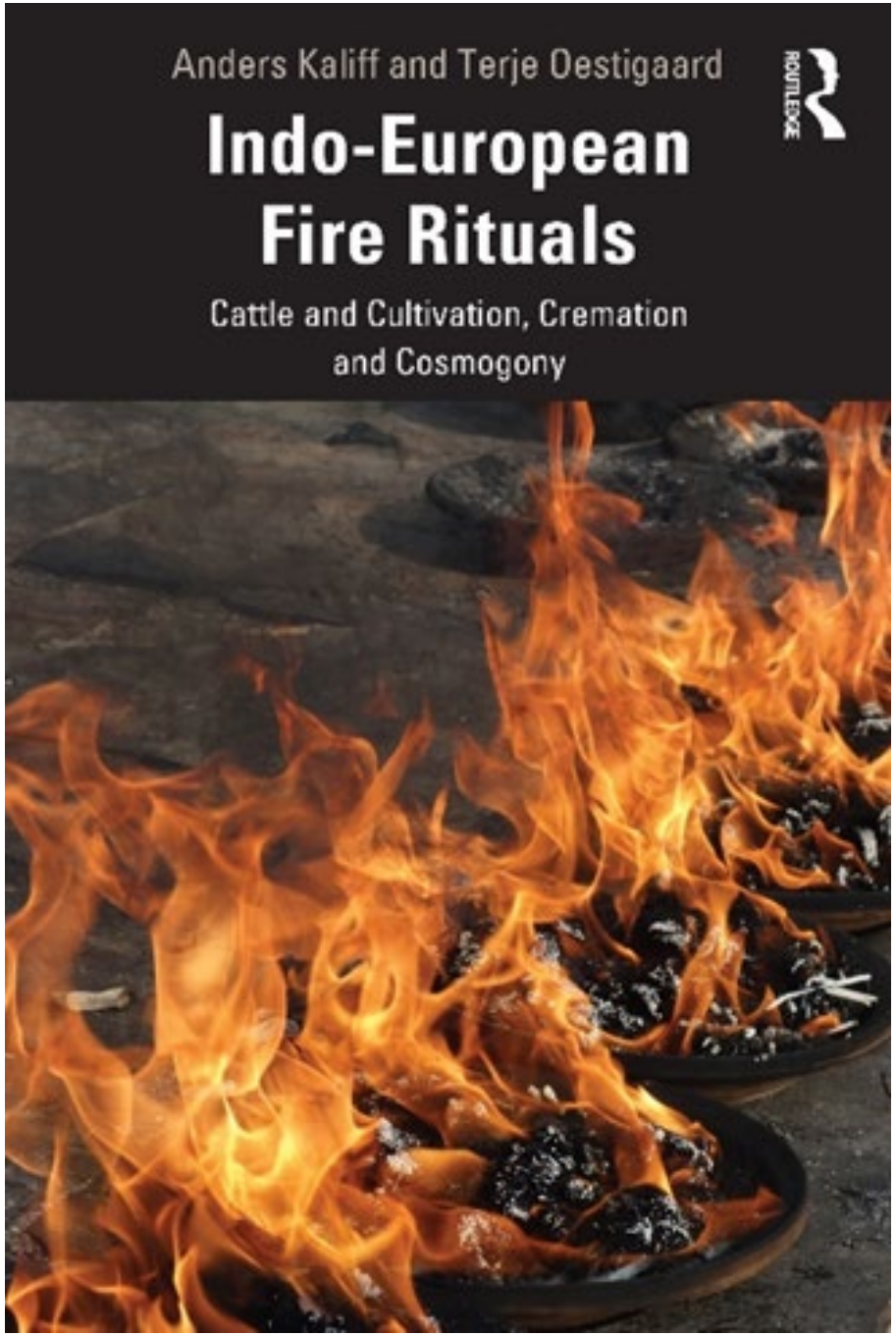
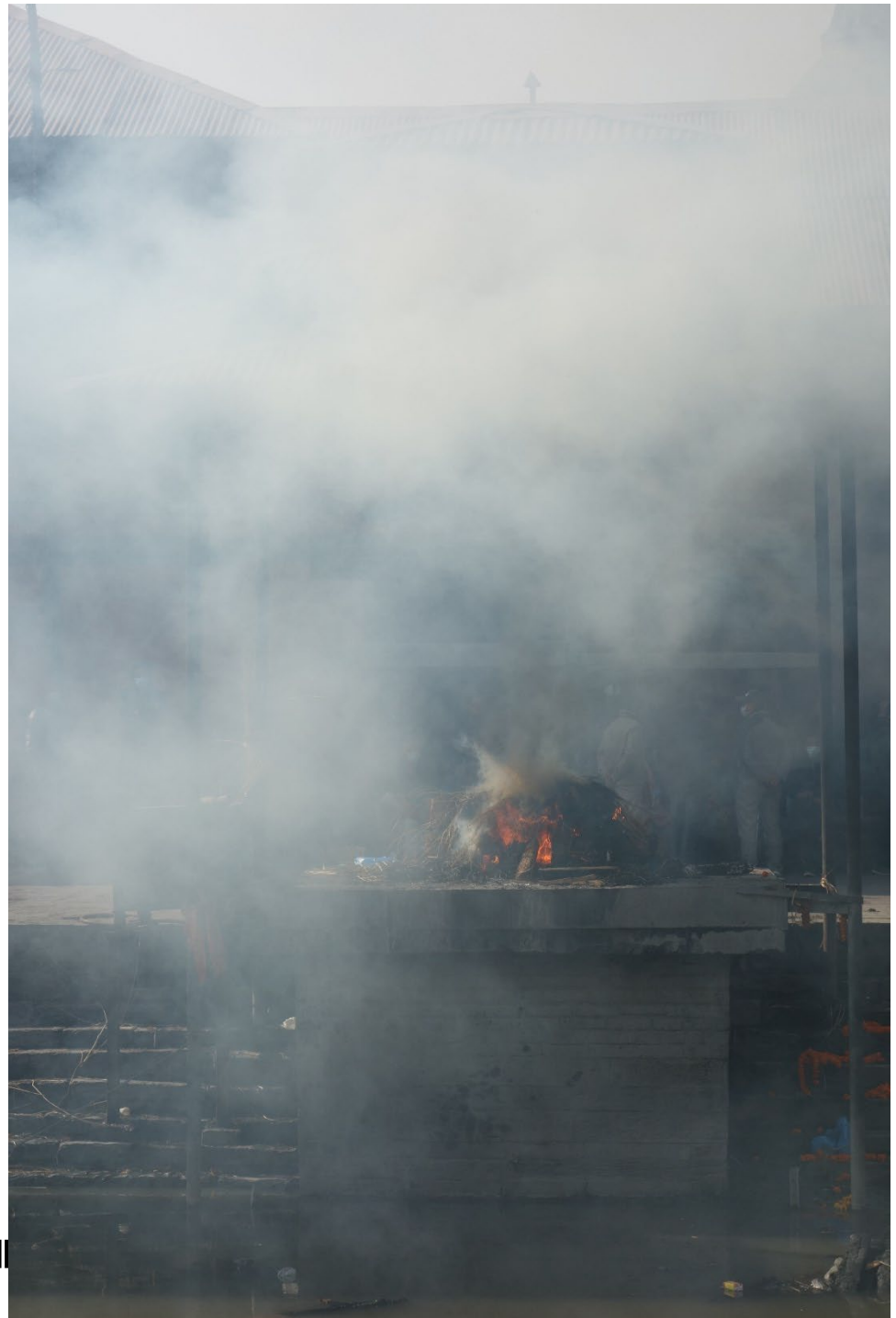
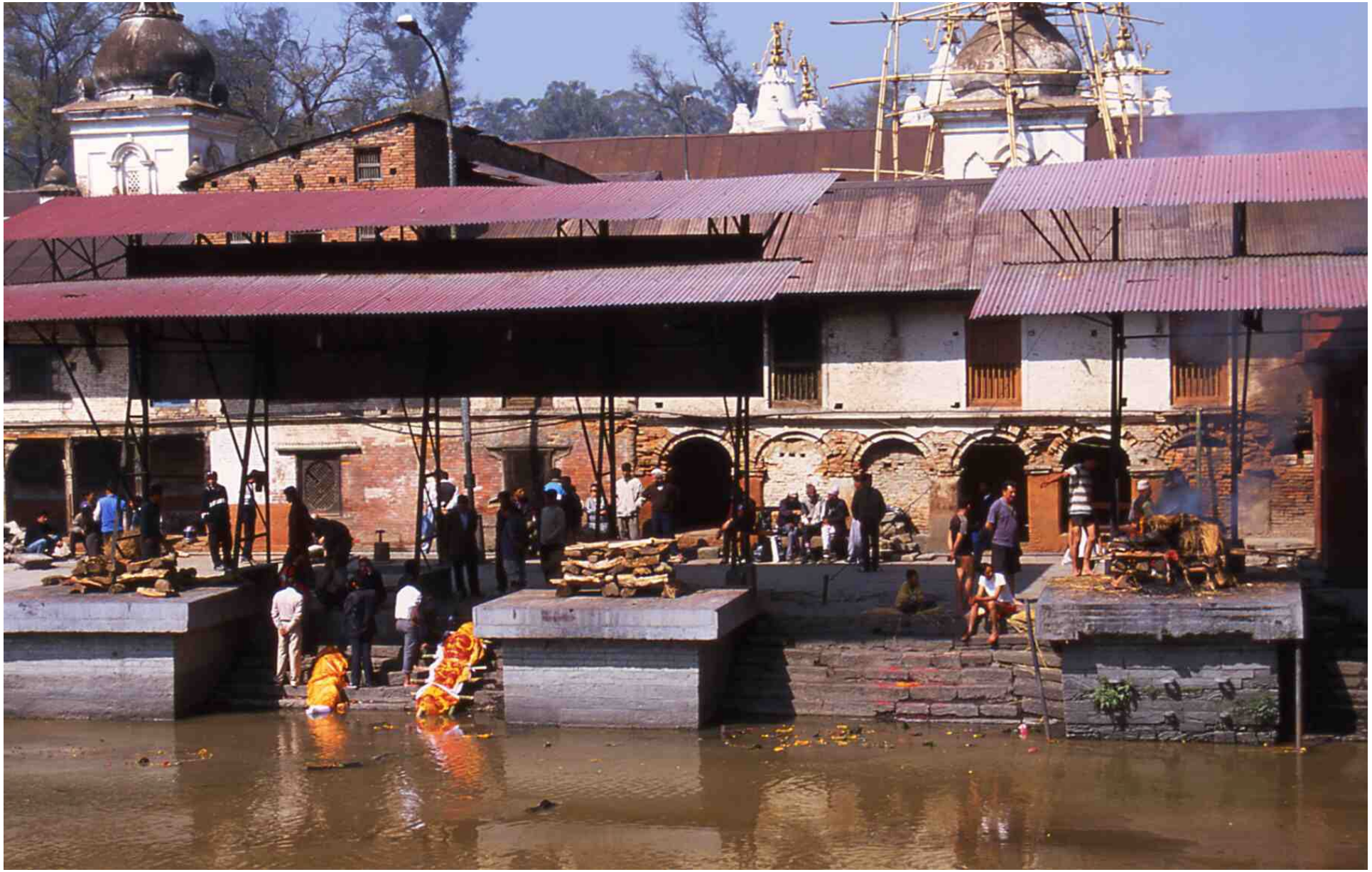
Cremation, culture and cosmology – ethnographies of humans and their funeral rites

Terje Oestigaard


Anders Kaliff and Terje Oestigaard
Indo-European Fire Rituals
Cattle and Cultivation, Cremation and Cosmogony
ROUTLEDGE

Linnéuni





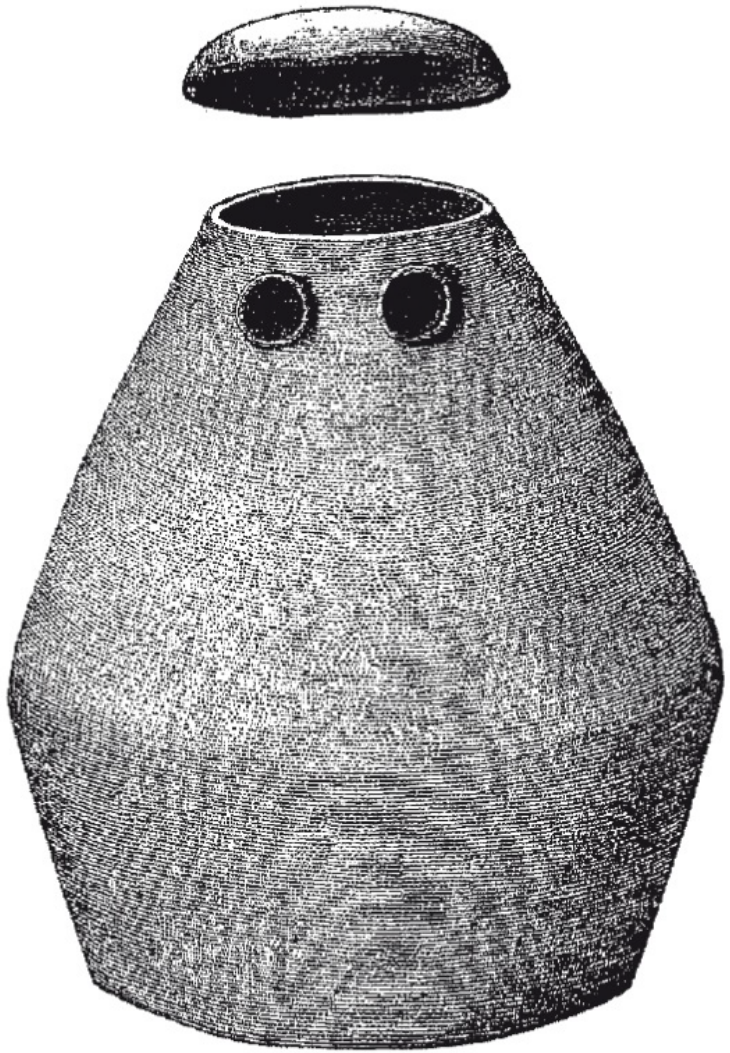
From a technological point of view, a cremation consists of at least three stages. Hertz pointed out the importance of the intermediary period, with three stages in mortuary sequences involving cremation:

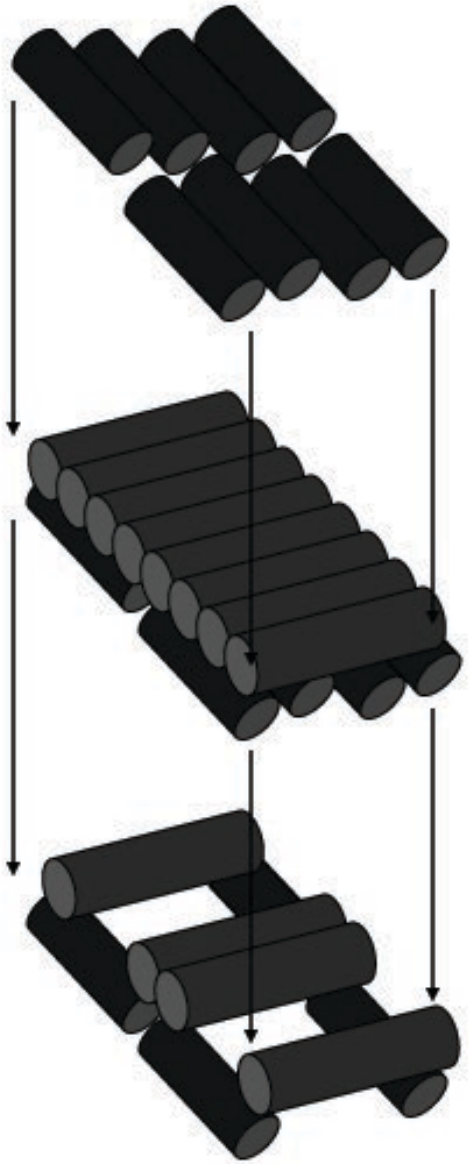
1) The place where the body was cremated.

2) The intermediary period in time and space. This interval is essential in understanding cremation practices. During this period, the bones cleaned during cremation may be further treated locally or transported in an urn over long distances.

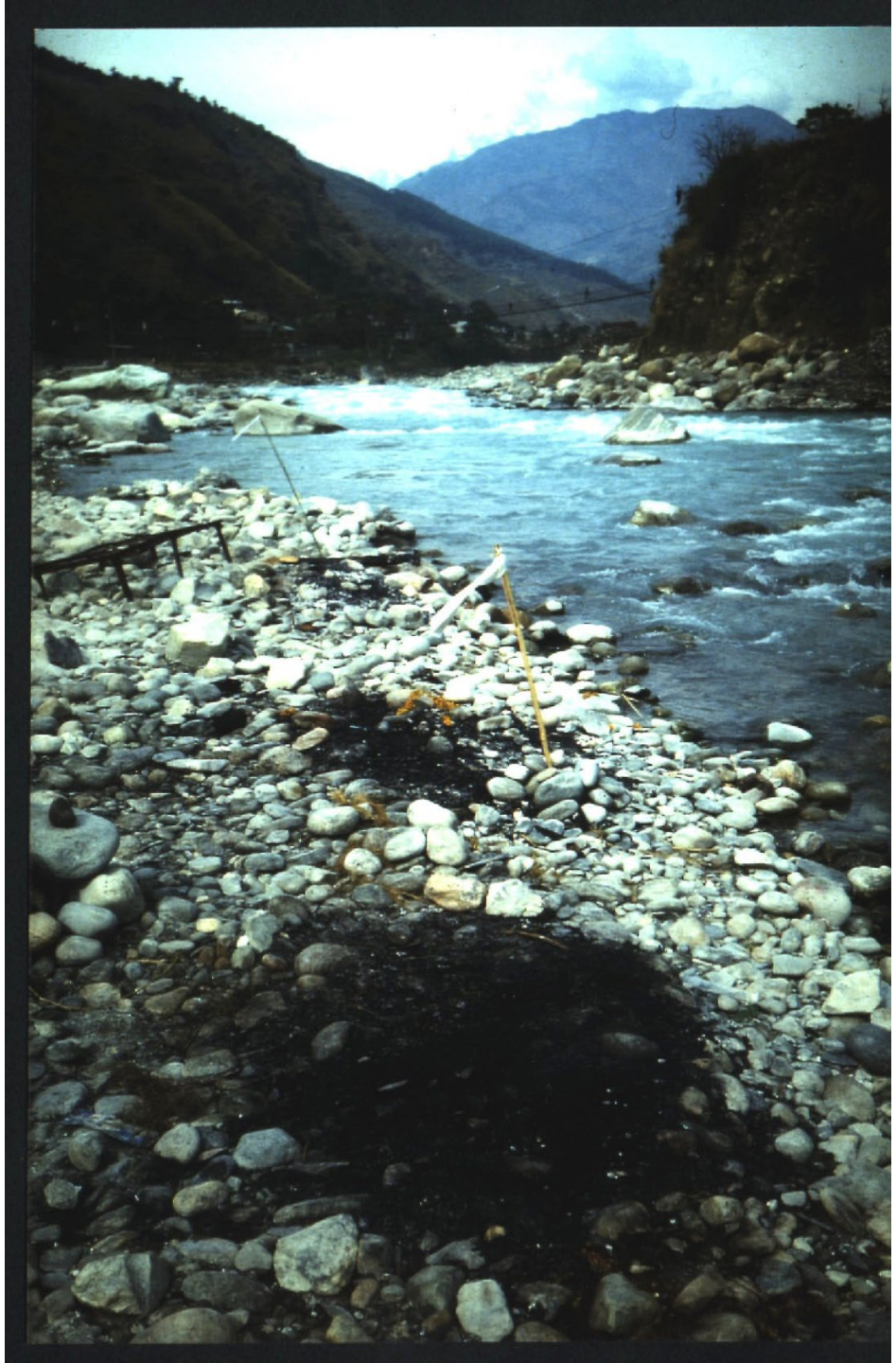
3) The place where the cremated remains were deposited or buried. This place may be the same site where the body was cremated, but normally the bones are transported (with or without urns) to other places or cemeteries.

.

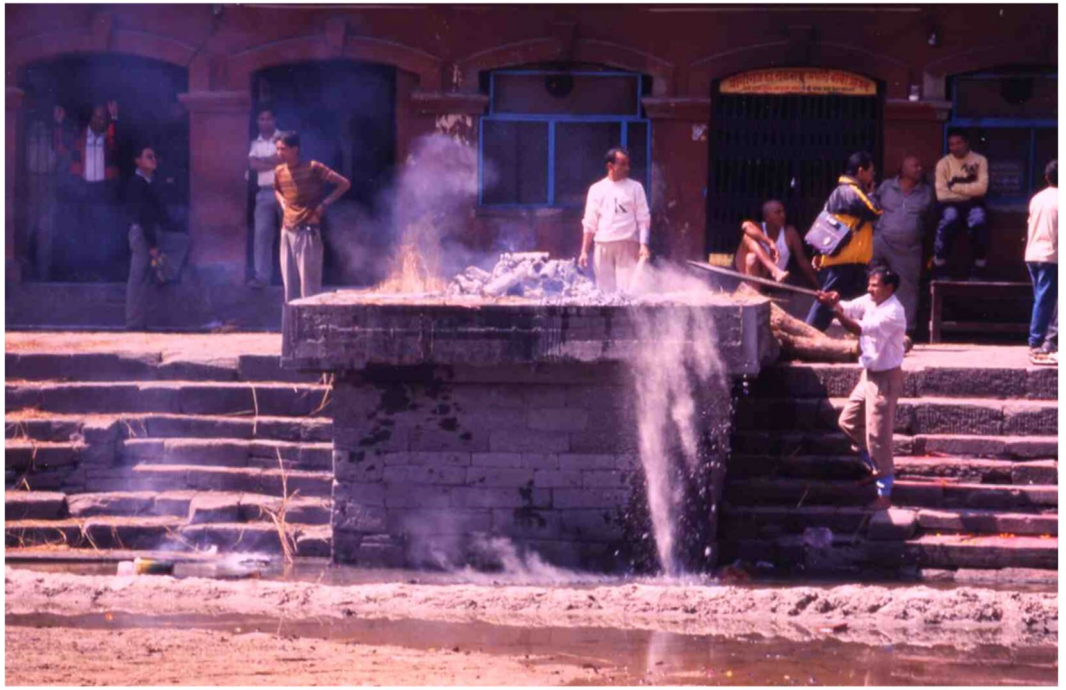




Linné



Linnéuni



Norway

1082 samples: 919 from Early Iron Age, 147 from Late Iron Age (19 from Bronze Age).

Average in crematorium:

3075 gram (3375 grams for men, 2625 grams for women)

Average in cremations

269,7 grams for single deposits

Identified with sex was 637,9 grams for men (with variation from 10 to 3175 grams) and 455,6 grams for women (with variation from 30 to 1950 grams)

Grade 0: Apparently unburnt. Although the bones have been on the pyre, they are so slightly affected by heat that they show no signs of being burnt. The temperature has probably not reached more than *200 degrees Celsius.*

Grade 1: Smoothing. Very slight, imperfect cremation due to lack of oxygen. Smoothing is more dependent on oxygen than on temperature, and therefore it is reasonable to assume that temperatures hardly exceeded *400 degrees Celsius* since changes in the bone substances occur at these temperatures.

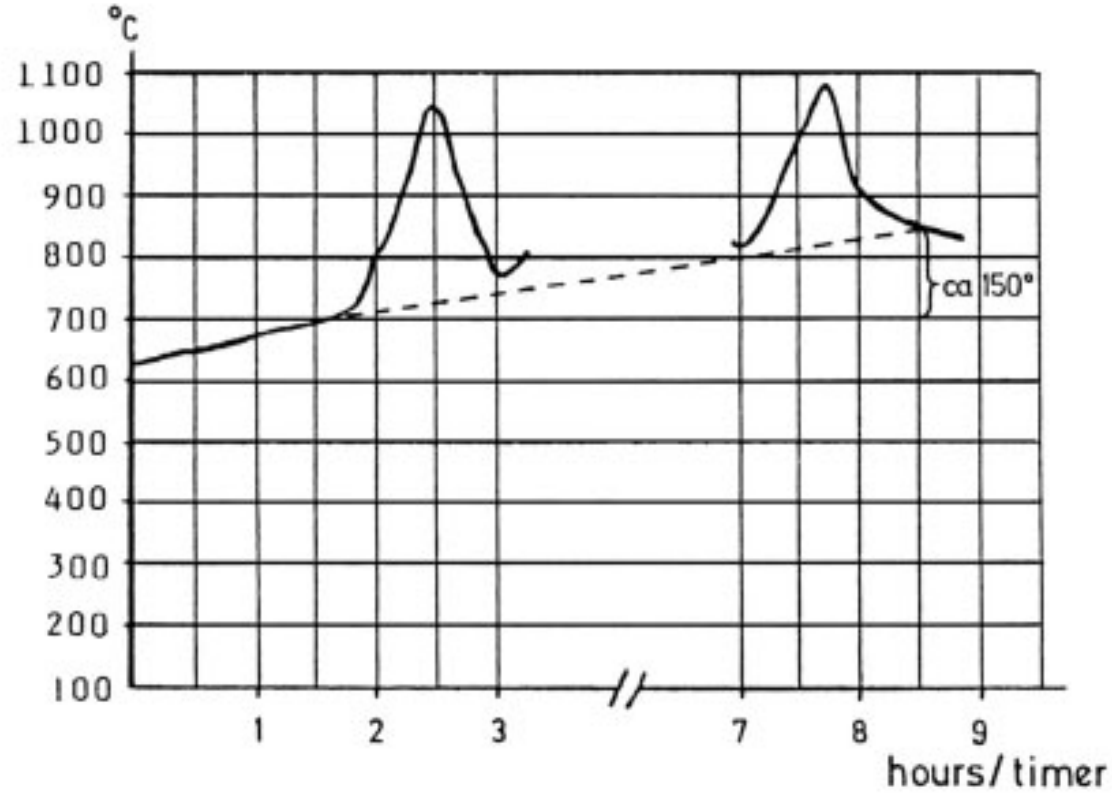
Grade 2: Slight burning. The bones are clearly burnt but have retained a pale colour. Cremations at grade 2 have reached a maximum temperature of approximately *700-800 degrees Celsius.*

Grade 3: Moderate burning. The appearance of the bones is about the same as in the previous group or somewhat paler in colour. These bones have been exposed to temperatures of *1000-1100 degrees Celsius.*

Grade 4: Hard burning. The bones are almost white and have porous, chalk-like consistency. Bones of grade 4 have been exposed to temperatures probably between *1200-1300 degrees Celsius.*

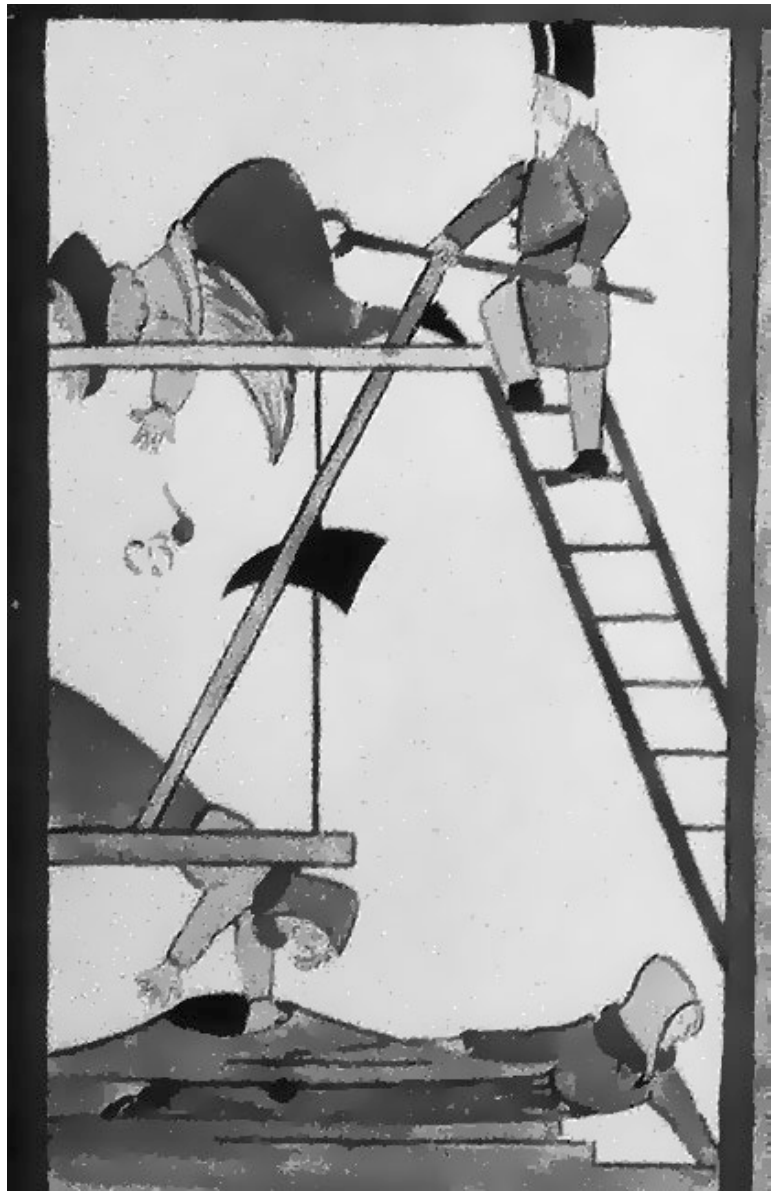
Of 1082 finds examined, the percents regarding cremations at extremely high temperatures are striking (Holck 1987:146-149):

Grade 0: 6,5 %
Grade 1: 11,9%
Grade 2: 28 %
Grade 3: 73,5 %
Grade 4: 37,5 %

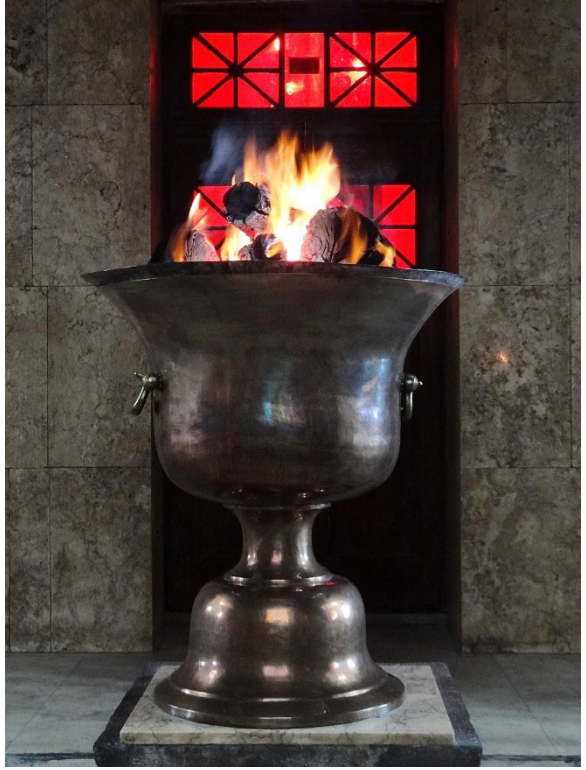


Copper smelts at 1083 ºC, but studies have shown that temperatures around 1300 ºC are preferable for casting. At higher temperatures, the metal becomes more fluid and hence easier to work with. However, bronze is an alloy of copper and around 10% tin. As an alloy, it is also easier to work with than copper during the smelting process, and it can be cast at lower temperatures. With between 8-13% tin, copper smelts at around 830-1000 ºC. Pure iron, on the other hand, smelts at much higher temperatures: 1537 ºC. However, the lowest temperature for smelting carbonized iron is 1145 ºC.

The Proto-Indo-European verb **mer-*- combines the meaning "to die" with the sense of "to finely divide". In the word for "die", this combination of meanings is found in different Indo-European languages, e.g. in Sanskrit *marate*, Old Persian *miryeite*, Hittite *me-ir-ta*, Latin *morior*, Lithuanian *mìrtšu*. In the other sense, "to crush, grind, or break up", the same root is also found in various Indo-European languages: Sanskrit *mrnāti*.



Linnéuni



Linnéuni

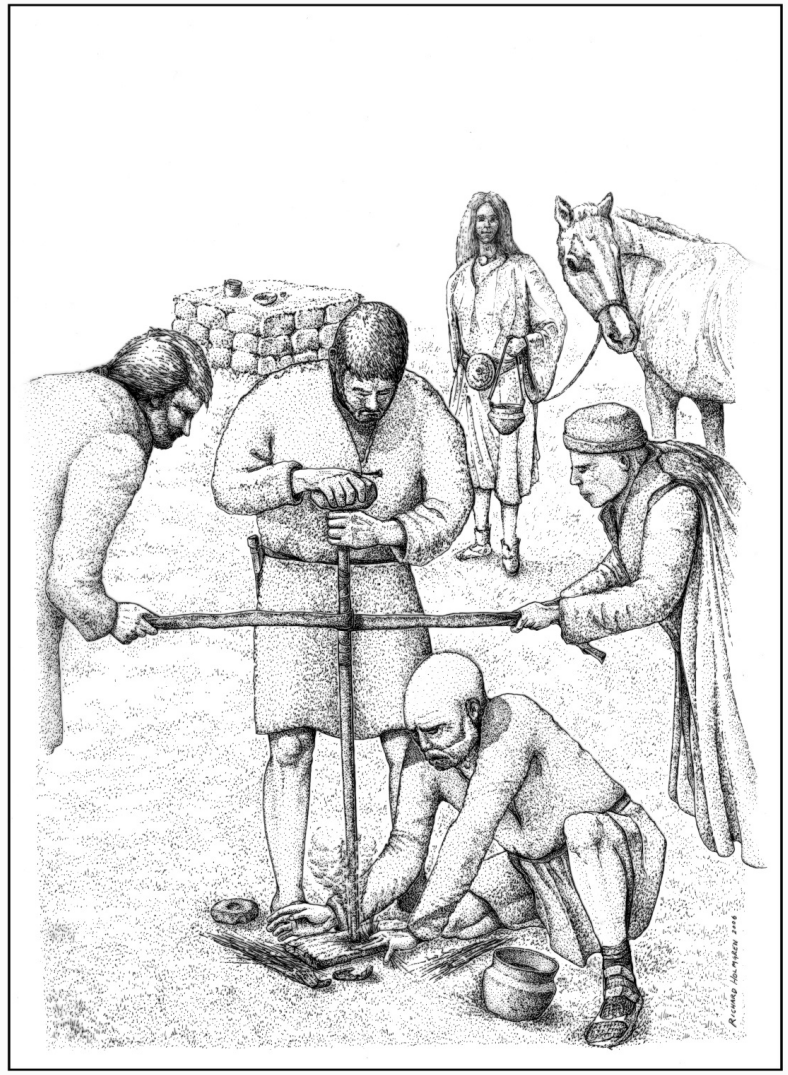
Consecrated flame: 16 fires

1 natural fire:	1) lightning fire
3 ritual fires:	2) royal or official fire
	3) cremation fire
	4) ascetic's fire
12 productive fires	5) fire of the dyer
	6) fire of the potter
	7) fire of the brick maker
	8) fire of the goldsmith
	9) fire of the mint master
	10) fire of the ironsmith
	11) fire of the armorer
	12) fire of the baker
	13) fire of the brewer
	14) fire of the soldier or traveller
	15) fire of the shepherd
	16) fire of the household

Broadly, there are two overall explanations or theories about fire festivals: 1) they are sun-charms and imitative magic ensuring and supplying sunshine for men, animals and plants by making fires, and 2) they are primarily purifying and protective means that ward off and destroy evil to ashes. In short, these two theories may be called the Solar theory and the Purificatory theory. While these two theories may at the outset seem contradictory, they are not:

'If we assume that the fires kindled at these festivals were primarily intended to imitate the sun's light and heat, may we not regard the purificatory and disinfecting qualities, which popular opinion certainly appears to have ascribed to them, as attributes derived directly from the purificatory and disinfecting qualities of sunshine? In this way we might conclude that, while the imitation of sunshine in these ceremonies was primary and original, the purification attributed to them was secondary and derivative' (Frazer 1913a: 330).

'On this view the fertility supposed to follow the application of fire in the form of bonfires, torches, discs, rolling wheels, and so forth, is not conceived as resulting directly from an increase of solar heat which the fire has magically generated; it is merely an indirect result obtained by freeing the reproductive powers of plants and animals from the fatal obstruction of witchcraft. And what is true of the reproduction of plants and animals may hold good also of the fertility of the human sexes. We have seen that the bonfires are supposed to promote marriage and to procure offspring for childless couples. This happy effect need not flow directly from any quickening or fertilizing energy in the fire; it may follow indirectly from the power of the fire to remove those obstacles which the spells of witches and wizards notoriously present to the union of man and wife' (Frazer 1913a: 346)



Beltane fire

Need fires

3x3
9x9 young men

4 seasonal fire rituals

Agriculture:

Midwinter

Midsummer

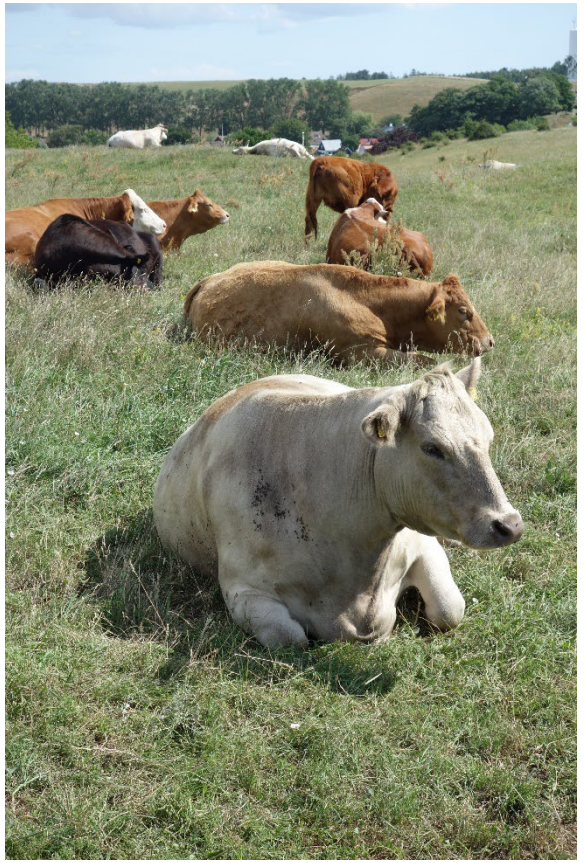
Sowing/plouging
(end of winter/ start of summer)

Pastoral groups:

1. May

1. November

Harvesting
(end of summer/ start of winter)



Lnu.se