Part IV. Vindicating Durkheim through long-range approaches

Chapter 8. Theories and methods towards a long-range perspective on Durkheim's *Elementary Forms of Religious Life*

8.1. Introduction: A long-range perspective

The purpose of the present Part IV of this book is to reconsider the issues Durkheim grappled with in *Les Formes*, but now from a perspective that was not yet available in his time: a long-range view informed by comparative / historical linguistics, Comparative Mythology archaeology, and comparative ethnography. In the Preface I have explained how such a perspective came to enrich my work in the second half of my career. Part IV is composed of two chapters. The first, Chapter 8, will be devoted to theoretical and methodological issues – this is particularly the point to discuss the archaeology of religion as an achievement and a problem, to introduce *Borean as an extensive Upper Palaeolithic language reconstruction, and to have a highly selective peep at modern Comparative Mythology. Against this background, Chapter 9 will concentrate on Durkheimian concepts and topics, in the first place the paired concepts *sacred* / *profane*, and assess whether these can be traced back into prehistory, all the way to Upper Palaeolithic times when some form of *Borean is claimed to have been spoken. In regard of *sacred* / *profane* the outcome of this exercise will be slightly depressing although (after our preceding discussions in this book) far from surprising: Durkheim claimed that the 'elementary forms of religious life' pivoted on his distinction between *sacred* and *profane*, which he thought to be absolute and universal, but *sacred* / *profane* will turn

out to be a relatively recent and local development only. What is truly surprising, however, and amounts to an unexpected further vindication of Durkheim, is that a great many other concepts Durkheim introduced as constituting 'elementary forms of religious life' at – what we would call today – the *emic* level, in fact turn out to go back to the depths of time, and are nicely attested in reconstructed Upper Palaeolithic language forms of *Borean. Moreover, once we have the principal data and the methodology in place, we can go one step further and consider (by the end of Chapter 9) even possible or probable 'elementary forms of religious life' of which Durkheim was not yet aware – they are not found in *Les Formes* but are suggested by the literature on comparative religion, religious anthropology and religious archaeology. Chapter 9 will also engage in long-range explorations into the prehistory of theistic forms of religion. This will allow us to propose a specific time scale and localisation on this point.
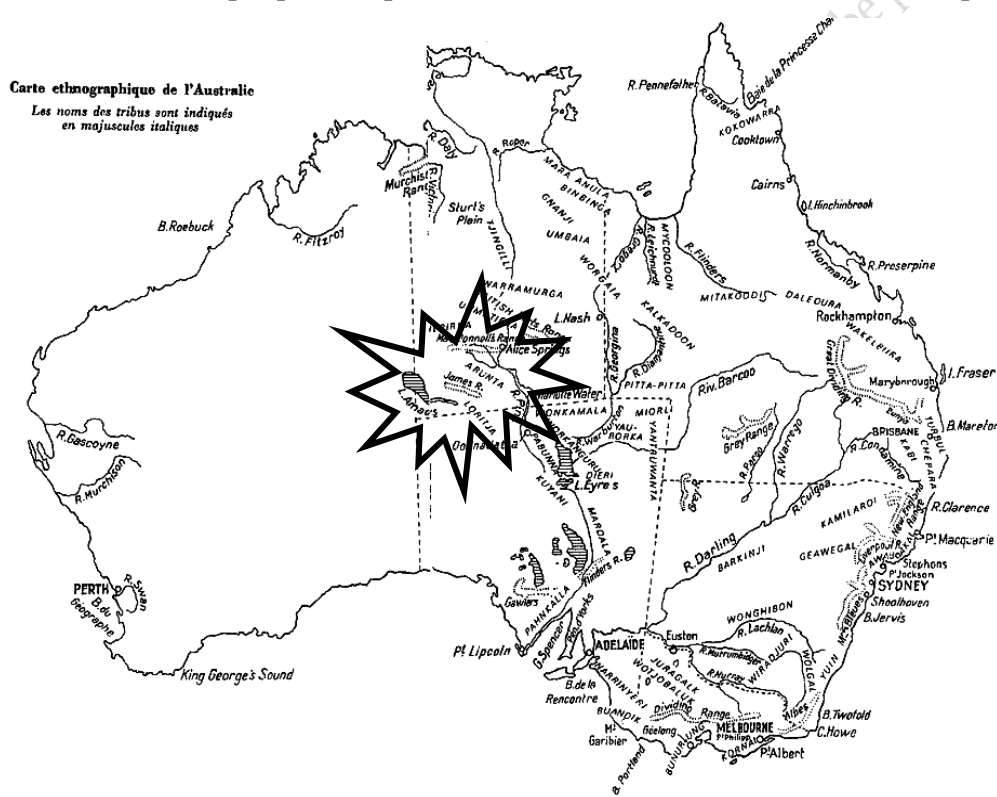
Most of the argument in *Les Formes* refers to the Aranda / Arunte / Arrernte people of Central Australia, marked by the transparent star which I imposed upon the map

Fig. 8.1. The detailed ethnographic map accompanying Durkheim 1912 / 1990

The essentialising of remote forms of religion (known second-hand only, to boot) in terms of just a model, an ideal type, meant that Durkheim's approach was rather a-historic. One of the ambitions of the present book is to supplant that obsolete position by a more historical one that, to the extent possible to me, benefits interdisciplinarily from recent advances in such fields as linguistics, archaeology, Comparative Mythology, comparative ethnography, and population genetics.

In his quest for 'elementary forms of religious life' Durkheim employed one,

somewhat surprising methodology: he analysed, creatively and in great detail, one relatively well-studied case recorded in historical times, notably the religion of the Aranda Australian Aboriginals; the data he gleaned from other scholars's books – he lacked all acquaintance with non-Western religion from personal participant observation. Yet a detailed ethnographic map of Aboriginal Australia embellishes his book – suggestive of rather more intimate acquaintance with that continent than could be gleaned from armchair study of the now obsolete ethnography available at Durkheim's time.

Many of the resources now at our disposal for research into 'elementary forms of religious life' are only dating from after Durkheim. Before the construction of large ethnographic data sets such as the Human Relations Area Files (a major resource of comparative anthropology in the mid-20th century), and before digitalisation and the Internet opened up the entire world's libraries for comparative ethnographic research, any cross-cultural research was to remain an essentially manual, partial and pedestrian undertaking. Comparative linguistics were already highly developed in Durkheim's time, but they were far from Durkheim's competence and interest, the time depth of their reconstructions was restricted to a few millennia, and their comparative scope limited to a few selected linguistic phyla at most, among which the Indoeuropean linguistic phylum was exceedingly dominant. Scientific archaeology was going through its infancy during Durkheim's career as a Founding Father of sociology, and some of the later debates with great relevance to our question as to 'elementary forms of religious life' had scarcely been initiated let alone that they could inspire and guide Durkheim; these are, among others, the debates on

- the emergence, among humans, of articulated speech, symbolising and art
- the dating and symbolic interpretation of prehistoric artefacts
- the interpretation of rock art in terms of the entoptic and shamanic hypotheses
- the relevance of long-range Comparative Mythology and population genetics for archaeology.
- the astronomical interpretation of prehistoric artefacts especially in regard of larger constructions in the landscape
- the possibility[230] of megalithic cultures forming a loose, Pelasgian-

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[230] #37. *THE IDEA OF WORLD-WIDE MEGALITHIC CONTINUITY IS COUNTER-PARADIGMATIC.* Today such a possibility is widely dismissed by the specialists, and has become completely counter-paradigmatic; *e.g.* Renfrew 1967, 1976, 1983, and Russell & McNiven 1998; *pace* de Jonge & IJzereef 1996; von Heine-Geldern 1928; Daniel 1963. This is certainly not merely a matter of an obsolete paradigm being happily supplanted by a new one that fits the data better. The literature (*cf.* van Binsbergen & Woudhuizen 2011: 378, 1249n) on what could be called *megalithic structures worldwide* is very extensive, and touches on all continents. A century ago this near-global distribution gave rise to a diffusionist 'heliocentric' theory, now discredited, of Bronze Age seafarers spreading their solar religion to all corners of the world (Smith 1915, for a

associated, transcontinental network of cultural, economic and religious relations from the Bronze Age onward.

Contrary to the situation today, Comparative Mythology, in itself a thriving new field in Durkheim's time thanks to the pioneering work of such authors as Max Müller, Frazer, Lang), had (apart from Müller's influential but sweeping 'natural', 'meteorological' or 'luminary' hypothesis) not yet reached a stage where it could begin to suggest overall interpretational schemes for the prehistoric iconographies that were then only gradually being retrieved by increasingly more sophisticated excavation and conservation techniques. With the recent revival of Comparative Mythology largely at the instigation of the Harvard Sanskritist Michael Witzel,[231] we can now employ an intersubjective (although still heatedly debated) and empirically-based list of humankind's earliest myths going back to Middle Palaeolithic times and possibly much further, and – to the extent to which these reconstructions are reliable and supported by specialists – this does allow us glimpses of the more or less religious representations of humans in remote antiquity, even though the mythological record is seldom conclusive as to whether these presumed early myths gave rise to actual cultic action; moreover the mythological record is excessively indirect – based as it is on reconstruction from documentary and oral sources hailing from fairly recent, historical times.

My task in the present chapter is formidable and its execution prone to error: although I cannot speak with professional authority as a linguist nor as an archaeologist, I will need to introduce the reader to both historical / comparative linguistics, and archaeology, and moreover to the subject of Comparative Mythology in which I have more or less specialised over the last two decades – all necessary steps towards the long-range methodologies with which we shall conclude our book's argument on the vindication of Durkheim's religion theory. Having been hypercritical of others over the decades, I know I can expect

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critical study *cf.* van Binsbergen in press (g); Perry 1923). A leading archaeologist like Renfrew – a British baron, member of the House of Lords, and keeper of national identity – has consistently (and not only in regard of megaliths) spoken out against extensive, transregional continuities, and opted for autochthonous explanations, for which he has even developed a special mathematical model. As has been very clear throughout my scientific production including the present book, my work (which, I admit, is archaeologically pedestrian, and comes from a child of the working-class, more at home in Africa than in my native Holland) is a plea for the exact opposite: long-range continuities, which I have tightly argued with considerable display of data and literature, for the Bronze Age Sea Peoples, the Pelasgian Hypothesis, the Sunda Hypothesis, the cosmology of the cyclical transformation of elements, selected mythemes, etc. (van Binsbergen 2010 a, 2011b, 2012d; van Binsbergen & Woudhuizen 2011). Wherever I have travelled in Africa, along the Indian Ocean and in South East Asia, I have encountered fairly converging megalithic expressions. Of course, this does not at all count as compelling scientific proof, but at least has kept the possibility of a global megalithic culture alive in my mind.

[231] Witzel 2001, 2012; *cf.* van Binsbergen & Venbrux 2010; Harrod 1987, 1992, 2003, 2006, 2010, n.d.; van Binsbergen 2006a, 2006b).

little clemency myself. Even so, my life-long commitment to Durkheim – intuitively aware of a validity which only now, about to conclude my book on the subject, fully dawns upon me – leaves me no choice but to pursue this tortuous path to the very end.
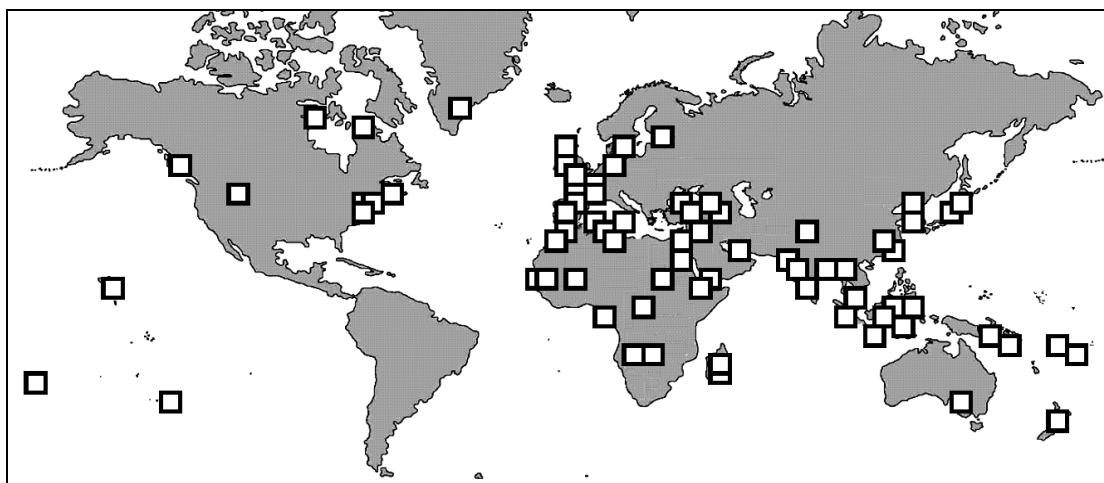
Source: van Binsbergen & Woudhuizen 2011: 378, Fig. 24.14, with extensive references

Fig. 8.2. Global distribution of megalithic structures and practices, all categories thrown together

At the entrance to this path stands a signboard with a note of warning:

> **WHY ENGAGE IN LONG-RANGE LINGUISTIC AND MYTHOLOGICAL EMPIRICAL TESTING OF DURKHEIM'S CLAIMS CONCERNING ELEMENTARY FORMS OF RELIGIOUS LIFE, IF WE HAVE THE *ARCHAEOLOGY OF RELIGION*?**

Yes, why indeed? Presumably, elementary forms of religious life are to be found in prehistory, and who better than archaeologists of religion would be suitably placed to identify and interpret them? [232] In the first section of this methodological and theoretical chapter, I shall articulate why our task cannot be considered to be exhaustively filled already by archaeology. Then we turn to long-range linguistics, to end with a brief and selective overview of aspects of Comparative Mythology.

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[232] There is no dearth of textbooks and monographs introducing the archaeology of religion. A selection will be considered below. A comprehensive, intelligent, recent approach is that of Wesler's 2012 textbook. One of the most sophisticated collections on religious archaeology is Whitley & Hays-Gilpin (2009), *Belief in the Past*.

Considering the precarious nature of a contested linguistic reconstruction of Late Palaeolithic language use (for which there are no *direct* attestations), and given the constantly growing wealth of archaeological data on the Palaeolithic, why do we at all turn to linguistic data for a reconstruction of the Upper Palaeolithic worldview? Before we try and answer this question, let us consider some aspects of the study of religion in prehistory.

When at this point, in preparation of my assessment of Durkheim's theory with state-of-the-art resources, I set out here to critically discuss aspects of the archaeology of religion, a disclaimer is in order. Although I have had a life-long fascination with archaeology, have dabbled in it incessantly, have frequently rubbed shoulders with archaeologists and have even a number of scholarly book publications in that field in which religion plays an important part,[233] I do not qualify as an archaeologist. My approach to that discipline remains (regrettably but excusably, perhaps even – because that condition affords me the critical perspective of the outsider – *fortunately*) external and amateurish. I tend to lag behind several decades concerning current debates and discoveries. And while attempting to do justice to what has been a major source of inspiration for me, I cannot hope to achieve more than barely scratching the surface – as every specialist will immediately perceive from what follows.

8.2. The archaeology of religion

8.2.1. Introduction

From the very inception of scientific archaeology in the North Atlantic region, the subject has been fascinated with religion. One reason for this is that many of the enduring remains from the distant past on which the subject has focussed, have had a religious origin: temples, other places of worship and sacrifice, burial sites that formed the centre of a cult of the deceased. Hence much of the archaeology of the Aegean[234] and of the Biblical lands[235] – early centres of atten-

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[233] van Binsbergen 1997a, 2011a; van Binsbergen & Woudhuizen 2011.

[234] Studies of the (religious) archaeology of the Aegean are too numerous to list in the present, Palaeolithic-focused context. Against the background of general studies of Greek religion (such as Burkert 1985; Harrison 1977, 1903; Nilsson 1949, 1961; Guthrie 1950) useful though dated overviews include: Whitley 2000; Coleman 2000; Middleton 2002; Cullen 2001; Hall 1995; Mountjoy *et al.* 1999; with abundant references. One of the most vocal participants in the debate on religious archaeology, Colin Renfrew, is among other things (while primarily a generalist, comparativist, archaeologist of mind, and linguist) an Aegean specialist (Renfrew 1965, 1972, 1973, 2001; Renfrew *et al.* 1965; Renfrew *c.s.* 2007).

[235] The desire to illuminate, even vindicate, the Biblical account has often formed a major inspiration for the archaeology of Syro-Palestine (among an avalanche of titles I haphazardly mention Albright 1942 / 1953 / 1957; Dever 1987, 2005 (*cf.* Bunta 2006); Holladay 1987; Nakhai 2001; Oden 1976). In the context of the modern state of Israel this to some extent turned into a national identity industry, concentrating on the traditional sites of Israelite / Jewish history (Sea Peoples / Philistine archaeology, Masada) and sometimes

tion in classical and Judaeo-Christian archaeology – was initially an archaeology *of religion,* and this largely remained the case when, in the course of the 19th c. CE, the archaeological field was effectively extended to include Ancient Egypt, Ancient Mesopotamia, other parts of the Middle East, South, South East, and East Asia, and the New World especially Meso America and Peru. The endeavour to capture the original contexts of world religions that subsequently conquered the world motivated a great deal research and writing (*cf.* Oates 1978). Also today, much of religious archaeology is conducted in the context of world religions.[236]

Many archaeologists would concur with the rather bleak and critical picture which Droogan (2013) sketches of the relationship between archaeology and religion, critically reflecting on important contributions to the debate by Insoll and Renfrew. Yet Droogan's own adoption (albeit somewhat reluctantly) of the *sacred / profane* dichotomy suggests (in the light of our preceding chapters) that further theoretical reflection remains to be done even for that enlightened archaeologist.

I propose to first take a more or less random look at a number of contributions to the archaeology of religion, concentrating on those of earlier decades and not exactly reflecting state-of-the-art debates in that field; after which I will concentrate on more recent theoretical debates among archaeologists of religion. This two-pronged approach will show us why, in addition to the archaeology of religion, we will still need long-range approaches from linguistics and Comparative Mythology in order to meet the methodological challenges which the testing of Durkheim's religion theory entails in relation to prehistory.

8.2.1. Selected common approaches in the archaeology of religion

Numerous have been the studies on the topic of prehistoric religious phenomena, *e.g.* Mainage 1921 – who adopts Durkheim's and Frazer's view as to the centrality of totemism, interpreting prehistoric animal depictions in this light; Maringer 1952 / 1977; Anati 1975 – which includes Camps 1975 on North African rock art – , and Anati 1999, which is remarkable not only for its synthetic overview but also for its stress (*e.g.* Anati 1999: 47, 84) on continuity between the culture of Anatomically Modern Humans and that of Mousterian / Neanderthals; in this connection Anati cites symbolism – as expressed in cupuled blocks – and the cult of the dead as two convincing pointers.[237] Anati is eloquent and seductive, but not truly convincing,

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interpreting the evidence from a Zionist perspective (Broshi 1987; van Binsbergen & Woudhuizen 2011).

[236] *E.g.* Buddhism (Behrendt & Brancaccio 2011; Hinduism (Chakrabarti 2001; Goodall 2011). Freund 2012 offers a captivating tour through archaeological mysteries and quests touching on most of the world religions, but without theoretically advancing the problem of the relationship between archaeology and religion.

[237] Anati is highly schematic (and, although somewhat unlikely to be a Roman Catholic considering

when stressing the systematic and meaningful pattern of what he has been able to learn on Palaeolithic religion on the basis of rock art – *the discovery of a primal, widespread language of symbols:*

> 'Le langage visuel de l'art préhistorique peut sans doute être defini comme un langage élémentaire. Un langage si simple qu'il était utilisé par des groupes de chasseurs, il y a quelques dizaines de milliers d'années, dans le monde entier. On peut supposer que le langage universel des origines est nécessairement le même langage universel que nous portons encore anjourd'hui en nous et que, théoriquement, nous pouvons réactiver. De fait, sans en avoir pleine conscience, nous l'utilisons constamment. Il porte en lui les caractéristiques élémentaires de la logique et du système d'associations qui constituent les facteurs clés des mécanismes d'intuition, symbolisation, conceptualité et ritualisme de l'Homo sapiens, en dépassant les barrières linguistiques, ethniques et confession-nelles qui se sont formées ultérieurement, en nous ramenant aux éléments fondamentaux de la pensée, de la logique, du fonctionnement du mécanisme associatif de base, commun à tous les peuples de la terre. Des éléments qui ont constitué l'ossature de la religion des origines de l'Homo sapiens.' (Anati 1999: 130)

Further authors in prehistoric religion include: Bergougnoux & Goetz 1958; Gibson & Simpson, 1998 (*non vidi*); Leroi-Gourhan 1961, 1964 / 1976a /1983 / 1990, *cf.* 1976b, 1976c, but while establishing an indispensible canon for the interpretation of signs and forms in the Franco-Cantabrian complex, Leroi-Gourhan's approach remained formal and there is little in his work that makes prehistoric religion come to life); Narr 2018; Otte 1993; Schebesta, ed., 1962 – work by Roman Catholic priests[238] who more or less continue the tradition established in the early 20th c. CE by their col-league Wilhelm Schmidt; Wipf 1990; Dickson 1990; Harrod n.d. The specialist in the religions of the Ancient Near East, G.A. Barton, fantasised[239] on the orgiastic

his close Israeli connections, reminiscent of Wilhelm Schmidt!) in his conception of a common human primal religion, which allegedly became fragmented in the course of the Palaeolithic. This inspired him with the unconvincing claim (1999: 52) that all cultures believe in an afterlife as a better world. And what to think of the following:

> 'Les dernières recherches montrent que les différentes expressions artistiques des phases les plus anciennes, dans le monde entier, illustrent une typologie similaire, le même choix thématqiue, le même type d'associations. Même le style s'inscrit fondamentalement dans une gamme limitée de variants.' (1999: 104)

[238] So were Maringer and Mainage (*cf.* Mainage 1921: 367, where Schmidt is cited with approval and 'the Bantus' are credited with two natural cycli, one of which 'has retained a remarkably intact image of God'... ; not to forget Breuil and Teilhard de Chardin, who however were not part of Schmidt's quest for an original human monotheism. Below we will see that in all prob-ability, theistic religion only arose in the Later Upper Palaeolithic, after c. 99% of the entire life span of humans until Present had already been spent. One cannot have 'primal monotheism' without theism, which puts paid to Schmidt's pious fantasy of primal religious purity followed by more recent corruption.

[239] *Cf.* 'Orgasm gave them the divinest thrills they knew. It was to them like the later bacchic ecstasy of intoxication. Women became their goddesses. Probably they did not generalize more than the dog, but each was devoted to his mistress (?? *sic*). Women obtained similar mystic ecstasy from the experience. She did not deify man, but the erect phallus. The heart of religion is a mystic, thrill, uplift or satisfaction. Creeds, rituals, and conduct are all subordinate to this. Palaeolithic religion was, then, sex-hystirism. The psychologic unity of the race made it universal as its survivals in the historic period prove. This is the real origin

Palaeolithic beginnings of religion, mainly as a cult of fertility (an idea that later returned in his colleague Allegro's (1970) phallic / urinary reading of the religions of the Ancient Near East). Apart from the overall idea that religion has been part of the human existence since anthropogenesis, there is little to recommend this line of approach – yet we may detect distinct echoes here of Durkheim's *effervescence!*[240] Eliade 1974, 1976 offered useful, theoretically and comparatively relevant review articles.

Remarkable is a tendency to narrow prehistoric religious forms down as the

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race made it universal as its survivals in the historic period prove. This is the real origin of religion. It was not begotten by fear (Lucretius), nor by animism (Tylor), nor by ancestor worship (Herbert Spencer [1877: I, 304 *f.*]), nor by the *mysterium tremendum* (Otto), but by the *mysterium femini[n]um*' (Barton 1940).

[240] #38. *FURTHER CRITICAL REMARKS ON EFFERVESCENCE.* The reader will have noticed that I have little sympathy for 'effervescence' as one of Durkheim's more puzzling though central concepts, inspired both by Australian ethnography and by the Near Eastern / Biblical researches of the 19th-c. CE theologian Robertson Smith. I have studied ecstatic forms of religion all my adult life and at the closest possible range – engaging in ecstatic trance myself (van Binsbergen 1981, 1991, 2003a), and have extensive personal experiences with musically-induced religious trance myself. The frenzy which Durkheim seems to mean may be known to me secondarily from descriptions of mass behaviour (Reich 1946; Le Bon 1914; Devisch 1995; Baschwitz 1973; Freud 1957; Canetti 1981; incidentally, many of these altered states of consciousness are already treated in Spencer 1877, vol. I), from desperate millenarian contestation like in the end days of Lenshina's church (van Binsbergen 1981 and references there), and from lynchings, religious mass gatherings, ecstatic healing (Katz 1981). Yet I think the concept of effervescence is too general, abstract, constructed, 'armchair', and both politically and morally dangerous (*cf.* above, Fig. 1.1) to have any real ethnographic utility. In this dismissive attitude I disagree with such authors as Olaveson 2001 (who, like I myself, signals the obvious parallel between effervescence and Victor Turner's 'communitas'), Ramp (2012) and Allen (2012). The leading British anthropologist Mary Douglas, who like myself had early childhood religious experiences with Roman Catholicism, has this to say on Durkheim's effervescence:

'It is not so easy to transpose Durkheim's theory of ritual from psychology to social fact. When I first read *The Elementary Forms* I felt puzzled by his description of rituals and the alleged exciting effect on the congregation. That ritual should be seen as a rabble-rouser was a surprise as my upbringing had given me quite another experience of the big rituals of the Roman rite. Dignified, but tedious, slow and elaborate, this is the Corpus Christi procession that used to wind its way down the sidewalks of Hampstead, or the long Easter Vigil at St Josephs, Highgate. Think of the high degree of co-ordination required to bring in every participant at the right moment. The ordered use of flowers, bells, lights and organ music, and the separation of consecrated from unconsecrated elements; it is all too careful and precise to be interrupted by volleys of spontaneous 'Alleluiah' and ecstatic shouting and dancing. Everyone is worried about getting the timing right and fitting in the highly classified parts of the congregation. The choir boys have to be separated from the girls, the Embroidery Guild has to be given a place, but is it before or behind the Knights of St Columba? And where do the Friends of St Vincent of Paul go? The Boy Scouts have to line up with their banners, there must be seats for the old age pensioners. Where is the tea? Where are the matches? Nothing must be left to chance.' (Douglas 2003 / 1970: xvi)

But, only too clearly aware of the structural differences between the world of the Australian Aboriginals and modern British urban mass society, Douglas must be saying this tongue-in-cheek. Like in much or her other work, here she is not so much after an ethnographic inventory of cosmologies and their religious implication, but after problems of rule-giving, pattern, order and control.

actions of shamans and sorcerers),[241] and to hypothesise (with Anati 1999, as we have seen) one fairly uniform hunter-gatherer religion, with near-global distribution and extending over tens of ka.

Díaz-Andreu 2001 has criticised this extreme over-simplification and spoken out against the empirically ungrounded sweeping generations circulating in this connection, *e.g.* in the prolific and widely applauded work on Southern African, San and Khoekhoen and Franco-Cantabrian rock art, by Lewis-Williams, Dowson, and their associates including Clottes.

Today, one and a half decades later, this tendency (as manifest in conference discussion and papers) is even more marked, reinforced by post-modern disdain of empirical and theoretical considerations, and the old-fashioned ethnographic empiricist is bluntly relegated to the ranks of incompetence and ignorance if she or he fails to applaud the science fiction of entoptic and shamanic reification that, in some peripheral circles at least, passe for accomplished modern rock art studies.[242] Meanwhile a global movement

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[241] *E.g.* Hayden 2003; Clottes & Lewis Williams 1996; Maringer 1977; Campbell 1992; Carr 1995.

[242] *#39. LEWIS-WILLIAMS AS AN ETHNOGRAPHIC FIELDWORKER?* The main point here is methodological. I found no evidence that Lewis-Williams's *ethnographic* (as distinct from archaeological) research meets the very strict criteria of anthropological fieldwork for the collection of qualitative, *emic* aspects of culture – where time as a measure for validity and reliability is counted in years, not weeks, and vast knowledge of the actors' original language and culture is indispensable (Naroll 1962; Ember 1986). Lewis-Williams's 1977 PhD thesis, the basis for all his subsequent work, makes mention of

> '...many years of original research on southern San rock paintings, on unpublished archival material and *o n f i e l d w o r k i n D e c e m b e r 1 9 7 5 a m o n g s t t h e ! K u n g* ; use has also been made of secondary literature which is acknowledged by the standard system of reference.' (Lewis-Williams 1977: Preface; my italics)

Of course, it remains possible that after Lewis-Williams established himself, on the strength of his splendid PhD thesis, as a leading figure, an icon even, of South African rock art studies, he engaged in new, prolonged and methodologically impeccable fieldwork, learning one of the San languages, familiarising himself with the tiniest details of San culture through a humble process of participant observation, etc. But (considering Lewis-Williams's impressive track record as an intellectual producer and academic administrator), such an extremely time-consuming and both logistically and psychologically demanding investment is somewhat unlikely, and I apologise if I have overlooked the evidence to that effect. What I have seen is arguments by Lewis-Williams in which he expertly, brilliantly, *reads* rock art iconographies, and San myths, as *texts*, and often on the basis of existing texts; but that is a very different thing from producing professional ethnographic text *from scratch, i.e.* not from pre-existing texts but from primary data mmediately based on prolonged personal participation and observation. In recent, postmodern decades it has become fashionable to speak about visual records as *texts*, but what this really means in terms of sleight-of-hand, uncontrollable procedures of idiosyncratic, unsystematic decoding, pretensions of reproducibility of etically-imposed interpretations, and lack of critical, emic feed-back from the original creators and owners of such alleged 'texts', few enthusiasts of the South African school of rock art studies seem to have stopped to consider. The issue of ethnography in the interpretation of Southern African rock art comes up repeatedly in the work of Anne Solo-

among modern inhabitants of the North Atlantic region and its dependencies has further gathered impetus: The performative, quasi-atavistic appropriation of globalised and stereotypified forms of ('neo'-) shamanism – an interesting and increasingly studied phenomenon[243] in which I have also engaged personally, by 'Becoming a *Sangoma*' (van Binsbergen 1991).
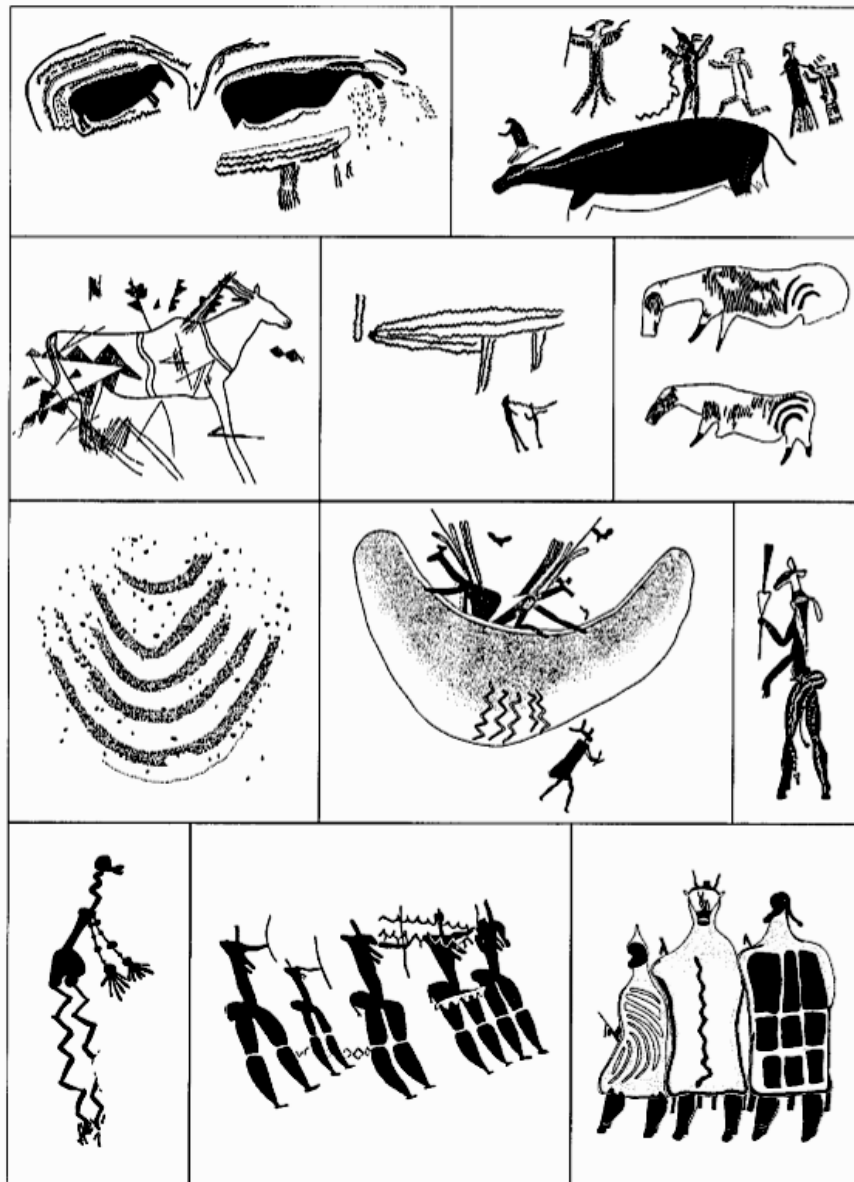
Source: Smith & Ouzman 2004: 507, Fig. 7

Fig. 8.3. Claimed 'evidence' of entoptic iconography in Southern African forager rock art

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mon (1992, 1997, 1998), but regrettably I had no access to most of her relevant publications; her eight questions for Lewis-Williams on the shamanic / entoptic hypothesis (2006a; *cf.* 2006b), however, show a healthily skeptical empirical / ethnographic positioning.

[243] *E.g.* Blain 2001; MacLellan 1995; Matthews 1996; Wilby 2005; von Stuckrad 2002; Townsend 1988.

I feel the need to stress *religious archaeology's dependence on external, interdiscipinary inputs in order to be able to identify items as belonging to the religious domain.* This dependence on a cosmology, belief system and ritual practice that are already known in detail from other sources than archaeology is also an important feature of this South African school of rock art studies. The heuristic value of this approach is further underlined when applied by the theologian van Huyssteen (2010) to the symbolism at Çatal Hüyük. Thus for the rock art of Southern Africa, meanwhile also for the Franco-Cantabrian region – Clottes & Lewis-Williams 1996 – a paradigmatic orthodoxy has developed that *e.g.* authors like Smith & Ouzman go out of their way to pay hommage to:

> 'We do not deny that entoptic imagery is present in southern African forager rock art (see Lewis-Williams 1988; Lewis-Williams & Dowson 1988: 206; Dowson 1989). It is well-established and has a restricted and distinct iconographic range dominated by angular zigzags, nested catenary curves, microdots, flecks, and grids (fig. 7). These entoptics seldom, if ever, occur alone. There are, for example, nested "U" forms [natural hives? but the identification of the specks as bees is rather arbitrary WvB] from which bees emanate, a catenary curve with zigzags below two parthuman, part-animal figures or "therianthropes," another therianthrope with geometrics spilling off its cloven leg, a human figure with zigzag neck and legs, hallucinatory rain-animals [nothing identifies them as connected with rain, except the accumulating conventions of modern Southern African rock art studies] surrounded by zigzags, and geometric markings on animals and therianthropes. Microdots and flecks are used to indicate concentrations of supernatural[244] potency (see, *e.g.*, Dowson 1989: 91). In terms of the three-stage neuropsychological model established by Lewis-Williams and Dowson (1988), these iconic examples are stage 2 "construal" hallucinations. They seldom occur as free-floating image isolates because their meaning relates to specific contexts known [*sic*] to have been supernaturally [another *etic* imposition] potent.' (Smith & Ouzman 2004: 505 *f.*)

But when, with this paradigmatic statement in mind, we take a skeptical look at their Fig. 7 (here reproduced as Fig. 8.3), we see quadrupeds, a natural bee hive, the repeated use of zigzag forms, but little, if anything at all, that necessarily induces, or compellingly suggests, 'altered states of consciousness'. Smith & Ouzman's reading here is an exercise, not only in paradigmatic fidelity, but in intertextuality: not between researchers and makers with their own *emic* categories, but between researchers *tout court*, within a sub-discipline.

So dominant is the entoptic paradigm (also *cf.* Carr 1995), that another member

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[244] As if the *supernatural* constitutes an obvious universal category; and again this claim is made, not by any *emic* meta-text provided by the creators of this iconography, but by the accumulating conventions of Southern African rock art studies. The specialist on Native North American religion, Åke Hultkrantz (1983) insists that even the most 'primitive' religion cannot exist without the concept of the supernatural, and criticised both Durkheim and Worsley from this perspective; however, he does not stop to consider whether, half a millennium after the forceful introduction of Christianity, we may still expect to encounter unadulterated preconquest religious concepts, nor does he investigate what thought instruments are required to render the concept of the 'supernatural' at all thinkable – and whether these thought instruments could be claimed to be in place in pre-conquest North America.

of the South African school, Loubser (2010) even goes to the extent of making

> 'the metaphor "Things Are Embodied Mindscapes" '

the centre of his religious archaeology, thus almost turning an empirical science into a *petitio principii,* for how (unless by paradigmatic, sub-disciplinary etic imposition!) to read the things if we have no direct access to the mindscapes through years of personal cultural and linguistic participant observation and interaction?

A prominent author in the exploration of religious and paranormal forms in space and time, the anthropologist Winkelman (2004) has this to say about shamanism:[245]

> 'Neurotheo-logical approaches provide an important bridge between scientific and religious perspectives. These approaches have, however, generally neglected the implications of a primordial form of spiritual healing – shamanism. Cross-cultural studies establish the universality of shamanic practices in hunter-gatherer societies around the world and across time. These universal principles of shamanism reflect underlying neurological processes and provide a basis for an evolutionary theology. The shamanic paradigm involves basic brain processes, neurognostlc structures, and innate brain modules. This approach reveals that universals of shamanism such as animism, totemism. soul flight, animal spirits, and death-and-rebirth experiences reflect fundamental brain operations and structures of consciousness. The shamanic paradigm can contribute to a reconciliation of scientific and religious perspectives by providing a universalistic biopsychosocial framework that explicates the biological underpinnings of spiritual experiences and practices and provides a basis for neurotheology and evolutionary theology approaches.' (Winkelman 2004)

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[245] Also *cf.* the entry on rock art in Harvey & Wallis 's recent *Historical Dictionary of Shamanism* (2007: 251):

> 'ROCK ART. The association between rock art and shamanism is enduring, with the "sorcerer" in the cave of Les Trois Frères in the Dordogne, France, often being cited as a Paleolithic shaman [*cf.* Fig. 9.32.l, below – WvB]. Such an association is exaggerated by the perception that shamanism is humanity's oldest religion (*e.g.,* Riches 1994, Ripinsky-Naxon 1993, McClennon 1997; Harner 1968, 1972, 1973; Hayden 2003; McClenon 2002) and that cave art marks the origin of art (*e.g.,* Lommel 1967). This, alongside recent theorizing of a shamanistic interpretation of rock art in an extensive body of literature, indicates that a separate section of the bibliography on rock art is pertinent. As the dictionary entry suggests, it is important to consider that the recent shamanistic interpretation of rock art has prompted much debate, with the emotive terms shamaniac and shamanophobe being exchanged between scholars. After David Lewis-Williams and Thomas Dowson (1988) made the initial suggestion of a neuropsychological model for interpreting Southern African rock art and Upper Paleolithic cave art, many rock art scholars applied the model to other traditions across the globe (*e.g.,* Sales 1992, Whitley 1992, Dronfield 1996, Bradley 1997, Patterson 1998). Overall, this has risked the shamanistic interpretation becoming a meta-narrative, as various commentators argued (*e.g.,* Bahn 1998, Solomon 2000). In response, Lewis-Williams and Dowson and other scholars (*e.g.,* Wallis 2002) have refined the shamanistic approach with a sensitive understanding of shamanism as diverse and culturally nuanced. The latest development involves the sophisticated deployment of animism by Dowson, offering a broader frame within which to interpret shamans and rock art in community contexts.'

Hosoi approaches the religious aspects of Jomon culture in Japan by applying, on the Japanese data, the analyses of more or less established authors on the prehistoric religion of Western Eurasia, such as Maringer and E.O. James – and find patterns (such as shamanism, the shamanic crown, and the *sacred* tree) which also have been attested in Western Eurasia. Ritual marking with the probability of representing astronomical cycles was the great discovery of Alexander Marshack (1964, 1972c, 1983, etc.). For over two decades Mithen (1996, 1998) has now explored 'the prehistory of mind', including religion; we shall come back to him in Chapter 9. Interestingly, marks have been recognised as guides to the *sacred*: dots as marks of potency (Anati 1999 / 1995; Garlake 1995); colour symbolism 'as symbolic markers dividing *sacred* from *profane*' (Wasilewska 1991); and the zigzags noted above.

The question as to what allows us to interpret prehistoric data in religious terms is more easily answered if, on the ground, we are dealing with specific, easily identifiable objects that have been treated, by the historical actors, in ways that are far from pragmatic or common-place and that therefore are unmistakably suggestive of religious beliefs, *e.g.* the human-skull cult in the prehistoric Near East (Bienert 1991).

Well-known for his work on North American traditional religion, Hultkrantz proposes a religio ecological method for research on prehistoric religion (1975). Some of the dilemmas of interpreting prehistoric artefacts without meta-text yet as religious have been recognised by Peter Jackson (2004).

Common usage in the discussion of rock art (*e.g.* that of the Franco-Cantabrian region) is to call the caves in question 'sanctuaries' or shrines'. Their painted nature is then an important argument. It is possible that this identification as places of collective worship is correct, but on what empirical and methodological grounds is it taking place? The quest for a prehistoric, primal religion which seems to provide an ancient charter for present-day religious practices appears to have a particular appeal, and to be inspired by ideological rather than scientific motivations. Thus creationists who seek to vindicate the Judaeo-Christian, Biblical record of creation, can be seen to eagerly appropriate, on the Internet, reports on 'Stone-Age Sanctuary, Oldest Known Shrine, Discovered in Spain' (Simon 1981):

> 'Scientists declared the ancient structure a religious sanctuary based on three criteria. First, it is a large structure that required the effort and cooperation of many people to build. Second, it has features that are unnecessary for daily living. Third, the structure is associated with a supernatural being. Scientists noted that the stone floor of the sanctuary shows a great deal of wear, indicating that it saw a lot of use. The worship center included an altar made of a limestone slab weighing nearly a ton. (...) The shrine also had a stone sculpture of a head. The right half of the head is human and the left half of the head is a carnivore of some sort. Worshippers at the site had separate storage places for sewing needles and hunting tools [for, with the typical presentist ethnocentrism and lack of historical imagination of *creationists* and other modern fundamentalists, of course the women brought their mending jobs and the men rushed to

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worship without even given themselves time to properly store their spears in the tool shed...– WvB] (Anonymous, n.d., 'Creation moments).

The temptation to read time-honoured *sacred* images of a present-day world religion into the archaeological record has been considerable, and has particularly affected Palestinian archaeology with its present-day role in legitimating or contesting the state of Israel. Even the specialist in rock at studies, Anati, cannot refrain from suggesting that the upright stone slabs he identified in the Sinai desert, *may well be* (which is quite different from: 'may well have inspired the story of...') the stone tables brought down by Moses from Mount Sinai, inscribed with the Ten Commandments (*Exodus* 24:12*f.*). Yet sometimes it is difficult to consider the site in question as anything else than a prehistoric shrine – *e.g.* the Upper Palaeolithic site of Har Karkom in the Mount Sinai region, Israel, as discovered by Anati. Another common locational term in connection with prehistoric religion is that of 'astronomical observatory'; here the evidence is somewhat more tangible since it is often possible to interpret features and patterns in the archaeological record in astronomical terms against the background of an objectively reconstructed pattern of the heavens for the relevant period and region.[246]


Source: http://www.harkarkom.com/Gallery.php?image=166, with thanks; © 2001-2016 by Emmanuel Anati; Anati (1999: 136 *f.*); original caption: 'Fig. 25. One of the structures referred to as "private sanctuaries". A large vertical stone leans against a rock which emerges naturally from the surface. A series of stones form a small repository in front of the pillar where a few flint implements were found. To the right of the structure is a collection of stones which have natural shapes resembling human faces. They were obviously brought and collected there by human beings. (Site HK 13; photo EA96: VI-18; WARA W05886).'

Fig. 8.4. A so-called 'private sanctuary' at Har Karkom, Negev, Israel, c. 35 ka BP according to the discoverer Anati

An apparently even stronger case for a Palaeolithic shrine is that published by Kenoyer *et al.* (1983) for India; present-day local religious practices helped to

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[246] For a fairly exhaustive recent overview of the field of archaeoastronomy, *cf.* Ruggles 2015; *e.g.* on prehistoric Eurasia: Parts VII and VIII, pp. 1133 *f.*

interpret its details and even suggest an theistic identification for an eroded possibly anthropomorphic statuette found *in situ*.[247]
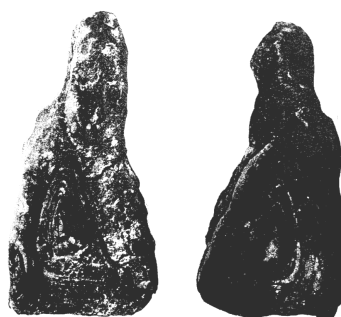
Source: Kenoyer *et al.* 1983: Plate X

Fig. 8.5. The Baghor I alleged shrine, Madhya Pradesh, India, Upper Palaeolithic, obverse and reverse, height 15 cm

Source: https://1.bp.blogspot.com/-wSrLX0_JodY/VQMGOHOoavI/AAAAAAAAMMI/hu1-Nm8QVjk/s1600/JuyoFace.jpg, with thanks; *cf.* http://portablerockart.blogspot.nl/2013/12/el-juyo-cave-santander-spain-one-eye.html

Fig. 8.6. Apparent representation of a human face, El Juyo Cave, Santander, Spain

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[247] #40. *CAN ARCHAEOLOGY IDENTIFY SHRINES ON ITS OWN IMPETUS?* Above, when considering the merits of religious archaeology, we had to conclude that by its own impetus and independently, without access to *emic* data from other sources, archaeology is unlikely to capture past religious expressions with any degree of certainty. Can archaeologists identify shrines in pre- or proto-history? Claiming 'very strong probability' (Kenoyer *et al.* 1983: 88) that they have in fact correctly identified a shrine built by Upper Palaeolithic hunter / gatherers in Baghor I, Madhya Pradesh, India, the confidence of these authors in their claim derives not only from an impressive scatter of artefacts around a stone platform (indication of repetitious localised behaviour of possibly but not compellingly a religious nature), but particularly from analogy with triangular village shrines still in operation in the region, and from the general background of latter-day Hinduism venerating, under the heading of *Shakti*, a benevolent female presence overseeing the relationship between humans and nature. *Cf.* Fig. 8.5. The case is not without parallels in religious archaeology. When in the 1950s at the El Juyo cave, near Santander, Spain, a rocky sphere was found with the appearance of a human face, one eye close as if winking, the step was hastily made (Freeman *et al.* 1983) to consider the rock a divine representation and the case a religious sanctuary. Too hastily, I am afraid, and without asking any of the theoretical and methodological questions highlighted in the present argument. When, a decade later, Marshack (1964, 1970) launched his eye-opening claim to the effect that repetitive indentations / incisions found in much Upper Palaeolithic mobile art could be interpreted as lunar calendars, a careful microscopic examination of the artefacts in question was used in order to identify the lines as deliberate, systematic, resulting from tooling. I am not sure if in the El Juyo case such an examination has taken place.

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The extent to which the identification of a prehistoric shrine does depend on the mind-set the researcher brings to the scene, will be clear from the perceptive remark made by C.C. Wrigley in relation to the interpretation of Great Zimbabwe, the major icon of Southern African prehistory:

> 'It is well known that, when investigated by Anglo-Saxons, Africans appear to be hard-headed farmers and village politicians, whereas francophone scholars find the continent peopled by philosophers and symbolists; and two recent comments on Great Zimbabwe provide an almost comical illustration of this contrast. Luc de Heusch, drawing on Shona myths reported by Frobenius, decides that 'the temple...is an enclosed anthill designed to link earth and heaven, to regulate rainfall under the sign of Venus'. For David Beach, on the other hand, who does not include Frobenius in his bibliography, the building in question is a grandiose cattle kraal, a kind of Southfork, displaying the power of successful ranchers who had made a second fortune out of gold. However, the opposition is not really as stark as might be thought. As a Belgian de Heusch is well placed to mediate the Anglo-French contradiction. Levi-Straussian in their procedures, his investigations of Bantu myth and ritual are largely Frazerian in content. Though he wants us to move away from the increasingly sterile political functionalism that still dominates the study of African culture and history, he remains firmly positivist. The intricately woven pattern of Bantu symbolic thought, with its oppositions of heaven and earth, king and queen, sun and moon, rainbow and lightning, eagle and python, fire and water, has as its basic reference the supreme material interest of those who live on the African savannas - an adequate supply of rain.'

No doubt one-sidedly, I have stressed the contribution which religion is likely to have made, from the beginning of humankind, to the intact retention and transmission of vital cultural material. Other authors on prehistoric religion have looked, not so much for religion as a mechanism for the survival of cultural items but for the survival value of religion as such. Here Dunbar *et al.* have broadcast Tanner's (1978) idea that divination may simply have the advantage of randomising behavioural choices in a productive situation (*e.g.* hunting and gathering) where distributions and opportunities are random.[248]

Paul (1956) claims continuity between a local prehistoric cult and present-day practices in Muslim Darfur, Sudan, which avoids the question as to the criteria by which the prehistoric data are identified as religious. But even in the earliest explorations of the Franco-Cantabrian painted cave complexes, the pioneer researchers believed they could identify shrines. *e.g.* Fig. 8.7:

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[248] Of course, Tanner's hypothesis is predicated on the general debunking attitude of social-science studies of religion, assuming: religion can only be make-believe, so divination is per definition a nonsensical play with figments of the imagination, so its survival can only rest in some unintended socio-economic advantage that divination unexpectedly brings. As a certified and practising Southern African diviner, I beg to differ. In my divinatory practice since 1990, I have been constantly confronted with the reality of (selective and distorted) extrasensory (including telepathic) knowledge of what goes on in the minds of other humans, and I have repeatedly tried to grapple with the ontological difficulties such experiences pose to me as a senior scientist not unaware of statistics, methodology, and epistemology (van Binsbergen 1991, 2003a, 2013a, 2015b).

Fig. 8.7. The niche at the Altamira underground complex, after Breuil
(Mainage 1921: Fig. 140, p. 285) – an Upper Palaeolithic natural shrine?

The problem of how to identify a shrine (if any) in the prehistoric context where meta-texts are absent, exists even *a fortiori* in relation to the interpretation of whatever prehistoric iconography: *How to read prehistoric images without meta-text?* One example is the following Fig. 8.8 from the La Madeleine prehistoric site in Dordogne, France.

(a)

(b)

Source: (a) Mainage 1921: Fig. 192, p. 354, derived in turn from: Breuil & Obermaier 1935: 125; (b) https://www.gettyimages.nl/detail/nieuwsfoto's/prehistory-france-paleolithic-reindeer-horn-with-carvings-nieuwsfotos/122212881, with thanks

Fig. 8.8. Graphic design on a reindeer horn from the La Madeleine shelter,
Dordogne, France, dated at 12 ka BP

Comparative mythology suggests at least one possible reading for this en-semble, which was recently reinterpreted, disenchantingly, as a simple record of eel fishing (Brown *et al.* 2017). This representation could be argued to show a large snake (symbol of the earth, or of the Rainbow Serpent? note the parallel with the Mal'ta snake / waves tablet, 20 ka BP – Fig. 8.10 in this book), two horse heads (the horse is a common symbol of the heavens? but why two?), a prognate, sexless anthropomorphic figure (as dweller on the bottom of the heaven? *cf.* the extensive etymology in *Appendix IV*, below) carrying a forked stick on the shoulder (the celestial axis?), while the available space is filled in with numerous horizontal minor elements that might represent foliage (reed or fern often spreads its leaves horizontally) or fishes / birds as the conventional inhabitants of the Waters Above and Below. But exciting as such a reading may sound, for the time being it is scarcely more than just one present-day scholar's projection of more familiar, more recent material onto the prehistoric un-known. Of course, the obvious way to attain greater certainty in the interpreta-tion of prehistoric iconographies would open up if we were to have a systematic, coherent, intersubjective theory of prehistoric *emic* themes – listing a limited number of mythical themes and applications, so that we would have a fairly reliable template against which any specific prehistoric iconography could be held and which would yield less than a handful options of interpretation. Recently, attempts have been made by Comparative Mythologists to produce such a template,[249] but we have still a very long way to go.

Whatever our attempts to interpret prehistoric images of this kind, we con-stantly hit upon another problem: the probably anachronistic projection of a modern notion of 'Nature'. Although the contents of Fig. 8.8 strongly suggests a reality that in modern discourse would be designated 'Nature' (plants, animals, the earth, perhaps the sky), it is extremely doubtful whether the concept of Nature, with its implied juxtaposition of human and non-human world, could at all have existed in the Palaeolithic. As Anati writes insightfully although with considerable exaggeration (1999):

> 'Le milieu et la nature, tels que nous les voyons et les définissons aujourd'hui, sont des thèmes presque inexistants dans l'art du pleistocène....[and the same applies to present-day pre-logocentric peoples such as the Australian Aboriginals:] Toutefois le paysage, les mon-tagnes, les arbustres, le ciel et la terre ne sont pas représentés dans leur art.' [250]

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[249] *Cf.* Witzel 2012; Harrod 2010; van Binsbergen 2006a, 2006b, 2010a, 2011e. Chapter 9, below, mas-sively leans on such lists.

[250] Exaggeration, for although Anati's point is well-taken, it would be quite possible to interpret certain aspects of prehistoric iconography as depiction of precisely the items that Anati denies depiction here. Fig. 8.8 is a case in point: although everything in the image may be sheer fantasy and myth, yet we seem to make out foliage, and fish. Several other examples from the Upper Palaeolithic come to mind. The point is not so much failure of prehistoric humans to depict elements of their immobile non-human environment (animal depictions have been numerous anyway, plant depic-tions more rarely so but still recognisable); the point is that 'Nature' as a category is unlikely to exist yet because this concept presupposes a transcendent, dissociating gaze upon the non-human sur-

In addition to interpretation, another problem confronting us in the study of prehistoric religion is that of the time scale. It took the study of prehistory centuries to emancipate itself from the narrow constraints of the Biblical time reckoning, which even to an incomparable genius like Isaac Newton was still a major intellectual inspiration, which nearly two centuries later still dominated the discussion around Darwin's theory of evolution – and which again almost two centuries later is still vocal in the form of Creationism (van Binsbergen 2018 and references cited there). Perhaps even present-day researchers have the tendency to situate the essential steps in the emergence of human culture primarily in as recent a period as the Upper Palaeolithic; the emphasis on the 'human (*e.g.* symbolic) revolution' which still captivated palaeoanthropology in the 1980s is a case in point. True enough, the Upper Palaeolithic is when we see an abundance of bodily adornment, symbolic articulation of human group formation, indications of socio-political inequality and long-distance relations, but meanwhile it has become clear that most of these developments were foreshadowed in the Middle Palaeolithic if not earlier. In this respect the many-faceted work by Robert Bednarik has been most illuminating: insistently stating the case for use of symbols, representative art, seafaring, as much as scores, sometimes hundreds, of ka before the commonly agreed dates. A similar orientation may be underlying the present argument: initially believing I could reconstruct the emergence of religion in the Upper Palaeolithic if not even as recent as the Bronze Age (*e.g.* in the temple workshops where Assyriologists have since long discerned the beginnings of organised religion, near that of the state, writing, and proto-science), I am now ending up with a combined view which sets the emergence of *t h e i s t i c* religion, admittedly, relatively late (ca. 20 ka BP, when more than 99% of humankind's cultural history until now had already elapsed! – so much for Wilhelm's primal monotheism), but admitting that, by my definition, probably religion has been part and parcel of human life ever since the beginning – so that the emergence of spirituality, as an implication of self-reflective thought, seems to be part of anthropogenesis in ways present-day, agnosticism and atheism (including my own) would find difficult to accept.[251]

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roundings, that we would rather associate with the much more recent, emerging logocentrism of the Early Bronze Age, in literate and statal Mesopotamia / Elam and Egypt. Neither is the depiction of the sky totally unheard of in prehistoric iconography: Rappenglück (1999) presents an extensive study of many prehistoric depictions that might qualify, as preparation for his main thesis, the astronomical interpretation of a central scene at Lascaux; an even bolder alternative reading of the same scene in terms of a prehistoric cosmology of the cyclical transformation of elements above is offered in van Binsbergen 2012d: 183-199. And above we have seen how even Neanderthal / Mousterian artefacts might be interpreted in this light.

[251] #41. *IS RELIGION THE NATURAL CONDITION OF HUMANKIND (JUNG)? ONTOLOGICAL OSCILLATION AS AN ALTERNATIVE VIEW.* Are we to go back then to a position like Jung's, according to whom religion is the natural condition of humankind, and atheism a more or less diseased aberration? I am in no position to answer this question, for although I have played many religious roles in the course of my life, right up to the present day, including that of Roman Catholic choirboy, diviner-healer in an Southern African ecstatic cult (*sangoma*), and although I regularly make offerings to my ancestors, to an Islamic saint, and the major gods of Hinduism and Buddhism at the various shrines which clutter my home, yet I am absolutely convinced that these supernatural beings have no objective independent

How do archaeologists identify items as 'religious' in the prehistoric record? Used to attribute, often precipitatively, some ritual or magical use to artefacts whose practical use is not immediately clear, authors on prehistoric religion have shown themselves to be rather inventive in the attribution of modern religious categories such as *holiness, myth, god, ritual* to the artefacts they study. In fact, it is almost a cliché of archaeological description to indiscriminately use such qualifications as 'ritual' or 'magical' for any object whose practical use is not immediately clear by extrapolation of present-day usages and technologies. Often the grounds for such attribution remain undisclosed, and usually these grounds are shaky, if existing at all.

For instance, Fig. 8.9 is claimed by the distinguished prehistorians Bandi, Breuil, and Lhote (Bandi *et al.* n.d., ca. 1958) to present a rain myth, depicted on an ivory tablet from the Abri de la Madeleine, Dordogne, France, found and published in the decades around 1900 CE. The same book presents a picture of what the authors call 'a holy stone with human head', from the Ouan-Sidi site, Eastern Erg, Sahara, Africa. The authors assert that in the animal depictions of San rock art in Southern Africa we have to do with *divine* images:

'Zoals bij alle oude culturen waar deze goddelijke dierafbeeldingen overleefden hebben wij hier met godenbeelden te doen en men stond zeker niet minder dicht bij de god/natuur door haar met het goddelijke dier te vereenzelvigen'	'As is the case with all ancient cultures where these divine animal depictions have survived, we here have to do with divine images, and if the prehistoric actors identified god / nature with the divine animal this can certainly not be interpreted as a sign of distance' (Bandi *et al.* n.d.: 168; my translation

Myths as recorded in historical times, among *South African* prisoners, by the pioneer Bantu linguist Wilhelm Bleek in the mid-19th c. CE, and much later published by his daughter in the 1930s, are used to interpret many millennia-old rock-art iconographies from (8,000 kms away) Upper Palaeolithic *France*, to which (somewhat in the same vein as Anati) the greatest possible relevance is ascribed:

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existence nor powers to manifest themselves directly in the material world, *outside our minds and outside our rites.* But I am equally convinced, precisely as a result of knowledge and experience gained in the course of playing these roles and engaging in these forms of devotion throughout my life, that as a *result of our thoughts and of our rites, these supernatural beings take on a virtual existence which can certainly manifest itself in material reality and make a difference there.* It would be rash to ask for a explicit, discursive, theoretical explanation on this point – the state of affairs I have just sketched appears to me the fundamental make-up of reality, of the universe, with which we can communicate and which we can mobilise to an incredible extent once we embrace this condition of being connected, even though our capability at reflective thought propels us in the opposite direction, that of absolute dissociation from the not-I. I am indebted to my dear wife, Patricia, for helping me to bring some clarity in my thinking on these points – ever since our marriage was brought in turmoil when, a quarter of a century ago, we both allowed ourselves to be co-opted on the path towards *sangoma*hood. So, in a way that appears to totally match the fundamentally oscillating structure of reality at large, I may be considered both a believer and a non-believer at the same time, and such a formulation may even convey the essence of religion to the widest extent of our mental capacity. *Cf.* van Binsbergen 2018.

'Zo blijken de Bosjesmannen de echte dragers en erfgenamen van een wereldbeschouwing te zijn, waaruit de gehele oudste rotskunst van Eurafrika is voortgekomen.' (Bandi *et al.* n.d.: 148)

'Thus the Bushmen turn out to be the true carriers and heirs of a world view from which the entire oldest rock art of Eurafrica has emerged ' (Bandi *et al.* n.d.: 148; my translation')

Source: Bandi *et al.* n.d.: 157, Fig. 51. The myth collections of the Bleeks, hailing from Southern Africa in the 19th and early 20th c. CE, are claimed, by Bandi *et al.*, to constitute sufficient ground to confidently interpret this scene from a France Upper Palaeolithic site as a rain myth! The distance from Dordogne to Southern Africa is c. 9,000 kms. The time difference between the Magdalenian culture and the Present is c. 20,000 years...!

Fig. 8.9. Alleged representation of what the authors Bandi *et al.* explicitly identify as 'a rain myth', depicted on an ivory tablet from the Abri de la Madeleine, Dordogne, France.

The point is not so much that such extreme continuities in space and time are totally impossible and totally inconceivable. In fact, much of my comparative research over the past few decades has been geared to the identification and empirical substantiation of such massive continuities in space and time (*e.g.* in the domain of granulation and leopard-skin symbolism, and in the domain of a transformative cycle of elements; van Binsbergen 2004a, 2012d; van Binsbergen & Woudhuizen 2011: *passim*; the findings on granulation are summarised in Appendix III, at the end of this book, but those on the transformative cycle of elements are so extensive that summary is hardly possible and the reader is to be referred to the publications cited. But while I am thus exceptionally sympathetic vis-à-vis such claims of long-range continuity, my own painstaking research over many years justifies my scepticism in cases like Fig. 8.9, where the claimants make no attempt whatsoever to argue the enormous continuity they claim, and to advance ground why such continuity should exist in the first place. A similar, but far more sophisticated, case is the leading prehistorian Anati, whose general synthetic works revolve on the claim of a common language of symbols permeating the entire prehistoric art of the Upper Palaeolithic – but who adduces sufficient comparative material to make such a claim somewhat plausible, even though he does not enter into a theoretical discussion of the mechanisms of retention and

transmission that would make such continuity across space and time possible in the first place. In my own analysis of considerable symbolic continuity across space and time as discussed in *Shimmerings* (2011e), I claim that initiation rituals notably those relating to puberty may well constitute the highly regulated institutional context is which the condition for such retention and transmission may be socially constructed, but this is little more than a plausible hypothesis.[252]

Fig. 8.10. Snakes (*recto*) and (*verso*) spirals depicted on an ivory tablet
from Mal'ta, near Irkutsk, Russia, ca. 23-19 ka BP; excavated 1928-1930

Confidently, Bandi *et al.* speak of 'gods' in connection with the Upper Palaeolithic and with Southern African hunter-gatherers. But what was *'a god'* under such conditions? What were the conditions under which an engraved stone, such as that from the La Madeleine cave, or from Mal'ta as shown in the next Figure 8.10, could acquire *sacred* connotations? Where those the same connotations we would today attribute to them from a Judaeo-Christian-Islamic per-

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[252] *#42. CULTURAL INERTIA AND THE UNWELCOME POSSIBILITY (JUNG) OF CULTURE BEING HERIDITARY, AFTER ALL.* We have already touched on the problem of cultural inertia, and shall return to it below. For the argument's sake, let me point out an interesting though eminently counter-paradigmatic solution for the problem of such extreme retention, inertia, and transmission across vast expanses of space an time: continents, tens of millennia. This contentious solution is: the possibility that symbolic and graphic meanings may somehow, *e.g.* as archetypes (Jung), be enshrined in human genes, and thus transmitted biologically. As a social scientist, the transmission of culture through a social learning process of interaction and sensory perception is the cornerstone of my theoretical outlook. Culture is by definition learned, not genetically inherited. But however anathema to modern social scientists, the unmistakable evidence of mind-boggling continuities in space and time call for rather drastic explanations, for given the massive evidence on cultural drift, variation, variability, transformative localisation, it is almost inconceivable by standard social anthropological explanations that cultural contents and forms would remain constant or at least recognisable across tens of millennia, and across tens of thousands of kms.

spective, or from a Durkheimian perspective? If would be extremely unlikely. And anyway, how could we ever know?

The important thing is to realise that, whatever the common prehistoric heritage we all demonstrably share as Anatomically Modern Humans, in the great many cultural universals (Brown 1991; Wiredu 1990, 1996; including religious and mythological traits) that constituted humankind's collective cultural treasure prior to the Out-of-Africa Exodus (80-60 ka BP), concepts and meanings are intimately linked to the social milieu and the modes of production in which they circulate. By implication, therefore, those of hunter-gatherers of dozens of millennia ago must have undergone specific and profound historic changes before reaching modern times with their context of writing, the state, organised religion, and proto-science.

Thus alerted to some of the methodological and theoretical difficulties in the identification of religion in prehistoric periods, let us return to our earlier question: *why attempt long-range linguistic research on the elementary forms of religious life, if we have the archaeology of prehistoric religion?* The answer may be clear by now: we need long-range linguistic analysis for the simple reason that the archaeological record is not going to inform us, by its own impetus, on prehistoric forms of *religion.* What we find is both abstract and figurative iconographies, and both utilitarian and enigmatic artefacts, which may or may not have had a religious signification; since meta-texts explaining this signification are totally lacking for the prehistoric period (which is by definition without written documents), the best we can do is guess by extrapolation of religious beliefs and practices attested in proto-historic and historical times. Numerous have been the studies proclaiming to deal with prehistoric religion, but (with the exception perhaps of rich sculptural and architectural remains from the Neolithic, *e.g.* the Pre-Pottery Neolithic in Anatolia, of which Çatal Hüyük has been such a famous example;[253] or the goddess temples at Malta and Gozo in the Central Mediterranean) virtually none of them has been able to produce material evidence, including site plans and photographs, that can only be interpreted in religious terms. Admittedly, there is abundant evidence as to human burial practices ever since Neanderthal times (*e.g.* Pettitt 2011a, 2011b; Gamble 2012) – even though some of the commonly circulating evidence – including *e.g.* that on the famous Central European prehistoric bear cult – must be considered with suspicion, not to say must be faulted, on taphonomic grounds (Binford 1981; Brain 1981).[254]

Nonetheless, there is a common archaeological strategy of considering

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[253] For decades archaeologists have assumed that the fairly unmistakable shrines (spatially set apart locations with evidence of offerings focused on sculptures of beings in anthropomorphic and animal shape) found at the Pre-Pottery Neolithic (PPN) site of Çatal Hüyük, Anatolia, Turkey, were among the oldest attested. Now that Çatal Hüyük has been supplanted, in nearby regions, by other PPN sites nearly twice as old, the site no longer holds the monopoly of so many 'firsts' as before.

[254] Taphonomy is the branch of archaeology dealing with the specific find patterns resulting from (real, presumed, apparent or natural) burial and subsequent decomposition, intrusion etc.

burial evidence of religion. Wesler (2012: 30 *f.*) discusses the relevant literature. A case in point is E.O. James' severely dated book *Prehistoric Religion* (1957). However, such a focus on burial is scarcely to be avoided given the fact that much of our archaeological data on prehistory derives from burials. At any rate, also the great icon of French archaeology in the middle of the 20th c., André Leroi-Gourhan, divides his textbook on prehistoric religion (1964) in five parts: 1. the cult of skeletons; *2. mortuary practice*; 3. objects and rites; 4. religious art; and 5. an overview.

8.2.2. Burial as an indication of Neanderthal star-orientated religion?

*But even in the many cases, from the Middle Palaeolithic onward, where burial through human agency is undeniable, is it inevitably to be interpreted in religious terms? S*ometimes it may be, for which I will give the following example of the La Ferrassie-6 child burial in the Dordogne Mousterian, ca 71 ka BP.

Around the year 2000 my initial work on *mankala* gaming boards[255] worldwide had kindled my interest in the cup markings that are begint to appear in Middle and Upper Palaeolithic contexts and that especially abound in Bronze Age contexts. My attention was drawn[256] to the Mousterian infant burial at La Ferrassie, near les Eyzies, Dordogne, France (44° 57′ 07″ North; 0° 56′ 17″ East). Here[257] an infant had been meticulously buried, the head separated from the body, under a capriciously-shaped[258] rather flat limestone block covered with cupmarks. Ever since the burial was discovered in 1921, a lively industry of scholarly interpretation has developed around this burial as a whole, the limestone block, the controversial identification of the place and number of the cupmarks on it, and the interpretation of the pattern they were forming if any. An astronomical interpretation has been plausible, not only because the cupmarks were facing downwards, to the earth (indeed, as if in analogy to stars), but also because such astronomical interpretation of prehistoric patterns has often been attempted in relation to other sites, and has meanwhile developed into the flourishing sub-discipline of ar-

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[255] A form of board game, already attested in the Neolithic, where, according to intricate rules, tokens have to be moved along one or more rows of cups, and to be captured in the process.

[256] In fact by a very inadequate depiction in Levy 1948.

[257] Peyrony 1934, and numerous secondary discussions in the specialist literature.

[258] In personal correspondence, the archaeologist James Harrod (2010) suggested to me that the shape could have been meant to represent the outlines of a bison kid, but so far I have found little comparative evidence to support such a claim. Nonetheless, elsewhere (van Binsbergen 2012d: 187 *f.*) I have presented a tentative analysis of the famous Le Puits scene at the Lascaux prehistoric complex from the Late Upper Palaeolithic, advancing iconographic and linguistic grounds why the bison could be considered a symbol of the primordial Waters (Above and Below) with celestial and underworld connotations. Bisons did occur in the region also c. 70 ka BP, when the burial is to be dated, and there is a slight possibility that already by those Mousterian times the bison had a similar symbolic connotation – as a fitting overall evocation of heaven, in which the cupmarks may then have represented conspicuous major stars of asterisms. This suggestion tallies with my finding, mainly on linguistic grounds, that the bison in the European Upper Palaeolithic had aquatic connotations (van Binsbergen 2012d: 188 *f.*), in other words, standing for 'the Waters Above'.

chaeoastronmy (Schlosser & Cierny 1996; Baudoin 1926; Ruggles 2015).

The following cluster of four images (Fig. 8.11.a-d) summarises my astronomical interpretation of the La Ferrassie-6 burial block. After showing the unprocessed block (8.11.a; photo: courtesy the Les Eyzies Museum) and identifying the cupmarks on it (8.11.b), the next two images, (8.11.c) and (8.11.d), present an astronomical situation modelled with the software ®Starry Night 5 Pro. In the background, all major stars (Mag ≤ 6) are shown in their correct places 71 ka BP, with modern constellation names (no doubt totally anachronistic for the Middle Palaeolithic) in larger print; selected modern star names (no doubt equally anachronistic) in smaller print. Upon this background I have projected the outline of the limestone block and relief feature; obvious cupmarks as open ellipses, probable and uncertain cupmarks as black dots. *Orion's Belt (nos. 1, 2 in 8.11.d) provides the first clue to the identification and orientation of the limestone block pattern to the precisely reconstructed night sky at the time.* Admittedly, and as the dotted lines in 8.11.d indicate, Orion's Belt appears as too large and too far to the East on the limestone block. *The next, even firmer, clue consists in identification of the conspicuous North-South groove as the Milky Way (no. 3 in 8.11.d);* its conceptualisation as a river is attested worldwide in several mythologies[259] – also *cf.* the adjacent modern constellation Eridanus, a river name. Further fitting of the pattern of location and size of the limestone block pattern is by trial and error. In the Eastern (bottom) part of the limestone block, major and isolated cupmarks appear to roughly correspond (4) with the major stars in (d) Castor (α *Geminorum*), Pollux (β *Geminorum*) and Procyon (α *Canis Minoris*). In my interpretation of the limestone block as star map, a section of the heavens is proposed where the block's abundance of cupmarks does match the abundance of relatively very bright stars in reality. No further very precise correspondence between cupmark pattern and star pattern can be claimed, but the concentration of larger cupmarks in the centre of the limestone block tallies with the presence, in the proposed part of the night sky, of major stars such as Sirius (α *Canis Majoris*), Betelgeuze (α *Orionis*), Bellatrix (γ *Orionis*), Rigel (β *Orionis*) and Aldebaran (α *Tauri*; co-inciding, in the Figure, with the constellation name Taurus). Sirius is the brightest star in the night sky, was so most probably also 68-74 ka BP, and I propose that the isolated large cupmark with emphatically raised edges (5) is a likely candidate for identification as Sirius. Beyond Aldebaran, at the edge of the projected limestone block, we can make out the Pleiades (Messier M45; 6 in 8.11.d).

Plausible and attractive though this hypothetical archaeoastronomical interpretation is on both astronomical and comparative mythological grounds, in the light of the Duhem-Quine Thesis we cannot hope to *prove* it to be correct.

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[259] *E.g.* Australian Aboriginals; Ancient China: Silvery River, so also Japan and Korea; Gaelic: White Stream of Heaven; India: as Ganges River of the Sky; sources include: Anonymous, 'Milky Way'; Allen 1963 / 1899; Hastings 1909-1921 / 1974-1981; Toivanen & Heikki 2006. For fuller information on Milky Way conceptualisation, see van Binsbergen 2011e.
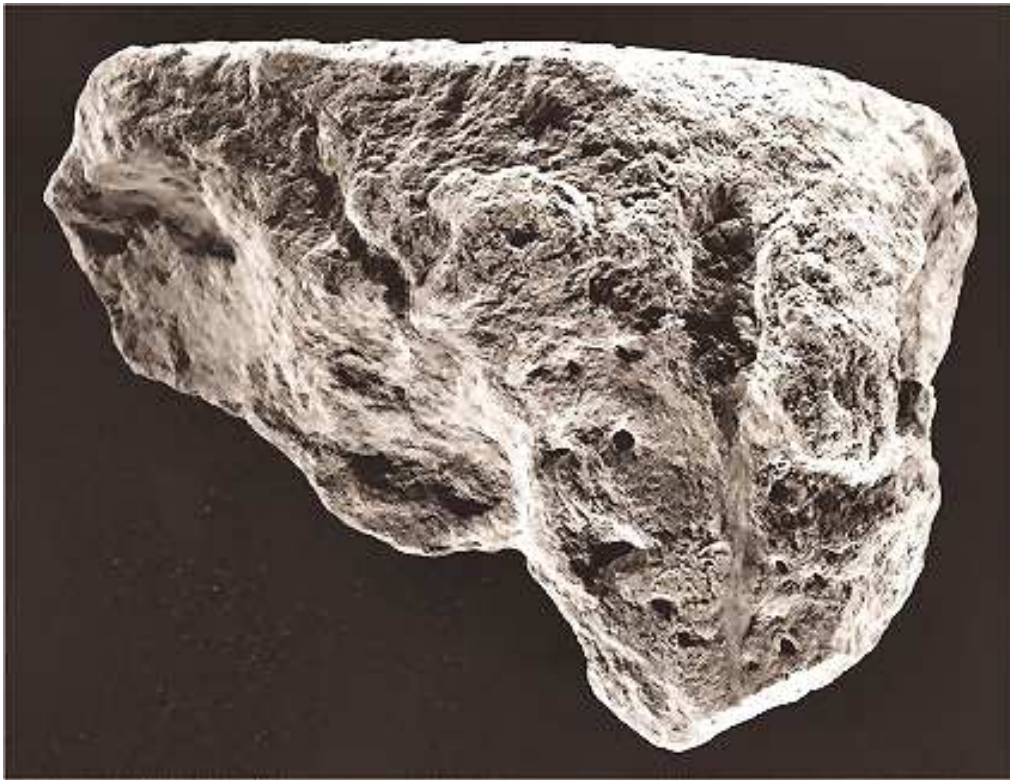
(a)
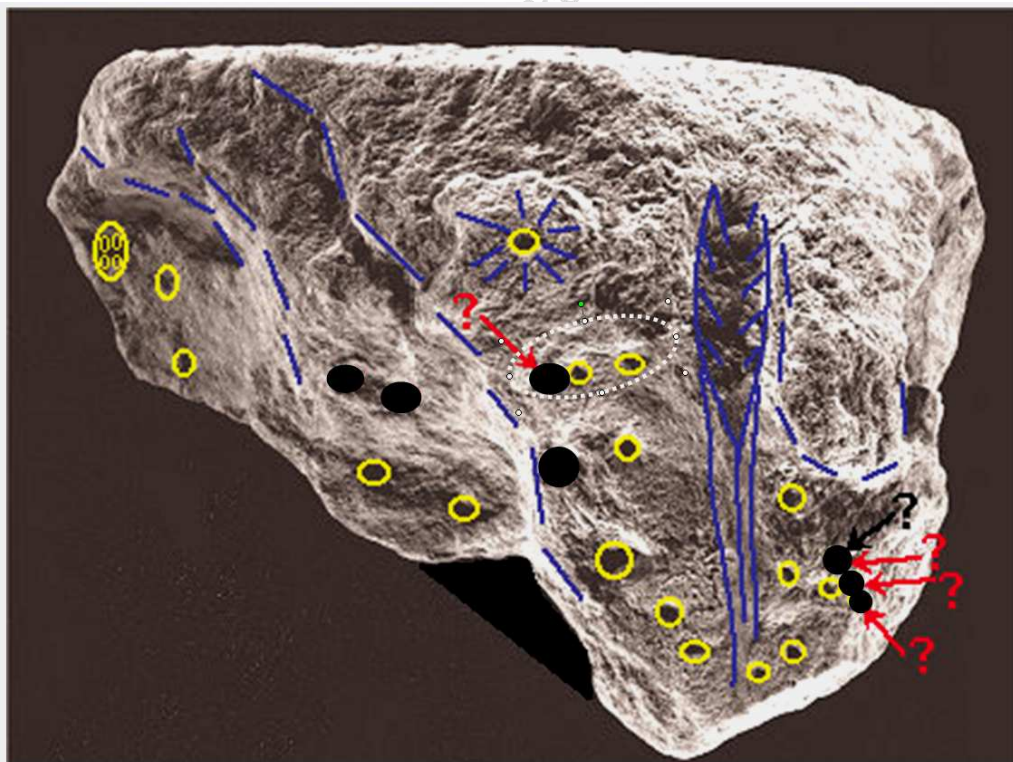
(b)
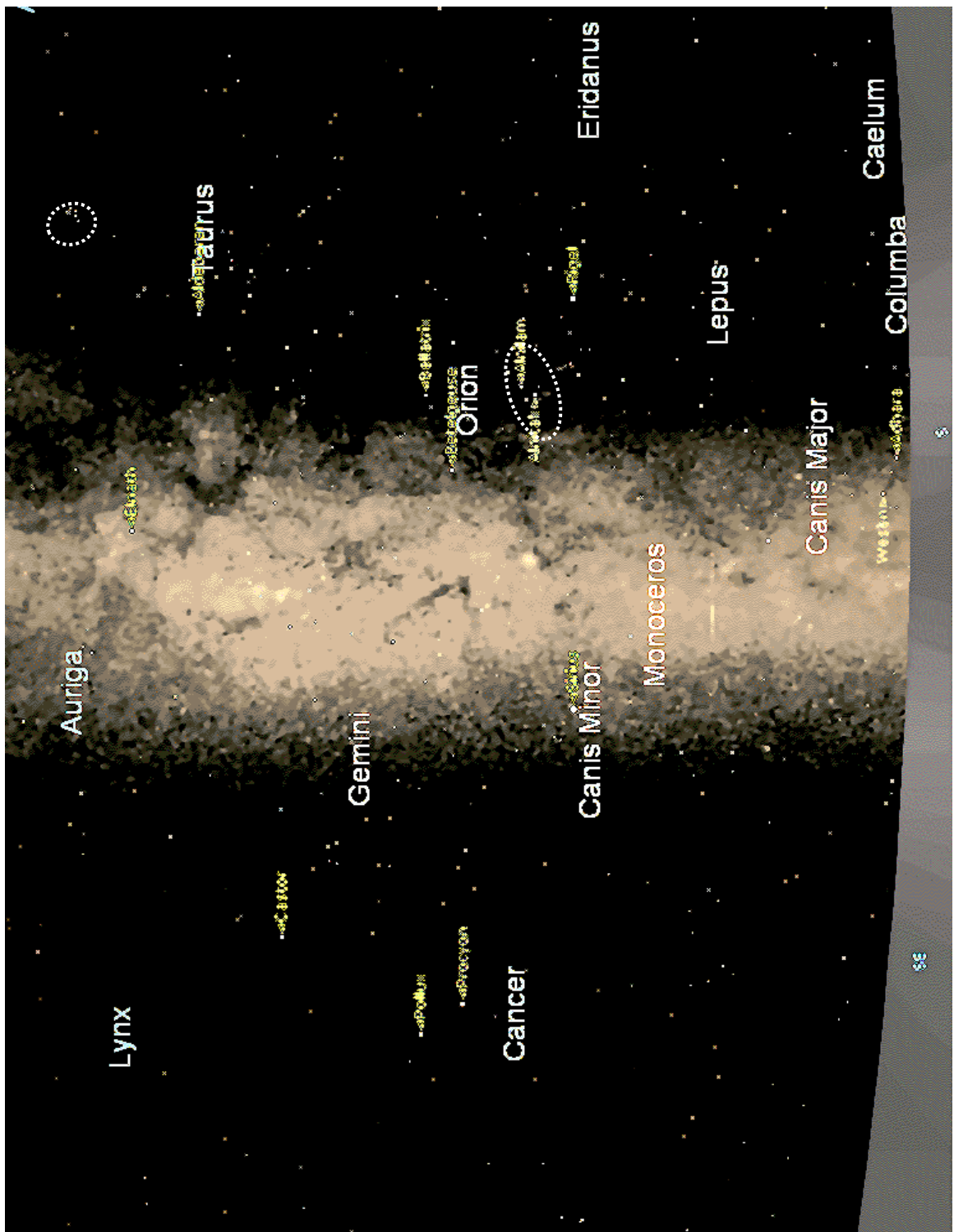
stars with Mag. ≤ 6 shown, the light central belt is the Milky Way, the larger dotted ellipse marks
Orion's Belt consisting of the three aligned stars Alnitak (ζ Orionis), Alnilam (ε Orionis), and Mintaka
(δ Orionis); the smaller dotted ellipse indicates the Pleiades

(c)

(d)

Fig.8.11. (a) The La Ferrassie-6 Mousterian limestone block; (b) with cupmarks identified; (c) the night sky over La Ferrassie 68-74 (aver. 71) ka BP (taking precession and proper motion into account); (d) one possible astronomical interpretation of the limestone block's cupmarks' pattern as a stellar map.

The attractive point about astronomic interpretations in archaeology is that, even if we lack meta-texts to explain prehistoric artefacts in the *emic* terms of the original actors, yet for every place on earth and for hundreds of thousands (not to say, millions) of years we can reconstruct in all detail the pattern of the heavens, so that we have an objective touchstone to confront the prehistoric record with, albeit under two conditions which render the whole exercise conjectural:

- the astronomical hypothesis will need to be rendered plausible in the first place, even though it runs counter to stereotyping, once *en vogue*, of the sub-human capabilities of Neanderthals!
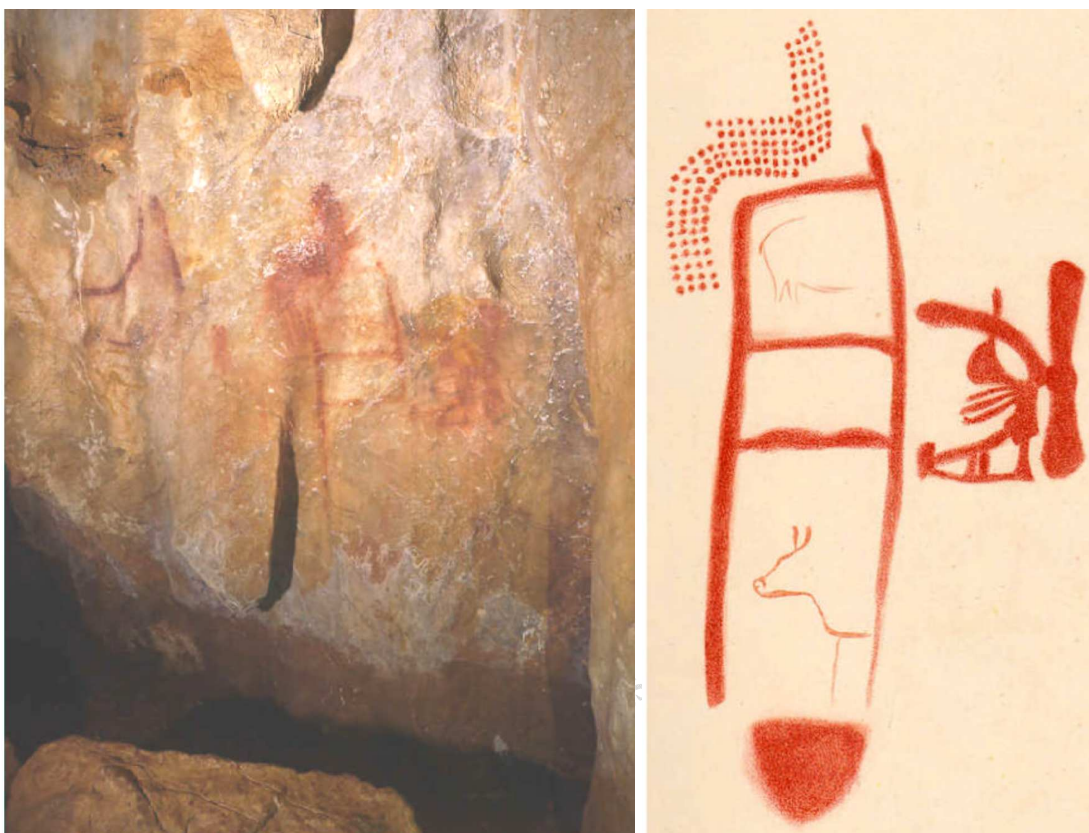- the specific astronomical feature selected and calculated is one out of several possibly relevant ones.

I closely examined that particular limestone block and many similar ones at the Les Eyzies Museum in 1999 and 2000, so that I was no longer dependent on mere drawings or photographs to determine the characteristics of the cupmarks; also I enlisted the collaboration of the Belgian experienced amateur astronomer Jean-Pierre Lacroix, who helped me calculate the relevant positions of major fixed stars during the Middle Palaeolithic, taking proper motion and precession into account – across stretches of tens of kA these two factors may render the prehistoric pattern of the heavens rather different from what we see today, so they need to be considered when we seek to interpret Middle Palaeolithic artefacts as depictions of such patterns.[260] With these precautions I felt sufficiently confident to argue that, indeed, a specific pattern of major stars c. 71 ka BP had been depicted on the limestone block – claiming it to be a very early star map. Such a claim goes well beyond the intellectual capabilities that had been attributed to the Neanderthals in the first hundred years after their discovery, but is in line with the revised appreciation of Neanderthal capabilities in the more recent literature (*e.g.* Marshack 1988; Mithen 1996b; Shreeve 1996). We had to wait till 2018 for the first publication of Neanderthal rock art (Fig. 8.12) – twenty years after my web-published analysis of the La Ferrassie – 6 burial block in archaeoastronomical terms. Considering the fairly precise astronomical fit, and analogies with astronomical human sacrifice at other times and places (see below, p. 340n), the decapitated infant may have been sacrificed to Sirius (well above the horizon at the time, as was Orion's Belt), or to the Milky Way – both astronomical items being ostentatiously marked on the limestone block – if it is

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[260] A few years into the new millennium Michael Rappenglück read with enthusiasm my 2000 preliminary archaeoastronomical analysis of the La Ferrassie-6 limestone block cupmark pattern and brought to my attention the astronomical application ®*Starry Night Pro*, the only one then on the market (at least for non-specialist use on microcomputers) to take precession and proper motion into account, notably for periods extending up to 100 ka Before of After Present. This greatly facilitated and reinforced the analysis since the complex astronomical calculations for each star separately no longer needed to be made by hand. The results presented here therefore differ significantly from those I posted 18 years ago on the Internet (van Binsbergen with Lacroix 2000), and support the astronomical internrpretation even better.

indeed a stellar map. Just at the limestone block's edge (in my present interpretation) lie the Pleiades (no. 6 in Fig. 8.11.d), to which also human sacrifices are known to have been made in proto-historical times.

Source: *De Volkskrant* 23-2-2018; same image at: http://timetravellerwiki.com/2018/02/22/case-closed-oldest-known-cave-art-proves-neanderthals-were-just-as-sophisticated-as-humans/

Fig. 8.12. A recently discovered specimen of Neanderthal rock art from the Middle Palaeolithic (left), with schematic hand copy (right)

8.2.3. Current debates among archaeologists of religion

Having touched on a number of methodological challenges and problems as manifest in fairly standard, theoretically and methodologically rather unsophisticated approaches to the archaeology of religion, let us now turn to recent debates on these points among the specialists in that field, and see whether they have spotted similar difficulties and have come up with solutions.

8.2.3.1. Aldenderfer

As is testified by a spate of recent books on the subject, in the early 3rd millennium CE the archaeological interest in religion was further enhanced, yet Aldenderfer (2011) in his synthetic overview signals widespread dissatisfaction among the scientists pursuing this sub-discipline:

> 'Over the past decade, many archaeologists have lamented over the parlous state of what is often labeled the "archaeology of religion." Although much of the problem with

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the development of a satisfying approach to the study of religion in the past lies with religion itself, a notoriously difficult concept with a plethora of definitions, archaeologists themselves must acknowledge that they too bear responsibility for this unsatisfactory situation. Archaeologists have turned to the analysis of ritual in the past because it is easier to see ritual in the archaeological record than religion. B*ut the result has been the creation of a corpus of disembodied ritual that may not fully capture the essential role that religion played in the past as a force for conservatism, transformation, or both.*' (Aldenderfer 2011: 23; my italics).

I leave it to Aldenderfer to defend the implied assumption to the effect that, with the kind of data archaeology has to work with, ritual and religion may be self-evidently told apart. In my opinion, it is not the difficulty of defining religion which is the main handicap of the archaeological study of religion, but the fact that by the very nature of their data (material remains usually lacking all *emic* meta-texts that reveal the historical authors' perceptions, beliefs and motivations) it is impossible, for most material remains, to determine with certainty whether they belonged to the religious domain, and if so, what the specific contents of the attending beliefs were. Aldenderfer suggests that if we only would opt for one particular philosophical perspective, that of Pragmatism,[261] the malaise surrounding the subject would disappear, but I think he is mistaken.

Typically, the first case study he offers (that of religion as a legitimating tool in the hands of Mae Enga big men in Papua New Guinea in the course of the last few centuries)[262] avoids the empirical question as to how to determine what is religion – Aldenderfer's answer being: not primarily from archaeological data, but from the writings of Meggitt and of Wiessner and her associates, based on contemporary ethnography, the religious, economic and demographic context is known and understood. Even though part of the period covered by Aldenderfer's case study might technically be considered *prehistory*,[263] epistemologically and methodologically the situation is not entirely different from studying questions in classical Graeco-Roman archaeology, interpreting the material remains against the background of Greek and Latin texts and scholarship's overall understanding, immensely accumulating over the centuries, of what the Ancient Mediterranean world and its religions were like.

Aldenderfer's second case study has basically the same limited scope: against an overall framework that is considered to be already mapped to satisfaction, a

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[261] *E.g.* James, Peirce, Dewey, and later followers such as Quine, Davidson, Putnam and perhaps the early Rorty. Above we have paid some attention to that school of thought in connection with Durkheim. For Pragmatism's place in religious studies, *cf.* Frankenberry 2010; Oppy 2010.

[262] *Cf.* above, note 1.

[263] Writing and the state, world religion and proto-science were only introduced to the Highlands of Papua New Guinea on any significant scale in the first half of the 20-th c. CE. Often prehistory is understood as a period lacking all written records, and proto-history as a period where written records have been available but not produced by the people under study.

specific point of Maya religious history is being tested by assessing material traces of cult frequency at places of worship.

> 'Although many early explanations evidenced a suspicion that religion and ideology played a role in the collapse, it has only been within the past decade or so that serious attention has been paid to just how religion fit into the causal mix. Holley Moyes (2006, 2007) and her colleagues (Moyes *et al.* 2009) have argued that the idea of a "loss in faith" in Maya elites and their religious activities has become increasingly popular as a potential explanatory factor of the collapse. As good as this idea sounds, it has never been adequately tested. Fortunately, Moyes and her colleagues set out to do just that by looking at changes in ritual practice within Maya caves before and during the time frame of the collapse. Through careful analysis of paleoenvironmental data, stratigraphic excavation, judicious use of ethnographic analogy, the examination and comparisons of artifacts of cave assemblages across much of southern and western Belize, and, finally, multiple theoretical perspectives on religion, they were able to define a unique ritual response to the drought. In their view, ritual practice conducted within these caves was transformed by Maya elites who used religion to ameliorate the effects of the drought and to bring rainfall back to their people. Even more interesting was that the structure of ritual performance changed significantly as the drought worsened. That is, using well-constructed proxy measures of cave use, Moyes and her colleagues were able to show that ritual was conducted in different places in the caves at the very height of the period of drought when compared to the pre-drought period and that the ritual assemblage itself changed' (Aldenderfer 2011: 28).

Aldenderfer's third case study, of the quasi-megalithic 'standing stones' of Pre-Buddhist Far Western Tibet, comes much closer to the kind of problems we meet in the study of remotely prehistoric religion, and *a fortiori*, the study of 'elementary forms of religious life' – notably, *a lack of interpretational context as may be derived from other than archaeological sources*. In the pre-Buddhist Tibetan context, the detailed outlines of the religious situation are unknown – the material record is nearly all we have. Y*et als*o even here

> 'The initial warrants for thinking these stones have a religious meaning *come from ethnography on the modern Tibetan mountain cult and its presumed antiquity*. A second, somewhat more indirect, warrant is provided by the multiple, contrasting contexts within which the stones are found. Although found in quotidian contexts – villages – they are found in special, different, or unusual spaces in and around the villages. A third warrant comes from an unexpected direction – the human propensity for the semantic categorization of visual information. Visually salient objects, such as mountains, are known as "focalizing" symbols that condense the importance of activities performed on them, near them, or within sight of them (Hanson 1994). Our eyes are drawn to the large, the unusual, and the different within the visual field, and Bradley (2000) has used this propensity to great advantage in crafting satisfying explanations about the relationships between monuments and topography. My approach, therefore, is a combination of phenomenology and practice or, in other words, how these stones might have been perceived and experienced in their varied locations. As such, this is consistent with Victor Turner's (1967) emphasis on the shared experience of religious practice (and its materialization).' (Aldenderfer 2011: 31; my italics)

I hope I am not alone in being unconvinced by the three specific grounds advanced here for the religious nature of these standing stones. The first is simply

the argument of ethnographic (as distinct from archaeological) analogy, reck-lessly projected onto an unknown (and ethnographically unknowable!) distant, pre-Buddhist past. The second ground reiterates the spurious equation:

'non-random' = 'religious'.

The third ground revolves around conspicuousness. But what is so unexpected about the truism 'mountains catch the eye?' – beyond the entirely unexpected fact that such a truism is being used as a scientific argument for certain stone formations being emically religious? Although the famous anthropologist of religion Turner in the passage cited by Aldenderfer clearly primarily means the shared experience *between Ndembu engaged in religion*, and only by implication between Ndembu and non-Ndembu fieldworker, Aldenderfer's invoking of this authority at this point may make matters worse. For, contrary to the relationship between

1. the anthropological fieldworker engaged in prolonged, culturally and linguistically underpinned participant observation and

2. the host community,

the interpreting religious *archaeologist* does not in the least have

3. a 'shared experience of religious practice'[264] with

4. the long-deceased members of the past society under study.

For (3) and (4) are and remain millennia apart, the archaeologist cannot hear *let alone understand* the original actors, and the latter cannot comment upon, *let alone correct*, the archaeologist's interpretation. The situation is made even more awkward for the modern archaeologist because he or she has at all costs to avoid the suggestion[265] (which by today's professional standards would be counter-paradigmatic, even anathema) to the effect that the 'standing stones' may belong to (what I have discussed 30 pages up as) a near-global network of such material constructions from the Bronze Age onward, and share in some sort of 'megalithic' worldview that would help us decide on the religious nature, or not, of individual apparently megalithic cases.

8.2.3.2. The case of South-western Iran: Again a known background context; repetition and non-randomness as archaeological operationalisations of religion

Also in the case of prehistoric South-western Iran our interpretation of remains as

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[264] Turner 1967: 351; characteristically Aldenderfer does not give the page reference.

[265] Clearly proffered by the dated travelogues cited; but also *cf.* van Binsbergen & Woudhuizen 2011: p. 378, Fig. 28.14.

'religious' is greatly aided by our extensive knowledge of the historical religious forms of the region, from at least the Neolithic on. This is what Karen Johnson (2004) has to say about the problem of doing an archaeology of religion:

> 'To be sure, there has been and continues to be ample scholarship in archaeology on the topic of religion. An unmistakable theme of this literature is the notion that extracting past beliefs from material residue alone is a perennial problem with many caveats attached. In general, these studies proceed by providing definitions for a series of relevant terms (religion, ideology, ritual, sacred, etc.), discussing the kinds of activities that tend to recur in religious practice, describing the material correlates of those activities most likely discernible through archaeological methods, and integrating ethnographic and ethnohistoric data where relevant. (...) The nature of religious ritual as a repeated act often performed with a designated set of artifacts in a delineated area provides the basic foundation for many archaeological methods investigating religious practice. In a study of formative Oaxaca villages in Mexico, K. V Flannery (1976) describes a "contextual analysis of ritual paraphernalia" based upon the idea that artifacts used in religious ritual should present nonrandom use and discard patterns, which upon analysis can offer insight into the beliefs that structured the ritual behavior in the first place (*cf.* Marcus & Flannery 1994).[266] Studying changing patterns of public architecture and space that are frequently the venues for ritual action contributes another data set with which to evaluate religious practice and belief (Flannery & Marcus 1976a, 1976b). Following similar postulations, C. Renfrew has proposed[267] a useful outline for identifying material indicators for ritual. In addition to the domains of (1) ritual paraphernalia and (2) public space, these include (3) indications for a significant investment of wealth and resources (luxury materials); (4) iconographical representations of (a) deities, (b) meaningful gestures, (c) important symbols, and (d) sacred animals; and the (5) presence or tradition of associated religious texts. With regard to all of these observations, it is critical to point out that the authors advocate for a documentation process that builds converging evidence from multiple materials and contexts. Archaeological evidence is always incomplete, and, perhaps because of this, the presence of seemingly ritual material is prone to promiscuous identification as "religious." The best solution is to construct a careful case of corroborating evidence.' (Johnson 2004: 46 *f.*; numbered series imposed by me – WvB)

The heuristic merits of Renfrew & Bahn's operational checklist are beyond doubt. At the same time, with its pretence of utter objectivity and even object-ifiability, in regard of the religious, Renfrew's stance has not remained without fundamental criticism even from within the ranks of his archaeological colleagues. Ian Hodder and Scott Hutson, in their thought-provoking *Reading the Past* (3rd edition 2003: 37 *f.*) phrase their objections in the following terms:

> 'Perhaps the fundamental difficulty underlying Renfrew's cognitive archaeology is his reaffirmation of old dichotomies such as function / symbol, emic / etic and subject /

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[266] Yet it should be clear that non-random distribution pattern is not enough as an operational-isation of what constitutes 'religious'. Sleeping places, deposits of human excrement, storage of implements, homicide, would similarly display non-random distribution patterns – yet none of these would automatically, intersubjectively qualify as religious. It is *emic* meaning, not non-random distribution, that determines the religious nature of some human products and expressions, and such *emic* meaning is not to be gauged just by the statistical processing of find patterns. But admittedly, it can be fathomed on the basis of analogies in space and time.

[267] Renfrew 1994 (following Renfrew & Bahn 1991: 359-360 – WvB).

object. Ultimately such dichotomous thinking pervades not just Renfrew's ideas on what we can and cannot know about the past, but also his ideas on how we claim to know what we do. Despite flirting with the idea that data cannot be fully objective, Renfrew's cognitive processual archaeology regresses to an absolute objectivity: "The material record of the past, the actual remains, may indeed be claimed as value-free and lacking in observer-induced bias" (Renfrew 1989: 39). Ironically, this unreconstructed objectivity 'in which the data have the last word' is nearly inverted in Renfrew's approach to the study of religion (1994a: 51), in which he suggests that investigation will be advanced by his own definition of religion, which is claimed to have nearly universal correlates. Elsewhere, Renfrew (1994a, p. 10) claims that his own personal experience does not differ radically from that of other humans. Renfrew's unmitigated objectivity coexists uneasily with his latent subjectivity. Both are undermined by the discussion in chapter 1 [of Hodder & Hutson 2003 – WvB] of the relation between fact and theory and will be discussed at greater length in chapter 9. [of Hodder & Hutson 2003 – WvB]

Despite its different goals, Renfrew's cognitive archaeology shares with Flannery and Marcus' approach a systemic understanding of the relationship between mental constructs and the material, observable world. Renfrew suggests six ways in which symbols structure human life and human affairs. The cognitive system thus has functional relationships with a variety of activities – measurement, art, production of architecture – that can be studied through their material remains. To recover cognitive processes from material signatures, Renfrew has repeatedly called for the development of secure networks of inference.

Such a direction appears to imply that there are some universal measurements of mind. The natural-science model is clear, but the internal tension within this view is distinctive. On the one hand, Renfrew, here, and Binford and Sabloff (1982), argue for independent yardsticks for measuring the past; on the other hand they accept that the past is perceived within our own social and cultural matrix. Renfrew also claims, in line with Flannery & Marcus, that 'each culture has its own "helix of interaction", its own historical trajectory, to use the terminology of systems thinking' (p. 25). The development of ideas, he claims, will be different in each context; each history will have its own cognitive phylogeny. For Renfrew, 'mind' is the formulated concepts and the shared ways of thought which, within any specific cultural matrix, are the common inheritance of all its citizens as participants' (Hodder & Hutson 2003: 26).

Yet with all these good intentions archaeology, even if called 'post-processual' or 'contextual',[268] does not seem to be able to make much progress towards the solution of the enormous problems emic meanings pose for anyone not directly communicating through spoken (or written, or implied) text with the original actors (*cf.* Johnsen & Olsen 1992).[269] It is significant that when, in 2012, Susan

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[268] *Cf.* Hodder 1987b: *The Archaeology of Contextual Meaning*, which acknowledges the problem of context without truly solving it. Especially in connection with Çatal Hüyük, Hodder (1987a, 2007) had made the claim of confronting the puzzle of contexts.

[269] Only in one crucial respect today's archaeologists may be said to be, in an implicitly *emic* fashion, remarkably close to the life world of the prehistoric actors they are studying; like trackers (Ginzburg 1984) in a hunting-and-gathering mode of production (apart from, possibly, part-time petty commodity production, humankind scarcely knew any other mode before the Neolithic), or like diviners – who most probably already did form part of the societies of the Upper Palaeolithic – *archaeologists use traces in the present as clues to knowledge of the past.*

Pearce edits her timely book *Interpreting Objects and Collections*, the book begins with the following super-short article by Ian Hodder which is a reprint from 1987 (a full quarter of a century earlier) and which by a very broad definition of meaning, and failure to apply the emic / etic distinction, makes us foster false hopes:

> 'All objects can be given meaning, and of varied types. Beyond the meanings of an object as matter, to be studied by physicists, chemists and biologists for example, it can be argued that cultural objects have three broad types of meaning. First, there is the object as involved in exchanges of matter, energy and information. We can talk of how the object is used, and how it conveys information about social characteristics, personal feelings and religious beliefs. This is to talk of the technomic, sociotechnic and ideotechnic functions of the object. The object's meaning is the effects it has on the world. Second, we can say that the object has meaning because it is part of a code, set or structure. In fact its particular meaning depends on its place within the code. Third, there is the content of meaning. The first and second types of meaning are little concerned with the non-arbitrariness of cultural objects. In the first, the object is assessed in terms of its ability to do a job (cut down a tree or convey information), and there is no way of choosing between equivalently efficient tools. Particularly in the realm of information exchange, any object will do as long as it conveys the correct information. In the second type of meaning any object will do as long as it has found a place within the code – the sign is arbitrary. So the third type of meaning is the historical content of the changing ideas and associations of the object itself, which makes its use non-arbitrary.' (Hodder 2012: 24).

8.2.3.3. Building a religious-archaeological case from scratch? Or rather on the basis of non-archaeological context information?

Meanwhile, to return to Aldenderfer's overview, what strikes me there is his almost demagogic suggestion of building an archaeological corpus and its attending interpretations *from scratch, following various complementary strategies but always exclusively confined to what archaeology has to offer*. This ignores the problem of how to ascertain whether a particular artefact belongs to the class of *ritual* paraphernalia, how that class may have been defined by the historical actors in question, how their definitions may have changed over time, how to distinguish secular from *sacred* public space (*e.g.*, a butcher's shop, a class room, a brothel, from a chapel), between secular luxury items (royal and aristocratic possessions) and (priestly) *sacred* ones; and how, in an archaeological context one does not already know from other sources, how to identify (a) to (d). Only meta-text can help us out here, and if the historical actors did not provide it in the form of their own texts (or at least, in the form of intersubjectively decipherable iconographies), it is the secondary writings of others (travellers, commentators, ethnographers, historians – even the *writings of* preceding archaeologists) that will save the day.

It is the naïve, empiricist contention of the archaeologist Joyce (2012) that such data and insights emerge from simple observation, especially counting material repetitions (even 'blindly'), assuming in passing that what the archaeologist sees to be repeated, she or he may also assume to have been emically considered, by the

original actors, as 'right', and hence may be considered to have been 'religious'.[270] With such a methodology, why not leave the interpretational process to an automated archaeological probe launched from the outer planets (if any) of Proxima Centauri – at any rate, we find ourselves in the realm of science fiction.

> 'Archaeology understands religion from embodied practices; interrogates the role of materiality in the reproduction of religion, accomplished in ritual; and explores what historical perspectives tell us about how religions persist and change. Archaeology is specially prepared to examine the repetition of practices over time, and their mediation through material forms. Embodied practices, routinized, unquestioned, yet subject to recognition and approval as "right," are the core of religion in action, or ritual. A pragmatic archaeological approach asks not what religion is, but what it does, and how the material and historical basis of archaeology might change our view of religion'.

With similar insistence but far greater sophistication, the classical archaeologist Kyriakidis in several publications (2006, 2007), shifts the focus from religion to ritual; and then, against a regional linguistic, cosmological and cultural environment that is known in detail – as is largely the case with the Aegean region from the Middle Bronze Age on – the interpretation of empirical traces is no longer an unsolvable puzzle. That this also applies to the Eastern Mediterranean Bronze Age at large is borne out by the excellent recent collected edited by Nicola Laneri (2015).

8.2.3.4. Religious archaeology implicitly based on the analogy argument, even in purely prehistoric and illiterate contexts such as the North-eastern Woodlands, USA

An example, both of the limitations and of the rich results of a religious archaeology which, through the 'analogy argument', is essentially though implicitly intercultural, is offered by Brown's 1997 synthesis of the archaeology of the North-eastern Woodlands, USA:

> 'Archaeology has begun to contribute to the history of spirituality in the Eastern Woodlands of North America to complement the perspectives offered by the comparative study of religions and by ethnological, folkloric, art historical, and astronomical research. Support can be found in the forms and types of ritual paraphernalia and in the associated iconography for the thesis that shamanism was a basic form of religious experience that extended back to the earliest material traces. Elaborations upon this foundation became most conspicuous during the Mississippian Period when social hierarchies developed upon an expanded, agriculturally supported population. Animal imagery changed, ancestor cults became elaborated, and cosmography took on increased importance in architecture, site layout, and mortuary rites. The canonical forms of the iconography of this period have become known as the Southeastern Ceremonial Complex. Since European contact, practices and beliefs associated with social hierarchies have disappeared or transformed.' (Brown 1997)

The recognition of material traces, notably paraphernalia, as shamanistic (or as ancestral cults, as cosmology impacting architecture, site layout and mortuary

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[270] Apply such a reasoning to human sacrifice, armed killings, deliberate arson, and the scope for religion in archaeology will have dramatically widened...

rites) would never have been possible if comparative ethnographic and his-riographic research and theorising had not already forged the idea of a fairly con-stant fond of shamanism, ancestral cults, cosmology, with very wide extension in space and time. The basic intellectual act here is not phenomenology, but classifi-cation by means of a pre-existing and intersubjective, paradigmatic scheme. As long we are on more or less known socio-cultural territory, charted by ethnogra-phy and historiography, by the accounts of now living descendants, by ancient travelogues etc., we may be comfortable with this approach. But if we find our-selves in uncharted territory – outside known culture provinces, and in remoter antiquity, – then the analogy argument can only produce unjustified projection from better known cases whose applicability to the unknown cases at hand can merely be blindly assumed, but – for lack of *emic* data – not proven.

8.2.3.5. Archaeological interpretation with an ever widening context of analogy: Interpreting Native American archaeological burial data with Indonesian burial ethnography? Enters the Sunda Hypothesis

From my perspective as an anthropologist, it seems true and fair to say that *research in the archaeology of religion is by definition research by proxy!*[271] Relig-ious archaeology is being realised within an upward spiral of ever widening ethnographic, comparative mythological, comparative religious, and other ana-logies. Interpreting ancient remains as religious can only be done within an intersubjective paradigmatic context. Comparative mythology is now beginning to offer such a context, where in the absence of contemporary, *emic* meta-texts there is often no other context available. World religions, major statal and cosmological complexes of the ancient world, cultural imperialism from neighbouring powerful centres, provide other such contexts especially for the last five millennia.

Another obvious context is that of the natural, default appearance of the non-man-made world. It is against this context that we may identify objects that are

- out of the ordinary, and conclude (sometimes erroneously, as taphonomy shows) that they may be

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[271] #43. *AGAIN: ARCHAEOLOGY'S INCAPABILITY OF EMIC UNDERSTANDING BY ITS OWN IMPETUS.* Should archaeologists be chided for using data from outside their own discipline? That could hardly be the point, in the present time of interdisciplinary research and publishing, Especially in the New World, many university curricula offer combined training in anthropol-ogy and archaeology, so there it would be more different to tell the two types of specialists apart, than in Europe, where the two disciplines have grown apart since more than half a cen-tury ago. The point however is that of *method*, as an intersubjective, paradigmatic check on academicians's truth claims. By the meticulous, and disciplinarily guarded, standards of partici-pation and observation by which anthropologists in the field make pronouncement on the religion of the people they study, there could be hardly any validity nor reliability in the pro-nouncements of archaeologists on the religion of people whose language and culture they have not personally experienced and from whom all *emic* statements are utterly lacking. Like a marriage by proxy, there is always the risk that the claims will never be substantiated.

- man-made artefacts,

- in fact even religious objects.

But the last two major steps should not be taken lightly; particularly we should realise that in appealing to 'Nature' we are not reproducing an *emic* world-view of the original actors,[272] but are merely imposing our present-day *etic* scientific knowledge, and our present-day classifications of things as either 'nature' or 'culture'. Natural phenomena such as sun, moon, stars, day, night, lightning, rainbow, rain, plant, tree, animal, presents themselves to humans with such unavoidability that they are likely to be reflected in any worldview and any language regardless of place and historical period. As such they are likely to feature in early mythologies – although Max Müller's *naturalism*, which claimed that *all* mythology was basically about natural phenomena, has been found to be an exaggeration. Mythologies go hand in hand with religious beliefs, and we will touch upon these natural phenomena to the extent to which they have suggested important early mythemes of humankind.

As a result of the importance of non-archaeological context, for instance, Indonesian burial ethnography might illuminate Native American archaeological burial data. Hutchinson & Aragon (2002) address precisely such a possibility. However, theirs remains a typological exercise, calling attention to such theoretically and comparatively possible cultural constructions of protracted burial as may not be conspicuous in the American archaeological record. What they fail to examine is the possibility of an historical connection, in the following sense. Early Sunda culture is likely to have been a significant influence upon recent Indonesian burial customs, but Sunda influence on North America cannot be totally ruled out. From the Early Holocene on, a very wide dispersal of a significant part of the human population of Sundaland took place as a result of the 200 m rise of the global ocean level, flooding what once was a contiguous land area from Malaysia to Bali and producing what is now the insular region of South East Asia. If, in an easterly direction, Sunda effects may be argued for much of Oceania, and in a westerly direction for the Indus civilisation, the Persian Gulf and Phoenicia, the Red Sea, Egypt, Madagascar, and (far more contentiously) for coastal and even inland sub-Saharan Africa,[273] North America would not be outside the Sunda range – perhaps as a mirror image of the

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[272] For they most probably did not have an analytical conception of 'Nature' as different from the man-constructed world; also *cf.* Thomas 1983; Anati 1999: 111; Habash 2016.

[273] Oppenheimer 1998; Dick-Read 2005; van Binsbergen 2007b, 2012b; van Binsbergen & Woudhuizen 2011: 354 f. Although initially I adopted a dismissive attitude *vis-à-vis* Oppenheimer's Sunda Hypothesis and specifically (and rightly) contested, on statistical grounds, his claim that the *Genesis* cosmogonic and anthropogonic mythology derived from Early Holocene South East Asia (van Binsbergen with Isaak 2008), I soon realised, and repeatedly acknowledged in print, that the Sunda Hypothesis does cast an illuminating though surprising light on much of the pre- and protohistory of Africa including Ancient Egypt.

hypothetical expansion processes from the New World to Oceania which Hey-
erdahl (1952) claimed when setting out on his Kontiki maritime adventure.
Perhaps the ethnographic peculiarities of the Ojibwas, for instance the impor-
tance of cowries there, are a case in point.
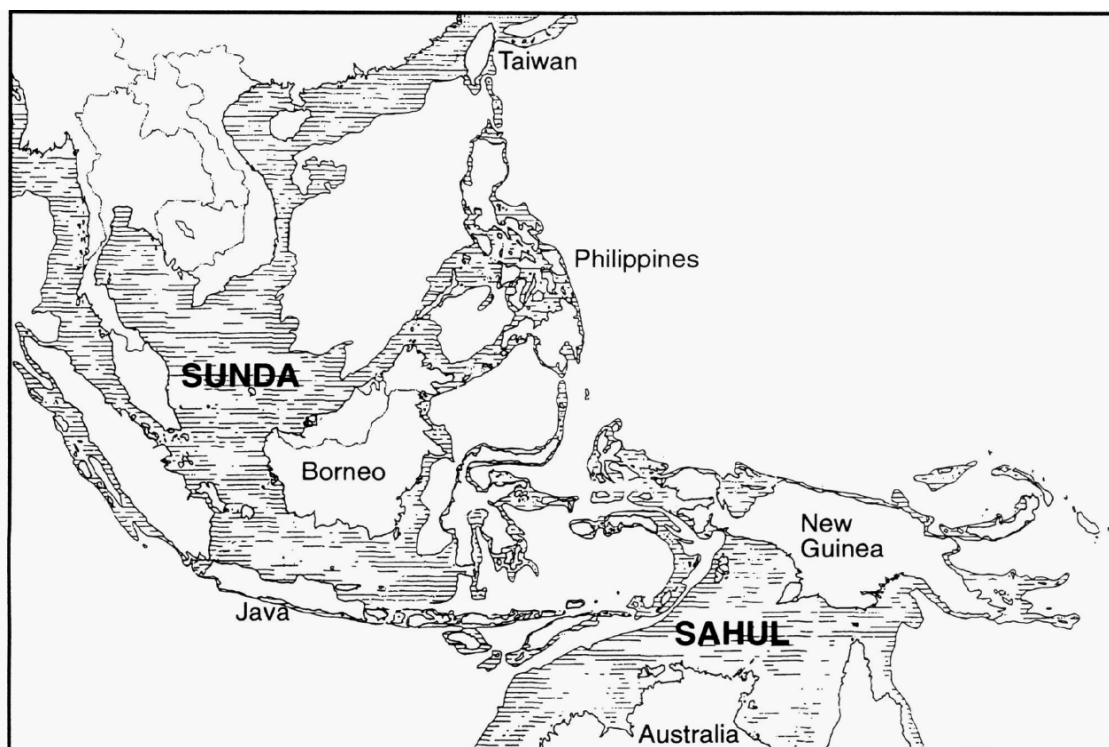
Source: Roberts-Thomson *et al.* 1996: 1018, Fig. 1.

Fig. 8.13. The reconstructed coastline in South East Asia in the Upper
Palaeolithic

The acknowledgement of such far-reaching continuity in space and time, is of
eminent importance for the project of religious archaeology. For *in principle* it
is not tied to a particular region or historical period, but is without limits, en-
compasses the whole of humanity all over the world and through all times. On
the basis of the firm postulate of *the fundamental unity of humankind*,[274] the
anthropological fieldworker is *not really a total stranger* amidst the host society
even in the very first phase of prolonged participant observation – but neither
is, by the same token, the religious archaeologist when confronted with a spe-
cific find pattern in space of time that appears without precedent and without
meta-text, but which yet she / he may at least begin to interpret by extrapolat-
ing on the basis of analogy and adjacent data in space and time. Without a
doubt, all religious archaeology is research by proxy because of the lack of an
interpretive meta-text – but that means only a gradual, not an absolute, disad-
vantage as compared with the ethnographer, who (lacking the deeply-ingrained

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[274] *Cf.* van Binsbergen 2015b: 8-14, with references.

early socialisation into the local society and culture, and usually being only moderately fluent in the local language, while (usually) locally classified as an outsider, somatically as well in terms of socio-political privilege), knows only too well that the knowledge gained in fieldwork, however prolonged, extended and passionate, remains fragmentary, partial, incomplete, and to an alarming extent, misunderstood.

8.2.3.6. Felicitous archaeological identification of religious elements on the grounds of peripheral dependence: The sphered ram in Saharan rock art (Camps)
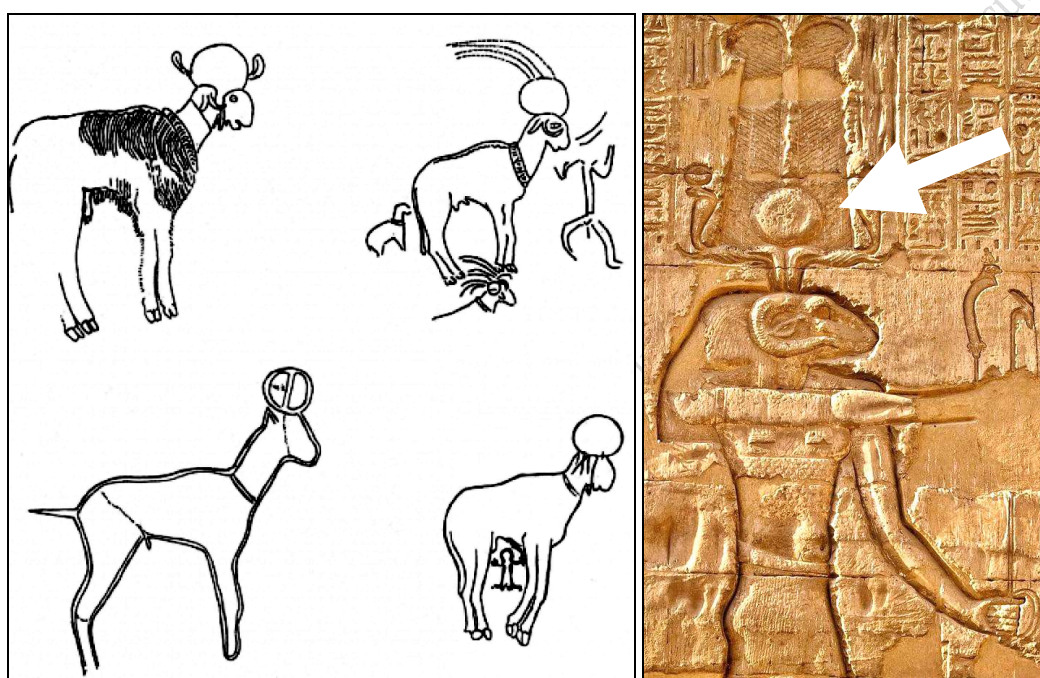
Fig. 8.14. The sphered ram: Northern African / Saharan rock art inter-preted as religious by Camps, and its Egyptian inspiration

Sometimes an experienced researcher who knows the region under study well, may confidently assign a religious nature to iconographies which, though otherwise puzzling, do not strike the outsider as particularly religious. This is the case in the rock art of Northern Africa, where the recognised specialist Camps detected a religious nature in the frequent images of a ram carrying a sphere on its head. Comparative ethnography of the region (notably Pâques 1964) confirms that the ram is an ancient and ubiquitous symbol there, also in connection with its importance in a cosmology / astrology which the region shares with the rest of Western Eurasia. This might suggest an originally local origin for the sphered ram in the Saharan region.

However, ultimately the sphered ram goes unmistakably back to Ancient Egyptian and Ancient Near East representations of the solar disk, often winged, or between the horns of a hawk (the national god Amon-Raᶜ), ovid / caprid (*idem*, or manifestation of the creator god Ḫnum), or bovine (as manifestation of the love and motherhood goddess Hat-ḥor). Although some Egyptianising rock art from the Sahara has been exposed as fraudulent and recent, yet actual Egyptian influence cannot be denied: we are unmistakably here in a periphery of one of the most powerful states and cultures of the Ancient World, whose archaeologically attestable influence reached extensively into the Mediterranean, North Africa and deeply into sub-Saharan Africa.[275] This is also the region remnants of the defeated Sea Peoples by the end of the Bronze Age passed through on their way from Egypt to West Africa (van Binsbergen & Woudhuizen 2011: 385 *f.*); numerous depictions of ancient chariots are found along the North-South throughways. Therefore, although there is good reason to accept Camps' religious interpretation, it is only by the distantly applied analogy argument and not by any independent local *emic* input such as archaeology in itself cannot offer.

8.2.3.7. The definitional problem in the recognition and reconstruction of elementary forms of religious life in prehistory

Burial practices have constituted an important argument for the existence of prehistoric religion (*e.g.* James 1960), although few authors in this connection seem to have realised that only under a very specific definition of religion would burial *ipso facto* qualify as evidence of religion.[276] Even if we could agree that my claim as to the astronomical interpretation of the La Ferrassie burial could stand up against specialist fundamental criticism (which, of course, is very far from obvious), the question remains: did I thus detect a case of Neanderthal *religion*? To a considerable extent, this depends on the definition of religion we decide to apply in this prehistoric case.

Clearly, here we cannot go by Durkheim's definition of religion, already considered above:

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[275] Breuil 1951; Wainwright 1949, 1940, 1951. The influence of Egypt upon the entire Mediterranean throughout the Bronze Age, and even after, has been repeatedly argued in the context of the *Black Athena* debate (Bernal 1997-2006; Brown 1975; Lambrou-Phillipson 1990; van Binsbergen 1997b / 2011a).

[276] Shreeve, an important specialist author on the Neanderthals, concedes that they buried their dead

> 'but they did not devote much time and attention to the act.' (Shreeve 1996: 271).

Frankly, the La Ferrassie-6 burial with decapitation and an elaborate, cupuled funerary block which might be interpreted as a stellar map, suggests the opposite. Anati (1999: 46) is more generously inclined towards the Neanderthals in crediting them with

> 'two great inventions, symbolism and the cult of the dead'.

Anati's suggestion, meanwhile, that the La Ferrassie burial block displays the oldest cupmarks known to us, is rendered obsolete in the light of other finds (Bednarik 1993, 2008).

'Une religion est un (1) système (2) solidaire (3) de croyances et de pratiques (4) relatives à des choses sacrées, c-à-d. séparées, interdites, croyances et pratiques qui (5) unissent en une même communauté morale, appelée Église, toux ceux qui y adhèrent.' (Durkheim 1912 / 1960 / 1990: 65; my numbered itemisation – WvB).

In the preceding Parts of this book I have sufficiently critiqued the concept of the *sacred*, and Durkheim's attempts to operationalise it towards concrete empirical ethnographic evidence, to be spared the trouble, at this point, to argue the impractability of the *sacred* element in this definition (4) in detail. Yet for the other elements in this definition, the critical task of operationalisation remains to be carried out. In the prehistoric context, without the possibility of participant observation, we simply miss the evidence to ascertain

1. to what extent the La Ferrassie burial was part of a *system* (although other burials were found *in situ*, in many respects this one was unique: the only one of an infant, the only one with decapitation, *not*[277] the only one covered by a limestone block, but the only one containing cupmarks whose abundance and patterns, at least, were without parallels at the site and in fact in Mousterian contexts), and with possibly astronomic significance

2. to what extent that system, if any, could be called 'solidary' – which, considering Durkheim's overall sociological theory, I am inclined to interpret as 'society-generating and group-solidarity-producing'; we know far too little to determine whether the infant burial may have had that effect. Was the interment and the placement of the 'tomb stone' a collective effort leading to enduring group cohesion? It may have been, but it is also possible that the child was an outsider[278] kidnapped from another nearby community and sacrificed, not by the co-resident group as a whole but by some individual ritual / shamanic leader, – sacrificed to the stars for some specific religious or magical purpose. Or that the child was indeed sacrificed, but not by general consent, thus splitting the co-resident group instead of reinforcing it. What mother would not try to defy group pressure and prevent her infant being sacrificed,, even decapitated? This also ad-

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[277] The Les Eyzies Museum holds dozens of limestone blocks from the region and from periods roughly coinciding with La Ferrassie 6 and later, up to post-Neanderthaloid, Aurignacian times. These blocks were intensively studied by the Dellucs (1978), provided a comparative background to my own 2000 analysis, and were again discussed at length by Anati 2007. I am not aware that all these limestone blocks were closely associated with burial. However, in addition to La Ferrassie 6 a few other Neanderthal burials with limestone blocks have been attested (Augusta & Burian 1963), *cf.* the famous Drachhöhle, Switzerland, which has often been interpreted as a shrine in honour of a bear god or bear spirit. Also *cf.* Anati 1999: 76 on another Mousterian burial with limestone block in Regourdoum, Dordogne – but here the block covers not a child but a bear, being reminiscent of the Swiss case.

[278] Molecular (DNA) genetic analysis of the infant remains and the other human remains at La Ferrassie would enable us to ascertain whether the child was a group member or an outsider, but I have no information that such analysis has already taken place.

dresses, in a dismissive sense, point (5) of Durkheim's definition.

3. Considering the material traces left on the ground, we know something of the practices involved in the La Ferrassie –6 infant burial – although (beyond the parallels with a few other Mousterian child burials nearby)[279] we have few clues as to the repetitive or unique nature of these practices – beyond the meagre point of the very wide distribution of cupmarks in both space and time. We have no information as to the attending beliefs. The placement of the cupmarks, their pattern, and perhaps the bison-kid shape of the block, may all point to astronomical / celestial beliefs, but this is mere analytical inference on our part. We are not even free to assume that his infant burial expresses a belief in the afterlife: to the original actors if may indeed have been a dedication to a hoped-for future life beyond the grave for a deeply mourned child that had died of natural causes – but it may also have meant the once-for-all termination of infant life force by violent human means for the purpose of placating a non-human agent. In other words, the burial is evidence of the original actors having had some attending beliefs beyond the here and the now, but we cannot know, *which* beliefs., nor whether those beliefs were *religious*.

These many points of uncertainty obtain not just in the special case of the la Ferrassie infant burial, but also in general, *mutatis mutandis*, whenever we are dealing with prehistoric material. If we are to identify religious elements there, it cannot be on the strength of Durkheim's definition of religion.

Let us therefore consider an alternative definition of religion, and one on which I have often relied, for the purpose of participant observation in religious fieldwork, ever since I came in touch with it as a budding student of religious anthropology in the 1960s – I mean Clifford Geertz's, who by that time had already established himself as a leading anthropologist in the American context:

> 'Without further ado, then, a religion is: (1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic.' (Geertz 1966: 4)

Conceived, like most twentieth-century CE work in the field of religious anthropology, in a tradition which was largely informed by Durkheim's work, Geertz's felicitous departure from that tradition is only too obvious. The most striking point is that Geertz is not out to problematise or explain 'the social' /

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[279] The overwhelming majority of these do not involve limestone blocks. The literature on La Ferrassie runs into nearly 100 titles. It would take us too far to discuss these in any detail. For an initial impression, *cf.* Taborin *et al.* 1977; Heim 1976-1982.

society. Without proceeding to that highest level of abstraction, Geertz suggests that he remains at the level of empirical phenomena: 'powerful, pervasive, and long-lasting moods and motivations' (2) that can be ascertained, more or less, by standard social-science methods (2) – *only, because of the lack of direct emic statements by the original actors, these cannot be applied in the prehistoric context*, since we can only guess at to the original prehistoric actors's 'powerful, pervasive, and long-lasting moods and motivations'. Endearing to a humanistic, implicitly even existentialist tradition in religious studies within and outside anthropology, is that Geertz employs the stepping stone of 'conceptions o*f a general order of existence*' (3), which again one would expect to be open to investigation, more or less, by standard social-science methods – but again, *because of the lack of direct emic statements by the original actors, these methods cannot be applied in the prehistoric context*, and again we can only guess at the original prehistoric actors' 'conceptions of a general order of existence'. In the prehistoric context, this applies *a fortiori t*o the final two legs of Geertz's religion definition: (4) 'clothing these conceptions with such an aura of factuality' that (5) 'the moods and motivations seem uniquely realistic.' This, no doubt, is what veritable *religion* tends to do and what we may assume to have been the case also in the case of the La Ferrassie Neanderthals – *but then we are already assuming that what motivated their infant burial behaviour should be designated by the term 'religion' – which is simply begging the question.*

Incapability of being operationalised towards prehistoric contexts is not the only shortcoming of Geertz's religion definition. Also in other respects it leaves much to be desired, as I now realise. I am not convinced that religion comes in countable, discrete units (which is presupposed by the expression '*a* religion'), for the same extensive reasons why I do not believe that it is useful to speak of 'cultures', plural (van Binsbergen 2003a / 2015b). Moreover, like many definitions of religion and myth also this definition is not really a definition but a nutshell theory: it tells us not so much how to identify religion in empirical reality, but goes much further than that, and claims to reveal its inner workings such as can never be immediately manifest upon empirical scrutiny. Geertz's personification of 'a religion' ('which acts'...) leaves unsolved the puzzle as to how, precisely, the cognitive elements that he places at the centre of the religious process ('formulating conceptions'...) manage to inspire the specific moods and motivations which allegedly constitute ('a') religion. On the basis of comparative and theoretical considerations) we would be inclined to propose that all these cognitions, moods and motivations remain up in the air, utterly ineffective in shaping a religion and, through religion, a 'uniquely realistic' life world, *until they are put into practice by the believers' specific actions both in the ritual sphere and in everyday life.* Clearly, apart from *the personification of religion as an acting agent in its own right, action* is the one major missing element in Geertz's famous definition of religion.

Another shortcoming of Geertz's definition is that it accords a central position to symbols, but does not disclose what they are, nor what they refer to (as sym-

bols are generally considered to do), how and why.

There is a long-standing critical tradition of European thought about religion, which goes back at least to the Greek thinker Euhemerus (c. 300 BCE).[280] He considered the gods deified humans. This theme was continued with the Stoic and Epicurean discussions on the nature of the Gods,[281] and in Modern times has yielded the religion theories of Hume, Voltaire, Feuerbach and Marx.[282] Also Geertz, and even Durkheim, in their definitions show themselves to be exponents of the *debunking* approach of religion. To them, religion is an illusion which may take on reality for the believers but which to scholars, as distancing analysts, readily reveals its essentially deceptive and distortive nature. Until quite recently, the basic tenet of religious anthropology[283] has been, ever since the late 19th c. CE: 'the believer's gods do not exist'. This principle was picked up by the biologist Richard Dawkins (2006) in his book *The God Delusion*, after his earlier popular book *The Selfish Gene* (Dawson 1976) had already turned him into a scientism hero – as if the kind of reductive, competitive, essentially superficial and materialist (and journalistic) knowledge conception prevailing in natural-science professional publications today constitutes the mandatory, or only, way to reflect on the perennial philosophical questions of humankind. The problem with religion is that it is *both* a delusion *and* (as mystics, and also psychoanalysts like Carl Jung, have stressed) essentially true at the same time – in a way that totally defies the reductionist binary Aristotelian logic which has kept the West spellbound for over two millennia. Put succinctly, religion is the technology of both having your cake and eating it, which – in the face of *thought* as the undeniable hallmark of being human – yet relies on tertiary logics in the production of a profound, *devastating experience of the total connectivity between the I and*

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[280] #44. *ON EUHEMERISM.* The Greek writer Euhemerus (Dörrie 1979) in his book ἱερὰ ἀναγραφή (*hiëra anagraphē*, 'Sacred Notes') sketched the insular society of Panchaia in the 'Eastern Ocean' (perhaps the isle of Baḥrayn was meant, or that of Sokotra – or, alternatively, Euhemerus' story may have been inspired by then already Buddhist Ceylon, although that was usually known under the name of Taprobana) whose rulers rose to become gods, thus implicitly proposing the theory that the gods are merely humans raised, by other humans, to an exalted state.

[281] *E.g.* Cicero *De Natura Deorum,* 1972 /c. 45 BCE, a work with considerable influence upon the 18th-c. CE writers Hume and Voltaire. Although Cicero cleverly lends a voice to both theistic, agnostic and atheistic views, the latter as represented by Cotta (a historical figure pressed into literary service by Cicero) appear to have his support.

[282] Contrary to Feuerbach and Marx, and separated from them by a century, Voltaire as a Deist did not so much reject all religion but found much fault with most specific organised world religions, especially Christianity, while favouring Hinduism (Voltaire 1877, *Oeuvres complètes,* especially vols XVII-XX: *Dictionnaire philosophique*). Further: Feuerbach 1841, 1967 / 1846; Marx 1975 / 1845, Marx & Engels 1975;. Remarkably, all these authors were ignored in Durkheim 1912 / 1960 / 1990.

[283] I have discussed this tenet, and tried to explode it, especially in van Binsbergen 2003a.

the not-I,[284] between human and cosmos, thus reuniting that which the human capability of thought has severed.

Is this enough for a definition of religion? I would hardly think so. I am still not satisfied: all thought, and all religion, starts with the opposition between the I and the not-I, but not all thought is religion. When does it become religion? The Nkoya hunter softly speaking to the tools of his trade, bow and arrow, (next to tinderbox and axe), exhorting them to take good aim and to otherwise perform well, is strictly speaking not being religious, although he is personifying. By contrast, the Nkoya hunter is being religious when he, on the eve of his nocturnal departure for the forest, lays his bow and quiver (nowadays rather his rifle) below the branches of the village's ancestral shrine and invokes his ancestors' blessing on his intended hunt, promising to share a fair portion of the quarry with his female relatives once the hunt will be successful, and in fact taking the successful outcome of the hunt as a form of divination as to the ancestors' favourable attitude towards him. The ingredients of that situation are not just the opposition between the I and the not-I, but the insertion, in addition to the category of the I, of forces that, from the hunter's conscious perspective, have the following characteristics:

- the hunter cannot perceive them directly with his sense organs

- the hunter considers himself to be utterly dependent upon these forces

- the hunter considers these forces superior to himself

- the hunter addresses them in person after the model of human verbal communication

- the hunter engages more or less in a *do-ut-des*[285] contractual relationship with these forces

- the hunter does not act idiosyncratically but follows an established, intersubjective local cultural pattern

- engaging in these 'ritual' acts does not discharge the hunter from the obligation to expertly perform all the technical tasks of his trade

- yet the hunter considers these ritual acts essential for establishing the proper relationship between himself and the world, on which the details of the hunt and the distribution of the proceeds largely depend

- and in the process the hunter is confirmed as belonging to a comprehensive moral order, which links the living to the dead and the unborn, and stresses how the hunter finds himself at the hub of a

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[284] This formula is inspired by Jacques Derrida's approach to religion as the essentially bi-focussed orientation of the human existence, *cf.* Derrida 1996; van Binsbergen 2005a / 2015b.

[285] Latin: 'I give so you may give'.

> network of relationships, which particularly involve humans still alive, and which make up the very value of his existence.

Is it, then, the interaction with *imaginary, invisible, non-existent* beings which constitutes the hallmark of religion? Then we would be back with the religion definition of Tylor, and with the old, debunking emphasis *à la* Voltaire and Feuerbach. But the invisible and the imaginary, as categories, are, for instance, not very conspicuous in the case of the historic religion of the Australians c. 1900, when the *chirunga* as objects of veneration were very much material and tangible, even though they were supposed to stand for invisible totemic spirits hailing from Dreamtime, *i.e.* the beginning of time. Is it the *do-ut-des* element? This is not very conspicuous in the case of the Nkoya hunter at his ancestral shrine. It is far more marked in societies like those of both the Northern and the Southern shores of the Mediterranean, and *e.g.* those of West Africa with their cults of land spirits, where specific contracts are struck between human and spirit.[286] Is it the element of awe-stricken respect (the Kierkegaardian *fear and trembling,* the *fascinans et tremendum* stressed by Otto (1917)), which may have characterised the Australian ritual attitude, and can even be detected in the Nkoya ancestral rite, but which, for instance, is far from conspicuous in the relaxed, playful familiarity displayed by the villagers visiting the shrines of Sidi Mḥammad during my North African field-work, or by the *sangomas*' jokingly pouring beer at the ancestral shrine in their urban compound in the course of the initiation rite of a new lodge member.

We could pile example upon counter example. Yet we would probably never find one externally observable, empirical characteristic that would apply to all cases, in space and time, to which we would be inclined to apply the label 'religion', for we would never be able to define religion in purely analytical, *etic* terms without taking into account the way the religious is *emically* being constructed and is given meaning by the actors themselves in their own conscious terms and tacit presuppositions. Taking such into account is relatively easy (for a well-trained, experienced fieldworker, at least) in participant observation within the here and the now; it is practically impossible for prehistory. To emically appreciate a form of religion in its specificity in space and time, we always require the actors' own commentary in their own modes of expression. *And if such emic meta-text is absent, all we have to indicate to us that we are in the presence of the religious would be our subjective perception (essentially an analytical, etic imposition) of a n a l o g y with other, better studied situations in which similar, analogous conditions and objects are at hand.*

Meanwhile we may try to qualify our tentative definition of two pages up in terms of the opposition between the I and the not-I, in such a form that not all

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[286] Crowley 1990; van Binsbergen 2017a: 241-290 (on the Manjacos of Guinea Bissau); Köbben 1975.

thought, but mainly religion is covered by it. I propose the following:

> religion is the human condition in which both representations and actions testify to the conscious, existential, mystical and mysterious encounter of the I and the not-I, in such a way that the scope of the not-I is consciously thought, by the actors, to encompass not only material and sensorily perceptible aspects of reality but also immaterial and sensorily imperceptible aspects of being.

Since my troubled dreams of menacing and attacking devils at age three (reflecting not only my Roman Catholic upbringing against a background of family history of paganism and Judaism, but also the disturbing social and sexual conditions prevailing in the nuclear family in which I grew up); and since my conveniently reassuring conclusion at age seven or eight to the effect that the devil did not exist and was only a personifying human expression for evil as the absence of good, and therefore that children (including myself, in the first place) were incapable of sin; I have now grappled with the essence of religion for nearly seventy years, in various capacities as a terrified infant; as the presumed spiritual protégé of a guardian angel, or a sanctified godmother; as a choir boy (although without any of the sexual assaults for which the Roman Catholic church is now under fire); as an adolescent mystic believing himself to be the incarnation of Jesus Christ; as an anthropologist and historian of religion; as a devotee of the cult of the North African local saints Sidi Mḥammad; as an adoptive Nkoya praying at village shrines and royal shrines and sponsoring sessions of the *Bituma* ecstatic cult for his adopted sister; later as an African diviner-healer identified, by my *sangoma* teachers and colleagues, as the reincarnation of a Southern African of mixed African-European descent who died and was buried in Francistown, Botswana in the mid-20th c. CE; as a preacher in African Independent Churches in South Central and Southern Africa; and as a professor of intercultural philosophy... And in all these apparently conflicting partial and situational identities, the puzzle has remained that, on the one hand, I have remained convinced that in religion humans try to establish contact with the essence of what makes them human (and, following Durkheim, I have often been inclined to consider the production of sociability the main *raison d'être* of religious beliefs and actions), while, on the other hand, the personal spiritual figures humans conjure up in the process have always remained to me mere figments of the imagination, non-existent in any material sense, although they yet appear to be capable of exerting a material influence on reality. Most probably, this puzzle is an inevitable effect of the capacity of thought, which makes us human, and in that case it would have been with us since remotest prehistory – and certainly since the emergence of Anatomically Modern Humans c. 200 ka BP. If the myriad expressions (with their enormous range of variation though space of time) of this puzzle, both individual / idiosyncratic and collective / institutionalised in both conceptualisation and action may be subsumed under the heading of 'religion', then we would have defined an enormous field, essentially continuous with the experience of religion and non-religion in our time and age, yet extending across hundreds of thousands of years back, in ways that largely or totally defy direct empirical investigation. One simply cannot unequivocally identify spirituality / religion, when all we have, empirically, is

scattered and eroded material traces without the original actors' contemporary meta-texts.

If we cannot project, in an operationally productive way, the spurious universality of Durkheim's *sacred / profane* distinction into the prehistoric past, and if – because of a virtually total lack of *emic* data – we cannot ascertain there, across the mists of time, the impressive and endearing (not to say fashionable)[287] profundities fondly attributed to religion, I suggest, once more, that our best way out is *not by strict definition but by analogy:* we look in prehistory for

- surface phenomena which,

- even though contentless and devoid of proper interpretative context in the material form (site plans, distribution patterns, iconographies, artefacts) in which they have come to us,

- *yet are reminiscent* of well-studied forms of religion as known from comparative ethnography –

- and (to also cover the literate world of *sacred* texts, formally organised rites and world religions) reminiscent of empirical religious studies at large.

Although the conventions and pretensions of scholarly discourse suggests otherwise, this is in fact the approach which many or most serious writings on prehistoric religion have taken: we make a list of religious phenomena in comparative ethnography, and project this list back into the past, specifying empirical surface phenomena in comparative ethnography and trying to identify matching surface phenomena in the prehistoric record. Definitionally and methodologically this is admittedly a weak procedure, but at least one that avoids the deceptive sleight-of-hand of an apparently theoretically inspired yet essentially projective and model-directed, *science fiction.*

This suffices to drive home the fact that in reassessing Durkheim's pronouncements on 'elementary forms of religious life', we cannot simply rely on the existing reconstructions of prehistoric religion by archaeologists. We clearly need the historical authors own words in their own contexts – and the only way to even remotely retrieve them is through the kind of lexical analysis which the reconstruction of *Borean is now affording us. We will therefore now leave the archaeological discussion of prehistoric religion, and proceed to the analysis of the *Borean reconstructed lexicon. The concrete results of this exercise will be presented in Chapter 9, where such lists of religious phenomena will be our guides. The purpose of the present Chapter 8 has been to pave the road towards such an analysis.

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[287] The term 'fashionable' comes to mind, for instance in relation to a conception of prehistoric rock art as essentially trance-inducing and psychedelic, which, in the past three decades, I have seen evolve from a bold, imaginative hypothesis (somewhat reflecting the use of hallucinogens and entrancing dancing pattern in pop music, among by a growing proportion of the intellectual population of the North Atlantic, from the 1970s CE on) to become a more or less self-evident, central paradigm, no longer in need of justification or substantiation (nor receiving any!), nor tolerating any alternative views, in the 2010s CE.

8.3. Long-range comparative and historical linguistics

Thousands of languages have been identified and their lexicon recorded, and to scrutinise all these for equivalents of *sacred / profane* would have been, in Durkheim's time, at least the task of a scholar's lifetime. Meanwhile, a century later, comparative and historical linguistics have greatly advanced. Bold theories concerning the grouping and taxonomy of the world's languages have been launched, discussed and found considerable support in the last few decades, and yielding a handful of illuminating synthetic hypotheses defining the macrophyla as the largest units with which long-range linguistics is working today:

- the Austric hypothesis,[288] linking most languages of South East Asia and Oceania under two subgroups Austroasiatic and Austronesian;

- the Sinocaucasian hypothesis, linking linguistic phyla from disparate regions in both the Old and the New World: Basque, Northcaucasian, Burushaski, Sinotibetan, and Denē);[289]

- the Eurasiatic hypothesis, linking most languages spoken between (working in an easterly direction across Eurasia and Beringia) Portugal / Iceland and Greenland: Indoeuropean, Altaic, Uralic, Kartvelian, Dravidian, Chukcheekamchatkan and Eskimo);

- the Nostratic hypothesis, largely overlapping with the Eurasiatic one, with this proviso that Afroasiatic (Semitic, Oldegyptian, Berber, Chadic, Cushitic, and Omotic) which according to some North Atlantic approaches[290] would be subsumed under Nostratic, according to the now dominant, Russian approaches would be considered to constitute an Afroasiatic macrophylum on its own;

- and finally Fleming's and Starostin's *Borean hypothesis which reconstructs a language form supposed to be spoken in Central to East Asia in the Upper Palaeolithic and to have left detectable traces in the lexicons of nearly all macrophyla spoken today.

The gigantic *Tower of Babel* project (Starostin & Starostin 1998-2008), in which some of the world's major universities and research institutions co-operate, including Leiden, Moscow, and the Santa Fe institute, now offers a generally accessible data base in which the etymological and semantic ramifications of nearly all languages of the world are more or

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[288] Note my emphatic use of the word 'hypothesis' in connection with these language clusters. None of them is uncontested. Making myself interdisciplinarily dependent upon long-range linguistics unfortunately, but inevitably, means that I am freezing, reifying and appropriating momentary results in a rapidly changing field of research.

[289] In long-range linguistics today, there is some variability in the designation of macrophyla and phyla, *e.g.* one finds Sinotibetan next to Sino-Tibetan, Afroasiatic next to Afro-Asiatic. In a bid to achieve unity of style and to avoid confusion, in this book's main text and footnotes all languages and language groups are rendered as one word without hyphenation, even when this leads to monstrous constructs such as Chukcheekamchatkan (instead of Chukchee-Kamchatkan, a phylum within Eurasiatic), Oldgreek, Westchadic, etc. In the General Index, such compounds are divided up again, so *e.g.* Old Greek.

[290] Bomhard 1984; Bomhard & Kerns 1994.

logical and semantic ramifications of nearly all languages of the world are more or less brought together. Inevitably, there are weaknesses and blind spots. Of the four macrophyla found in the African continent, only Afroasiatic and Khoisan are systematically recorded within the *Tower of Babel* project, while Nigercongo (to which the important Bantu phylum belongs, which encompasses most of Africa South and East of Chad) and Nilosaharan (a somewhat limited fringe North of Nigercongo) only feature sporadically in the longe-range etymologies (at the macrophylum level), but are not treated in any detail. This point is important, not because I myself have mainly identified as an Africanist in which capacity I have acquired fluency in a few Bantu languages, but because an authoritative statement on Nostratic (Kaiser & Shevoroshkin 1988) has identified Nigercongo (albeit under the alternative name of Nigerkordofan) and Nilosaharan as branches of 'Super-Nostratic'; the significance of this position cannot be overestimated, for if thus major African languages are recognised as close to Eurasiatic, the result is that any apparent fundamental difference between African and Eurasian cultures (a central justification of European expansion, colonialism and racism, and unfortunately still taken for granted in much work in the fields of population genetics and Comparative Mythology)[291] is no longer reified, making thinkable at least a partly Eurasian origin for Nigercongo and Nilosaharan.[292] A similarly incomplete treatment is found in the *Tower of Babel* database in connection with Native American languages, as if the considerable progress in their classification attained in recent decades[293] has not yet been reflected in the *Tower-of-Babel* data set. Spanning most of the world, the *Tower of Babel* database largely ignores the (Indo-Pacific) languages of Australia, New Guinea, the remoter groups in the Indian Ocean, and Melanesia[294] – rather to our regret for this is the region whence Durkheim derived his primary data.

While thus reliance on the *Tower of Babel* database has considerable limitations, it is yet an impressive tool for the testing of a hypothesis such as the universality of the *sacred / profane* opposition – and for the exploration of other presumed 'elementary forms of religious life' in the Upper Palaeolithic. However, using the *Tower of Babel* database as a tool for exploring the 'elementary forms of the religious life', one has to plod through tens of thousands of pages with hundreds of thousands of etymologies in thousands of languages – a painstaking and complex job if only for the logistic and formatting difficulties to be overcome; and although I am not disappointed by the results, during the many weeks when I was engaged in this exercise I often felt like Mme Eve Curie – who in her pioneering work on radioactivity had to process tons and ton of pitchblende only to be rewarded with a thimble-full of uranium – and a lethal radiation disease![295]

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[291] *E.g.* Witzel 2001, 2012; Cavalli-Sforza 1997; Cavalli-Sforza *et al.* 1994; for criticism of Cavalli-Sforza's linguistic position, *cf.* van Binsbergen 2006a, 2010a.

[292] As foreshadowed already in the work of Trombetti (1905, 1922-1923) a century ago, also *cf.* Karst 1931: 30 *f.* (on Nuba languages – today classified as either Nigercongo or Nilosaharan – in relation to other languages especially Armenian); van Binsbergen in press (c) extensively states the phonological and statistical case for Bantu / Nigercongo as having a *Borean background.

[293] *Cf.* Greenberg 1971, 1987; Greenberg & Ruhlen 1992; Greenberg *et al.* 1986; Ruhlen 1987, 1990, 1991, 1994, 1998.

[294] Many of which have been brought together in the Indo-Pacific hypothesis; Greenberg 1971.

[295] Inevitably, in the remainder of this book I will have to use literal quotations of considerable length from the *Tower of Babel* database in order to substantiate my *Borean-based semantic analyses. I realise that this

Meanwhile, a special, methodologically highly commendable feature of the *Tower of Babel* collection and work grounded in it, is that comparison is based on painstakingly and intersubjectively reconstructed though usually never attested, oldest *proto-forms* (usually marked by an asterisk *), and not (as *e.g.* in the works of Greenberg and Ruhlen) on 'mass comparison' of actually attested present-day forms. Given all the chance effects to which present-day forms have been subjected (loans, phonetic and semantic drift, popular etymologies, interference between languages, etc.), mass comparison is a far less secure form of linguistic reconstruction, and one positively rejected by many linguists – even though the results especially of the two authors just mentioned, are widely and deservedly recognised as impressive. Thanks to the considerable advances in linguistic, long-range research in recent decades (aided by similar developments in the mythological, archaeological and ethnographic fields), we have begun to affirm *large patterns of cultural continuity across the continents and across the millennia.* The image of a multitude of disparate and essentially unrelated human cultures – the patchwork-quilt image of human cultural history – has owed much to the North Atlantic imperialist and colonial dream, and was shattered along with that dream.

*Borean does not present itself as a monolith. My statistical analysis[296] suggests an

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is copyright material and I have made every attempt to acknowledge my indebtedness. Since most of the expected readership of the present book will consist of non-linguists, and even among linguists long-range research is not everyone's cup of tea, I have expanded most of the many acronyms in use in the *Tower of Babel* in regard of individual languages, phyla, macrophyla, and authors. Since the bibliographic data provided in *Tower of Babel* are often very defective, I could not be totally consistent in this effort. Since my use of the *Tower of Babel* material is secondary, applied, and not in the first place meant for intradisciplinary debate among long-range linguists, in most cases I have omitted the elaborate technical comments that often accompany specific entries in that database.

296 van Binsbergen in press (c). Cluster analysis is a statistical numerical technique that allows us to confidently gauge the degree of similarity which exists between a limited number of separate but related data sets (samples). For instance, if a number of reconstructed *Borean roots *Cn...Vn...Cn...Vn... tend to have demonstrable reflexes in three macrophyla but far less so in the three other macrophyla, our cluster analysis will return the result of two clusters macrophyla, the members of each cluster being more intimately related to one another than to the other cluster. The logarithmic scale in Fig. 8.16, meant as a rough time scale, was experimentally determined so as to fit an estimated age for *Borean of 25 ka (proposed date of the split separating the African / Amerind (misc.) / Austric macrophyla from the Eurasiatic / Afroasiatic / Sinocaucasian macrophyla), and, as a benchmark, the dissociation between Afroasiatic and Eurasiatic at 12.5 ka BP (under the Natufian hypothesis – *cf.* Militarev & Shnirelman 1988; Militarev 1996, 2002; Turner 2008; and references cited there – according to which Afroasiatic emerged in Syro-Palestine in the context of the Mesolithic Natufian culture, *c.* 14.5 – 11.5 ka BP; and moreover assuming that the middle of the Natufian period marks the dissociation of Eurasiatic and Afroasiatic). The relative length k of each scale unit of 2.5 ka is given by:

$$k = {}^{1}/ \left(a + b^{*r} \log(c^{*}q + d)\right) = {}^{1}/ {}^{10}\log(0.476^{*}q),$$

where q is the inversed rank of that scale unit, counting from the origin. Other choices for the parameters (the constants: c, here 0.476; a and d, here 0; b, here 1; and r, here 10) would produce a similar logarithmic scale but with lesser or greater acceleration of rate of change towards more recent millennia. The present parameter choice (scale A) gives a greatly accelerated rate of change from the Mesolithic onward. Stipulating a very high rate of acceleration for the most recent millennia, scale A situates the node splitting Austric from the African / Amerind (misc.) macrophyla at *c.* 24 ka BP; the node splitting the Eurasiatic / Afroasiatic from the Sinocaucasian macrophyla at *c.* 23 ka BP; and the node splitting African macrophyla from Amerind (misc.) at *c.* 20 ka BP. These are excessively high dates, which can be brought down by assuming the split between Eurasiatic and Afroasiatic to have occurred several ka later, and adjusting the parameters accordingly – as in scale B, with which I am more comfortable (c = 0.666).

initial bifurcation of the *Borean-speaking linguistic, cultural and demographic stock.
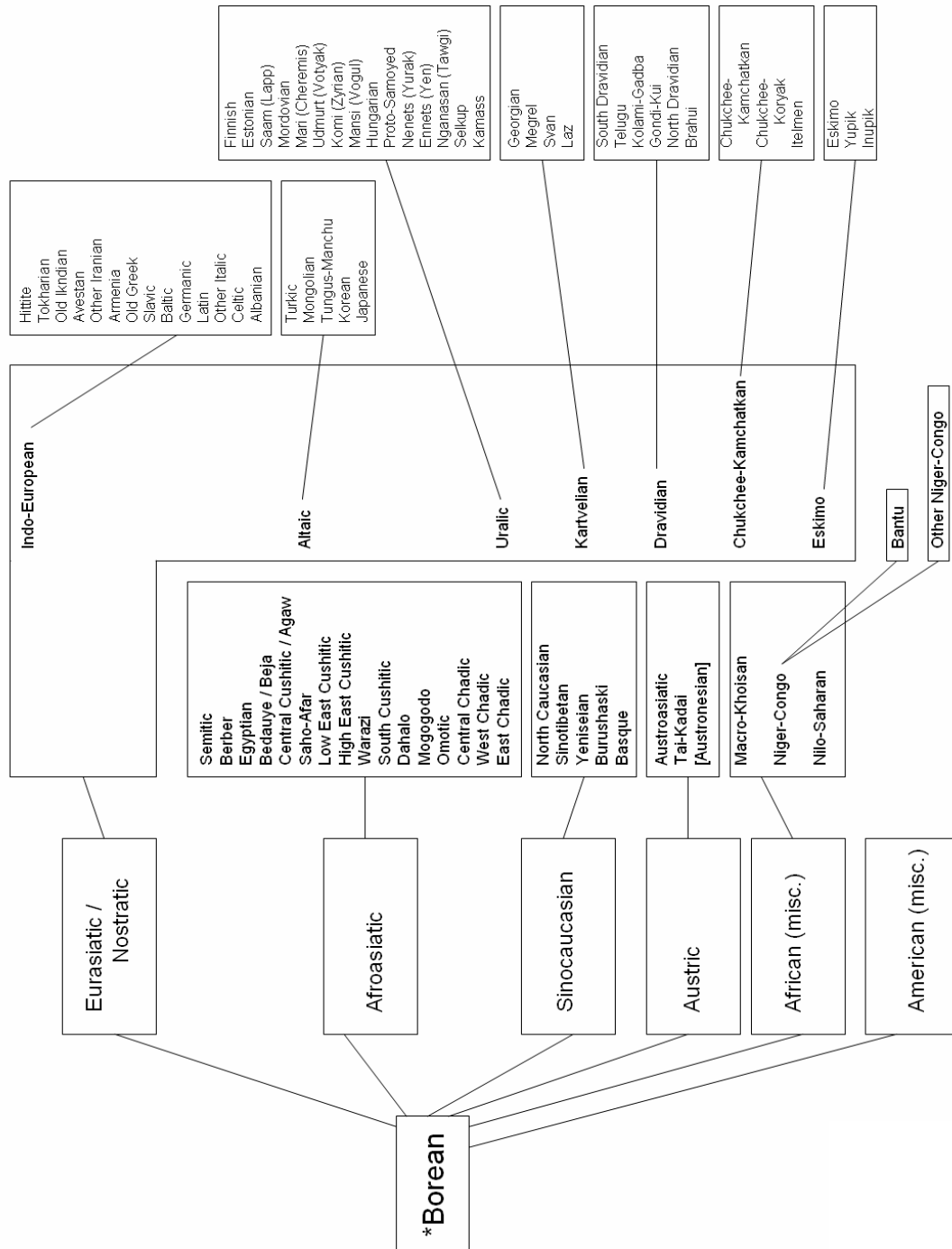
Only the connecting lines, and not the shape, position or size of the blocks, denote the proposed relationships between (macro-)phyla, whose various levels are denoted by font size. Only for Eurasiatic, branches below phylum level are displayed. Austronesian is put between brackets: with Austroasiatic, it is one of the two branches of Austric under the Austric hypothesis, but the only sub-macrophylum for which the *Tower of Babel* database does not provide a separate etymological database. The English language belongs to the Germanic branch.

Fig. 8.15. Dendrogram showing the proposed relationships between major

```
        C A S E           0       5        10       15       20       25
                          +--------+--------+--------+--------+--------+
        Bantu       27%   -+-----------------+
        Khoisan      4%   -+                  +--------------------+
        Amerind     33%   ------------------+                     +-------+
        Austric     40%   -----------------------------------------+       I
        Eurasiatic  81%   --------+-----------------------+               I
        Afroasiatic 66%   ---------+                      +-------------+
        Sino-Caucasian 72% ----------------------------------+

        log. time scale A  0   5   10  15    20  22.5                  25 ka BP
        (c = 0.476)        +-+-+-+-+-+--+---+----+------------------------+

        log. time scale B  0    5    10   15     20    22.5        25 ka BP
        (c = 0.666)        +--+--+--+--+--+---+----+-----+-------------+

        uncorrected linear 0        5       10      15       20      25  ka BP
        time scale         +--------+--------+--------+--------+--------+
```
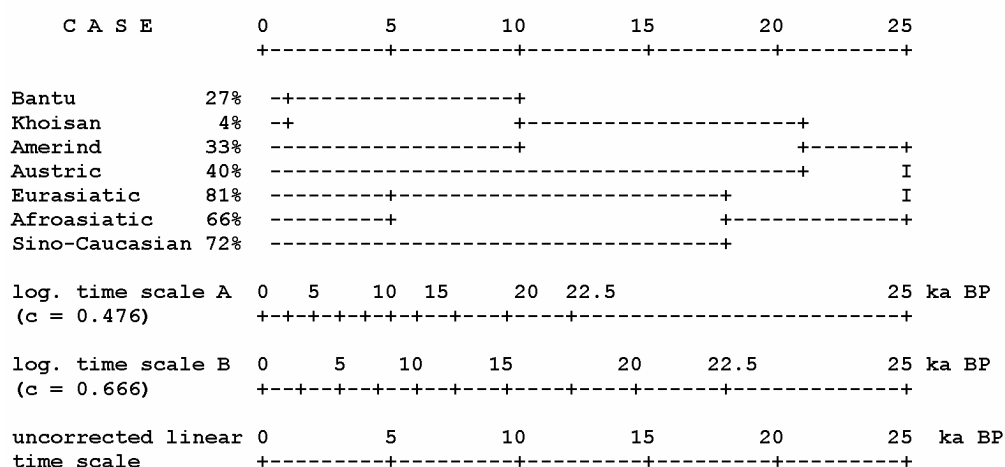
A macrophylum's percentage under CASE would be 100% if the *Borean reconstructed lexicon is entirely represented among the reconstructed protolexicon for that macrophylum.

Fig. 8.16. Dendrogram setting out the relative positions of the *Borean-associated linguistic macro-phyla in relation to Bantu and Khoisan[297]

*Borean turns out to consist of two main branches

1. one, ultimately Peripheral, branch vacating the Central Asian homeland and moving on (being chased? or differentially equipped with the necessary technology to explore new continents and on their own initiative?) to South East Asia, Oceania, the Americas and sub-Saharan Africa, and

2. the other, ultimately Central, branch remaining in the Eurasian homeland, gradually expanding westward to finally occupy most of Eurasia,

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[297] Apart from disagreement on the nature and degree of reality of specific macrophyla, there is considerable debate on their interrelationships. My diagram Fig. 8.15 represents the views held by Russian specialists over the last half century, propagating the Nostratic / Eurasiatic Hypothesis. North Atlantic specialists such as Bomhard and Kerns (1994), however, have stated the case for including Afroasiatic within Nostratic. Another moot point is the status of the languages spoken in Africa prior to Early Modern European global expansion: the macrophyla Afroasiatic, Khoisan, Niger-congo and Nilosaharan. Of these, only Afroasiatic was historically recognised as also spoken in Asia The other three are now confined to Africa, although the oldest attestations of Proto-Bantu (< Nigercongo) are from Bronze Age Syro-Palestine, *e.g.* such place names as Jabbok, Canaan. Some authors (*e.g.* Cavalli-Sforza 1997; Cavalli-Sforza *et al.* 1994) count the African macrophyla are belonging to the extreme periphery of human cultural history (and human genetic history, for that matter) – partly on the grounds of the click sounds in Khoisan. Others see these three macrophyla as part and parcel of the human linguistic map; thus the *Tower of Babel*, while not discussing Nilosaharan and Nigercongo in detail, yet includes them in their account of long-range etymologies, while others, as we have seen, have specifically treated them as branches of 'Super-Nostratic', thus stressing their continuity with the other languages commonly considered as branches of Nostratic / Eurasiatic.

and the Northern half of Africa.

Probably there is a very simpleexplanation for the bifurcation between the peripheral branch (African languages, Amerind (misc.) and Austric) and the central branch (Eurasiatic / Nostratic, Afroasiatic, and Sinocaucasian) that strikingly emerges from Fig. 8.16, For when we confront these statistical results with the reconstruction of the global history of mtDNA haplo groups (Forster 2004), the Peripheral Branch appears to derive from mtDNA haplo type M, the Central Branch from type N – the bifurcation appears to mainly reflect an initial segmentation, already in the Arabian peninsula some 60 ka BP, of Anatomically Modern Humans's early movement 'Out of Africa'.

The essential point about using *Borean in a testing of Durkheim's religion theory is that it allows us fairly detailed glimpses on the meanings which Anatomically Modern Humans in the Upper Palaeolithic attached to elements in their life world. So it is on *Borean semantics that our analysis will have to concentrate. It is to this topic that we now turn.
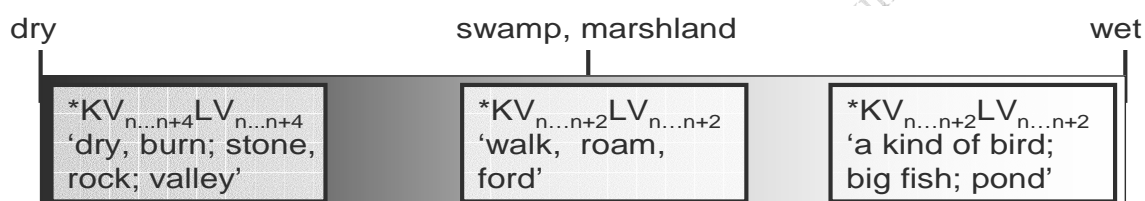
8.3.1. How *Borean semantics is structured: Introducing 'range semantics'

Above (section 4.3) I have already referred to my analysis of *range semantics* as exemplary of modes of thought in the Upper Palaeolithic. In my published work, I first introduced the peculiarities of *Borean semantics in my discussion of the life-world of the Sea Peoples at the end of the Bronze Age in the Eastern Mediterranean. In Upper Palaeolithic oppositional or polar semantics (such as 'dark / light', 'water / land', 'male / female') may not be rendered by the word for either end of the range but by evocation of the entire range leaving it to the context which end of the range was intended. This prompted my hypothesis that absolute difference was difficult or impossible to express in *Borean,[298] and only came as a later development, especially with the Bronze Age logocentric package of writing, the state, organised religion, and proto-science. Immediately I had to qualify this hypothesis, since the entire use of articulate speech depends on the possibility of making clear-cut, not to say absolute, distinctions between phonemes and between the words and other language constructs build out of phonemes. If we would not be able to distinguish rigorously between, for instance, *tape, tap, tip, top, taupe,* communication by means of articulate language would be very difficult not to say impossible.

"*Borean reconstructed roots are mainly of the form *CVCV, where C is a specifically reconstructed consonant, V an unspecified (and unspecifiable) vowel. Now looking at the *Borean repertoire for 'wet' and 'dry', we see to

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[298] In such reconstructions of ancient modes of thought we have to proceed very carefully and not jump to conclusions. Below we shall consider the case of the 'enclosure, fence' semantics in *Borean, as an aspect of the sacralisation of space. In this connection it is important to realise that although a man-made boundary / fence / limit may not amount to an absolute distinction (boundaries are meant to separate as well as to be crossed, at least in the imagination), it yet comes sufficiently close to one to make us suspect that *considerable* (as distinct from *absolute*) difference was not so unthinkable after all. We shall also consider such apparently natural boundaries as that between life and death, night and day, man and beast, which point in the same direction.

our amazement that many reconstructed words which have the same specific consonantal structure (although, admittedly, the underlying vowel structure remains undefined), in their semantics relate to both 'wet', 'intermediate, swampy', and 'dry'. It is as if the *Borean words (or, to be more precise, the vowel-unspecified word cluster with the same consonantal structure) had a meaning that is not calibrated at one specific point in the semantic range between 'wet' and 'dry', but that indicates the entire range, leaving it to context to determine which position on this range is meant. Such 'range semantics', as a general characteristic of *Borean, reveal a mode of thought that is very different from the triadic mode often found in the literate Eurasian civilisations from the Bronze Age on, and even (because of the fluid range semantics which implies an absence of firm juxtaposition) from the dyadic, binary oppositions which Lévi-Strauss (1962a, 1962b, 1969-78) thought to be a human universal and even the very basis of human culture. On the contrary, *Borean range semantics are far more reminiscent of Derrida's *différance* (the postponement of dyadic opposition); when Derrida (1967b: 149 f.; 1997 / 1967a) attacked Lévi-Strauss precisely on the latter's postulate (following de Saussure 1916 / 1968) of the universally constitutive nature of binary opposition, Derrida was in fact reviving the time-honoured ancient mode of thought characteristic of the Upper Palaeolithic and reconstituted for *Borean, and thus thinking away from the logocentricity of modern academic language use based on the Aristotelian logical principle of the excluded middle ('it is impossible for A to be, and to be not, at the same time'), and modern life in general.' (van Binsbergen & Woudhuizen 2011: 142)

dry   swamp, marshland   wet

$$*KV_{n...n+4}LV_{n...n+4}$$
'dry, burn; stone, rock; valley'

$$*KV_{n...n+2}LV_{n...n+2}$$
'walk, roam, ford'

$$*KV_{n...n+2}LV_{n...n+2}$$
'a kind of bird; big fish; pond'

where $-9 \leq n \leq 1$: the number of different vowels involved in these 10 reconstructed *Borean words of the general form *KVLV is minimum 1 and maximum 10. For each of the dry, intermediate and wet clusters, n is to be determined in the same way. Note in many ancient cosmologies, birds are regarded as 'fishes of the waters above' – source: van Binsbergen & Woudhuizen 2011: 144, Fig. 6.3.

Fig. 8.17. 'Range semantics': Diagrammatic representation of the semantic field of the cluster of *Borean words $*KV_{n...n+10}LV_{n...n+10}$

WATER		INTERMEDIATE (note: a vessel is solid, contains fluid		LAND	
				*CVCV_{1,2,3}	dry; stone; tip, spout
*CVKV	bird			*CVKV_{1,2}	hard; stand
		*CVLV_{1,2}	fish trap, fence; slime, dirt	*CVLV	steppe, valley, meadow
*CVLV	water, pour				
*CVMV_{1,2}	a kind of bird; fish			*CVMV	marsh, uncultivated land
				*CVNV	stone, mountain
*CVPV	to sink				
*CVRV	to flow, drip			*CVRV_{1,2,3}	dirt; to dry; to stand
*CVTV	drink, liquid				
*CVWV_{1,2}	liquid; sea, water				
				*HVHV	to stand up, move upwards
*HVKV	water				
*HVLV	wet				
				*HVMCV	stone
				*HVMGV	dirt, earth ?
*HVMV	drink, swallow				
				*HVNLV	stone
*HVNV	water				
*HVRCV	rain, pour				
*HVRV	liquid			*HVRV	stone
*HVWV_{1,2}	bird; stream, flow of water				
*JVMV	sea, water				
				*JVNV	to live, stand
				*KVCV_{1,2}	dry; sand
*KVHNV?	water				
				*KVKV	dry
*KVLV_{1,2,3}	a kind of bird; big fish; pond	*KVLV	walk, roam, ford; vessel	*KVLV_{1,2,3}	dry, burn; stone, rock; valley
*KVMCV	a kind of fish				
*KVMV	a kind of bird			*KVMV_{1,2}	dry; hard

				*KVNTV	corner, enclosure ?
*KVNV	a kind of bird			*KVNV$_{1,2}$	burn, roast, dry; hill
*KVPV	a kind of bird				
				*KVRTV	enclosure
*KVRV$_{1,2,3}$	a kind of fish; a kind of gallinacean bird; crane			*KVRV$_{1,2,34}$	dry; dung, mud; enclosure; mountain, hill
*KVTV$_{1?,2}$	water, to submerge; a kind of bird			*KVTV	dirt
				*KVWV	stone, mountain
*LVJV	liquid, flow				
*LVKV$_{1,2}$	a kind of bird; goose	*LVKV	pool, low ground	*LVKV	dirt
*LVLV	boat				
*LVMV$_{1,2}$	large fish				
		*LVMV	swamp (land / water)		
*LVNV	to wash, pour			*LVNV	stone
*LVPV	soft, wet				
*LVTV	liquid				
*LVWV	to pour				
*MVCKV	wash				
				*MVLV	mountain
*MVRV	wet				
*MVTV	moisture				
MVWV	water, wet				
				*NVHV	to stay, be, stand
*NVNV	a kind of fish				
*NVRV	flow				
*PVCV	sprinkle				
*PVHV$_{1,2}$	bird, fly; to pour			*PVHV	hill, rock
*PVKV	to pour, wash			*PVKV$_{1,2}$	dust, dirt; hard, firm
				*PVLV$_{1,2}$	ashes, dirt; mountain, hill
				*PVMV	earth, mound
*PVNV	water			*PVNV$_{1,2}$	clay, mud; stone
				*PVRV	mountain, top
				*PVTV	ashes, burn
				*RVMCV	stone
				*RVNKV	dry
				*RVPV	stand
*SVKV	a kind of bird				
*TVHV	spit, spittle			*TVHV$_{1,2,3}$	bottom; earth; stone
*TVKV$_{1,2,3}$	a kind of duck or hen; fish; to pour, drop	*TVKV$_{1,2,3}$	vessel, boat; vessel, to scoop; water, pond	*TVKV$_{1,2}$	earth; mountain, high
				*TVLV$_{1,2}$	hill; stone
*TVNV$_{1,2}$	pot, vessel; to melt, flow			*TVNV	top
				*TVPV	hill
*TVRV$_{1,2}$	a kind of bird; to drink, flow			*TVRV$_{1,2}$	earth, dust; enclosure, yard
				*TVTV	dust, ashes
				*WVCV	enclosure
				*WVRV	mountain
*WVTV	water				

Cells with a grey background present the isolated words, *i.e.* those that are not paired with an opposite or intermediate form displaying the same consonantal structure. The subscripts indicate a plurality of otherwise indistinguishable reconstructed *Borean words with the specified consonantal structure; source: Starostin & Starostin 1998-2008, 'Global etymologies' / van Binsbergen & Woudhuizen 2011: 143-144, Table 6.5

Table 8.1. *Borean reconstructed words of 'dryness' and 'wetness'

'light' words	'dark' words		'light' words	'dark' words
*CVCV 'fire'			*HVMV$_1$ 'fire, burn'	*HVMV$_2$ 'dark'
*CVJV 'to blink, shine, shade'	*CVJV 'to blink, shine, shade'		*HVNKV 'fire, burn'	
*CVKV$_1$ 'white'; *CVKV$_2$ 'morning, evening'; *CVKV$_3$ 'fire, to strike fire'	*CVKV$_4$ 'dirt, faeces; *CVKV5 'morning, evening '			*HVPV 'black'
*CVLV$_1$ 'to flash, shine'	*CVLV$_2$ 'black, dark'; *CVLV$_3$ 'coals, soot, burn'; *CVLV$_4$ 'slime, dirt'		*HVRV 'light, burn'	
	*CVMV 'dark, black'		*JVKV 'light, shine'	

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*CVNV₁ 'burn, shine'	*CVNV₂ 'night, sleep'; *CVNV₃ 'black'; *CVNV₄ 'cold'		*KVCV₁ 'warm'	*KVCV₂ 'night'
	CVPV 'evening'		*KVJV 'to burn, boil'	
	*CVRV₁ 'dirt'; *CVRV₂ 'grey'; *CVRV₃ 'evening'; *CVRV₄ 'cold'		*KVLV 'dry, burn'	
*CVWV₁ 'to burn'; *CVWV₂ 'sun'			*KVMV₁ 'sun, burn (?)'	*KVMV₂ 'winter, cold'; *KVMV₃ 'black, dark'
*HVCRV 'star, shine'			*KVNV₁ 'dawn, light'; *KVNV₂ 'burn, roast, dry'	*KVNV₃ 'brown, dark'
*HVCV₁ 'to burn'; *HVCV₂ 'bright'			KVPV 'to burn, heat'	
	*HVDV 'night, sleep'		*KVRV 'burn, hot coals'; KVRV₁ 'to burn, bake'	*KVRV₂ 'black'; *KVRV₃ 'cold'
*HVHV 'fire'			*KVTV₁ 'burn, fire'	KVTV₂ 'dirt'
*HVKV₁ 'light, fire'; *HVKV₂ 'day, sun'	*HVKV₃ 'ice, cold'		*LVKV₁ 'shine; burn'	*LVKV₂ 'dirt' *LVLV 'night'
*HVLTV 'burn, boil'			*LVMV₁ 'warm'	*LVMV₂ 'dark'
*HVLV 'light, shine'			*LVNV₁ 'dawn, light'	*LVNV₂ 'dark, black'
	*HVMGV 'dirt, earth ?'		*LVPV₁ 'to shine, glitter, flash'	*LVPV₂ 'dusk, dim, cloud'

(from van Binsbergen & Woudhuizen 2011: 145, Table 6.6)

Table 8.2. 'Light' and 'dark' words in *Borean

Clearly, the example of Table 8.1 does not stand on its own – I ascertained the same phenomenon for other semantic complexes, notably for 'light and dark' words (van Binsbergen & Woudhuizen 2011: Table 6.6) – even though the succession of night and day must have been a primary nature given, also for people living in the Upper Palaeolithic, and hence might have helped them to think difference – although cyclical succession of two radically opposed phases is rather a way, not to think, but to avoid thinking, *absolute* difference.

'Let us agree that *Borean speakers seem to have had considerable difficulty in thinking absolute difference, in other words in thinking the kind of binary oppositions that Aristotle has planted as the hallmark of rationality and proper thinking in the Western philosophical tradition.

In fact the binary opposition appears to be merely a relatively recent (Middle Palaeolithic?) achievement (closely associated with, and enhanced by, the emergence of articulated speech) of Anatomically Modern Humans worldwide; which in turn was greatly enhanced again in the Late, or Post-, Neolithic (the civilisation package) within the Extended Fertile Crescent – a belt stretching across the Old World from the then fertile Sahara to China.

As the principal logical tool of modern humankind, binary oppositions not only allow us to think and to symbolise in a 'modern' fashion, and to formulate an objective, (proto-)scientific world-view. The binary opposition is also largely responsible for one of the greatest revolutions in the history of religion: *the installation of the notion of transcendence.* The possibility of thinking beyond the here and now is already given in any language, which by the universalising tendencies of the semantics of words allows us to speak of situations, entire worlds even, that are far away, long past or in the distant future, and even non-existent. But such rudimentary, universalising and virtualised dimensions as are inherent in any language use, are greatly enhanced if (especially with the invention of writing, and its vital contribution to the creation and maintenance of states, organised religion and proto-science) language is utilised to think and express differences that are no longer conceived as merely gradual as specific calibra-

tions upon a scale between two opposites or contrasted paired concepts (as, presumably, under the *Borean range semantics), but differences that are absolute. Transcendence amounts to the application, in the cosmological, ritual and experiential fields, of the ability to think absolute difference. Today, transcendence as a feature of human thinking permeates all aspects of the modern societal experience, from world religions to state-of-the-art science, from legal systems to new technologies of information and communication, and to the virtualisation of the body, the person, and identity in the face of the encroachment of external models, so eminently persuasive through the very virtuality through which they are being mediated. If in an empty street in the middle of the night and without evidence of camera supervision (therefore no risk of external sanctions) we find it normal to stop for a red traffic light, this is because the authority of the state's regulations has taken on a sense of transcendence that allows it to operate irrespective of the practicalities of the here and the now. But although totally taken for granted, and almost impossible to think away (although Derrida has come a long way in this respect), transcendence must be recognised as a relatively recent achievement, whose antecedents in writing, the state, organised religion and proto-science suggest it to date, in recognisable form, from the Neolithic or Bronze Ages – even more recent than binary opposition in general. (...)

All this raises the question (fundamental for any pre- and protohistory of human thought and philosophy) as to how the transition was made from the range-like logic implied in *Borean reconstructions, to the binary oppositions that today govern our lives, technologies, and knowledge production.

In my opinion the binary opposition came to be installed as the norm, in the first place as a result of articulated speech (which – de Saussure was right – is predicated on binary opposition between phonemes), and subsequently and even more formidably, as a result of the logocentric package of post-Neolithic civilisation, containing writing, the state, organised religion and proto-science, that has raised domesticated, binary thought to the norm and has banished undomesticated thought to the (fortunately still very extensive) non-specialised, non-academic, non-formal domains of everyday life. The capability of transcendent thought is also predicated on binary oppositions. In a logic based on range semantics, however, no firm binary opposition and no genuine transcendence can be thought. It is my contention that not transcendentalism, but immanentalism is the default option of the world-view of Anatomically Modern Humans. Only occasionally, under very specific historical and statal conditions which happened to be met in sections of the Extended Fertile Crescent since the Early Bronze Age, does immanentalism fully give way to transcendentalism.[299] The typical implication of immanentalism is repetition, when it is fundamentally impossible to escape from the here and now, and all appearances to the contrary are ultimately a disguise of the idea of an *'Ewigen Wiederkehr des Gleichen'* ('eternal return of the same'; Nietzsche 1973a, 1973b; Eliade 1954). In ancient cosmologies, two complementary forms of repetition are conspicuous:

- In the first place the cyclical repetition implied in a transformative cycle of elements, such as we know from Chinese Taoism but as is also implied in the elemental systems of the Greek Presocratic philosophers, with further manifestations throughout Central Asia (Mongolia, Tibet), South Asia, and South Central Africa.[300]

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[299] Van Binsbergen forthcoming (a) is a further attempt to define the conditions for the historical emergence of transcendence, and to derive firm empirical evidence as to the nature and periodisation of this process from, again, the statistical analysis of Flood myths worldwide.

[300] *Cf.* Texts of Taoism 1891; Needham *c.s.* 1956; Fiskejo 2000; Freeman 1948; Diels 1934-37; de Raedemaeker 1953. Van Binsbergen 2012d presents a transcontinental overview.

- And in the second place the process which the ethnomathematician Ron Eglash (1997, 1999, 2005) in his studies of African formal systems in divination and ornamentation, following common mathematical usage, has discussed under the heading of *recursion*:[301] the endless repetition through bifurcation of the same phenomenon at successive levels, like a binary dendrogram unfolding endlessly. Here the binary opposition is not a real one, because it is not conclusive nor stable in itself but – for fear of the absolute difference implied in the real binary opposition – it keeps repeating itself, it is merely an invitation to further and further bifurcation. (van Binsbergen & Woudhuizen 2011: 142 *f.*)

8.3.2. Methodological difficulties in the long-range linguistic reassessment of Durkheim's claims

In the long-range linguistic assessment of Durkheim's claims, the methodological difficulties are numerous, and of rather different kinds; range semantics is only one of the difficulties that must be faced.

The basic problem is that we are working at a high level of unreality and make-believe. Using the *Borean reconstructed lexicon as a source of information means reifying it and ignoring the many ways in which it is conjectural and artificial. *Borean roots are reconstructed on the basis of reconstructed proto-forms of many linguistic phyla and macrophyla; the words were usually only committed to writing and to databases in the course of the last hundred years, reflecting the concerns of scholars in modern and post-modern global society – so how can we ever be sure that the *Borean semantics that we attach to these recent words, are reliable and valid? The truth is that we cannot be sure, and that all we have is fairly systematic conjectures reflecting the state of the art in long-range linguistics. The linguists defining the *Borean semantics did normally not do so with an explicit religion theory in their minds, and we cannot expect their reconstructions to be extremely sensitive and sophisticated on this point. Perhaps, if we have specific theoretical reasons for doing so, the often general and unspecific *Borean semantics as listed in the *Tower of Babel* might be slightly adapted to the present problem at hand, that of the cultural history of religion.

To use such reconstructed lexical material for religious analysis opens up another difficulty. Every *Borean root, with the semantics attribute to it, constitutes the top of a pyramid of derivations / reflexes (in the form of proto-forms) in the macrophyla and phyla of the recent world. We assign semantics to these proto-forms, and since the semantics of the more recent proto-forms may be determined with a fair degree of precision, this is what leads our attribution of

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[301] A useful general definition of *recursion* is: the situation in which a class of objects or methods is defined by a simple basic case and where specific rules derive from, and reduce to, this basic case all other cases. In iconography, repetitive patterns of decoration (...) constitute examples of recursion. In social organisation, segmentation, the segmentary lineage, and the genealogy represented as a dendrogram also amount to recursion.

*Borean semantics. In the first place we shall be looking for unmistakably religious semantics in the *Borean layer of our data. Descending along the linguistic tree from the *Borean top to the more recent proto-forms, we often observe slight or considerable shifts in semantics: what appears to be religious at the *Borean level, may not be so and may seem to be totally pragmatic and secular in the more recent proto-forms, and especially the other way around. Anticipating our findings in the next two chapters, we must particularly prepare ourselves for a situation where the lower, recent proto-forms are suggestive of religious semantics, whereas the higher, older forms right up to the *Borean level, lack manifest religious connotations. This poses a problem of interpretation. If the later reflexes seem religious, are we justified to project such religious semantics back into *Borean times, even if the listed semantics from the *Tower of Babel* database do not explicitly indicate religious semantics? Or, given the generally plausible idea of the gradual unfolding of the religious as a level of thought and experience, must we stick to the principle that more recent reflexes may display religious overtones and still derive from earlier, *Borean forms which lacked such religious connotations? The problem is very real, and very difficult to solve; we shall encounter instances of it when we inspect the details of the *Borean lexicon in the following chapter.

Another important methodological point has been implicitly made in passing: Considering the semantics and morphological pyramids of proto-forms from the most recent and local ones to the most comprehensive and oldest, *Borean ones, means that we are projecting the semantic evolution of *Borean words against a time scale. Although the reconstruction of *Borean does not go back further than the Upper Palaeolithic, within these confines the *Tower of Babel* is a remarkable long-range linguistic clock, which in the best case may begin to show us the historical evolution of religious forms across the millennia.

A further methodological question that arises at this point is: What does the replacement of older by newer religious concepts and terms mean for the reconstruction of the religious lexicon of *Borean? With the progress of centuries, new and more modern religious notions invade the life-world and begin to be reflected in the lexicon. This is likely to affect the older terms which inherently belong to the higher etymological level. Either they become unspeakable and disappear from the more recent language forms, so that they can no longer inspire the reconstruction of *Borean and disappear from our listings altogether. Or, as heathen concepts now to be shunned, they become demonised – perhaps with the implication of becoming tabooised,[302] but at least with the

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[302] #45. *TABOO IN ARCHAEOLOGY?* In archaeology, Fowles (2008) has presented an attempt to build an awareness of the social and material effects of *taboo* into archaeological research and interpretation. Inevitably, however (and as Fowles admits explicitly) interpreting the archaeological record from a taboo perspective means using the argument of silence and absence – which is shaky methodology, for so many other factors may explain the absence of data (*e.g.* absence of pork in Middle Eastern archaeology) than a cultural taboo; after all, chance plays an important role in archaeological finds, and the fact that one has not (yet) found some-

implication that at the higher etymological levels, those closer to *Borean, we may expect, among the apparently religious terms, more negative than positive terms – thus 'demon, devil', rather than 'god, spirit' – for the latter may be taken to already have been demonised and marginalised in the historical process.

*The most formidable problem, however, in the use of the *Borean data for an assessment of Durkheim's theory of religion, is that the latter is predicated on the assumption that absolute distinction is not only possible and standard in the prehistoric cultural life-world under consideration, but that such absolute distinction will also be at the heart of that life-world's religion. This shaky assumption must now be reconsidered in the light of demonstrable peculiarities of *Borean semantics, which I have repeatedly discussed in my earlier work (van Binsbergen 2012d; van Binsbergen & Woudhuizen 2011, and summarised in the last few pages above).*

Above I already indicated that the concept of Nature cannot be confidently projected back into Upper Palaeolithic life-worlds. The concept of nature as used in global modern life presupposes the actors to make a radical distinction between themselves as humans and the non-human world. In modern life, one of the principal distinctions, and a fairly absolute one, is that between human and animal. There are indications that this distinction did not obtain in the same absolute form in *Borean times. The totemic principle implied a gradual merging / identification / distinction between humans and animals. This is religiously relevant because the totem spirits were often venerated – according to Durkheim (relying second hand on the ethnography of Spencer & Gillen, mainly), they even constituted the core of Aboriginal Australian religion.

Let me briefly indicate two further problems.

In the first place, the impact of taboos upon the reconstructed *Borean lexicon. Language use in human communities, especially under conditions prevailing prior to the installation of the Bronze Age logocentric package of writing, the state, organised religion and proto-science, tends to be governed by many taboos, which restrict the use and circulation of certain language forms depending on time (*e.g.* night) and place (*e.g.* a sacred place, a village of affines), kinship role (*e.g.* spouse, mother-in-law), special relationship with the non-human object designated (hunter / prey, thief / loot, clansman / totem, specialist (diviner-healer, shaman, metalworker / esoteric objects and associated knowledge). In the interminable listings of the *Tower of Babel* data base, such taboos are frequently suggested at (though hardly ever spelled out) in relation to more recent, lower-level reflexes, but never for the *Borean level itself. But also, perhaps particularly, *Borean is likely to have contained numerous taboo words, especially in the (pre- or proto-) religious sphere, which could not freely circulate, and thus were unlikely to be passed on as reflexes in later macrophyla and phyla. In some

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thing that could have been there, does not mean that it ever was or could have been there – in other words, that there have been systematic, *emic*, cultural reasons why it did not surface.

ways, our present *Borean reconstruction is merely the tip of an iceberg, and we lack the underwater technology to explore what is beneath the ocean's surface.

The second point relates to this: the free circulation of words may be restricted by taboos, but also by the specific, usually professionally guarded, technical language of local (part-time) specialists – hunters, diviners, healers, flint knappers, rope-makers, fishermen, etc., such as are likely to have existed among many societies in the Upper Palaeolithic, if not already before. Ritual specialists often use language forms which are different from everyday speech and which, given the shielded nature of exoteric knowledge, may not end up in the general vocabulary available for transmission to later generations and to later language forms. Examples could be given from most cultures in the world. *E.g.* in Eskimo:

Proto-Inupik: *taụ 'human being (shaman's language)'
Seward Peninsula Inupik Dialects: (...) tuaq* (tuāk, tuāt) 'man, person'
Westcanada-Inupik Dialects: (...) tau* 'man, person', (...) tauq (...)
Eastcanada-Inupik Dialects: (...) tau (...), (...) tau (arch.) (...), Igloolik taujaq 'white man' (...)
Greenlandic Inupik Dialects: Eastgreenlandic tāq 'man', Westgreenlandic taušaq 'man (shaman's word)'
(Egede 1741), Eastgreenlandic (...) tāq 'person whose name has left him after death', *cf.* East-
greenlandic tāʁtaq 'helping spirit' (Fortescue 1994: 333-334)

Table 8.3. Selected specialist's terms in Eskimo

Here, thanks to the exceptional quality of Eskimo ethnography and descriptive linguistics (largely based on the work of the great student of the Eskimo world, Birket-Smith), the specialist, shamanic word could be retrieved – but we can safely assume that such retrieval was an exception rather than a common oc-currence.[303] These two final points are further reasons not to cling to the *Borean lexicon too closely, and not to overestimate the uses to which we can put it in the reconstruction of prehistoric forms of religious life.

8.3.3. Sketching a *Borean life-world

With all the above qualifications of our use of the reconstructed *Borean lexicon, it may come almost as a surprise when I now proceed to actually sketch the bare out-

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[303] And a most felicitous exception at that, corroboration of my hypothesis (*cf.* van Binsbergen 2011e; but also advanced in the present book) to the effect that the ritual domain of specialists, initiation, rites, may be particularly suitable for the unaltered transmission, in space and time, of older cultural including mythical material. For the comparative linguist, a Proto-Inupik shaman's word *taụ is most significant. For it links Eskimo language use with a global etymology (*cf.* Appendix IV, below, where this 'Earth-Human-Bottom' complex is listed in detail) around the root *taw / *(n)tu, 'human', with ramifications in all macrophyla of the world. At the same time, we are reminded of the typological / taxonomic proximity of the Eskimo world with that of the Central and South Pacific. The famous Captain Cook in his 18-c. CE maritime expeditions, within one voyage would hit both on the tropical Oceanian world of Polynesia, and on the arctic Eskimo world of Beringia in the extreme North. Also the major Eskimo ethnographer Birket-Smith was struck (Birket-Smith & Calvert 1936) by the similarities between Eskimos and inhabitants of the insular Pacific, speakers of Austronesian – in the latter phylum, as in Bantu, *taw / *(n)tu is the word for 'human'.

lines of the *Borean life world of the Upper Palaeolithic in Central to East Asia, merely on the basis of the linguistic reconstructions: at least 1151 roots which have left arguable traces in the lexicons of macrophyla spoken in historical times (Starostin & Starostin 1998-2008, s.v. 'Long-range etymology.). Of course we need to proceed with great care, and must not attach too much importance to the results of our reconstruction. We only dimly perceive the mechanisms of selection, transmission, retention, erosion and both semantic and phonological drift which have led to some words spoken in *Borean times leaving detectable traces in recorded, much later language forms more than 10 ka later – while others apparently did not leave such traces. We can moreover be sure that the set of 1151 reconstructed roots did not cover the entire range of a *Borean lexicon. We can also be sure that there was in actual fact not just one *Borean lexicon but that considerable differences existed between the language variants spoken in various regions and various periods over Central to East Asia in Upper Palaeolithic times, c. 25-20 ka BP. Moreover, we can only retrieve the probable semantics of each reconstructed root on the basis of the semantics of the much later words out of which the *Borean form has been reconstructed – under productive, social, political and religious conditions that must have been rather different from *Borean times. Glossing over the reconstructed roots is not the same as doing field-work in a living language community with a living culture.

So many uncertainties and arbitrary scholarly impositions attend the reconstructed *Borean semantics, that it would be foolish to try and build a comprehensive picture of *Borean life and meaning on the basis of that lexicon. Yet a great deal of rather convincing data may be gathered there. To give an impression of the great extent to which the *Borean life world is down-to-earth, practical, geared to productive activities, the following Table 8.4 lists about 150 *Borean roots (about 13% of all 1151 that have been reconstructed!) that relate to productive activities, and to the man-made material objects required or produced in that connection; the listing is not entirely exhaustive, *e.g.* *LVLV, 'arrow, harpoon', should have been included.

item	*Borean word		item	*Borean word		item	*Borean word
beat, push, beat; grind (2 roots?)., to	*NVKV		fire, light	*HVKV		sew, cloth, to	*RVPV
bind, girdle, to	*KVTV		fire, to strike fire	*CVKV		sharp object	*CVNV
blow, fan, to	*HVPV		fireplace, burn	*PVPV		sharp point, tooth	*HVKV
boat	*LVLV		fish trap, fence	*CVLV		sharp, to cut, sharp	*CVRV
bore, dig, to	*LVNV		fringe, thread	*CVNV		sharp, to whet	*PVHV
bow	*PVKV		gum, resin, mud	*PVNV		sharp; to scrape	*CVKV
bow, arc	*TVNV		hair, rope	*NVJV		soot, burn , coals,	*CVLV
branch, stick	*HVLV		hit, beat, hit	*TVPV		spin, wind, to	*KVRV
break, chop	*CVPV		hit, push, to	*MVKV		spin, twist	*PVNV
bridge, road	*LVMV		hoe, furrow	*HVRV		split, break, separate	*PVTV
build, house	*TVMV		house	*HVLKV		split, burst, split (many roots), to	*PVKV
build, house, roof	*PVNV		house	*HVTV		spin, twist	*PVNV
burn , coals, soot,	*CVLV		house	*PVRV		split, break, separate	*PVTV

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burn, ashes, burn	*PVTV	house, roof , build,	*PVNV	split, burst, split (many roots), to	*PVKV
burn, bake, to	*KVRV	house, village	*KVMV	split, cut, split, to	*CVKV
burn, boil	*HVLTV	join, glue	*CVPV	stalk, peg	*KVNPV
burn, boil, to	*KVJV	knife, cut, break	*KVNTV	stalk, root	*KVRV
burn, hot coals	*KVRV	mound, earth, mound	*PVMV	stick	*KVLV
burn, light	*HVRV	mushroom, sponge	*PVTV	stick	*PVCV
burn, roast	*PVKV	net	*MVNV	stick in, pierce, to	*NVKV
chopped piece, to cut	*KVTV	peel, naked, to	*LVKV	stick, board	*TVLV
cut, break, wound, to	*HVRV	peg, nail	*KVKV	stick, sharp stick	*CVLV
cut, hit, saw, to	*PVWV	pipe, throat , to swallow, throat; pipe	*PVLV	stick, tree	*KVRV
cut, knife, to	*KVLV	plait, weave, to	*HVPV	stir, mix, to	*PVLV
cut, sharp, to	*CVRV	plank, board	*PVLV	sweep	*CVPV
cut, split, to	*CVKV	plant vertically, stand, to	*TVKV	sword, weapon (spear, sword)	*TVNV
cut, split, to	*RVKV	pot	*PVTV	tear, break, split, to	*PVRV
cut, tear, to	*MVCV	pot, vessel	*TVNV	tie, bind, to	*KVNV
cut, to	*HVCV	prepare food, to	*PVCV	tie, knot	*KVRTV
cut, to	*KVCV	resin, coniferous tree,	*PVNCV	tie, net, to	*TVLV
cut, to	*TVNV	resin, gum, mud	*PVNV	tie, weave	*TVKV
dig, hack, to	*KVPV	ring, hook	*KVCV	tooth, peg	*HVNV
dig, hole, to	*TVWV	road	*RVMKV	touch, plaster, attach ?	*TVPV
door	*HVRV	road, pass , direction,	*KVCV	trap, a kind of trap	*TVPV
dry , burn, roast	*KVNV	road, walk, run, road (several roots? assimilations?)	*TVRKV	vessel	*KVLV
dwelling	*KVLV	roast, boil	*CVRV	vessel	*KVPV
enclosure	*KVRTV	rod, strap	*LVKV	vessel, a kind of vessel	*PVNV
enclosure	*KVRV	rod, twig	*CVTV	vessel, blood vessel	*PVHV
enclosure	*WVCV	roof, cover	*LVNV	vessel, a kind of vessel	*KVKV
enclosure, corner, enclosure ?	*KVNTV	roof, house	*MVRV	vessel, boat	*TVKV
enclosure, yard	*TVRV	rope, thread	*WVRV	vessel, to scoop	*TVKV
fat, smear; fat	*CVMV	sack, bag	*LVMV	village, house	*KVTV
ferment, sour	*CVKV	scrape, scraper	*KVNCV	wash	*MVCKV
fire	*CVCV	scrape, to	*KVRV	wash, pour, to	*LVNV
fire	*HVHV	scratch, rub, scratch, to	*PVKV	wash, pour, wash, to	*PVKV
fire	*PVHV	scratch, scrape	*KVCV	wear, dress	*WVCV
fire	*TVHV	scratch, scrape	*WVRCV	weave, plait, weave, rope (?), to	*RVCV
fire, burn	*HVMV	scratch, to	*HVKV	whetstone, blade, whetstone	*HVLV
fire, burn	*HVNKV	seed; to sift	*CVHV	yard, building	*KVNV

Table 8.4. Productive activities and related objects in *Borean

Independently from the reconstructed lexicon, archaeology and comparative ethnography afford us models and empirical data on the *Borean life world. We know that this was a time when hunting and gathering formed the sole sources of human nutrition, in the sense that agriculture and pastoralism as modes of

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production had not yet come into existence. By the same token, stone tools provided the main cutting and hammering implements, metal-working can hardly have played a role, but in addition to the splendidly documented stone-tooling, also wood-working, leather-working, spinning and weaving may have existed to some extent, even though these techniques tended to yield perishable products that could rarely persist across the millennia. Much of the *Borean lexicon deals with simple productive activities notably in the process of food processing: scraping, burning, ashes. Small settlements, often in caves and other natural formations, stipulated a closely-knit, relatively simply-organised social life, in which clan identities and probably ethnic, linguistic and religious affiliations may have provided wider regional ties, to be activated seasonally. The *Borean lexicon is largely taken up by terms denoting the surrounding world (plains, hills and mountains, surface waters), the vegetal and animal species that inhabit it (folk botany and folk zoology as recorded among human groups outside the now dominant literate North Atlantic scientific tradition have already prepared us to expect[304] widely different animal and plant classifications from what we learned at home, on family outings and at school!), a markedly small selection of natural phenomena (night and day, wind, clouds, rain, sun and moon, stars), and much detail on the appearance and inner contents of the human body. Few abstract terms are available (notable exceptions are: denotations of moral and cosmological categories most of which we shall encounter below, and moreover, surprisingly TVRPV, 'satisfaction'; *KVLV, 'painful state, grief'; HVNV, 'wish'). Words that seem to unmistakably denote a spiritual / religious consciousness and ritual practice are few and far between; we shall encounter them below. May we assume that this paucity of spiritual / religious terms reflects the absence of spiritual / religious concerns in *Borean times? Such an assumption would scarcely be in accordance with what information we believe to derive from the archaeological and comparative ethnographic record. Or must we assume that the repeated advent of new modes of production and the concomitant new world-views and religious concept and practices in post-*Borean times have merely eclipsed the older terms and banned them (perhaps even under the threat of supernatural sanction?) from use even to the extent of leaving no traces in the later lexicons?

We have now put in place most of the methodological and theoretical conditions with which to execute our long-range linguistic assessment of Durkheim's religion theory, in the next chapter. However, before we do so one field of inspiration needs yet to be introduced: a succinct outline of the new Comparative Mythology, and particularly of some of my own contributions to that exciting field, which will provide an additional background for the appreciation of *Borean concepts in a religious light.

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[304] Lévi-Strauss 1962a, 1962b; Durkheim & Mauss 1901.

8.4. Comparative mythology

Having dabbled in Graeco-Roman, North African / popular Islamic, and Nkoya mythology for decades, it was only in 2005[305] Kyoto, Japan, that I engaged in my first long-range exploration in Comparative Mythology (van Binsbergen 2006a, *cf.* 2006b). Starting out with a rather defective and hastily compiled data set of cosmogonic myths collected in sub-Saharan Africa in historical times, I boldly improvised a complex method (comprising, among other elements, modes-of-production analysis and interpretative close reading) that, I hoped, would allow me to read some of these myths as deriving from the pre-Out-of-Africa collective heritage (which I called 'Pandora's Box') of Anatomically Modern Humans,[306] and other such myths to have been developed in post-Out-of-Africa-Exodus times, especially in Asia – and to have subsequently drifted back into Africa on the spurs of the 'Back-into-Africa' movement as from c. 15 ka BP, which molecular genetics has discovered in recent decades.[307] I proposed a score of what I termed Narrative Complexes' (NarComs); for some of these I believed I could detect their presence in Pandora's Box, whilst for others I made informed guesses concerning their appearance and interrelation whilst being developed inside Asia and in some cases returning, in transformed shape, back to Africa.

As an exercise in long-range Comparative Mythology my attempt has been very far surpassed by Michael Witzel's 2012 magnum opus (whose earlier instalments *e.g.* 2001 greatly inspired mine of 2005 in the first place), and without whose immensely simulating revival of Comparative Mythology (*cf.* Witzel 2001) I would never have entered that field in the first place. Yet our basic views remained fundamentally different, notably in the place we have accorded to Africa (which Witzel sees as peripheral and lagging behind; whereas I see it as original and mainstream) and to theory and method (where Witzel's position is methodologically and theoretically eclectic and superficial, with no disciplinary accountability outside the field of Comparative Mythology which he largely controls himself; whereas my position is methodologically and theoretically more ambitious and more explicitly aiming at disciplinary intersubjectivity).

Inevitably, my first attempt at long-range Comparative Mythology had many defects. For instance, it used a date for the Out-of-Africa Exodus that was twice

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[305] For the comparative myth section of the Research Institute for Humanity and Nature (RIHN) Pre-Symposium / 7th ESCA Harvard-Kyoto Roundtable on 'Ethnogenesis of South and Central Asia', organised by RIHN, NIHU / Harvard University, the Department of Sanskrit and Indian Studies, Kyoto, Japan, 6-8 June, 2005 Kyoto.

[306] Anatomically Modern Humans are the most recent branch of humans, having emerged in (East? Southern?) Africa c. 200 ka BP, and after genetic and cultural fruition inside the African continent having spread to the other continents in the Out-of-Africa Exodus as from c. 80 to 60 ka BP.

[307] *Cf.* Hammer *et al.* 1998; Cruciani *et al.* 2002; Coia *et al.* 2005.

as remote as the figure now commonly in use; this defect I have meanwhile corrected in later versions. Another defect was that the set of twenty proto-mythemes would soon turn out to be too narrow: later, when I turned to the analysis of flood myths through time and space since the Upper Palaeolithic,[308] I found that at least double that number was required to cover the proto-mythology available in the Flood context.

meaning	*Borean word		meaning	*Borean word
earth	*TVHV		ashes, dirt	*PVLV
earth	*TVKV		mountain	*MVLV
earth, dust	*TVRV		mountain	*WVRV
earth, mound	*PVMV		mountain, high	*TVKV
dirt	*CVRV		mountain, hill	*KVRV
dirt	*KVTV		mountain, hill	*PVLV
dirt	*LVKV		mountain, top	*PVRV
dirt, earth ?	*HVMGV		hill	*KVNV
dirt, faeces	*CVKV		hill	*TVLV
dust	*PVRV		hill	*TVPV
dust, ashes	*TVTV		hill, rock	*PVHV
dust, dirt	*PVKV		top	*KVKV
ashes, burn	*PVTV		top	*TVNV

Table 8.5. The *Borean lexicon for 'earth' and associated semantics'

Subsuming the proposed reconstructed proto-mythemes under some twenty early 'Narrative Complexes' (or NarComs), another defect was to be found in one of these NarComs, no. 3: 'What is in the Sky?' One recurrent problem in ethnography, long-range Comparative Mythology, cognitive archaeology etc. is that our own, present-day concepts and modes of thought come so naturally to us that we do not always realise how arbitrary they are, however specific in space and time. In 2005, at the very outset of what was to be my sustained work in Comparative Mythology, I did not realise that such an obvious concept as 'heaven' was yet likely to have had a long and complex history in space and time. What can be taken for granted is people's experience, even in remotest antiquity, of meteorological phenomena occurring at some unspecified height above the surface of the earth. The earth's surface itself is a widely not to say universally acknowledged given – as demonstrated, among other things, by the rich vocabulary focussing on 'Earth' in all languages of the world, past and present (Table 8.5), and by the fact that one of the persistent global etymologies, obtaining since the Upper Palaeolithic and probably even the Middle Palaeolithic and applicable to most of the world's languages, is the complex focussing on the semantics 'Earth / Bottom / Human', which I have repeatedly described elsewhere and include once more in the present book as Appendix IV.

However, what I have meanwhile realised that the local historical actors' perception of *meteorological* phenomena in the original Aristotelian (1834 / 4th c.

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[308] Van Binsbergen 2010c, and forthcoming (a); van Binsbergen with Isaak 2008.

BCE) sense (sun, moon, stars, clouds, rain, rainbow, wind, snow, meteorites, Northern Light, comets, etc.) does not necessarily presuppose a theory of Heaven specifying how far above our heads they occur. In Western Anatolia in the 6th c. BCE, the Greek Presocratic philosopher Anaximander had such a theory and, under the term το ἀρειων *apeirōn*, , claimed for Heaven an infinite extension – deviating from views commonly held at the time. Many have been the cases in comparative ethnography where the luminaries were claimed to be small and very near, scarcely higher than birds' flight. 'Heaven' (which is hardly an attested concept in *Borean)[309] was a specific invention, and one that only came within reach, I submit, with the development of naked-eye astronomy, probably in the context of proto-shamanism (*cf.* Calvin 1996 / 1994) – coinciding with the period *Borean was spoken, but not yet attested there. It is better to speak of 'sky' (as a neutral given) rather than heaven (as a construct and a theory). But also the various items I listed as part of the early mytheme 'what is in the sky [/ heaven]' were problematic. I could have listed:

- sun
- Rainbow Serpent / snake
- lightning
- rain
- moon
- stars
- the celestial axis.

However, of these *the sun* escaped my attention because it was not attested in the African cosmogonic mythological data at my disposal;[310] the moon acquired a NarCom of its own; stars and the celestial axis (even though a manifest in every clear night from the circular movement of the circumpolar constellations) were ignored; rain and lightning (*cf.* Blinkenberg 1911) were considered one pole of an opposition that had the rainbow / Rainbow Serpent at the other pole – considering these two poles, as in some myths available in my data set, as alternating and inimical items contesting each

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[309] What we have, instead, is: *HVKMV, 'sky, cloud'.

[310] This was somewhat surprising considering the enormous scope of solar cults especially in Asia and North America. In European mythology, especially that recorded in the Indoeuropean context, the sun (Surya, Helios, Sol, Baldur, etc.) tends to appear relegated to a secondary place, as if it were an ancient deity dethroned by later arrivals. Some African major deities, *e.g.* Nyambi, are explicitly associated with the sun, but in historical times their solar aspect tends to have become submerged or implicit – perhaps in line with the fact that, in tropical climates, the sun appears to personal experience not as benign but as an adversary. In one of my current writing projects (van Binsbergen in press (g), I associate the distribution of solar cults with the Pelasgian Hypothesis, and discuss its manifestations in place and time – and its proposed being eclipsed by later sky gods not so much of a solar but of a meteorological nature, notably associated with storm, thunder and lightning: Tešub, Zeus, etc. – in far more detail than is possible in the present context. For now it seems sufficient to remind us that the sun is well-attested in the *Borean lexicon, as is clear from Table 8.6.

other the domination over the sky; and in fact, the rainbow appears when the rainstorm and lightning have ended. In the version of my Kyoto 2005 approach worked into the present book, I have tried to be more explicit and consistent on the point of meteorological phenomena.[311]

sun			sun, moon, luminary, star	
day, sun	*HVKV		sun	*CVWV
day, sun, light	*NVRV		sun, burn (?)	*KVMV
shine, sun	*PVCV		sun, day	*TVNV
serpent, snake ('rainbow' is not directly attested in *Borean)			to burn, sun	*NVJV
snake	*HVNKV		moon, luminary	*TVLKV
snake	*NVTV		star	*TVCTV
snake	*PVCV		star, shine	*HVCRV
snake	*PVMV		**rain**	
snake, lizard	*WVRLV		rain, pour	*HVRCV
snake, worm	*LVRV			
celestial axis, as such not attested in *Borean				
rod, strap	*LVKV		stick	*PVCV
sharp stick	*CVLV		stick, tree	*KVRV
stalk, peg	*KVNPV		twig, branch	*CVLV
stick	*KVLV		twig, rod	*CVTV

Table 8.6. Looking for the *Borean vocabulary applicable to NarCom 3
'What is in the Sky'

Although the *rainbow* is not directly attested in *Borean, several reflexes at the macrophylum or phylum level suggest that the concept may not have been unknown in *Borean times, probably in the mythical form of the Rainbow Serpent (see van Binsbergen 2011e):

snake: *HVNKV (as epiphany of heaven and of earth), *NVTV, *PVCV, *PVMV, *WVRLV (also lizard), *LVRV (also worm, snake[312]
rainbow: Proto-Mongolian *solona < Proto-Altaic *ziola 'to shine, blaze' < Eurasiatic *CVIC 'to burn, flash' < *Borean *CVLV, 'to flash, shine'; this suggests that *CVLV (> Austric > Proto-Austronesian 'lightning, moon') was also a *Borean expression for 'rainbow'
Proto-Japanese *nuN etc. < Proto-Altaic < Eurasiatic *IVw[nasal n]V 'dawn, noon' suggests ancient semantic link with 'rainbow'
Proto-Eskimo *a[gamma]lu- 'rainbow, meteor' < Eurasiatic *aga, 'rainy weather', might suggest underlying semantics of 'rainbow'
*Borean *CVJV 'blink, shine, shade', produces > Sinocaucasian > Proto-Northcaucasian > some branches 'rainbow', which suggests that also the *Borean root may have had rainbow connotations
*Borean *LVLV 'arrow, harpoon' > Sinocaucasian > Sinotibetan > Kiranti > Tulung 'rainbow', suggests the slight possibility of 'rainbow' semantics for *Borean *LVLV
*Borean *HVRCV, 'rain, pour', > Sinocaucasian > Basque '1. sky, 2 storm 3 thunder 4 Thursday 5 rainbow 6 cloud', which suggests similar connotations for the *Borean presumable parent form
Proto-Austroasiatic *jV[nasal n], *rV[nasal n] 'dragon', produces 'rainbow' in many later reflexes, which comes close to recent Sinotibetan 'dragon' semantics; in Proto-Austroasiatic this yields the semantics 'demon'
Of course, there are many other words in many other languages with 'rainbow' semantics but their etymologies do not ascent all the way to macrophylum level let alone to *Borean. We might consider

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[311] Further analysis suggested this NarCom – an analytical construct, like all NarComs – to be an unfortunate contamination of nos. 4 (*cf.* Rain), 13, and 19.

[312] Although in many contexts (*e.g.* medieval English) no clear distinction is made between snake and worm, I refrain from listing the nearly ten *Borean forms with 'worm' semantics where 'snake' is not explicitly specified.

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> Central-Bantu ngorongoro, 'rainbow', and the strikingly similar Chinese 龍 long / rong, 'dragon'.

Table 8.7. Indirect evidence for the semantics 'rainbow' in *Borean

With this proviso, I present, in Table 8.8, the various NarComs along with what I propose is their historical emergence, according to mtDNA group among Anatomically Modern Humans, historical circumstances in terms of modes of production / Contexts of Intensified Transformation and Innovation (CITI), and linguistic macrophylum.

Contexts of Intensified Transformation and Innovation (CITIs)		proposed Narrative Complex (no. and description)	mtDNA type	remarks	linguistic context
in time	in space	*'Pandora's Box': the original mythical package, arguably containing:*	L (L1, L2, L3)	• The emergence of Anatomically Modern Humans as a biological mutation?	Proto-Human
I. Pre-Out-of-Africa Middle Palaeolithic 80 ka BP and earlier	Sub-Saharan Africa	3. What is in the Sky: (a) rain, lightning, thunder, with connotations of darkness; (b) rainbow (*cf.* the Cosmic Rainbow Snake, below); (c) as perhaps a catalytic element: the sun, with connotations of lightness – (c) may also be subsumed under (b) 4. The Lightning Bird (and the World Egg)[313] 8. The stones (as earth; under CITI VI revised as the stones as connection between heaven and earth) 9. The Moon 10. The Earth as primary (10 was subsequently revised towards cattle, in the Neolithic) 12. From the Tree (in subsequent CITIs diversified into 12a 'The world and humanity from the tree', and 12c 'the leg-child') 13. The Cosmic / Rainbow Snake 15. The Spider (subsequent transformed into 'the feminine arts' in CITI VI) 17 Speckledness / granulated surface texture / leopard / scatter, strew / spot		• Africa's soil carrying capacity, even for hunting and collecting, is the lowest in the world, mainly due to geological conditions that predate the appearance of humans by hundreds of millions of years, so it is possible that there was a push out of Africa • The emergence of myth as constitutive of a new type of human community: self-reflective, coherent, communicating, engaging in hunting and collecting, and creating coherence, through the narrative and ritual management of symbols, leading to articulate language If this last point is plausible, then the earliest phase in the overall process is in itself myth-driven	

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[313] Eliade 1976: 31, 184, citing Gimbutas 1989:

> 'The idea of a water bird, or a form of anthropomorphized bird, as a creator of the cosmic egg is clearly represented in Neolithic figurine art. It must have been a dominating theme among the cosmogonic myths'.

		18. Honey, bees, honey beer 20. Contradictory messengers bring death			
II. Middle Palaeolithic, c. 80-60 ka BP	West Asia, and from there to Australia and New Guinea	5. The Mantis	N and / or M	Leaving Africa and venturing into West Asia is likely to have produced new challenges and to have given access to new opportunities; possibly Neander-	
III. Middle Palaeolithic, c. 35 ka BP	West Asia	6. Escape from the Ogre	A and B (out of N)	Neanderthaloid influence?	
IV. Upper Palaeolithic, c. 25 ka BP	Central Asia	11. The Primal Waters and the Flood[314]	B (out of N)	Installation of the cosmogony of the Mother / Mistress of the Primal Waters, and the Land	*Borean

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[314] #46. *ON WATER IN THE *BOREAN LEXICON.* The *Borean lexicon is (see Table 8.1, and 9.51 below) exceptionally extensive for 'water' semantics, which is my reason to offer more extensive treatment here. The excessive frequency of *Borean 'water' words evokes the conception, important in Comparative Mythology, of the Primal Waters of Heaven and the Underworld, and the aquatic creator figure(s) associated with them. In my work on Comparative Mythology so far I have rejected Witzel's (2010, 2012) assumption as to the primordial, Pandora-Box nature of *The Primal Waters and the Flood,* and I have instead situated this NarCom in the Upper Palaeolithic. Witzel's implicit argument seems to be: *because* Flood myths have a near-global distribution (which they do have), they are likely to belong to humankind's common cultural heritage as developed in Pre-Exodus Africa 200 to 80 ka BP. In principle this is a sound argument, which I myself also use to justify situating various other NarComs (notably Nos 3. 4. 8. 9. 10. 12, 13, 15, 17, 18, 20) in Pandora's Box, as in the present Table. Yet my main reason for not applying the same argument to Flood myths is the following: I see the Flood myths as in the first place a logical thinking-through of the cosmogony of the Separation of Water and Land: if that Separation produces reality / the *cosmos, then the annihilation of the Separation restores the original, pre-cosmogonic chaos. My discussion, above, of 'range semantics' (also cf. van Binsbergen 2012d for further 'ancient modes of thought', especially of cyclical element transformation) suggests that such thinking of absolute difference requires an advanced logical and conceptual apparaturs that probably was not yet in place in the Lower and Middle Palaeolithic but only emerged (also as*

V. Upper Palaeo-lithic, c. 20 ka BP	Central Asia	1. The separation of Heaven and Earth 16. Shamanism, bones	N (H, A, B)	The separation of Heaven and Earth as central cosmogonic theme; shamanism associated with naked-eye astronomy (for hunters, later agricultu-ralists). The shaman's (belief of) travelling along the celestial axis to underworld and upper world, created (the idea	Peripheral and Central branches of *Borean have separated
VI. proto- Neolithic c. 12 ka BP	Extended Fertile Crescent	2. The Re-Connection of Heaven and Earth (after separation) 19. The Cosmogonic Virgin and her Son / lover 14. Twins	R and M1	Neolithic food production through agriculture and animal husbandry; Neolithic arts and crafts such as pottery, spin-ning, weaving; male ascendance; complex society, the emergence of writing, the state, organised religion, and	Eurasiatic, Afroasiatic, Sinocaucasian, Nigercongo, Nilosaharan, Austric, Khoisan, Amerind (misc.)
VII. Neolithic to Bronze Age c. 5 ka BP	Extended Fertile Crescent	7. From the Mouth	too recent and too limited in scope to be interpreted in terms of mtDNA type	masculinisation and mythical 'hysterical displacement' of pro-creative functions, from groin to mouth and head – transcendentalism as triggered by writing, the state, organised priest-hood, and science	as above
VIII. Neolithic to Iron Age c. 4 ka BP	Extended Fertile Crescent	14a. Twins, Two Children, Duality		further reflection needed	as above

after van Binsbergen 2010a: Table 9.2, pp. 160 *f.*; and 2006a, 2006b

Table 8.8. 'Contexts of Intensified Transformation and Innovation' (CITIs)
in the global history of Anatomically Modern Humans' mythology

Despite all its obvious shortcomings, my general approach and its provisional results met with considerable approval from specialists such as Witzel and Bellwood, have provided a useful and consistent stepping stone for my later work in this field, was found by me to be methodologically and confirmed on many later occasions, and for better or worse continued to be used by me in later arguments. In Table 9.50 we see that there is some long-range linguistic support for my 2005 series of NarComs: as I was to find out years after my 2005 Kyoto paper when I began to give serious attention to *Borean as a potential window on the remotests history of Anatomically Modern Humans' cultural history, *nearly all of them turn out to be expressible in the *Borean roots which specialists in comparative historical linguistics have painstakingly reconstructed.*

*a result of more developed us of articulate language) with the Upper Palaeolithic, when the recon-structed *Borean lexicon still shows extensive traces of that emergence.*

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With the extensive methodological and theoretical preparation offered by the present chapter, we are now sufficiently equipped to embark on the proposed vindication of Durkheim's religion theory with long-range methods, in the next chapter. In this exercise we shall often make reference to my Aggregative Diachronic Model of Global Mythology, as summarised in Table 8.8.[315]

Again our analysis produces the suggestion (notably in the left-hand column) that we may proceed from mere typological classification to historical sequencing / to periodisation. Comparative mythology thus begins to form a tool for the reconstruction of the very history of human thought.

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[315] In my 2005 Kyoto argument on cosmogonic myths, I overlooked the Sun, as stated above, and I was not ready yet to recognise its possibly catalytic nature as in the most advanced forms of the cyclical element transformation (van Binsbergen 2012d). Moreover the NarComs 17, 18 and 20, all three extremely old to judge by their near-global distribution, have been the subject of several case studies by modern comparative mythologists: NarCom 20: Berezkin 2006b, 2009, and Oppenheimer 1998; NarCom 17: van Binsbergen in press (d), and present book, Appendix III; since bee and honey symbolism are conspicuous both in Ancient Egypt and among the Nkoya, NarCom 18 was originally the central topic of a drafted book project, *Global Bee Flight* (van Binsbergen 1998b), but this was subsequently abandoned as I gained more experience in methods and data in the field of long-range comparative mythology; its remainders are large incorporated in van Binsbergen 2012d. Nonetheless these four NarComs were underplayed by me when drawing up earlier versions of the same table. This is why the present table differs substantially from that of those appearing in my work in 2006a, 2006, and 2010a.