The beginning of religion at the beginning of the neolithic

I want to point a direction for future research on the beginnings of religion and the beginning of the neolithic[1]. First, I need to say something about the ideas that have been advanced on the emergence of the modern human mind at the beginning of the upper palaeolithic. Then I can show how the theory of an upper palaeolithic revolution points the way to further cultural and cognitive evolution and the realisation of religious representations of ever greater significance.

The upper palaeolithic revolution

The idea that hominid cognitive faculties and their evolution are at least as important as changes in cranial morphology and brain size has been gaining ground in recent years. Through popular science books and TV documentaries such as Apeman and Neanderthals we are all becoming aware of the advances in cognitive theory and evolutionary psychology. The psychologists, anthropologists and palaeolithic archaeologists tend to bring their accounts to a climax with the emergence of Homo sapiens, the extinction of the Neanderthals and the upper palaeolithic revolution around 40,000 years ago.

The middle palaeolithic of the Levant shows that Homo sapiens had expanded out of Africa by about 100,000 years ago, but, as in western Europe, the upper palaeolithic began around 40,000 years ago. So Homo sapiens and Neanderthals had co-existed for tens of thousands of years in south-west Asia, and it was only at the turn of the middle to the upper palaeolithic that Neanderthals disappeared from the record. It is only then that the behaviour of Homo sapiens exhibits new traits. The south-west Asian situation shows that it was not the arrival of Homo sapiens on the scene that brought an end to the Neanderthals' success of a quarter of a million years. Homo sapiens at 100,000 years ago, Homo sapiens at 40,000 years ago, and Homo sapiens of today are no different, at least as far as their brain-cases and the size and shape of the brain contained are concerned. What has changed is what goes on in that brain in terms of our capacity to generate and transmit culture. Cultural evolution is more than just a cumulative process of adding or substituting new elements. Homo sapiens began to evolve cultural faculties that gave the species a competitive advantage over the Neanderthals, but that advantage was initially very small. It has been calculated that a competitive advantage of only one or two per cent would have seen the end of one of the species of Homo and the survival of the other after only one or two millennia. So we can infer that the competitive advantage began to show only at the very end of the middle palaeolithic.

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1   This is the text of a paper given at the Liverpool conference of BANEA, the British Association for Near Eastern Archaeology, in January 2001. Constraints of time meant that the version read at the conference was 500 words shorter than this, the intended version.

What European palaeolithic specialists have been calling the upper palaeolithic revolution, or the human revolution, was the beginning of a new phase in human evolution. The archaeologists have referred to the new tool-making technology, the use of new materials for tools, and the use of tools to make tools. But of more obvious significance to use are the use of personal ornaments, the formal burial of the dead, cave art and the fashioning of portable art objects. No-one doubts that these things had *meaning*, and that is possibly the most important thing about them. Linguists interested in the evolution of language believe that the first modern language - that is, a language that is as complex and powerful as any language you can find in the modern world - would have been evolved around 50,000 years ago. Language is an excellent medium for the expression of *meaning*. Both language and art are forms of symbolic representation, and it is no accident that art begins at about the time that linguists believe that full modern language evolved.

The upper palaeolithic revolution and the emergence of the modern human mind

As far as we are concerned, if we are interested in the neolithic or later periods, the upper palaeolithic revolution is by no means the end of the story. The psychologist Merlin Donald (1991) argues that the most significant innovation after the emergence of a full language faculty was the development of writing, the achievement of what he calls 'external symbolic storage'. External symbolic storage, the use of material culture in any form to carry symbolic meaning, may begin early in the upper palaeolithic, before 30,000 years ago, but it is not until about 5,000 years ago that the co-evolutionary process reached the stage where the externalised symbolisation of language expressions – writing – began.

Steven Mithen, author of the widely acclaimed *The Prehistory of the Mind: a search for the origins of art, religion and science*, thinks that the only important development after the upper palaeolithic revolution, which saw the origins of art, religion and science, was the domestication of plants and animals, the neolithic revolution of yesteryear. In the *Epilogue* at the end of his book, he sets out to show how 'the rise of agriculture was a direct consequence of the type of thinking that evolved with the emergence of cognitive fluidity' (Mithen 1996: 217 'cognitive fluidity' is Mithen's term for the way that the modular human mind has learned to work). Perhaps Mithen is unaware of the extraordinary discoveries in the early neolithic from sites in N Iraq, SE Turkey, Syria, Israel and Jordan. I wrote about the almost ritual approach to building, equipping and maintaining houses, and the functional zoning of the settlement layout at Qermez Dere in N Iraq over a decade ago (Watkins 1990, 1992). The architecture of the nearby site of Nemrik is equally inexplicable in simple, functional terms (Kozlowski 1990a, 1990b, 1992). The recently excavated site of Jerf el Ahmar, on the Syrian Euphrates a little south of Carchemish, shows us the extraordinarily structured layout of a settlement of the earliest neolithic, focused around large, subterranean structures (Stordeur 1998a, 1998b, 1999). From the same site have come shaft-straighteners and stone plaques carved with what can only be called signs or symbols. The list of extraordinary treatments of human remains, especially skulls could be endless, but the site of Kfar HaHoresh in northern Israel, which seems to be entirely devoted to the cult of the dead, or a cult that involves the use of human remains, has to be mentioned (Goring-Morris *et al.*1998). In southeastern Turkey we can now add to the shrine at the centre of Nevali Çori (Hauptmann 1988, 1993), with its carved, anthropomorphic menhirs, and the succession of cult buildings at the centre of Çayönü (Özbek 1988; Schirmer 1988, 1990) the even more elaborate and extraordinary cult statues from Göbekli (Schmidt 1995, 1998). There is so much more than the examples of female human and bull figurines that are at the centre of Cauvin's (2000) thesis. Suffice to mention the cache of ritual equipment in the cave at Nahal Hemar (Bar-Yosef 1985), the caches of

half-size human figures found at 'Ain Ghazal, and the rest of the evidence of cult practice at the site (Rollefson 1983, 1986, 1998).

Relative to the preceding epi-palaeolithic period, these things are certainly new, but I suspect that they are also qualitatively different. The question is whether culture simply changes or whether, at a level deeper, our capacity to form and use culture evolves. I suspect that Ian Hodder would not say of pre-neolithic cultures that 'all material culture [can] be seen to be meaningfully constituted' by 'the active individual' within 'particular culture-historical contexts' (Hodder 1986: 3-17), though he plainly feels that it is true of culture in the neolithic. Somehow things change around the beginning of the neolithic, whether we are looking at the epi-palaeolithic - neolithic transition in south-west Asia or the mesolithic - neolithic transition in Europe. We may feel with Jacques Cauvin (2000) that the most important changes at that time concern *The Birth of the Gods* and are 'psycho-cultural', that is psychological changes relating to the operation of culture.

The evolution of 'external symbolic storage' and symbolic culture

Colin Renfrew talked about this problem to a conference of upper palaeolithic revolution groupies. He called it 'the sapient behaviour paradox' (Renfrew 1996). If the human, or upper palaeolithic, revolution saw the emergence of a fully modern human mind, why is it that 'the *big* changes in behaviour seem to have taken place many millennia after the alleged genetic changes which are said to have "caused" them', and in a very patchy way. The solution to the paradox is that cultural evolution since the upper palaeolithic has involved learning more and more about the formulation and expression of symbolic values, the development of systems of symbolic representation, and the articulation of symbolic representation in concrete, material forms - what the psychologist Merlin Donald (1991) has called 'external symbolic storage'.

Indeed, Renfrew was able to take his ideas a step further in the context of another conference that was organized around Donald's ideas, particularly that of external symbolic storage (Renfrew & Scarre 1998). Donald (1991; 1998a) described human cognitive evolution in terms of three transformations. The second transformation was accomplished by the acquisition of the level of linguistic facility that all contemporary and recent humans enjoy, opening the way for what Donald calls mythic culture. That stage was reached, according to most linguists, just before the beginning of what archaeologists refer to as the upper palaeolithic period in Europe and south-west Asia. The third transformation led to what Donald calls theoretic culture, which depends upon external symbolic storage, in particular writing. Renfrew proposes that a significant additional transformation should be interposed between Donald's second and third: 'it is the phase of symbolic artefacts or material symbols, of Symbolic Material Culture' (Renfrew 1998: 3). Within the constraints of that brief conference paper, Renfrew could do little but assert his view and say that much more work needed to be done in the field of symbolic material culture and its evolution. In his response at the end of the conference papers, Merlin Donald (1998: 180) accepted that 'I now realise that I have not addressed this question as thoroughly as I should have'. And he goes on to agree that Renfrew's proposal of an additional transformation, the emergence of 'symbolic material culture' is a useful one.

The use of material culture as a medium of symbolic representation is probably a good deal more complex that most of us think. Perhaps it will be easier to describe what systems of symbolic representation mean in terms of language, with which we are all - we think - more familiar. When we speak, we draw on a lexicon of sounds that we call words, and each word (the signifier) stands for the signified idea. But language, and by implication any other system

of symbolic representation, is much more than a lexicon of words. The critically important thing about language is that a sentence has more meaning than the sum of the meanings of the words of which it is composed. Words operate more significantly in relation to one another than they do in relation to their individual signified meanings, and there are different ways, grammar and syntax among them, in which language forms a highly complex web of symbolic relations. The operation of symbolic reference and other forms of reference concerned the American philosopher Charles Peirce, who laid the foundations of modern semiotics - how signs work iconically, indexically or symbolically. Terence Deacon (1997) gives a very useful account of this difficult, philosophical subject in his book *The Symbolic Species: the co-evolution of language and the human brain.* We should be clear that language, and any other system of symbolic representation, is extraordinarily subtle and powerful; and the cognitive processes of inference, encoding and decoding are amazingly complex, even though we do not need to think about them in order to perform them in terms of our everyday use of language.

A human mind capable of the complexities of the symbolic representation that is at the root of language is capable of applying the same principles to other media, for example material culture. However, whereas humans and their mind-brains have co-evolved with language, there is no theory that suggests that the use of material culture as a medium for symbolic representation has been part of that co-evolution. It would seem that the application of symbolic representation principles to material culture is an extension of the faculty that evolved as part of the human language faculty. Once humans had a full, modern language faculty, they had the *potential* to produce systems of symbolic representation in other media, particularly material culture. But it was a potential that we can see with hindsight, a potential application of symbolic representation that needed to be developed and realised. Throughout hominid evolution language had been evolving in ways that are little understood and certainly not agreed by linguists. In the paintings and modelled representations of the upper palaeolithic we can see, I would suggest, the first essays in another mode of symbolic representation – like a child's first words. A few tens of thousands of years later, at the end of the epi-palaeolithic and the beginning of the neolithic periods in south-west Asia, we see much richer vocabularies of symbolic representation, and enough hints, I think, to indicate that these are material expressions within systems of symbolic representation.

The faculty of symbolic representation, and more particularly its application in terms of symbolic representation in material culture, or external symbolic storage, is, I suggest, a vitally important for us to begin to explore. It is one of the contentions of archaeology that we shall understand things better if we can understand how they have come to be as they are. And that is surely true of the evolution of our cultural ability to externalise and make concrete our mental constructs and systems of belief. As archaeologists we also claim some expertise in material culture, and this is an aspect of material culture that is only now beginning to be talked about and to which we have much to contribute.

Symbolic representation of the super-natural

As Steven Mithen (1998, 1999) has pointed out, it is no coincidence that the first uses to which this extension of symbolic representation were put included representations of beings that are half animal and half human, non-natural or super-natural beings. With the emergence of what Mithen calls 'cognitive fluidity', the human mind enjoyed the power for the first time to reflect on the nature of the world, to use its power to cross-reference across all the realms of experience and knowledge, to think analogically, to formulate vivid ideas in terms of metaphors. Just as humans enjoyed the faculty of turning the most abstract thoughts into the spoken terms of language, they also began to recognise that there were other media in which

to formulate, articulate and express those ideas, including symbolic representation in material culture. Pascal Boyer (1994, 2000) helps us to understand Mithen's point, as he explains the common, cross-cultural features of our (mental) representations of the supernatural as anthropomorphic, human in some or many regards, whether of appearance or behaviour, but counter-intuitive in other regards.

In fact, we know as little about the origin and evolution of religious representations as we know about the origin and evolution of symbolic representation in terms of material culture. The problems start with the cross-cultural, general definition of religion. In days gone by, most people in this country would have claimed experience of religion, but overwhelmingly it would have been experience of Christianity. We would not say that someone brought up to speak English was *ipso facto* knowledgeable about linguistics, and it would be as illogical to presume that someone brought up in a particular Christian faith could by the same token claim expertise in comparative religion. Ironically, we are almost the first generation to have access to such a wide variety of evidence about the world's religions, and yet many people today have no experience of religion at all. We should be aware that our largely secular western culture is a very rare phenomenon, quite probably unique in the experience of modern humans. The anthropologist Pascal Boyer tells us that people in every society encountered by anthropologists have religious ideas (Boyer 1994). We are the odd ones out. And much of the general literature on religion as a phenomenon has been written either by writers hostile to or suspicious of any idea of the supernatural or by writers whose stance is, we could say, the religious equivalent of ethnocentric.

A particular problem we face if we wish to focus on religion, then, is that of definition. It is little comfort to find that contemporary specialists, too, have the same difficulty, but here are two, quoted by James Thrower in his recent book, *Religion: the Classical Theories* (Thrower 1999). In Eric Sharpe (1983, *Understanding Religion*: 47) writes that we are looking at religion when there is 'the firm conviction on the believer's part . . . of the actual existence of a supernatural, supersensory order of being, and of the actual or potential interplay, through a network of sacred symbols, of that order of being with the world in which [people's] normal life is lived'. John Hick (1977, *God and the Universe of Faiths*), a Christian theologian, writes that religion is 'an understanding of the universe, together with an appropriate way of living in it, which involves reference beyond the natural world to God, or gods, or to a transcendental order or process'.

I was surprised to discover a neolithic workshop at the second International Congress on the Archaeology of the Ancient Near East in Copenhagen last year had as its subject neolithic 'magic practices' because it was believed that the neolithic was too primitive a period to have been capable of religious ideas and practices. Such equations of 'magic', as opposed to religion, 'primitive' and prehistoric were seriously argued by major scholars such as Herbert Spencer, Edward Tylor and James Frazer in the second half of the nineteenth and the early twentieth century, applying principles of progress or evolutionary theory to a defective database of second-hand information about contemporary, or Graeco-Roman religious phenomena, devised evolutionary theories of religion that have proved remarkably influential. Whether we have studied their works or not, we have been influenced by their ideas, but we need to move on. We need to catch up with more recent debate on the nature of religions and religious experience. As archaeologists, we frequently complain when non-archaeologists use out-dated theories and wrong information from archaeology: we should not do the same when we turn to matters 'ritual', religious or magical. The situation we find in comparative religion, however, is far from simple. In his recent book, James Thrower (1999) reviews theories of religion as revelation, religion as experience, religion as philosophy, and then turns to 'naturalistic' explanations of religion as constructs of mis-begotten reason, as psychological

construct and as sociological construct. Positivist, unilinear evolutionary accounts of the development of religious ideas are now out of fashion; rather, we live in a global, multi-cultural world, in a post-modern era of religious multi-vocality.

In short, there is no single, convincing account of the nature of religion and religious experience (though Boyer's work takes us a good way towards the cognitive phenomena that characterize religious experience), and there certainly isn't an account of the evolution of religious representations. And there won't be one, at least until the relevant prehistoric archaeological material is investigated in appropriate ways. There are two important and related projects here: the investigation of the cognitive evolution of symbolic culture, and its application to the problem of the evolution of cosmological thought and expression. I think that that is one of the most exciting challenges for archaeologists in the years to come.

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