

Göbekli Tepe – the Stone Age Sanctuaries. New results of ongoing excavations with a special focus on sculptures and high reliefs

Klaus Schmidt

Deutsches Archäologisches Institut, Orient-Abteilung, Berlin, DE
kls@orient.dainst.de

ABSTRACT – *The transition from non-food producing to farming societies first took place during the Pre-Pottery Neolithic (PPN) of the Near East. It happened immediately after the end of the Pleistocene, between the 10th to the 8th millennium BC. One of the main questions that have exercised the minds of generations of archaeologists is why people first gave up a hunting and gathering way of life and start to domesticate plants and animals. In other words, why did the Neolithic Revolution take place? The new discoveries at Göbekli Tepe have turned up evidence for explanations that differ from the generally accepted wisdom on this issue.*

IZVLEČEK – *Prehod od skupnosti, ki hrane niso pridelovale, do skupnosti kmetovalcev se je najprej zgodil v predkeramičnem neolitiku na Bližnjem Vzhodu. Zgodil se je takoj po koncu pleistocena, med 10. in 8. tisočletjem BC. Osnovno vprašanje, s katerim so se ukvarjale generacije arheologov je, zakaj so ljudje opustili lov in nabiralništvo in pričeli domesticirati rastline in živali. Z drugimi besedami, zakaj se je zgodila neolitska revolucija? Nova odkritja na Göbekli Tepe so prinesla dokaze, ki spreminjajo sedanje splošno sprejete pojasnitve.*

KEY WORDS – *Pre-pottery Neolithic; Upper Mesopotamia; monumental sanctuaries; anthropomorphic pillars; deities*

Göbekli Tepe: the site and its significance

Göbekli Tepe is one of the most fascinating Neolithic sites in the world. It is a tell, an artificial mound dating to the Pre-Pottery Neolithic. It was not used for habitation; it consists of several sanctuaries in the form of round megalithic enclosures. The site lies about 15km north-east of the Turkish city of Şanlıurfa, at the highest point of an extended mountain range that can be seen for many kilometres around. It is a landmark visible from far away (Fig. 1). Its enormous deposition of layers, up to fifteen metres high, have accumulated over several millennia over an area of about nine hectares. Even today, the place has lost nothing of its magic appeal. For example, a wishing tree which stands on top of the ridge is still sought out by the residents of the surrounding area.

Archaeologists found an important piece of the puzzle in the early history of humanity at the site, which contributes to a completely new understanding of the process of sedentism and the beginning of agriculture. The hill, which is strewn with countless stone implements and large-format, regular-shaped ashlar, revealed its secret as a result of the excavations carried out since 1995 by the German Archaeological Institute in cooperation with the Archaeological Museum in Şanlıurfa (*Schmidt 1995*).

Remarkably, no residential buildings have been discovered. However, at least two phases of monumental religious architecture have been uncovered. Of these, the older layer is the most impressive. The

main features are T-shaped monolithic pillars, each weighing several tons. They were erected to form large circular enclosures, at the centre of which a pair of these pillars towers over all (Fig. 2). The diameters of the circles are between 10 and 20 metres, and the ten to twelve pillars of the circle are connected by walls of quarry stone (Fig. 3). The enclosures have been designated A, B, C and D in a range according to the date of their discovery in the first years of the excavations. Later, enclosures E, F and G were added, but they do not show the monumentality of the other four, and these later enclosures are not discussed fully in this paper.



Fig. 1. The site of Göbekli Tepe seen from the southeast in 2009 (foto Klaus Schmidt, DAI).

The age of layer III and the monumental enclosures is impressive: they can be dated to the 10th millennium calBC, a time when people all over the world were still living as hunter-gatherers, except in the region of the Fertile Crescent of the Near East, where people had started to settle in permanent villages and begin activities which led to the domestication of plants and animals. And there is no question that the site of Göbekli Tepe was not a mundane settlement of the period, but a site belonging to the religious sphere, a sacred area, since the excavation has revealed no residential buildings. Göbekli Tepe seems to have been a regional centre where communities met to engage in complex rites.

The younger layer of Göbekli Tepe has been dated to the 9th millennium calBC. It has been demonstrated that some domesticated plants and animals were already in use during this millennium, and that elaborate settlements had been built, such as Nevalı Çori, which lies 50 kilometres to the north, a site now submerged by the flooding of the Atatürk Dam Lake in 1992 (Hauptmann 1991/1992; 1993). The excavation caused a sensation in the 1980s, as it opened for the first time a new window on a previously unexpected world of Stone Age culture. The type of dwelling excavated at Nevalı Çori, with a living space in front and a rectangular area behind for storing provisions may be considered the proto-



Fig. 2. Göbekli Tepe, schematic map of the main excavation area at the southern slope and the western hilltop, the stratigraphic position of the structures mapped in blue ("layer II/III") is not determined finally.



Fig. 3. *The main excavation area at the southern slope, spring 2010; in the foreground, enclosure D, followed by enclosures C, B and A (foto Nico Becker, DAI).*

type of the Anatolian farm house that can still be found today. Even then, the houses were up to 6 metres wide and 18 metres long.

But Göbekli Tepe differs from Nevalı Çori; layer II is not a settlement, but it contains a series of sanctuaries. However, the large circular structures of layer III disappeared, to be replaced by small rectangular rooms (Fig. 2). But the main feature of the monumental enclosures, the T-shaped pillars, survived. Therefore, most of the buildings of layer II again can be identified as sanctuaries. But it was not only the scale of the architecture that was reduced – the numbers and size of the pillars are much smaller now. The average height of the pillars in layer III is 3.5m, while in layer II, it is only about 1.5m.

The pillars are made from a very hard and quite crystalline limestone. They are the most durable objects at the site. To produce monoliths with a length of 4 to 5, sometimes even 7m, Neolithic people needed limestone of supreme quality, which can not be

found everywhere. This is one reason the sanctuaries were erected on the Göbekli Tepe plateau, as it consists of limestone of such quality.¹ The pillars are usually connected by the walls which define the inner and outer spaces of the enclosures. The walls are built mainly from ashlar stones, sometimes including *spoliae* – fragments of pillars and other shaped stones common at the site – in secondary use as wall stones. There is a 2cm thick layer of clay mortar between the stones. The mortar causes a serious problem for the conservation of the site. Rainwater is disastrous for it, as the soft clay is easily washed out by water. The same problem exists with aeolian forces, wind erosion again is a big problem. And there is a third danger: insects like to build nests in the spaces between the stones, as the clay mortar is very soft and holes are dug easily. The mortar may originally have been tempered, but the preservation conditions for any organic remains are very bad, with the exception of bones, which exist in huge amounts. But there are almost no other organic remains, as the use of fire at the site has not been

¹ Some years ago, when the construction of the new highway from Gaziantep to Mardin (the highway runs not far from Göbekli Tepe in the valleys west and south of the site) was planned, the engineers wanted to use the limestone of the Göbekli Tepe plateau to produce gravel, as such a hard limestone does not exist elsewhere in the region. The company started coring activity, but it was possible to stop it soon, fortunately.



Fig. 4. Enclosure D seen from the west in autumn 2009 during preparation work for the consolidation of the upright stand of the central pillars (foto Klaus Schmidt, DAI).

noted (contact with fire would help to preserve some of the organic materials by carbonisation, but almost no carbonised material has been found).

It has been a great advantage to archaeology that, after a period of unknown duration, the sanctuaries of the older layer at Göbekli Tepe were intentionally and rapidly buried, a process which seems to have been a certain part of their use from the beginning. The old surfaces that can be observed in the excavations and the processes that occurred in the sediment have been subjected to pedological analyses, allowing the filling to be dated. Moreover, the circumstances in which the structure was filled are a matter for speculation: was the act of filling part of some ritual? Was this ritual carried out repeatedly?

The origin of the filling material is unknown. The provenance of the material is not unimportant, as some 500 cubic metres of debris would be required to backfill enclosure D alone. Moreover, the material is not sterile soil. It consists mainly of chips and pieces of limestone – usually smaller than fist-size – and many artefacts, mainly of flint, but also fragments of stone vessels, grind stones and other ground stone

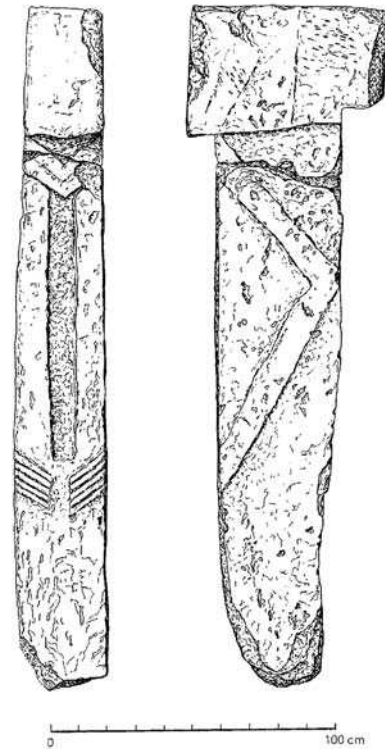


Fig. 5. T-shaped pillar from Nevalı Çori (after Hauptmann, Schmidt 2007.80).

tools. Beside the stone artefacts, there are many animal bones, mostly broken into small pieces as is usual for waste. The bones are primarily of gazelle, but in terms of weight of meat, wild cattle is the most important species. Other species of importance are red deer, onager, wild pig, and wild caprovids (Peters, Schmidt 2004).

There are no domesticated animals or plants. The enclosures date to the period of transition from hun-



Fig. 6. Göbekli Tepe 2006, pillar 18 in enclosure D (foto Berthold Steinhilber).



Fig. 7. Pillar 31, the western central pillar of enclosure D, after being raised into an upright position in spring 2010, height 5.3m (foto Klaus Schmidt, DAI).

ter-gatherer to farmer societies during the 10th and 9th millennia in the Near East.

It should be mentioned that the bone material from the backfilling includes some human bones. Their appearance is similar to the animal bones – they were broken into small pieces; several have cut marks; and it appears that they were treated in a similar way to the animal bones. As the study of these finds (by Julia Gresky, DAI Berlin) is in progress, no final results can be given here. While cannibalism as an explanation of the appearance of the bones within the remains of hunted animals can be not excluded, it seems most probable that these bones attest to the special treatment of the human body after death, a custom known from many PPN sites in the Near East. And it seems probable that the presence of human bones in the filling material should strengthen the hypothesis that there are primary burials somewhere at Göbekli Tepe, burials which were opened after some time for a continuation of very specific rituals performed with the dead.

In recent excavation seasons, surprisingly new discoveries were made in layer III. The floor level was re-

ached in enclosure C and D, which has been under excavation for over ten years. A terrazzo floor was predicted, as such a floor had been excavated in enclosure B. But in both enclosures the floor was natural bedrock, carefully smoothed. As in enclosure E – the so-called ‘Felsentempel’ located outside the mound at the western plateau – two pedestals, where a central pair of T-shaped pillars were erected, were cut out of the bedrock in the centre of both enclosures C and D. But unlike enclosure E, where no pillars or walls survived the millennia, or enclosure C, where the central pillars were destroyed in antiquity, both central pillars in enclosure D survived with no damage, and with a breathtaking height of 5.5m, having stood *in situ* for more than 11 000 years. There is only a small problem regarding their stability, as slope pressure has caused the pillars to shift into a slightly oblique position. Without support or – much better, without the re-erection of both pillars into a vertical and stable position – both would fall down after the removal of the surrounding sediment which covered the enclosure completely before excavation, being the result of the backfilling process during the PPN period. The stabilisation of both pillars – work began in 2009 – was one



Fig. 8. Pillar 18, the eastern central pillar of enclosure D, after being raised into an upright position in spring 2010, height 5.4m (foto Nico Becker, DAI).

of the main goals of the 2010 spring season, a task which has been completed successfully in splendid fashion (Fig. 4). At this point, it must be mentioned that the general goal of the excavations is not to reconstruct Neolithic architecture, but to expose several of the important monuments, to understand their meaning, to keep them in their original find spots, and to protect them from weather and other destructive forces. Only in some exceptions can pillars or other parts of the architecture not remain in their original positions, e.g. the pillars in enclosure D, which had to be re-erected to enable excavations to continue there.

The T-shaped pillars

The T-form of the pillars can easily be interpreted as anthropomorphic, as some of the pillars appear to have arms and hands, undoubtedly human; they are, in other words, stone statues of human-like beings (Schmidt 2006.Fig. 43a). The head is represented by the cross on the pillars, an interpretation supported by a pillar from Nevalı Çori, where a longer face section and a shorter back of the head are observable, corresponding to the natural proportions of the



Fig. 10. Pillar 43 in enclosure D (foto Berthold Steinhilber).



Fig. 9. The decorated belt of pillar 18 seen from the southwest in spring 2010 (foto Nico Becker, DAI).

human head (Hauptmann, Schmidt 2007.80) (Fig. 5). Differentiation of the sexes was evidently not intended. It is also clear that the minimalist form of representation was intentional, because other statues and reliefs found at the site offer sufficient proof of the artists' ability to produce naturalist works.

Very often, a specific attribute is depicted on the pillars: two bands in flat relief are visible on the front of the shafts, somewhat resembling a stole and it is highly probable that this motif actually refers to a specific garment. It is possible that only certain persons were permitted to wear the stole, being an important element of a ritual robe. Perhaps the stone buttons, which occur in large numbers only at Göbekli Tepe (Schmidt 2005.Fig. 6), are from a robe of this type.

An important role must also have been ascribed to the pairs of pillars at the centre of each space which tower over the other pillars. It seems probable that they depict twins, because twins, or at least pairs of brothers or sisters, are a common theme in mythology (Lévi-Strauss 1991; Meixner 1995). The explanation that they may simply represent the classic duality of man and woman can be excluded after a recent discovery in enclosure D. The central pair of pillars (pillars 18 and 31) and their flat reliefs depicting arms have been visible for several years (Schmidt 2006.Figs. 73–75, 79–81). The western pillar is wearing a necklace in the form of a bucranium, the eastern one a necklace in the shape of a crescent, a disc and a motif of two antithetical elements whose meaning is not understood. This eastern pillar also holds a fox in the crook of its elbow (Fig. 6).

In the 2009 season, the previously hidden lower parts of the pillars' shafts were excavated (Fig. 7).



Fig. 11. Fragment of a decorated pillar found in the debris of enclosure D, north of pillar 18 (foto Klaus Schmidt, DAI).

It was no surprise when hands and fingers soon became visible, but a few hours later a sensational discovery was made: both pillars were wearing belts depicted in flat relief just below the hands. A belt buckle is visible in both cases, and on the eastern pillar, there are decorations on the belt in the form of H- and C-shaped figures (Fig. 9). However, there is an even more interesting feature: a loincloth covering the genital region hangs from each of the belts (Fig. 8) – the hind legs and tail of what appear to be fox pelts are visible. The loincloth covers the genital region, so the sex of the two individuals is unclear, but since the several clay figurines with belts found at the Pre-Pottery Neolithic site at Nevalı Çori are all male (Morsch 2002.148, Pl. 3, 3–4.6), it seems highly probable that the pair of statues in enclosure D are also male.

The flat reliefs on the T-shaped pillars

Often, the pillars are elusively decorated with reliefs. The motifs often depict animals, but there are some abstract symbols, mainly in the form of the letter H, both in its original position or rotated through 90°. Other symbols are crescents, discs and anti-thetic motifs, and there are two depictions of humans. The first was found on a pillar in enclosure D is presumed to be an ithyphallic, headless man. The second is on a pil-

lar in enclosure F. A standing person with a long neck and head is depicted. Above the person, there is a small dog, recognisable by its tail bent over the back.

However, the reliefs adorning many of the monumental pillars depict a wide range of wild animals such as predatory cats, bulls, wild boar, foxes, ducks, cranes, gazelles, wild asses, snakes, spiders and scorpions (Fig. 10). In the spring season of 2010, north of pillar 18, in the back fill material of enclosure D, a decorated pillar fragment was discovered. The object was probably part of the missing twelfth pillar of the enclosure, as there is a gap between pillars 43 and 30 in the northern section of the enclosure (comp. Fig. 2). The depiction shows a vulture and a species as yet unknown among the images at Göbekli Tepe – the long, coarse ridge of mane along the length of the back of the animal indicates that it is a hyena (Fig. 11).

These reliefs open a view of a new and unique pictorial language not known before whose interpretation is a matter of important scientific debate. So far as can be seen, the mammals depicted are male. It remains a mystery whether the relief images were attributes of the pillars, or whether they were part of a mythological cycle. They may have had a protective aspect, serving as guards, or – perhaps more



Fig. 12. Nevalı Çori, sculpture of a bird with a human face (after Hauptmann, Schmidt 2007.Kat.-Nr. 98).



Fig. 13. Göbekli Tepe, engraving of a female person from layer II (foto Dieter Johannes, DAI).

probably – are part of a horrific scenario somewhat like Dante's 'Inferno'.

The animal reliefs are quite naturalistic and correspond to the fauna of the period. However, the animals depicted need not necessarily have played a special role in peoples' everyday lives – as game, for example. They were rather part of a mythological world which we have already encountered in cave painting. The important thing is that fabulous or mythical creatures, such as centaurs or the sphinx, winged bulls or horses, do not yet occur in the iconography and therefore in the mythology of pre-historic times. These creatures must be recognised as creations of higher cultures which arose later. In this context, it has to be mentioned that there is the exception of anthropomorphic beings with animal heads, a group which can be summarised under the term 'goat-demon', creatures already known from Upper Palaeolithic art (Schmidt 2001), but so far not seen at Göbekli Tepe. Another exception is the so-called 'bird-man', a sculpture excavated in Nevalı Çori whose meaning is unclear (Hauptmann, Schmidt 2007.70 Kat.-Nr. 98) (Fig. 12).

At Göbekli Tepe, distinctly feminine motifs are lacking from both the animal and human images. There is a single exception – a naked woman engraved on a stone slab placed between the so-called lions' pillars (Schmidt 2006.235–237, Fig. 104) (Fig. 13). But

it seems clear that this depiction is not part of the original decoration, but more probably belongs to a group of engravings which can be classified as graffiti (comp. pillar 10: Schmidt 2000.23, Fig. 10b). In Nevalı Çori, in contrast, of the clay figurines that have been found nowhere else in such abundance – 700 in number – over 90% are anthropomorphic objects, and male and female figures occur in equal numbers (Morsch 2002). The complete absence of clay figurines at Göbekli Tepe is most remarkable. This surely reflects the different functions of the ritual buildings at each location: while the buildings of Göbekli Tepe have a possible connection with burial customs, at Nevalı Çori, it is possible to examine a village settlement and everyday life. The use of clay as the material for the male and female figures found here is not insignificant. The smaller stone figures that were also discovered exhibit a completely different and much richer iconographic repertoire which repeats the stock of motifs associated with the large stone sculptures and reliefs at Göbekli Tepe.

Non-stylized life-size human heads and statues – guardians of the T-shapes?

It is now clear that the T-shaped pillars have an anthropomorphic identity. But who are they? As their faces were never depicted, they seem to be imperson-



Fig. 14. The Urfa statue (foto Irmgard Wagner, DAI).



Fig. 15. The 'skin head' from Nevalı Çori (after Hauptmann, Schmidt 2007.Kat.-Nr. 96).

nal supernatural beings from another world, beings gathered at Göbekli Tepe for certain, so far unknown, purposes. Their identity is obviously different from that of the several life-size and more or less naturalistically depicted human heads found at Göbekli Tepe. On the basis of the one completely preserved limestone statue found at Urfa, not Göbekli Tepe, which is male and dates to the Early Neolithic, it seems that the limestone heads are most probably statues of male personages (Bucak, Schmidt 2003; Schmidt 2006.Fig. 93) (Fig. 14). This completely preserved, 1.80m tall limestone sculpture was discovered in the 1990s in the old town north of the Balıklıgöl, where an important Islamic sanctuary is located. According to a local tradition, the prophet Abraham was born in a cave near the springs and lakes nearby. Several observations attest to a PPNA site north of the springs (Çelik 2000) which was destroyed by immense construction works in the 1990s or sealed by the old town of Urfa in medieval times. Fortunately, at least the statue survived; it is a find whose provenance from the PPNA site of Balıklıgöl mentioned above has a very high probability.

The statue has a face: the eyes are deep holes and black obsidian blade segments struck from bidirectional cores. It may be noteworthy that no mouth was depicted. The statue seems to be naked, with the exception of a V-shaped necklace. It is not enti-

rely clear, but it seems that the hands are holding the phallus. Legs are not depicted. Below the body is a conical tap, which easily allows the setting of the statue in the ground, in a way quite similar to that of the Early Dynastic Foundation figurines of ancient Mesopotamia deposited in the corners of sacred buildings (Rashid 1983).

The so-called 'skinhead' discovered at Nevalı Çori (Hauptmann 1991/1992.Fig. 23) (Fig. 15), a life-size human head with a snake atop recalling the Egyptian Uraeus snake which protects the pharaoh, seems to belong to a similar statue. Unfortunately, the face was deliberately destroyed some time in the Neolithic. The remaining part of the head was used as spolia in the northern wall of the terrazzo building, where T-shaped pillars were discovered in the 1980s (for the first time in the world). The snake clearly underlines the importance of the person, but as the skinhead was found in the wall of the terrazzo building, with its T-shaped pillars, it seems most probable that the status of the person depicted by the sculpture is much below that of the T-shaped pillar-statues.



Fig. 16. The 'totem pole' from Nevalı Çori (after Hauptmann, Schmidt 2007.Kat.-Nr. 101).

An answer to the question ‘Who are the T-Shapes?’ may be a little easier when these non-stylized statues are taken into account. The more or less naturalistically depicted statues seem to represent members of our world, powerful and important, but inferior to the T-Shapes, who remain in mysterious, faceless anonymity. The T-Shapes seem to belong to the other world; the non-stylized statues seem to have the role of guardians of the sacred sphere.

There are two other, nearly life-size limestone sculptures of human heads at Nevalı Çori. They belong to composite motifs reminiscent of the totem-poles of the Native Americans of the northwest coast. One head is placed in front of a large bird, probably a vulture (*Hauptmann, Schmidt 2007.68 Kat.-Nr. 95*), which seems to be holding the head in its claws. Unfortunately, the lower and upper parts of this sculpture are not preserved. Therefore, the preserved part of the sculpture could be only the ‘medial’ part of a possibly much larger composite statue which – stressing comparisons with totem poles again – originally included many other motifs.

A similar situation is visible on a second object: another large bird (again, probably a vulture, but the



Fig. 18. A ‘totem pole’ from Göbekli Tepe, excavated in October 2010 (foto Nico Becker, DAI).

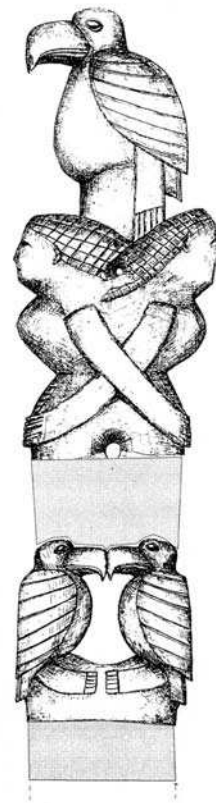


Fig. 17. Tentative reconstruction of the ‘totem pole’ from Nevalı Çori (drawing Klaus Schmidt).

head is missing) is clasping in its claws two human heads (*Hauptmann, Schmidt 2007.67 Kat.-Nr. 101*) (Figs. 16 and 17). Unfortunately, this fascinating sculpture was destroyed some time in the PPN, and only some pieces survived, buried in the north-eastern bench of the terrazzo building, where they were discovered when the bench was removed at the end of the excavations. But the overwhelming majority of the elements of the sculpture – which again was originally a little similar to a totem pole made of limestone – are lost. A recently discovered sculpture from Göbekli Tepe (Fig. 18), which has to be analysed in detail in the near future, may help us to understand better the meaning of these object.

These sculptures are mentioned here to demonstrate that, clearly, not all life-size human heads belong to statues of guardians. There are more variants of art objects where three-dimensional sculptured human heads would have been used. From Göbekli Tepe, one example fits into the group bird/ animal and human head (*Schmidt 1997/98.Fig. 9, Nr. A10*). This motif is probably related to the well-attested skull cult of PPN cultures.

Four human heads are known from Göbekli Tepe; they probably belong to sculptures similar to the



Fig. 19. Göbekli Tepe, life-size human head, limestone, height 23cm (foto Nico Becker, DAI).

Urfa statue. The first was discovered in 1998 in the filling debris of a building complex which was erected in superposition to enclosure A (Schmidt 1999, Pl. 2, 1–2, Kat.-Nr. A5). Again, the mouth is not depicted. There are two other pieces, which are not well preserved (Kat.-Nr. A32, 50). The fourth life-size human head was discovered at Göbekli Tepe in spring 2010 in the filling debris directly east of pillar 31, the western central pillar of enclosure D (Fig. 19). It is broken at the neck, and there is damage around the mouth, but the rest of the head is preserved quite well. Its find spot can be understood as an offering of the head during the filling process of enclosure D. The life-size human heads from sites in the Urfa region are listed in Table 1.

A medium-size statue found in 2008 at Göbekli Tepe could represent a further category of statues (Fig. 20), particularly with regard to its less than life-size dimensions and the body being reminiscent of the ‘*Beterstatuetten*’ of the New Sumerian period in Lower Mesopotamia (Braun-Holzinger 1977). We are far from a final assignment of these objects, but the appearance of this statue – the face looking slightly upwards at someone much more powerful, the hands in front of the body, but without presenting the male genitals, which remain invisible – all these elements seem to corroborate that this statue shares its main characteristics with the New Sumerian ‘*Beterstatuetten*’.

The north-western hilltop

In the 2009 campaign, a second excavation field was opened on the north-western hilltop of the mound. As expected, architecture typical of layer II, with

small rectangular rooms and small T-shaped pillars appeared in most of the trenches. A flat relief is visible on the surface of one of these monoliths, easily identified as the upper arm of the ‘pillar’, as the depiction of arms is a very common attribute in layer II, underlining the anthropomorphic meaning of these objects.

But the layer II structures did not cover the eastern row of the new trenches. Under surface layer I – a layer characterized by dark humous sediments produced by farming on the site – a brownish-grey sediment appeared. It included a lot of limestone gravel, but almost no stones larger than fist size. Such sediment is typical of the filling debris of the enclosures of layer III. Expectations that a structure of Layer III lay below the filling were soon justified, as the upper part of a megalithic pillar was found, to all appearances in situ. There is no question that this pillar is part of a so far unknown enclosure that had not been detected by geophysical investigations in previous seasons (Schmidt 2009b). What is not clear is the extent and orientation of the new structure.



Fig. 20. Göbekli Tepe, sculpture of a man with beard, limestone, height 66cm (foto Dieter Johannes, DAI).

The discovery of a so far unknown megalithic enclosure in the new excavation areas on the north-western hilltop was in fact not really a surprise, as it is known that geophysical methods do not map structures buried deep below the surface. The single monumental pillar found in this area was nearly 1m below the surface. Other pillars which can be expected to belong to the structure have not been discovered, which obviously can be explained by the suggestion that the missing pillars and walls are buried quite deeply. Therefore, they remained invisible in the geophysical record.



Fig. 21. Porthole stone from enclosure B (foto Irmgard Wagner, DAI).

But another find from these areas is unique so far and very exciting. It belongs to the group of so-called porthole-stones. All the objects in this category share general characteristics. One face of the stones, the face we may call the lower face, is always completely plain, while on the upper face there is a high and broad collar around a central, usually rectangular hole. In appearance, these objects somewhat resemble an oversized hat with a broad brim; the difference to real hats being that in the centre of the object there is a large rectangular hole, which could originally have been used to crawl through the stone (Fig. 21).

Similar objects are well known *e.g.* from megalithic barrows of Atlantic Europe. Stone slabs with a central hole were placed in several barrows vertically so that the stones defined the entrance leading into the darkness of the grave (*e.g. Reden 1978.215, Fig. 85 'Los Millares'*). At Göbekli Tepe, quite similar

stones exist in monumental dimensions; one lying on the northern slope of the southeast plateau is over 3m in length (*Schmidt 2009a. 216*). But most are of medium size, and some are *en miniature*, which can only be understood as their being models of the larger ones that actually allow a person to crawl through the porthole.

The porthole stones of Göbekli Tepe were known from the beginning of the investigations. A quite large example was observed during the author's first visit to the site in 1994. The stone, broken in several pieces, but nearly complete, was visible in a stone heap in the depression between the north-western and south-western hilltop. Unfortunately, however, the object disappeared during the ensuing years, as the site was affected by stone robbery (for house foundations) until the excavations of the site were fully established in 1996. Smaller fragments of port-

Probably guardians

"Urfa statue" (<i>Bucak, Schmidt 2003; Fig. 14</i>)	broken, but completely preserved life-size statue
Nevalı Çori, "skinhead" (<i>Hauptmann, Schmidt 2007.70 Kat.-Nr. 96; Fig. 15</i>)	only head, no face preserved
Göbekli Tepe, head no. A5 (<i>Schmidt 1999.Pl. 2,1-2</i>)	face completely preserved
Göbekli Tepe, head no. A32 (unpublished)	no face preserved
Göbekli Tepe, head no. A50 (unpublished)	bad preservation
Göbekli Tepe, head no. A69 (unpublished)	bad preservation
Göbekli Tepe, head no. A75 (<i>Fig. 19</i>)	nearly completely preserved

Probably related to skull cult

Nevalı Çori, bird and one human head (<i>Hauptmann, Schmidt 2007.68 Kat.-Nr. 95</i>)	only head, lower part of face destroyed
Nevalı Çori, bird and two human heads (<i>Hauptmann, Schmidt 2007.67 Kat.-Nr. 101, Figs. 16 and 17</i>)	Head 1, nearly completely preserved Head 2, no face preserved
Göbekli Tepe, animal and human head, no. A10 (<i>Schmidt 1997/98.Fig. 9</i>)	lower part of face destroyed

Tab. 1. Life-size human limestone heads and statues from PPN sites in the Urfa region



Fig. 22. Enclosure C with the two central pillars set on pedestals cut out of bedrock, autumn 2008 (foto Klaus Schmidt, DAI).

hole stones were found scattered all over the mound during the survey of 1995 (Beile-Bohn *et al.* 1998. 45–47, Fig. 19 'Pfeilerbasis'). These objects were called 'portable pillar base' at that time because of the similarity observed between these objects and the two pedestals of the so-called 'rock temple', a structure cut out of the natural bedrock, now numbered as enclosure E (Schmidt 2006. Fig. 35). The pedestals have an oval tub-shaped hole in the middle of the object. Already in the first year of investigations, 1995, an explanation was given for them, which has now been confirmed: they were identified as the bases of the (now lost) central pillars of the rock temple. The function of the holes was reconstructed such that the lower part of the pillars was set in and fixed there. During the excavations of enclosure C in 2008 and enclosure D in 2009, both pairs of central pillars were found still in situ. Their bases are placed exactly in the way as the rock pedestals, as supposed in 1995 in the case of enclosure E (Fig. 22).

The more or less close similarity between the rock pedestals and the objects now called porthole stones was the reason for the original designation 'portable pillar bases', but during the sixteen years of excavations many fragments of such stones have been

discovered in both layers II and III, although no situation was ever found confirming the suggestion that the feet of the pillars were fixed by such portable stone frames. A medium-size stone of this group, for example, was found in the centre of enclosure B, immediately in front of the central pillars (Schmidt 2006. Fig. 34) (Figs. 20 and 22). Its function was obviously that of a porthole stone; it is only unclear if the stone was placed vertically in the enclosure wall or horizontally in the middle of the roof – if a roof existed, this being an unanswered question.

Returning to the new trenches on the north-western hilltop: a megalithic porthole stone was discovered south of the single monumental pillar in the new trenches (Fig. 24). The stone appeared in an oblique position on top of debris which should belong to layer III, given its composition of mainly stones smaller than fist size, with quantities of earth or clay between. The object is of similar monumental dimensions to the porthole-stone on the southeast plateau mentioned above. The excavated stone has lost some parts of its rim, but the remaining piece, nearly 3 x 3m, is unbroken. What never was observable on the (more or less complete or fragmented) porthole stones excavated so far at Göbekli Tepe can now be seen: the stone has two portholes, two adjacent re-



Fig. 23. Enclosure B and its portholestone in centre (foto Irmgard Wagner, DAI).

ctangular openings. But this so far unique double porthole is not the only astonishing feature. On the southern rim is a flat relief of a very large snake. On the western rim there are high reliefs of three animals. In a direction from south to north, a bull, a billy-goat and a predator showing its teeth are positioned. A high relief with a very similar animal was found in the same season in the northern profile of a trench in the west of enclosure D (Fig. 25). Again, the tail of the beast is curved at its back. The repetition of the motif underlines the observation that there was a fixed canon of depictions which was unveiled step by step and year by year.

At present, it is not possible to present an interpretation of the shape, with its two entrances and the decoration of the porthole stone. It is not clear if the porthole stone is just lying in the debris, separate from other structures, or if it belongs to an architectural context, like the porthole stone found in enclosure B ten years ago. But we can recognize that pillars were not the only objects to which high reliefs were added, as seen in the case of the predator sitting on the stomach of pillar 27, a masterpiece of stonemasonry (Schmidt 2008c, Fig. 2g). Several high reliefs on limestone slabs of unknown size and shape now seem to have

originally been parts of porthole-stones, e.g. the predator found atop the wall east of pillar 36 in enclosure C (Schmidt 2006, 151–156, Figs. 63–64 No. A35).

It is not the first time that animals have been found depicted on the rim of a porthole stone at Göbekli Tepe. There are several fragments with reliefs, but the motifs are quite small, or the preservation of the surfaces was so poor that there remained doubts as to whether a relief was present; it is possible that the form in question was not an image, but an irregularity in the stone.



Fig. 24. Huge porthole-stone in situ in new excavation area on the north-western hilltop of the mound, depicted scale 0.5m (foto Oliver Dietrich, DAI).

At the so-called ‘lions gate’ at the entrance of the ‘Dromos’, a structure south of enclosure C which has not been completely excavated (Schmidt 2006.153–157, Fig. 66–67), a second type of porthole stone without a collar around the hole has been discovered. Placed vertically at the entrance was a limestone slab with a flat relief of a wild boar below the porthole. The animal is depicted upside down, lying on its back, legs stretched away from the body (Fig. 26). While there remain some doubts as to whether the stone was originally made just for this purpose – or used in its current position in a secondary function – it seems most probable that the port stone and its depiction symbolizing the broader sphere of death, which is entered by crawling through the hole. However, the further investigations and new finds will clarify this question.

Recent discoveries provide overwhelming evidence that a porthole stone could be decorated not only in flat relief, but also with three-dimensional sculpture. Several types of worked stone were used for art, T-shaped pillars, both variants of porthole stone, with and without collars, kidney-shaped stone slabs – usually covering stone benches – and large stone rings of unknown function (Schmidt 2006.Fig. 23) reminiscent of the heavy stone rings used by ancient Meso-Americans in ball games (e.g. Alegria 1994). The megalithic objects and types of decoration are listed in Table 2.

Conclusion

The transitional period of the late Pleistocene to the early Holocene in south-western Asia saw the emergence of the first large, permanently settled communities. Permanent settlements dating to 12 000–10 000 BP currently under excavation are producing unexpected monumentality and extraordinarily rich symbolism that challenges our ability to interpret. Especially in Upper Mesopotamia, in the centre of the so-called Fertile Crescent, large sites with exciting finds have been unearthed in recent years. The results of these recent and ongoing excavations have not turned our picture of world history upside down, but they are adding a splendid and colourful new chapter between the period of the hunters and



Fig. 25. High relief of a predator on a stone slab, probably part of the rim of a porthole-stone, from the bulk west of enclosure D, length 53cm (foto Nico Becker, DAI).

gatherers of the Ice Age and the new world of the food producing cultures of the Neolithic period – the extent of which had not been predicted some years ago – a chapter which is enlarged year by year by the ongoing excavations at PPN sites in the Levant and Upper Mesopotamia.

The evolution of modern humanity involved a fundamental change from small-scale, mobile hunter-gatherer bands to large, permanently co-resident communities. Following the ideas of Trevor Watkins, to whom I am grateful for long discussions and much inspiration on this subject, we observe that Jacques Cauvin's suggestions were correct (Cauvin 1997): the factor that allowed the formation of large, permanent communities was the facility to use symbolic culture, a kind of pre-literate capacity for produ-



Fig. 26. Fragmented portholestone with the relief of a boar depicted side down; the stone slab is defining the entrance into the “Dromos” south of enclosure C.

cing and ‘reading’ symbolic material culture, that enabled communities to formulate their shared identities, and their cosmos (*Watkins 2010a–b*). There has been much progress in the investigation of the earliest signs of symbolic behaviours (from 100 000 years ago), followed by the earliest figural representations in European Upper Palaeolithic art from 30 000 years ago (*Bosinski 1987*). Now, the 12 000 year old sites in Upper Mesopotamia make us believe that something new and very important was happening. We are finding our way back to a quite diffusionistic point of view, when we observe the success of people in possession of the ‘Neolithic package’, which first occurred in its complete form in the Northern Levant and Upper Mesopotamia, between the Upper Euphrates and the Upper Tigris. From these regions, the new way of life was disseminated across the Old World from the 9th millennium calBC onwards, reaching Europe and Africa in the late 7th millennium (for north-western Africa, especially Egypt, comp. *Shirai 2010*).

Göbekli Tepe opens a new perspective on the Early Neolithic: specialisation on particular tasks must have been possible in order for members of the community to be able to erect these monuments and decorate them so elaborately. We can assume that much older traces and constructions have yet to be found at Göbekli Tepe, and it can be guessed that the place has a history stretching back over several thousand of years to the Old Stone Age. The people must also have had a highly complicated mythology, including a capacity for abstraction (*Morenz, Schmidt 2009*). The question of who is being represented by the highly stylized T-shaped pillars remains open, as we can not say with certitude if concepts of god existed at this time. So the general function of the enclosures remains mysterious; but it is clear that the pillar statues in the centre of these enclosures represented very powerful beings. If gods existed in the

	engraving	flat relief	high relief
T-shaped pillars	X	XXX	X
Porthole-stones with collar on face	X	X	XX
Porthole-stone without collar		X	
Large, often kidney-shaped stone slabs covering stone-benches	X	X	
Large stone rings of unknown function		X	

Tab. 2. Megalithic objects decorated with engravings, flat relief and high relief.

minds of Early Neolithic people, there is an overwhelming probability that the T-shape is the first know monumental depiction of gods.

Further investigations will certainly provide us with more detailed information. But to understand the new finds, archaeologists need to work closely with specialists in comparative religion, architectural and art theory, cognitive and evolutionary psychology, sociologists using social network theory, and others. It is the complex story of the earliest large, settled communities, their extensive networking, and their communal understanding of their world, perhaps even the first organized religions and their symbolic representations of the cosmos.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the Ministry of Culture and Tourism of the Republic of Turkey for the kind permission to excavate at the important site of Göbekli Tepe. The project is funded by the German Archaeological Institute (DAI), the German Research Foundation (DFG) and supported by the Theodor Wiegand-Gesellschaft and by ArchaeNova e.V. Heidelberg.

REFERENCES

- ALEGRIA R. E. 1994. Le jeu de balle chez les indiens Tainos des Grandes Antilles vu par les chroniqueurs de l'Amérique. In J. Kerchache (ed.), *L'Art des Sculptures Tainos. Chefs-d'Oeuvre des Grandes Antilles precolumbiennes*. Musées de la ville de Paris. Paris: 232–247.
- BEILE-BOHN M., CH. GERBER, M. MORSCH, K. SCHMIDT 1998. Neolithische Forschungen in Obermesopotamien. Gürcütepe und Göbekli Tepe. *Istanbuler Mitteilungen* 48: 5–78.
- BOSINSKI G. 1987. Die große Zeit der Eiszeitjäger. Europa zwischen 40 000 und 10 000 v. Chr. *Jahrbuch des Römisch-Germanischen Zentralmuseums* 34: 3–139.
- BRAUN-HOLZINGER E. A. 1977. *Frühdynastische Beterstatuetten*. Abhandlungen der Deutschen Orient-Gesellschaft 19. Gebr. Mann Verlag, Berlin.
- BUCAK E., SCHMIDT K. 2003. Dünyanın en eski heykeli. *Atlas* 127: 36–40.
- CAUVIN J. 1997. *Naissance des divinités, naissance de l'agriculture. La révolution des symboles au Néolithique. Nouvelle édition*. CNRS Éditions. Paris.
- ÇELİK B. 2000. An Early Neolithic Settlement in the Center of Şanlıurfa, Turkey. Neo-Lithics. *A Newsletter of Southwest Asian Lithics Research* 2–3: 4–6.
- HAUPTMANN H. 1991/1992. Nevalı Cori. Eine Siedlung des akkeramischen Neolithikums am mittleren Euphrat. *Nürnberger Blätter zur Archäologie* 8: 15–33.
1993. Ein Kultgebäude in Nevalı Çori. In Frangipane *et al.* (eds.), *Between the Rivers and over the Mountains. Archaeologica Anatolica et Mesopotamica Alba Palmieri Dedicata*. Rom: 37–69.
- HAUPTMANN H., SCHMIDT K. 2007. Die Skulpturen des Frühneolithikums. In Badisches Landesmuseum Karlsruhe, *Vor 12 000 Jahren in Anatolien. Die ältesten Monumente der Menschheit*. Begleitband zur großen Landesausstellung Baden-Württemberg im Badischen Landesmuseum 2007. Theiss. Stuttgart: 67–82.
- LÉVI-STRAUSS C. 1991. *Histoire de Lynx*, Librairie Plon, Paris – deutsche Übersetzung 1993: *Die Luchs Geschichte. Zwillingsmythologie in der Neuen Welt*. Carl Hanser, München – Wien.
- MEIXNER G. 1995. *Frauenpaare in kulturgeschichtlichen Zeugnissen*. Frauenoffensive, München.
- MORENZ L. D., SCHMIDT K. 2009. Große Reliefpfeiler und kleine Zeichentäfelchen. Ein frühneolithisches Zeichensystem in Obermesopotamien. In P. Andrassy, J. Budka, F. Kammerzell (eds.), *Non-Textual Marking Systems, Writing and Pseudo Script from Prehistory to Modern Times*. Lingua Aegyptia – Studia monographica 8. Göttingen: 13–31.
- MORSCH M. G. F. 2002. Magic Figurines? Some Remarks About the Clay Objects of Nevalı Cori. In H. G. Gebel, B. D. Hermansen, C. Hoffmann Jensen (eds.), *Magic Practices and Ritual in the Near Eastern Neolithic*. Proceedings of a Workshop held at the 2nd International Congress on the Archaeology of the Ancient Near East (ICAANE) in Copenhagen 2000. Studies in Early Near Eastern Production, Subsistence, and Environment 8, ex oriente. Berlin: 145–162.
- PETERS J., SCHMIDT K. 2004. Animals in the Symbolic World of Pre-pottery Neolithic Göbekli Tepe, South-eastern Turkey: a Preliminary Assessment. *Anthropozoologica* 39.1: 179–218.
- RASHID S. A. 1983. *Gründungsfiguren im Iraq*. Prähistorische Bronzefunde Abteilung I Band 2. Beck. München.
- REDEN S. VON *Die Megalith-Kulturen. Zeugnisse einer verschollenen Urkultur. Großsteinmale in: England, Frankreich, Irland, Korsika, Malta, Nordeuropa, Sardinien und Spanien*. DuMont. Köln.
- SCHMIDT K. 1995. Investigations in the Upper Mesopotamian Early Neolithic: Göbekli Tepe and Gürcütepe. Neo-Lithics. *A Newsletter of Southwest Asian Lithics Research* 2/95: 9–10.
- 1997/1998. “Stier, Fuchs und Kranich” – der Göbekli Tepe bei Şanlıurfa (Südosttürkei). *Nürnberger Blätter zur Archäologie* 14: 155–170.
1999. Frühe Tier- und Menschenbilder vom Göbekli Tepe. *Istanbuler Mitteilungen* 49: 5–21.
2000. »Zuerst kam der Tempel, dann die Stadt« Vorläufiger Bericht zu den Grabungen am Göbekli Tepe und am Gürcütepe 1995–1999. *Istanbuler Mitteilungen* 50: 5–41.
2001. Der “Ziegendämon”. Archäologie und Religionsgeschichte. In R. M. Boehmer, J. Maran (eds.), *Lux Orientis. Archäologie zwischen Asien und Europa. Festschrift für Harald Hauptmann zum 65. Geburtstag*, Rahden: 381–388.
2005. Die “Stadt” der Steinzeit. In H. Falk (ed.), *Wege zur Stadt – Entwicklung und Formen urbanen Lebens in der alten Welt*. Vergleichende Studien zu Antike und Orient 2, Verlag Ute Hempen, Bremen: 25–38.

2006. *Sie bauten die ersten Tempel. Das rätselhafte Heiligtum der Steinzeitjäger. Die archäologische Entdeckung am Göbekli Tepe.* C. H. Beck. München.

2008. Die zähnefletschenden Raubtiere des Göbekli Tepe. In D. Bonatz, R. M. Czichon, F. J. Kreppner (eds.), *Fundstellen. Gesammelte Schriften zur Archäologie und Geschichte Altvorderasiens ad honorem Hartmut Kühne.* Harrassowitz Verlag. Wiesbaden: 61–69.

2009a. Göbekli Tepe. Eine Beschreibung der wichtigsten Befunde erstellt nach den Arbeiten der Grabungsteams der Jahre 1995–2007. In *ArchaeNova, Erste Tempel – frühe Siedlungen. 12 000 Jahre Kunst und Kultur. Ausgrabungen und Forschungen zwischen Donau und Euphrat.* Isensee. Oldenburg: 187–223.

2009b. Göbekli Tepe Kazısı 2007 Yılı Raporu. In *Kültür Varlıkları ve Müzeler Genel Müdürlüğü (ed.), 30. Kazı*

sonuçları toplantısı. 3. Cilt. Ankara 2008. Kültür ve Turizm Bakanlığı. Kültür Varlıkları ve Müzeler Genel Müdürlüğü, Ankara: 163–182.

SHIRAI N. 2010. *The Archaeology of the First Farmer-Herders in Egypt. New Insights into the Fayum Epipalaeolithic and Neolithic.* Archaeological Studies Leiden University 21. Leiden University Press. Leiden.

WATKINS T. 2010a. Changing People, Changing Environments: How Hunter-Gatherers Became Communities that Changed the World. In B. Finlayson, G. Warren (eds.), *Landscapes in Transition.* Oxbow. Oxford: 106–114.

2010b. New Light on Neolithic Revolution in South-West Asia. *Antiquity* 84(325): 621–634.