# Violence and transcedence in the emergence of civilization. Çatalhöyük as a case study.

Ian Hodder

#### General aims

The aim of this proposal is to implement an interdisciplinary approach to the study of the role of spirituality and religious ritual in the emergence of complex societies, involving natural scientists, archaeologists, anthropologists and theologians in a novel field-based context. The project aims to have impact both on public audiences and on opinion formers, and to demonstrate by example the value of working at the interface between science and religion.

But it might be asked: 'How is it possible for an archaeological excavation project to have a significant strategic impact on the science and religion interface?' This proposal argues that such an impact can be achieved in two ways: through the project's content and through its mechanisms. First, in terms of intellectual and scholarly content, the proposed project can claim to have wide influential impact. In general terms, archaeology deals with issues of deep significance to our understanding of ourselves as humans. Why did we settle down and start living in towns? Did we do this because we were forced to by climatic change, or did we seek it because of a search for meaning and fullness in life? Archaeology can contribute hard evidence to intellectual debates that reach to the heart of issues surrounding what it is to be human. The project proposed here aims to add to the stock of scientific knowledge about the role of spirituality and religion in the formation of human society. Because of its track record, institutional affiliations and personnel, it has the authority and visibility to make significant scholarly impact.

Second, in terms of the mechanisms it will be using, the proposed project will have wide impact on both opinion formers in a range of intellectual contexts as well as on the media and general public. A central component of the project will be a bringing together of major figures in anthropology, philosophy, history and theology to debate the issues under concern. These individuals, together with their archaeological colleagues, have direct and indirect impact (through students and in publications and conferences) on a wide range of disciplines. In terms of the general public, archaeology is a very popular subject with a major presence in the media. Issues such as the 'origins' of settled life and sites such as Çatalhöyük, around which this proposal is built, have an assured place in the media. The public impact of the proposed project has considerable potential, and the existing Çatalhöyük Research Project has a proven record of effective media coverage.

## *Introduction to the project*

For about 140,000 years before the start of the Holocene, anatomically modern humans lived in small groups of relatively mobile hunter gatherers. Then in a relatively short time after 12,000 BC, human groups began to settle down, start agriculture and take many of

the steps that we associate with 'civilization'. The reasons given for this shift have predominantly been climatic change, population increase, economic and ecological factors, although social factors have increasingly been included (Bender 1978, Hayden 1990). The aim of the proposed study is to explore the extent to which spiritual life and religious ritual may have been causal in creating this momentous shift.

The aims of the excavations at Çatalhöyük in central Turkey (7400-6000 BC), where I have been working since 1993, are to explore a site of great importance for our understanding of the first steps towards 'civilization' and to understand its art. Although the site occurs several thousand years after the earliest domesticated plants, its very large size (34 acres), its elaborate narrative art, the occurrence of burials beneath house floors, and its remarkable preservation mean that it has taken its place as key to the understanding of early settled agricultural life (Cauvin 1994, Mithen 2003).

This foundational moment in the development of human society is usually studied by archaeologists and natural scientists working in close collaboration. In fact, this period of prehistory has been characterized by the interaction of, for example, palaeoclimatologists, pollen analysts and archaeologists. The emergence of settled life has remained the domain of scientific and anthropological discussion. Yet recent work has increasingly drawn attention to the importance of mind, meaning, symbol, ritual and religion (eg Cauvin 1994, Verhoeven 2002, Hodder 1990, Renfrew 1998, Donald 1991). But there has not been a wider discussion amongst anthropologists of religion, philosophers and theologians. This proposal seeks to create such a dialogue, but in a concrete way, teasing apart the evidence from one particular site. Participants will be chosen so as to effect broad impact amongst opinion formers, and the fame of the site will act as a focus for widespread dissemination and strategic impact.

### History and background to the project

The focus of this proposal, Catalhöyük East (7400 – 6000 BC) in central Turkey, is one of the best known Neolithic sites in Anatolia and the Near East, roughly contemporary with later Pre-Pottery and the following Pottery Neolithic in the Levant (see Figures 1 and 2). It became well known because of its large size (32 acres and 3,500-8,000 people), with 18 levels inhabited over 1,400 years and dense concentration of 'art' in the form of wall paintings, wall reliefs, sculptures and installations. Within Anatolia, and particularly within central Anatolia, recent research has shown that there are local sequences which lead up to and prefigure Catalhöyük (Gérard and Thissen 2002, Özdoğan 2002). In southeast Turkey, the earlier villages of Cayönü (Özdoğan and Özdoğan 1998) and Göbekli Tepe (Schmidt 2001) already show substantial agglomeration and elaborate symbolism. In central Anatolia, Asıklı Höyük (Esin and Harmankaya 1999) has dense packed housing through the millennium prior to Catalhöyük. There are many other sites contemporary, or partly contemporary with Catalhöyük that are known in central Anatolia and the adjacent Burdur-Lakes region (Duru 1999, Gérard and Thissen 2002). Yet Çatalhöyük retains a special significance because of the complex narrative nature of its art, and many syntheses (eg by Cauvin 1994 or Mithen 2003) give it a special place. Much of the symbolism of the earlier Neolithic and later (into historic times) periods of the Near East can be 'read' in terms of the evidence from Çatalhöyük and the rich evidence from the site enables interpretation of the evidence from other sites.

The site was first excavated by James Mellaart (eg 1967) in the 1960s (Figures 3 and 4). After 1965 it was abandoned until a new project under my direction began in 1993 (Hodder 1996; 2000; 2005a, b, c; 2006a, b). Through both Mellaart's and my projects, only 5% of the mound has been excavated, but the whole mound has been sampled using surface survey, surface pick-up, geophysical prospection and surface scraping (see reports in Hodder 1996). 166 houses have so far been excavated by Mellaart and the current project. The main architectural components of the site are densely clustered houses, with areas of refuse or midden between them. The art and symbolism and burial all occur within houses. There is evidence of productive activities in all houses and on roofs of houses. None of the sampling has found evidence of large public buildings, ceremonial centers, specialized areas of production, or cemeteries. The population of the settlement at any one time (between 3,500 and 8,000 people packed into 32 acres) has been conservatively estimated (Cessford 2005b) using a variety of techniques, and making a variety of assumptions about how many houses were inhabited at any one time.

Although 166 houses have been excavated at Çatalhöyük, only 6 buildings have been fully excavated by the present project using modern scientific techniques (Figure 5). Most of the houses, and all of the extensive excavation took place in the 1960s without screening, and with limited recording and no scientific analysis (except radiocarbon dating). The current project (since 1993) has used modern scientific techniques but has concentrated on individual buildings (such as Building 5 in Figure 5). It remains the case that only 5% of the mound has been excavated, and a very small proportion of that excavation used modern scientific techniques.

In the earliest phase of the current project (1993-1995), we concentrated on regional survey and on planning and studying the surface of the mound, conducting surface pick-up, drawing eroded profiles of the earlier excavation trenches, and using geophysical prospection. We also undertook a re-evaluation of the material in museums that had been excavated by Mellaart. This work has been published (Hodder 1996).

In the second phase of fieldwork and publication (1996-2005) the research aim focused on individual buildings. We excavated in two main areas on the mound (Figure 6). In the North area we concentrated on excavating two buildings in great detail in order to discern depositional processes and in order to understand how individual houses functioned. In the South area we continued the trenches that had been started by Mellaart in order to understand the overall sequence of the site and in order to see how individual houses were rebuilt and reused over time. At the same time palaeoenvironmental work was conducted (Roberts et al 1999; and see KOPAL trenches in Figure 6), regional survey continued (Baird 2002) and excavations were undertaken on the later Chalcolithic mound at Çatalhöyük West. Publication of the monographs for this second phase of work is underway and will be completed in 2006 (Hodder 2005a, b, c, 2006a,b). The methods used by the project were published in an earlier volume (Hodder 2000). Articles have

also been published in journals (see bibliography in appendix) and in the project's own archive reports and newsletter available on the web at <a href="https://www.catalhoyuk.com">www.catalhoyuk.com</a>

The research aims for the current phase of the project (2006-8) turn from individual houses to the social geography of the settlement as a whole and larger community structure. The 3-year phase will consist of three years of larger-scale excavation leading to a further round of publication. During 2004 and 2005, initial exploratory work for this stage was carried out, and the project for which funding is sought from the Templeton Foundation will be a component of this 2006-8 phase of work aimed at larger-scale exposure and excavation.

The Çatalhöyük Research Project works with an annual permit provided by the Turkish Ministry of Culture and Tourism, and under the auspices of the British Institute of Archaeology at Ankara. It is directed by Ian Hodder at Stanford University and the main institutional partners are the Department of Anthropology, University of California at Berkeley, the McDonald Institute for Archaeological Research at Cambridge University, University College London (Institute of Archaeology), Poznan University in Poland, Selcuk University, and Istanbul University Department of Prehistory.

Artifacts cannot be removed from Turkey, and so much laboratory analysis and post-excavation interpretation take place at the site. The project has constructed a large 'dig house' at the site which contains living accommodation, storage space, a Visitor Center, and 9 laboratories. These laboratories function during the excavation seasons as well as during periods of post-excavation analysis. The project has also constructed a large shelter, 50m x 25m, over the excavation area in the South of the East mound, as well as a smaller shelter in the North area.

## Proposed research questions

I wish to apply to the Templeton Foundation so that we can expand the scope of our work within the current phase to answer four related questions of widespread importance for understanding the links between spirituality, purpose and human societal evolution.

First, how can archaeologists recognize the spiritual, religious and transcendent in early time periods? The rich symbolism at Çatalhöyük, widely recognized since its discovery by James Mellaart, provide an ideal context for exploring this question. There have long been debates within archaeology about the identification of ritual and the interpretation of meaning (eg Renfrew 1985) and a wide range of approaches have been applied from the structuralist to the historical, cognitive and evolutionary (eg Renfrew 1998, Tilley 1999, Donald 1991). I have contributed to that debate (Hodder 1982, 1986, 1999) in arguing for a contextual and interpretive approach in archaeology. Many archaeologists would now accept that a multi-stranded approach is needed. How can it be shown at Çatalhöyük that specific objects have 'aura' or transcendental qualities for certain groups of people? How is it possible to show that the art is ritual or spiritual in nature or that the houses partly functioned as 'shrines' or 'temples'? These questions can be answered by linking

specialized natural science techniques to archaeology, anthropology, history, philosophy and theology.

For example, we believe that at Çatalhöyük human skulls (in one case plastered to recreate facial features) and the plastered skulls of wild bulls were often dug up from previous layers of burial or occupation and placed as installations in houses and then dismantled and handed down over many generations. In order to demonstrate that these objects came to have a spiritual presence and aura the following analyses could be conducted:

- detailed AMS radiocarbon dating of the skulls in relation to their context of deposition in order to work out the span of time they were in circulation
- chemical analysis of plasters used on human and bull skulls to see if they differ from the plaster used in other installations, floors, figurines
- chemical analysis of floor residues near bull skull installations to see if special activities were carried out there
- dietary research based on isotope and teeth wear analyses to see if the animals and humans whose skulls were handed down differed from other individuals, and to see whether those that lived in the houses with such installations and skull deposits had different (perhaps higher status or more specialized) diets

Such analyses might demonstrate that humans or bulls with special diets were buried and then their heads were retrieved and passed down over several generations during which time the heads or skulls were placed in special areas of buildings before being deposited in foundation deposits. In these ways an argument can be built that the objects had a special significance that can reasonably be interpreted in religious or spiritual terms, especially given the role of heads and bulls in the art. Such arguments have also to be explored in terms of comparative and contrastive examples from ethnography and history, and in terms of broader philosophical and religious scholarship. Similar ranges of techniques could be applied to other categories of data from Çatalhöyük, such as the paintings, figurines, leopard reliefs and so on.

Funding from the Templeton Foundation would allow the application of specialized scientific techniques (like those listed above) in order to answer the specific questions about the special importance of certain objects. Such evidence regarding items linked to human death and symbolically highly charged animals (wild bulls), and passed down over many generations, would constitute a good case for the recognition of items of spiritual and transcendent value. But interpretive challenges would still remain, and Templeton funding would also allow us to bring together specialists in related archaeological, ethnographic, philosophical and theological theoretical debate.

Second, are changes in spiritual life and religious ritual a necessary prelude to the social and economic changes that lead to 'civilization'? Recent archaeological discoveries from southeastern Turkey, Syria and the Levant have identified large ceremonial structures that occur very early in the development of settled 'towns' and agricultural life. For example, Göbekli Tepe has produced clear evidence for public ritual and monumental sculpture

beginning in the 10<sup>th</sup> millennium BC. Other sites include Jerf el-Ahmar, Çayönü, and Nevali Cori. Some of these are close to where recent biomolecular studies have suggested that the first domestication of einkorn wheat occurred somewhere near Karacadağ in southeastern Turkey, rather than in the Levant (Heun et al. 1997, Jones 2001). As Steve Mithen has suggested (Mithen 2003, 67), the first domestication of wheat may have been connected with the nearby sites such as Göbekli Tepe. Indeed, it seems quite possible that people who had come together largely because of large ritual centers, ended up 'accidentally' domesticating plants and animals. The large agglomerations of people would have depended on a wide range of local resources which would increasingly have had to be more intensively collected (just because of the large numbers of people exploiting the same landscape). Part of that intensity would have involved keeping grains and replanting them. At Göbekli Tepe itself it is argued that there are still no domesticated plants or animals (Schmidt 2001). But the intensification would likely have produced the selective environment in which domestication could have occurred at some site in the region. Many now argue that the reason people started agglomerating and creating settled life may have been religious ritual and the search for meaning and purpose (Mithen 2003, Cauvin 1994). Catalhöyük is too late to contribute directly to this debate, except that our detailed studies of the location of the site have suggested that the search for the clays and plasters for symbolic installations may have been central to the site's location. In addition, the rich symbolism undoubtedly could have been a factor in attracting people to the site.

But the general hypothesis can be explored at Çatalhöyük in relation to two important developments. The first concerns the domestication of cattle. Cattle are wild at the start of the Çatalhöyük sequence (Russell and Martin 2005), but we hypothesize that they had been domesticated by the end of the sequence (they were certainly domesticated by the ensuing Çatalhöyük West mound). New excavations are necessary in the upper levels of the Neolithic site in order to explore this hypothesis. But we also believe that wild cattle may have been used extensively in feasting and in ritual and spiritual contexts right from the start of the site. By exploring the role of wild cattle, and their special significance as described in the first research question above, it may be possible to show that their domestication came about as a result of the need for spiritual well-being and purpose.

Another example is the introduction of pottery (for the overall situation in the Near East and at Çatalhöyük see Last 1996 and Moore 1995). The lowest levels at Çatalhöyük are aceramic. When pottery first occurs it is not used for cooking. Our hypothesis is that its first use at Çatalhöyük is in religious rituals. This hypothesis can be explored (as in the first research question above) by carrying out detailed residue analyses (for example lipid analyses) of the earliest pots in comparison with later pots, and in comparison with contemporary baskets (for example using phytolith analysis) and wooden containers. These and other analyses would indicate whether the pots were used in special contexts for special purposes and in relation to spaces and objects of ritual significance. For example, it is clear that wild cattle, and especially bulls, were central in feasting (Russell and Martin 2005) and a wide range of rituals. It is possible in the residue analyses conducted by Richard Evershed and his team of chemists to distinguish large from small ruminant fat residues (Copley et al 2005). Residue analysis of later pots at the site has

shown that the pots were used to cook small ruminant animal fat, and other work has identified milk residues. If the early pots were used for large ruminant fats, the most likely candidate, given the overall prevalence of cattle amongst the large ruminants, would be cattle. Such a result would indicate that the early pots were used for foods with a special ritual significance.

In this second case, Templeton Foundation funding would allow larger scale excavation in the upper layers in order to explore the domestication of cattle, and in the lower levels to explore the introduction of pottery. The funding would also allow the application of a range of specialized scientific techniques, and the bringing together of inter-disciplinary leaders that can provide a broader context for discussions.

Third, do human forms take on a central role in the spirit world in the early Holocene, and does this centrality lead to new conceptions of human agency that themselves provide the possibility for the domestication of plants and animals? For 140,000 years modern humans had lived as hunter-gatherers and ethnographic evidence suggests that they would have seen the environment as giving and reciprocating, and that their spirit worlds would have consisted largely of animals and natural features with which shaman-like figures may have mediated. While human figures do appear in the Palaeolithic art of France, Spain and elsewhere, they do not dominate animals. There are images that suggest humans may have mediated with the spirit world, but there is no evidence of a central human divinity.

Then suddenly in the 10<sup>th</sup> millennium BC at Göbekli Tepe and then at Nevali Çori in southeastern Turkey there are monumental monoliths within ceremonial structures. On these huge stones are the carvings of an array of wild animals. The huge stones have human arms. The symbolic world of animal spirits is here dominated by human figures. In the art of Çatalhöyük humans are shown teasing, baiting and dominating over-sized bulls and other wild animals, in stark contrast to Palaeolithic art (as in Figure 7). (See Cauvin 1994 for this increased importance of humans, and Helms 2003 for a wider argument about the emergence of human divinities in relation to domestication.)

This increased centrality of the human in the spirit world may have come about through the increased importance of 'shamans' or mediators. Or it may have come about through the increased importance of ancestors. Those buried beneath the floors at Çatalhöyük sometimes had their heads removed (see first point above) and there is much evidence for the veneration of ancestors, here and at other sites in the Near East. It is possible that distant ancestors became elevated as divinities who could intercede directly in the spirit world? Figurines of humans at Çatalhöyük sometimes have removable or transferable heads, and individual heads are shown in the art. Throughout there seems to be a link to ancestors that is referred to in the figurines and art.

In order to explore these hypotheses we need to carry our additional research surrounding the art and burial at Çatalhöyük. By exploring more art, can we identify the work of specialized producers of the art (in the paints and techniques used), or does the art seem to have been produced at the domestic scale? Is there a relationship between those that

produced more art and houses with a greater emphasis on ancestry? We also have much evidence of the increasing use of objects that acted as agents in the spirit world. These include animal parts placed in oven walls and house foundations, and figurines of persons and animals in abandonment deposits (Figure 8). These apotropaic objects suggest a greater human intervention in the spirit world, but larger numbers of houses need to be excavated for patterns in such data to be identifiable. It would also help to have a clearer understanding of how these 'agentful' objects were made. For example, if the figurines were made and used by children, then the hypothesis that they had power, aura and agency seems undermined. New advances in the understanding of fingerprints may allow such hypotheses to be explored, since many of the figurines do have clear fingerprints.

In this case, Templeton funding would allow larger scale excavation so that more art and material agency can be discovered, and it would allow the specialized scientific techniques that need to be applied. It would also allow the broader intellectual discussion that is needed for the interpretation of the evidence.

Fourth, do violence and death act as the foci of transcendent religious experience during the transitions of the early Holocene in the Near East, and are such themes central to the creation of social life in the first large agglomerations of people?

It has long been assumed that the primary focus of symbolism at early village sites in the Near East is a nurturing 'mother goddess' who embodies notions of birth and re-birth (Rudebeck 2000). So it is not surprising that when James Mellaart discovered opulent female imagery at Çatalhöyük (as in Figure 8), he presumed that it represented the mother goddess (Mellaart 1967). There are undoubtedly a number of female figurines that have been found, especially in the upper layers of Çatalhöyük. But recent finds have suggested a link to death and violence as much as to birth and re-birth. In 2005 a figurine was found that looked like a typical 'mother goddess' from the front, with full breasts and extended belly, but at the back she is a skeleton, with ribs, vertebrae, scapulae and pelvic bones clearly shown. And in 2004 a grave was found in which a woman held a plastered skull of a man in her arms – she was also found with the only leopard bone we have ever found on site, worn as a claw pendant.

In fact, there is much imagery and symbolism of death and violence at Çatalhöyük. Apart from the burials beneath floors (up to 62 in one house), and the re-circulation of skulls of ancestors, there are bulls' heads fixed to walls, and other installations on and in walls including the tusks of wild boar, vulture skulls, the teeth of fox and weasel. Daily life at Çatalhöyük was surrounded by symbols referring to death and violence (such as Figure 9). The new finds from the earlier sites of Göbekli Tepe and Nevali Çori in southeastern Anatolia indicate that this focus on dangerous wild animals is a central theme of the development of early villages and settled life. There in addition there is a clear link to sexuality, with ithyphallic animals and humans commonly shown.

How can we make sense of this imagery? One person whose general thinking on the symbolism of powerful violent animals may be useful is Georges Bataille (1962). In his work on violence, sex and death, Bataille argues that there are moments of transcendence.

He notes the frequent links between violence, sex and death and suggests that one link is that each of these involve moments in which there are movements away from the hereand-now. Such movements beyond everyday experience allow humans to cope with the restraints and limitations of social life. They create a sense of timeless unity that can be used in ritual to create social bonds and a sense of social commitment. Anthropologists such as Maurice Bloch (1992) have explored the role of violence in ritual across a wide range of different societies. Bloch particularly concerns himself with initiation, where the initiate returns into a different stage of life, and he is concerned with the way in which initiation often involves a symbolic 'killing' of the initiates. So rather than birth leading to growth and further reproduction, movement to a new stage in life is achieved through death, violence and rebirth.

Bloch argues that this violence is a necessary part of the movement into another world. He sees most human societies as understanding that there is a permanent framework to social life that transcends the natural transformative processes of birth, growth, reproduction, ageing and death. The violence and symbolic killing take the initiate beyond process into permanent entities such as descent groups. By leaving this life, it is possible to see oneself and others as part of something permanent and life-transcending.

In general terms it seems that one can argue at Çatalhöyük that there was a process of movement through death and violence to social order. At the core of this process there must have been some experience of the transcendent. It seems that the creation of the social order that is required in the large early villages of the Near East may be closely connected with the transcendent experience gained through violence and death. The specific contexts of such experiences may have included burial, dealing with ancestors, feasting, teasing and baiting wild animals in initiation ceremonies and so on. But a central theme may have been a transcendent experience gained through death and violence.

To explore this idea further, it is necessary to examine more closely the contexts in which images and symbols of death and violence occur at Çatalhöyük. There is a need both to examine the existing data in order to explore the data from floors and parts of houses in which such images are found, and also to conduct further larger-scale excavation in order to identify new associations and contexts. For example, in recent excavation a pattern seems to be emerging in which the skulls, horns and teeth of wild animals are especially associated with feasting during the dismantling of a house and the founding of a new one. But a larger sample size through further excavation is needed in order to be able to explore this patterning.

But perhaps the most useful development in this fourth area would be wider discussion amongst anthropologists, theologians, philosophers and archaeologists about ways in which death and violence are connected to transcendence and experiences of the divine. Templeton funding would be used to bring together a range of specialists dealing with the cross-cultural evidence and philosophical understanding of violence, danger, death and sexuality in relation to moves beyond the here-and-now. Such discussions could lead back into new research questions and new analytical approaches.

#### General methods

My research has long been involved with the recovery of meaning, agency, intention/purpose and being in archaeology (eg Hodder 1982, 1986, 1999, 2004). But there is much more that would need to be done to explore the above four research questions at Çatalhöyük. There are three areas of additional funding that are needed.

- 1. Larger scale excavation would be undertaken with the specific purpose of answering the four questions outlined above. The current project has not uncovered large amounts of new art at Catalhöyük. This is in contrast to the work of James Mellaart in the 1960s. The reason for this is that he excavated large numbers of buildings very quickly, whereas modern scientific techniques are very costly and time-consuming so that we have completely excavated very few. (As noted above, while so far 166 buildings have been at least partially explored at Catalhöyük, only 6 of these have been fully excavated using modern scientific techniques.) Our chances of finding new art have therefore been minimal. We have now done sufficient preliminary work in excavation and conservation techniques at the site to know how to excavate more quickly and on a larger scale, although this remains expensive. Templeton funding would allow a faster rate of excavation for a 3 year period. In this time, extensive excavation would uncover approximately 60 houses, providing very high likelihood of discovering significant new art, symbolism and religious practice (most buildings have some art, but Mellaart found significant sculpture, painting and installations in about one quarter of his 160 buildings), and allowing large enough sample sizes to explore the four hypotheses outlined above.
- 2. A wide range of specialized natural science/archaeology techniques from residue analysis to isotopic analysis would be applied. These techniques have been used successfully at the site before to answer general questions about the nature of the site (for example, were domestic activities carried out in buildings?). The techniques would, with Templeton funding, now be targeted at the specific questions listed above, and sufficiently large sample sizes would be attained (of dates, residue analyses, paint and plaster analyses, bone isotope analyses and so on). For example, although we have carried out chemical studies of variation in activities across floors, we have not looked specifically at whether there are variations in chemical markers around installations of bull horns and other symbolic markers. This would involve a different and more intense sampling strategy.
- 3. I would like to suggest a novel integration of analytical and inter-disciplinary interpretive expertise at the site itself, as we dig, 'at the trowel's edge' as well as in the laboratory. Each excavation season for 3 years will focus on the new coordinated research project dealing with the four questions described above. Towards the end of each season a week-long seminar will be held either at the site or at Stanford two months after the end of the excavation. The seminar will include the archaeologists working at the excavations as well as the natural scientists working on the various aspects of the analysis of materials from the site (such as isotopic research, residue analysis). But it will also include eminent scholars working on the role of religion and the spiritual in history, ethnography, philosophy and theology. The seminars will include anthropologists

specialized in hunter-gatherer and farming peoples, rituals and religions, as well as philosophers and theologians specialized in cross-cultural and evolutionary approaches. The aim of the seminar will be for the excavation and analytical teams to explain and show the finds from that year, and to engage in discussion of possible interpretations. The seminar will also discuss strategies for the following season.