

Kinship patterns as a doorway to apprehend the symbolic and social structure of Göbekli Tepe communities.

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Summary

After discarding, on historical and structural grounds, the idea that Neolithic sumptuary buildings could represent temples, it is assumed that the pillars of Göbekli Tepe relate to a system of belief illustrated by a mythology featuring interacting mythical beings. Like a mirror, the form taken by this symbolical interrelation must reflect something of that society's own form of internal social relations. Numerous ethnological studies, like the work of Lévi-Strauss, have shown that among primitive societies², the exchange of women is the most crucial subject of social interaction. These matrimonial rules exist under a great number of forms, but there is one universal principle determining them all and it must have characterized the social organization of Euphratean Neolithic societies as well: a group receiving a woman must absolutely give another woman back, thus creating an inalterable sense of reciprocity, as well as a strong and egalitarian bond between the communities involved in the exchange network. Reviewed in the light of this basic social consideration, the symbolism of Göbekli Tepe starts making sense.

Introduction

Göbekli Tepe and other large sumptuary constructions of the Neolithic period are, more often than not, regarded as temples or as cultic places of some sort. It takes a step sideways in ethnology to realize that similar interpretations are a straight projection of our modern cultural references on obscure archaeological features. Because every human society can be considered as a coherent system more or less determined by its economic infrastructure (Echaudemaison 2009: 474), cultural items, like temples, must be taken with extreme precaution when applied to different social structures. In Mesopotamia, the temple-building tradition is well attested from the earliest Bronze Age onward and this seemed early enough to drag it all the way back to the Neolithic period. However, a drastic gap separates these two periods: the process known as the Urban Revolution since Childe. Forest (1996: 137-40) showed how an urban context is indispensable for the rise of temples³ and god-worshipping habits, as these are gradually being enforced by the élite to replace the long-forgotten 'ancestor of reference'⁴. Though it has been shown elsewhere that an incipient form of competition seems to have

¹ <http://ethneo.scienceontheweb.net/publications/>

² "The word 'Primitive' [from *prime*] is not used in any derogatory sense, but simply to indicate a mode of subsistence and of socio-cultural integration that came early in the history of human kind" (Llobera 2003: 88).

³ According to the dictionary, a temple is 'an edifice consecrated to the worship of one or more deity'.

⁴ The emergence of élites is explained by Forest as the end-result of the lengthy upward integration of patrilineal lineages as the urban community widens. This integration follows the 'elder principle', where a

emerged in the latest PPNB of the Middle Euphrates (Bodet 2010b)⁵, the Neolithic social context will never come close to that required for the appearance of cultic practices.

For Australian Aborigines, mythological beings (of the Dream Time) are often mobilized to explain events that cannot be understood, like the beginning of the universe or the birth of the tribe. A major difference with deities, as they are conceived in urban societies (including our own), is that individuals do not feel related to the creatures of the Dream Time, who are believed to belong to a separate time and space⁶ (Testart 2006: 22-4, 43-52). More importantly, even if such a connection were to be found, it would certainly not exist under a submissive or hierarchical form, with humans below obeying mighty mythical heroes above. We see how the type of relation among individuals (élites Vs mass, in the case of urban societies) is reproduced on a supernatural scale (gods Vs humans). This correlation works with every society and explains why a hierarchical relation has no chance to be conceived and reproduced in the mythology of a society functioning under an egalitarian ideology, like that of pre-urban peoples. Subsequently, in the absence of a relation of obedience to, or of dependence on a master, Neolithic people do not worship deities, and temples cannot have appeared so early.

Now that the temple hypothesis has been set aside, what sense can be made of Göbekli Tepe's symbolism? Whether as an illustrated myth, as a concept or as a moral prescription, the pillars and their decoration must contain a fundamental message, like Leroi-Gourhan (1995) said of the Franco-Cantabrian paintings. This message, even if intended for supernatural forces, would have been understood by the population. A functionalist approach would easily add that the population is the body to which the statement is conveyed at last instance. Concerning the content of the message, it can be guessed that an investment like the one required for the erection of Göbekli Tepe must address the most obsessing matters of the population. These are likely to be conditioning the society's very survival (in the Darwinian sense of the term⁷): food and women, **production** and **reproduction** (Forest 2006: 131).

The relations of production

Food acquisition requires an interaction with nature which is largely under the control of hunter-gatherers (and incipient farmers), the knowledge being passed on from one generation to the next over millennia. Magical ceremonies of resource multiplication are known in ethnography but can be considered as having an influence on the expansion of the resource in the wild (Levi-Strauss 1962: 138; Llobera 2003: 79-82), or must be apprehended within a larger ideological framework, as reconstructed by Testart (1985). On its own, the mode of production thus appears little subject to a great expenditure of symbolic effort. The relations of production are probably a better guess, and concepts like cooperation and sharing are more likely to integrate or at least to influence the symbolic

certain social prominence (originally purely functional) is given to the eldest males of elder lineages, as is characteristic of all Agricultural Domestic Communities (Meillassoux 1991).

⁵ The argument is based on a confrontation of the pace of animal genetic evolution from neighboring regions, replaced in an evolutionary perspective.

⁶ This explains why Cauvin's hypothesis, according to which the emergence of the concept of god (how ?) entailed the practice of agriculture (how ?), is just as irrelevant (Testart 1998: 26). The representation of deities is a delayed political consequence, and not a mysterious cause, of the farming system.

⁷ Primitive communities, with their subsistence economy, are known, since Sahlins, to rarely fall in danger of starvation (Echaudemaison 2009: 7, 167), at least not before the encounter with white men (Michalon 1997).

message. At this early stage, it is however illusory to draw a clear link between these and Göbekli Tepe.

A preliminary assessment of the socio-economic context

Before closing this parenthesis on production, it is essential to note that the society that built Göbekli Tepe was, without a doubt, agriculturalist. The absence of morphological domestication on the grains found on the site has long been put forward to affirm the absence of agriculture; the most recent analyses have however altered this position (Schmidt 2008: 173). Willcox (2000: 129-32) indeed showed that morphology alone cannot stand as an ultimate argument. Moreover, the site incidentally happens to be contemporary and adjacent to the first known cases of pre-domestic agriculture (cultivation prior to genetic repercussion on the seeds) at Jerf el Ahmar, Tell 'Abr and maybe Mureybet (Willcox *et alii* 2009) –not to mention earlier Abu Hureyra. Also, though morphological domestication of herd animals is not known in the PPNA (Peters *et alii* 2005), pre-domestic husbandry was recognized at contemporary Hallan Çemi (Redding 2005) and 'cultural control' over *Sus* has been suggested at early Çayönü (Ervynck *et alii* 2002). Finally, the labor force needed for the completion of this monumental architecture could hardly be fed on hunting and gathering alone: a good reference is found all along the Atlantic fringe of Western Europe, where the erection of Neolithic megaliths follows exactly the arrival of agriculture through diffusion (Sherratt 1990: 147-50). The consumption of farmed resources at Göbekli Tepe appears hardly refutable.

What can then be said of reproductive patterns among primitive societies? First-hand ethnographic data as well as structural analyses can be found in the literature, and the fundamental book by Lévi-Strauss (1967), *Les structures élémentaires de la parenté*, will serve our purpose.

I- The relations of reproduction

Finding a sexual partner is of primordial importance in primitive contexts for reasons that go far beyond physiological instincts. As people grow older and approach an age where they cannot produce food anymore (either through gathering, hunting or farming), children represent an irreplaceable social security (Michalon 1997: 21; Meillassoux 1991: 72-2). And since adults were themselves taken care of in their own youth, a cycle of endless cooperation between generations takes shape (Testart 1985). There are more immediate reasons. Lévi-Strauss (1967: 45-6) recalls that men generally take care of the meat production, while women are concerned with the plant foods as well as a number of activities that men do not undertake: non-married men usually live very miserable lives. Women are thus considered to be the most precious good (Lévi-Strauss 1967: 71-9), so much so that their reproductive capacities could not have been left anarchically to the free will of males: leading to a context of permanent internal conflicts, such disorder would indeed seriously threaten the stability of the community as a whole.

As a result, somehow shocking to modern minds but utterly logical on a materialistic base, in such societies, sexual mates could not but be the object of a strictly regulated form of exchange; it is considered a dishonor for a woman not to be acquired in this way. What are the terms of this exchange? The basic principle is the prohibition of strict endogamy, that is, in its extreme form, incest. Another crucial aspect is that only a woman equals a woman (Meillassoux 1991: 73). Found on all continents, we will see that a spontaneous solution (without possible diffusion) imposed itself, though it is known under a large variety of forms. Southwest Asian Neolithic communities are also concerned.

The elementary kinship structures

Primitive societies are generally closed on themselves, and within them virtually everybody has a tighter or looser biological relation with every other. It is therefore within this social pool that people mate according to predefined rules. Apart from first degree relatives -siblings, parents, children- who are almost always prohibited, since everyone is related⁸, the prohibition of incest is mostly a cultural notion: the individuals falling into the proscribed class are defined by each society. Whatever its form, prohibition cannot be missing.

The quasi-universal solution, from which all other refinements derive, goes as such (Lévi-Strauss 1967: 405): the group, which can be referred to as a tribe, is artificially divided into subgroups (moieties, clans, sections, descent lines etc.) exchanging their women on the basis of reciprocity, according to which a subgroup gives its women and receives, immediately or belatedly, the same number. The internal division follows either one of the genitors, according to the recognized type of descent: female in a matrilineal society, or male in a patrilineal one. A horizontal or generational division can be added to this vertical division, thus assigning everyone in a **class**, according to the terminology of Morgan. In primitive societies, which include (early) Neolithic ones, kinship is thus termed 'classificatory'. The different forms of alliance patterns characterizing them are said by Lévi-Strauss to be of the **elementary** type, meaning that the class into which individuals find their mate is determined by rule. In contrast, modern societies (and a few others) are characterized by 'complex' structures where relationship and mating patterns are centered on the individual and where only first degree relatives are proscribed. There are two main forms of elementary structure, the restricted and the generalized types⁹:

a) Under the **restricted exchange**, exogamous groups exchange mates in a symmetrical pattern: a man from moiety A can only marry a woman from moiety B and vice versa; in its simplest form, referred to as the dualistic organization, the men of two moieties exchange their sisters. Sometimes divided once more into 4 sections (where a generational parameter intervenes), and sometimes again into 8 subsections, the tribe always operates under a direct and reciprocal pattern of exchange and does not open itself to other groups (at least for matters of alliance).

b) Under the **generalized exchange**, partners are exchanged in a circular cycle among at least three subgroups (referred to, here, as clans), and often many more: clan A gives its women to clan B, which gives its own to clan C, and so on, until clan n gives its women to clan A. Whatever the number of clans, the circle must necessarily close at some point, and this fact is acknowledged by everyone. The exchange between clans is asymmetrical and delayed, and reciprocity is thus indirect, but it remains a fundamental principle.

Let's illustrate: in a society of patrilineal descent, the marriage of Ego, a male, will be prescribed with his cross-cousin, who is the daughter of his father's sister, as they necessarily belong to different classes, while he cannot marry his *parallel-cousin*, who is the girl of his father's brother, as Ego and this girl would automatically belong to same class (Llobera 2003: 47-9; Testart 2006: 130-4). In a restricted exchange among four sections for example, the child belongs to a different class than both his parents, and his marriage is prescribed with a cousin belonging to a fourth class. According to

⁸ The kidnapping of women from foreign groups, at least on a regular basis, is probably a rather late development (Meillassoux 1991: 51-6; Forest 2006: 131)

⁹ See also Ghasarian (1996: 147-71) for a clear summary.

Lévi-Strauss (1967: 281), the marriage of the cross-cousins (real or classificatory) is the rule defining all elementary kinship structures. On the other hand, a mating couple belonging to the same ‘class’ is treated as incest, and the violation of this exogamic principle is severely suppressed, even by death. The reality is usually very (often incredibly) more complicated, but whatever the complexity, the **preservation from strict endogamy** remains the fundamental goal of these social divisions.

To avoid endogamy, the solution lies in **exchange**. Not only is exchange the origin of and the reason for the internal division of the group into subgroups, but this is a conduct on which humans rely for their success as a species (ibid: 56, 83): “*matrimonial exchange is just a particular case of these multiple forms of exchange, including material goods, rights, and persons*”. Both groups being very careful to exchange on a purely egalitarian basis, the systematic exchange of women can only work under a **reciprocal** pattern, whether direct or delayed: any received woman must be answered by the ‘gift’ of another woman. To complete this paradigm, let’s note that for Lévi-Strauss (*ibid.* p. 22-9), the danger of endogamy has nothing to do with a presumably ‘natural’ horror of incest but is purely social in nature, as only healthy -thus reciprocal- social relations, both in terms of production (Llobera 2003: 36) and reproduction, can ensure the success of the human group.

On the abstraction capacity of primitive societies

Levi-Strauss opens another of his books, *La Pensée Sauvage* (1962), by challenging the preconceived idea that primitive people are not capable of formulating complex concepts, a point also underlined by Forest (2009: 113; see Tattersall 1999 for the emergence of the intellectual capacities of *Homo sapiens*). The first ethnographers were indeed quite stunned by the fact that not only could Aborigines make a complete sense of their sometimes extremely complicated kinship patterns, which they perfectly conceived as a coherent system, but also that they were able to think of them in abstract terms. Drawing signs, arrows and circles in the sand, indigenous specialists of kinship relations would explain the theory of their tribe’s alliance system to visitors who would travel far away simply to learn about it. At a time when material belongings are limited, tribes could even measure their prestige by comparing the complexity of their alliance system (Lévi-Strauss 1967: 145-7, 252).

These abstractions go a long way. In the mind of the primitives living under a dualistic organization, it is not just people but everything in the universe that is divided into moieties: species, geological markers, natural events, stars... (Testart 1978: 2, 77). This general dichotomy reflects on their mythology (and not the other way around) where the interaction of two principles (male and female) often happens to assume a role in the foundation of the universe. Indeed, the principles of exchange and reciprocity are ultimately reduced to a symbolical interaction between two bodies, confounded with two exogamous moieties (Lévi-Strauss 1962: 115; 1967: 114-20).

It is possible to conclude this brief review of sociological theory by this simple syllogism: the basic principles of exogamy and food sharing imply exchange, exchange implies two reciprocal entities, therefore the Neolithic fundamental values dwell in dualism. Having recognized the fundamental importance of kinship systems for primitive people as well as their ability to intellectually manipulate and represent concepts, it is tempting to assume that principles of dualism and reciprocity would take the center stage in Neolithic symbolic representations. Let’s confront these assumptions to Neolithic symbolic structures, in particular those of Göbekli Tepe where they are most obvious.

II- The layout of Göbekli Tepe III

As we can see in figure 1, the layout of the earliest level of Göbekli Tepe, III (in green), dating to the Late PPNA, is characterized by the circular arrangement of a various number of T-shaped pillars, each

circle surrounding a unique pair of parallel ‘twin’ pillars, similar in morphology but nearly twice as large as the surrounding ones. Of the four fully excavated enclosures, only one (enclosure A) is not circular and displays a roughly symmetrical arrangement. At least twenty more enclosures known from geomagnetic survey presumably belong to this level (Schmidt 2007: 117).

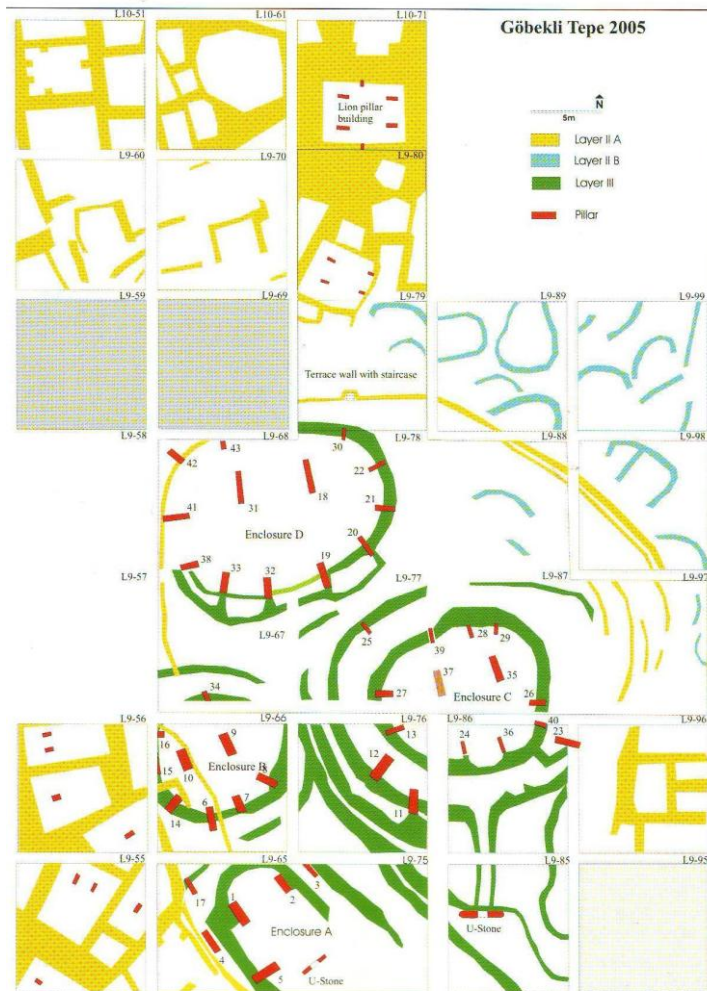


Fig. 1- Main area excavated at Göbekli Tepe (in 2005). Layer III, in green (to which the yellow half-circular walls surrounding enclosures D and C should be added), dates to the Late PPNA. Layer II, in yellow, belongs to the Early/Middle PPNB. After Schmidt 2007 : 106 (vol. 2), fig. 2.

The following analysis is built on a couple of preliminary considerations. Their anthropomorphic aspect, with arms and hands carved on their flanks (Schmidt 2007: 118-20), indicates that the pillars stand for a form or another of human entity. In the sumptuary buildings of Çayönü, Nevalı Çori and Çatal Höyük, Forest (1996b: 25-8; 1993) indeed successfully identified a series of pillars and non-functional parallel pilasters as standing for exogamic moieties or lineages (probably not actual, but conceptual ones). In the same trend of thought, the pillars at Göbekli Tepe possibly represent subgroups of the society (around which the kinship pattern revolves), a society ultimately to be considered as a whole, in conformity with the holist ideology characterizing primitive people (Dumont 1985: 303; Echaudemaison 2009: 242). Accordingly, the meaning of the different parts (the pillars) of the composition will only appear when each enclosure is considered in its totality. Finally, because the pillars –as human entities- are placed in strict relation to each other (either parallel or in circle), the concept in display is expected to be determined by, and therefore to reflect, specific forms of interaction between the society’s (clan like) subgroups.

- a) Just like at Çatal Höyük, **the central twin pillars** arguably stand for two exogamous moieties, and we can at least be quite confident that the dualist principle influenced greatly the

composition. In order for these concepts to be more readily apprehended by individuals, it is probable that the moieties composing the dualistic principle are somewhat personified by mythical entities taken from the mythology, just like the basic principles of modern religions (charity, love, sacrifice etc.) take various living forms in their mythology. From this point of view, the reference to a pair of mythical heroes (male and female), from which the tribe would originate for example, can be expected. This narrative part shall remain a mystery, but this matters little as long as we can grasp the structure of the symbolism¹⁰. At that level, given the similarity and the symmetrical arrangement of the central pillars, it seems that a relation of strict equity is symbolized. As a matter of fact, the concept of dualism could hardly have been evoked with more ostentation than it has at Göbekli Tepe¹¹. As assumed on a theoretical level earlier, reciprocity seems to take center stage in the symbolism of the site, reflecting, in this, the basic ideological (and economical) foundation of the society.

b) To go further, we must return to **Çatal Höyük** where the rich iconography enabled Forest (1993: 6-9) to transcribe the main elements of the Neolithic symbolism. This author identifies four elements (life, death, and two exogamous moieties) at the intersection of which stands a procreating principle, embodied by a female figure: reaching out with her legs and arms to two symmetrical poles (the moieties), it is giving life to a bull (symbolizing society, emphasizing its male component - the horn being an obvious phallic symbol) and swallowing it with its mouth (teeth being a widespread symbols of death). The (male) society is also present at Çatal Höyük under the form of chevrons and snakes (Lévi-Strauss 1962: 115-6), emphasizing its linear aspect (in terms of regeneration). Taken as a whole, this composition displays the representation that primitive people have of their own society: continuously exchanging women among social subgroups (moieties or others), it is caught in an eternal cycle of life and death. The *vagina dentata*, or ‘toothed vagina’, is thus a universal symbol (*ibid*: 131-3), and such allegories are certainly to be expected at Göbekli Tepe. Both symbols for the living society (aurochs, snakes), as well as those for death (birds, toothed animals), indeed appear to be omnipresent on the site – but the iconography shall not be discussed further here. The 4-part cross composition centered on a procreating principle cannot be excluded from enclosure C, where the side pillars surrounding the dualistic principle can be associated in four dualistic pairs -plus pillar 39 reinforcing one of the principles. But for enclosures B and D (fig. 3) at least, the varied (but certainly not random) number of regularly spaced pillars evoke something else or something more than the endless cycle of life and death¹²; in fact, at Çatal Höyük, society is always represented in a linear perspective, never in circle.

c) **The smaller surrounding pillars** have the same shape as those of the central pair, and could also represent a section of the society (at least, their spatial distribution must have been influenced by the organization of the society); also, the abstraction represented by these pillars is certainly

¹⁰ Leroi-Gourhan (1995: 107-12) has shown that at sites like Lascaux, Altamira and others, the painted faunal species and the signs can be statistically grouped according to the morphology of the cave walls (protruding vs. concave parts, entrance vs. depth etc.): the whole program is thought to represent a dichotomy between male and female elements. Exogamic kinship structures may also enlighten the Franco-Cantabrian symbolism.

¹¹ In the center of the communal buildings of Jerf el-Ahmar (and Mureybet?), two pillar bases deprived of visible architectonic function could also stand for the exogamic principle (see fig 6 and 5 in Stordeur 2000: 46).

¹² Reincarnation would be an anachronistic guess: this concept probably appears, like divinities and for similar reasons, with urban social structures.

related to the central theme reviewed above¹³. The different areas of a society's superstructure (kinship patterns, laws, symbolism, ideology etc.) are guided by the same fundamental principles (ultimately of economic origin): these have already been identified as exogamy and reciprocity, and, whenever more than two components are implied, as we have seen with the kinship structure, the exchange driven by these principles necessarily take the form of a closed circle. (1) This layout conveys the idea that every subgroup (say, a clan) takes a crucial *but equal* role in the system, which can only work as a whole: the circle only functions if every clan holds its position in the cycle of exchange, reinforcing the dependence of each of them on all the others. Moreover, because the generalized exchange works as a process delayed in time (the clan giving a woman must wait to receive one back), the arrangement is based on an everlasting and mutual **trust**. (2) A social arrangement based on the restricted exchange system, working symmetrically among two moieties, four or eight (sub)sections, should not entirely be excluded, as the pairs of parallel pillars in Enclosure A could indicate. Lévi-Strauss relates several examples where both restricted and generalized forms are practiced within the same society, as well as others where a form evolves towards the other one (in both directions): both obeying to the same basic principles (reciprocity & equity mainly), the coexistence of such matrimonial patterns cannot be excluded from the Near Eastern Neolithic. (3) From a materialistic point of view, the sheer size of the pillars (especially the central ones) invites us to think that the extraction, carving, transport and erection of each of them could not have been undertaken by a single isolated subgroup, but would probably include the labor force of the several clans composing the entire society, say a tribe: these clans are then bound in the construction of one enclosure just as they may be for the exchange of women. Now, because kinship patterns are simply a technical aspect of social life which does not really have its place in the symbolic realm, the pillars cannot be directly equated with clans (Forest: pers. com.). However, the society makes, at the structural level, a coherent whole: the symbolical and ideological structure of that society determines the overall kinship structure in the same way it influences the type of relation conducted by mythical beings -represented here by the spatial distribution of the pillars; the former, well known from ethnology, is thus projected to throw light on the latter. Consequently, the circular shape of the **surrounding pillars** at Göbekli Tepe must be influenced by the reciprocal form of the social exchange practiced by the community that erected them, particularly -though not only- effective in the distribution of women.

Some tribes, like the Katchins of Burma, who practice the generalized exchange within a cycle of five exogamous groups, recognize in their mythology the presence of two principles, a male and a female one, responsible for everything in the universe (Lévi-Strauss 1967: 289). In the underlying Göbekli mythology, the expected original Couple (the twin pillars ?) could have had a number of offspring (the side pillars, maybe conceived as the mythical ancestors of the different subgroups composing the society ?). The story, again, will remain pure speculation, but, the interaction of the different elements composing primitive societies can always, ultimately be shrunk to a restricted 1-to-1 reciprocal principle, and this is arguably the structural meaning lying behind the circle of pillars surrounding the central pair. Combining these different points, I propose that **the enclosures at Göbekli Tepe are a reflection of the living structure of the society-whole, working through the egalitarian exchange among its subgroup-parts (clans?) around a dualistic principle, simultaneously procreating and deadly.**

¹³ The bench lining the exterior wall of the contemporary (PPNA) EA 53 building at Jerf el Ahmar (Stordeur 2000: fig. 7) is segmented with 6 pillars which may have a similar symbolical function as the side pillars at Göbekli Tepe (in spite of the absence of the central twin pillars); this very late PPNA example may also be seen as the early sign of the evolution to be seen in the PPNB Pre-Taurus (*analyzed below*).

In all human societies, kinship patterns and religion are indirectly related to each other as both these elements reflect one common system of values (the ideology), itself shaped by the type of relations of (re)production (the sharing of food and women). Thus in a society characterized by inequity, hierarchy has good chances to be reflected among the mythical beings of its mythology; for example, the churches of the highly stratified Byzantine society display the prophet at the highest point (below the dome), the four archangels below (in the apses for example), the twelve apostles at a lower level still (in the tympanum...), while the common worshipper stands at ground level. As for primitive societies, the egalitarian form of matrimonial exchange is in concordance with the reciprocal relations of production. The kinship (infra)structure therefore stands as an indirect but precious hint to make sense of the ideological (super)structure lurking behind the pillars of Göbekli Tepe. On that site, the expenditure of symbolism is certainly intended to address more transcendental matters than kinship patterns, but the disposition and the spatial arrangement of these pillars –in particular their relation to each other-, seem to tell us, without much surprise (but it is worth stressing it in regard to the symbolism) that the type of relationship existing between the mythical beings in this religion is based on reciprocity, equity and dualism. At last, this implies that this form of social relation must also bind the individuals of these Neolithic communities together.

Implications on the settlement pattern

The buildings of Göbekli Tepe III were certainly erected by communities who, for a good part at least, did not live *in situ* year-round but gathered on special occasions, presumably during the dead seasons of the agricultural cycle (end of the summer ?). Given the effort produced however, certain workers may have stayed more permanently, and the blue walls on the site map (fig. 1) could represent such a dwelling area. Assuming that the excavated enclosures of Göbekli Tepe III are roughly contemporary (as they are neatly built next to each other, never overlapping), then the entire construction must have been supported by a large number of separate communities –all the more so if the numerous unexcavated enclosures are also concerned. These communities cannot have lived very far away from the site. At 4 km per hour and 8 hours of walking per day, populations within a 200 km-radius could gather within less than a week: this includes easily all the known sites of the Middle Euphrates bend – from Çayönü to Mureybet– as well as certain sites of the Upper Tigris. The expected population density is not contradicted by the relatively large number of identified PPNA sites in the area (fig. 2), an overview which can only be a very pale reflection of the Neolithic reality. Though the majority of these villages are situated on the banks of the Euphrates or of the Tigris rivers, where several dam projects spectacularly intensified our knowledge, the Neolithic settlement pattern was certainly much more equally dispatched: agriculture being rain-fed, the proximity of a big river is not a necessary precondition, a spring or a stream being sufficient. Tell Qaramel near Aleppo (Willcox 2009: 152), Yeni Mahalle and Balıklıgöl Höyüğü in Şanlı Urfa are such examples (Çelik 2007: 165, 175), while the sites of Hamzan Tepe, Karahan Tepe and Sefer Tepe have been identified in the nearby Harran plain (Hauptmann 2007: 149-50). Moreover, it has been proposed elsewhere (Bodet 2010 a) that the density of E PPNB villages in the nearby coastal band of the Northern Levant, where only a few settlements are known, must have been in fact very high - a density that lead to the colonization of environmentally-unattractive Cyprus: this area and time period are close enough to those of Göbekli Tepe to support the evidence of a relatively high population density.

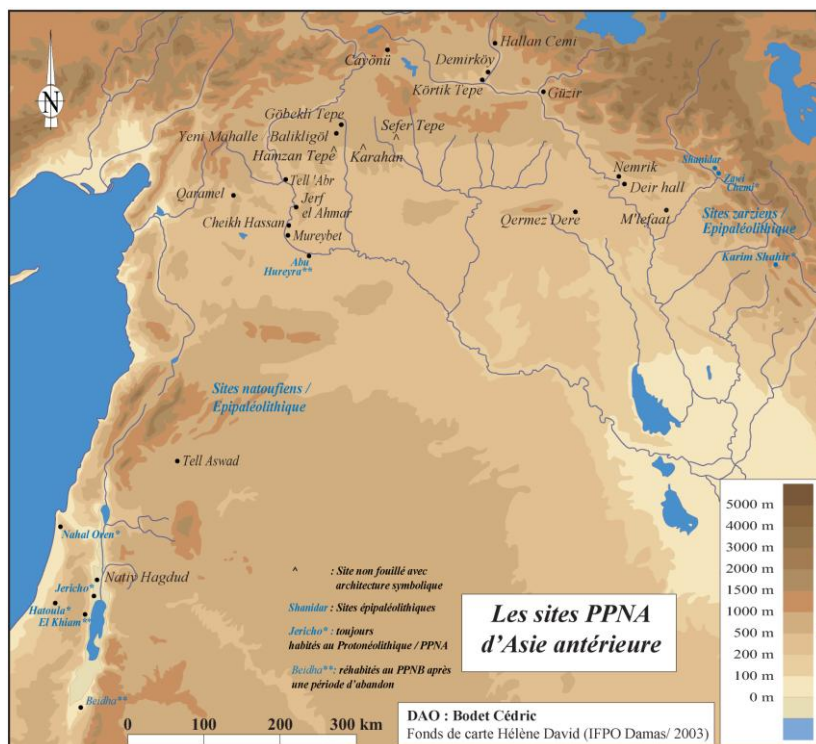


Fig. 2: Location of PPNA sites identified in Mesopotamia.

To get an idea of the social organization on the scale of the entire site, we can reasonably assume that each enclosure is built by an extended tribe made up of several subgroups or clans (Peters & Schmidt 2004: 210): in ethnology, the terminology differs from one author and from one society to the next, but this general arrangement roughly conforms to the social organization of sub-modern primitive communities. The size of enclosures, D in particular (fig. 3), implies an important population for its construction. The known contemporary sites of Jerf el-Ahmar, Çayönü A or Hallan Çemi seem all too small to contain such a population, and we are inclined to think that a unified set of hamlets could be engaged in the construction. These subgroups could even possibly be engaged in a generalized exchange cycle. According to Forest (pers. comm.), the exchange of women at a distance is doubtful at this date, because the unusual growth of certain PPNB sites can only be understood as a consequence of local endogamy. It must however be noted that these huge sites (Çatal Höyük, Ain Ghazal, Halula Abu Hureyra B etc. - Moore *et alii* 2000: 274) are all situated outside the core area of the Middle Euphrates of the Pre-Taurus (where the full neolithic system appeared, and where the consequent social restructuration is expected to have been more smooth and gradual). Also, the distance between hamlets can be limited to the land being farmed and left to fallow, as it is often the case in Africa (Mazoyer & Roudart 2002: 147-54; Testart 2003: 231); while local endogamy seems to be caused by a context of insecurity very probable from the later PPNB onward (*infra*), traces of violence are rare in the PPNA, a time-period when the free movement of sexual partners between bands, as commonly practiced by hunter-gatherers (Meillassoux 1991: 33¹⁴), is supposed to have been carried on. If inscribed in a confined area, the PPNA society may not have needed a deep restructuration¹⁵ of its alliance rules to have allowed a very relative separation of its members. To conclude, only a strong connection, of biological/marital nature, is expected to have ‘allied’ populations in the building of the enclosures of Göbekli Tepe.

¹⁴ About hunter-gatherers, Meillassoux (1991 : 34) says: “cette mobilité libre et volontaire des adultes des deux sexes entre hordes est le mécanisme dominant de la reproduction sociale ».

¹⁵ In contrast with the important lineage-splitting characterizing the onset of the Halaf period.



Fig. 3: Enclosure D, view from above. After Schmidt 2007: 115, vol. 2 (detail).

III- The layout of Göbekli Tepe II

In Göbekli Tepe layer II, dating to the Early/Middle PPNB, a cultural and ideological continuation from layer III is obvious in the shape of the pillars, in the iconography and particularly in the presence of twin pillars at the center of each building. Major changes, however, draw the attention. The constructions are much smaller, square, and almost never have the side pillars surrounding the central pair. It must be noted that this composition is widespread in the contemporary sumptuary buildings of Northern Mesopotamia, in particular at Çayönü B and Nevalı Çori¹⁶. This alteration parallels a relatively fast, systematic and simultaneous movement from circular to rectangular visible at this time in the domestic architecture all over Northern Mesopotamia. It is tempting to think that this has its roots in the social organization much more than in a technical discovery: the adoption of rectangular architecture is, for Forest (1996), a consequence of the sexual opposition, known to become very strong among agricultural communities (Meillassoux 1991)¹⁷. Let's also recall that, especially in the regions peripheral to the Upper-Middle Euphrates, the small and dispatched PPNA population aggregates into large villages counting up to several thousand people during the course of the PPNB; this evolving context must have had deep social consequences, in terms of kinship structure notably.

First of all, the dualistic concept remains central to the PPNB iconography and ideology, which is hardly surprising given that it is still present in VII millennium Çatal Höyük as mentioned earlier. In the absence of side pillars, the architectural arrangement of Göbekli Tepe II and other PPNB sumptuary buildings could evoke, when paralleled with kinship patterns, pairs of exogamic groups. Such evolution -from an originally generalized structure towards a restricted one- has parallels in ethnography, with the Murngin, the Dieri and the Manchu societies for example; the Angami equally withdrew from a generalized circle, dividing their group symmetrically (Lévi-Strauss 1967: 216, 333). The division of the society in symmetrical sections seems induced by the adoption of local endogamy: by the middle of the PPNB, the population of the villages appears to be large enough for the exchange of women to take place internally. Such a disposition would probably have been preferred as it avoided the necessity to exchange women outside the village; the context of endemic war, probable by

¹⁶ There are minor exceptions to this broad pattern, such as the 'Lion pillar' building at Göbekli Tepe and, most strikingly, the so-called 'Kultgebäude' of Nevalı Çori III-IV (see figs 1 to 4 in Hauptmann 2007: 118-9, vol. 2) with respectively two and twelve symmetrical pillars integrated in the square enclosure wall: these may be considered to witness a transition between PPNA and PPNB traditions.

¹⁷ By the L/F PPNB, the Middle Euphratean site of Mezaa-Teleilat is characterized by the presence of about 200 small phallic figurines (Özdoğan 2007: 192-3).

that time (Rosenberg 2003, Testart 2008), and possibly started because of these very matrimonial problems (Forest 2006: 131), certainly made such external matrimonial exchanges (or spatial exogamy) dangerous¹⁸: the distance between these big PPNB sites has nothing to do with the small PPNA hamlets supposed above.

This being said, this vision fails to integrate the profound economic transformations brought by the Neolithic revolution. Looking ahead of time, Meillassoux (1991) showed that with the establishment of 'Agricultural Domestic Communities', the original classificatory structure (giving primacy to the generation) tends to switch to a system based on **lineages** (giving primacy to the line of biological ancestors)¹⁹ -especially of patrilineal descent- among which the exchange of women comes to be performed. By the M PPNB, communities had been fully agricultural, domestic and rural for a number of generations, and it is fair to assume that a slightly more linear form of social organization had started to be felt, and that this could have left a mark on the symbolism. Forest (1993: 27) indeed interprets the twin pillars of Nevalı Çori and Çayönü as possibly commemorating a succession of ancestors in a descent line. The pillars of contemporary Göbekli Tepe II, still standing for a (male) component of the society, could thus be perceived under this new linear and genealogical light.

Also, this new emphasis placed on exogamic lineages divides the society in a much greater number of active components (every extended family ?) than was the case with the classificatory system where the clan is perceived as the unique social unit. The division of the sumptuary architecture in a great number of small structures, as it is seen in Göbekli II and all the way to Çatal Höyük, could be an indirect reflection of this social fragmentation.

It is anyway remarkable that in the ideological sphere, far beyond the technical kinship patterns, the most fundamental notions -exogamy, exchange, reciprocity- remain promoted all through the Neolithic; this could explain why the pillars of layer III were preserved through deliberate burial instead of being destroyed, reused or simply left to decay.

On the historical sequence of elementary kinship structures

Structurally, restricted exchange is condemned to social immobility because the reciprocity is direct, leaving no room for wealth or status disparity, and because it hardly allows more than eight subsections. On the contrary, the generalized exchange, because of its delayed process, permits a theoretically unlimited and asymmetrical extension of the social web; it holds the possibility of a disparity in wealth accumulation, in particular when coupled with a linear descent practicing agriculture. This latter structure could consequently be considered a more elaborated and complex form than the former. Lévi-Strauss (1967: 348-9, 366-7) however refuses explicitly to interpret these differences as a result of social evolution. Testart (1992: 155-7) points out that Lévi-Strauss belonged to a generation (with Radcliffe-Brown, Mauss etc.) characterized by a strong opposition to the evolutionist views of their predecessors (Morgan, Frazer etc). Though there cannot be, indeed, any

¹⁸ The morphology of arrowheads in the PPNB seems to be more adapted to war than to hunting, as they were in the PPNA (Rosenberg). Moreover, why would arrowheads continue to be produced on a large scale at a time when hunting is being replaced by animal husbandry (Forest)?

¹⁹ Such evolution has been clearly identified in India for example (Lévi-Strauss 1967: 531). At a symbolic level, the genealogical descent structure could be indirectly reflected in the megalithic alignments at Carnac, in French Brittany, just following the adoption of the Neolithic way of life had been (Sherratt 1990).

strict concordance in such matters, it remains difficult to deny that social structures evolve, along with economic ones.

The Miwok, Wintun, Yokut and other Californian societies (among others), who store food on an annual basis and even produce surpluses, are also reported to have replaced an originally restricted kinship organization in moieties by a generalized system featuring lineages of patrilineal descent (Lévi-Strauss 1967: 416, 423-6): these communities happen to be exactly those which Testart (1982: 94-105) identifies as the earliest societies (structurally speaking, i.e. pre-agricultural) confronted with social stratification. The generalized exchange among lineages is also widespread among pre-urban societies, and the tribes practicing it in Polynesia (Godelier 1996) or in Southeast Asia (as mentioned earlier) for example, make use of an early form of agriculture. In the light of these ethnological cases, if generalized exchange among exogamic lineages happens to have been practiced in the Pre-Pottery Neolithic, as supposed here, its potential for wealth disparity could support the hypothesis, presented in a previous article (Bodet 2010b), that M and L PPNB Euphratean societies experienced a very incipient form of social competition (though limited by the still egalitarian ideology). On a broader level, the PPNA-PPNB Euphratean sequence stands as a tiny fraction of a much lengthier evolution which sees farming societies, with their originally elementary and egalitarian kinship structures, sliding towards a linear type of kinship structure with more flexible social statuses. It is the latter system that later on enabled the advent of the Urban revolution, which, in turn, allowed the 'complex' (or modern) kinship structures to emerge.

In a sedentary and food producing (or food-storing) context, the extension of the community's kinship partners is plausible and even desired : the larger the community, the more effective the cooperation, for the exchange of women. However, in the long run, this extension comes in conflict with the strict egalitarianism of the ideology: indeed, such extension allows for flexibility in the reciprocity characterizing the original exchange system. It is arguably a situation like this that eventually lead to the inequities known among potlatch-type societies for example, which according to our 'ideological gap' article (Bodet 2010), could have also characterized the mid-PPNB societies of the Pre-Taurus.

IV- A hint of functionalism

Contrary to the matrimonial relationship linking the individuals and subgroups responsible for the same enclosure, such a permanent and strong matrimonial bound is unlikely to connect the communities responsible for each enclosure, as these larger groups must have lived in territories distant from each other. What, then, could have brought them together at Göbekli Tepe? The circulation of exotic stones, such as obsidian, shows that extremely distant villages did have knowledge of each other. Sharing rather similar modes of subsistence and kinship structures, ceremonies like circumcision and other initiation rites (Bischoff 2002: 239) could have made up an excuse for the gathering of such distant populations. It is however reasonable to think that these inter-tribal reunions were brought to existence for more material reasons, and, indeed, sociologists see the enlargement of a community's social sphere as a key to successful adaptation (Ghasarian 1996).

The generalized exchange system, especially among lineages, is very favorable to the emergence of social relations maintained by valuable gifts, dowry or bride-price, so as to seal marital and political alliances (Lévi-Strauss 1967: *chapitre XVI*, 346-9) - obsidian could, by the way, integrate such precious gifts. The inevitable consequence of this slight change is the emergence of a certain disparity in prestige and material wealth. Moreover, because the exchange of women is never simultaneous in the generalized exchange pattern, this system holds the risk, for a lineage, never to retrieve the given counterpart: the best insurance is then the multiplication of the matrimonial cycles in which the clan

takes part, leading the way to an even greater disparity in the acquisition of women and wealth (*ibid.*, 305-6). As a result, the search for matrimonial security as well as a dormant form of competition (based on women but fueled on agricultural surpluses) may have encouraged the regular encounters of Pre-Taurus Neolithic communities at symbolic places, namely Göbekli Tepe.

It is possible to go a little further in analyzing the strong emphasis on egalitarianism identified in the iconography. It has been duly underlined that equity and reciprocity in the sharing of women (reproduction) and of food (production) are, originally at least, a *sine qua non* precondition for primitive communities to flourish, to the point that these principles take a central place in the ideology and the symbolism. We conceive how the new economic context (potential agricultural surpluses), as well as the generalized exchange system (potential women/wealth disparity) may have triggered a threat on the ‘sacrosanct’ egalitarian ideology. Being a tacit consensus among people, nothing indeed secures reciprocity in human relations. In both domains of alliance and material goods, whenever a threat appears, a natural conservative reaction emerges: this threat may well explain why the concept of egalitarian exchange is so clearly emphasized in neolithic sumptuary buildings. ‘Reciprocity’ is ‘written’ with the twin pillars for everyone to remember, somehow in the way the word ‘liberty’ appears on our public buildings, a form of social prescription on which the established social system depends for its reproduction.

Conclusion

It would certainly take a long time to explain the function of a temple to someone who does not perceive the concept of deity. Inevitably biased by one’s own references, it is always difficult to understand the function of a cultural feature only fitting in its own specific social context. But beyond the cultural specificity, the constructions of Göbekli Tepe bring an answer to a tangible requirement of the social life. Like most cultic place, they are aimed at bringing the population together so as to recall, impose and promote basic social rules. These rules deal with the conduct that individuals should adopt in society in the most crucial matters, the relations of production and of reproduction. At Göbekli Tepe, they arguably concern kinship, alliance, exchange and sharing, in their reciprocal and egalitarian form. These are the notions on which the Neolithic structure is built. The ideology follows.

Outlook

The arguments in this article are more or less persuasive according to the question addressed. I firmly believe that the values revolving around reciprocal exchange cannot have been very far from the minds of the people who conceived Göbekli. The indirect connection between specific kinship patterns and the ideology is open to debate, while equating the exterior pillars with ancestors of clans is a pure illustrative speculation. Equally, though the evolutions from matrimonial exogamy to village endogamy and from horizontal to linear social structures are certainly a fact, their reflection in the symbolic context is calling for further explorations. As a whole, these interpretations still hold the benefit, I believe, of going over a panel of social structures likely to approach those of the Neolithic populations.

The ideological component of a society does not stand by itself. In a materialist conception, these are determined by the economy (Echaudemaison 2009: 159), and most particularly by the relations of production. These economic considerations have been, and continue to be analyzed by the author, and these results under the form of a PhD thesis, articles, charts, maps and the like are presented in the ‘archaeological research’ page of IFEA’s web site: www.ifea-istanbul.net.

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Bibliography

Bischoff D.,

2002 Symbolic Worlds of Central and Southeast Anatolia in the Neolithic. In *The Neolithic of Central Anatolia* (Gérard & Thissen ed.): 237-44. Istanbul: Ege Yayınları.

Bodet C.,

2010b The ideological gap, or the diffusion of neolithic farming from the Euphrates to Central Anatolia. *Peneo* 2/2: 1-24. www.ifea-istanbul.net, section 'archéologie'.

2010a Advent of farming in Neolithic Cyprus: a reflexion of the mainland, a reflection on society; *Peneo* 2/1: 1-28.

2008 *L'apparition de l'élevage en Anatolie: un reflet de la structure économique et sociale du Néolithique d'Asie antérieure*. Thèse de doctorat: université de Paris I - on *Peneo*.

Çelik B.,

2007 Şanlıurfa Yeni Mahalle – Balıklıgöl Höyüğü. *Türkiye'de Neolitik Dönem* (Özdoğan, Başgelen eds): 165-78. Istanbul: Arkeoloji ve Sanat Yayınları.

Dumont L.,

1985 *Essais sur l'individualisme, perspective anthropologique sur l'idéologie moderne*. Paris : Seuil.

Echaudemaison C.-D. (sous la direction de),

2009 *Dictionnaire d'économie et de sciences sociales*, Paris : Nathan.

Ervynck A., Dobney K., Hongo H. and Meadow R.,

2002 Born Free : New Evidence on the Status of the *Sus Scrofa* at Neolithic Çayönü Tepesi, SE Anatolia, Turkey, *Paléorient* 27/2: 47-73.

Forest J.D.,

2009 Nouvelles réflexions sur Çatal Höyük, in Débat autour de l'article d'A. Testart « Des crânes et des vautours ou la guerre oubliée ». *Paléorient* 35/1 : 113-5.

2006 Le processus de néolithisation proche-oriental : pour une archéologie sans frontières. *Syria* 83 : 125-138.

1996 *Mésopotamie, l'apparition de l'Etat*. Paris: Editions Paris-Méditerranée.

1996b Le PPNB de Çayönü et de Nevalı Çori : pour une approche archéo-ethnologique de la néolithisation du Proche-Orient. *Anatolia Antiqua* IV: 1-31.

1993 Çatal Höyük et son décor : pour le déchiffrement d'un code symbolique, *Anatolia Antiqua* II : 1-42.

Ghasarian C.,

1996 *Introduction à l'étude de la parenté*. Paris : Seuil.

Godelier M.,

1996 *La production des grands hommes*. Paris : Champs-Flammarion.

Hauptmann H.,

2007 Nevalı Çori ve Urfa bölgesinde Neolitik dönem: Genel bir bakış. *Türkiye'de Neolitik Dönem* (Özdoğan, Başgelen eds): 131-64. Istanbul: Arkeoloji ve Sanat Yayınları.

Leroi-Gourhan A.

1995 *Les religions de la préhistoire* (4^e édition). Paris : Presse Universitaire de France.

Lévi-Strauss C.

1967 *Les structures élémentaires de la parenté*, Paris : Mouton de Gruyter.

- 1962 *La pensée sauvage*. Plon : Paris.
- Llobera J.R.**
2003 An invitation to Anthropology. The structure, evolution and cultural identity of human societies. New York : Berghahn book.
- Mazoyer M. & Roudart L.,**
2002 Histoire des agricultures du monde. Paris: Seuil.
- Meillassoux C.,**
1991 *Femmes, greniers et capitaux* (2^e ed.). Paris : L'Harmattan.
- Michalon C.,**
1997 *Différences culturelles, mode d'emploi*. Saint-Maur : Sépia.
- Moore A. M. T., Hillman G. C. & Legge A. J.,**
2000 *Village on the Euphrates, from Foraging to Farming at Abu Hureyra*. Oxford : Oxford University Press.
- Özdoğan M.,**
2007 Mezraa-Teleilat. In Özdoğan M. et Başgelen N. (eds) *Türkiye Neolitik Dönem: yeni kazılar, yeni bulgular*. Istanbul : Arkeoloji ve Sanat Yayınları.
- Peters J., Driesch A. von den & Helmer D.,**
2005 The Upper Euphrates-Tigris Basin: Cradle of Agro-Pastoralism ? In : Vigne, Helmer, Peters (eds.), *The First Steps of Animal Domestication*: 96-124. Oxford : Oxbow.
- Peters J. & Schmidt K.,**
2004 Animals in the symbolic world of Pre-Pottery Neolithic Göbekli Tepe, Southeastern Turkey : a preliminary assessment. *Anthropozoologica* 39/1: 179-218.
- Redding**
2005 Breaking the Mold: a Consideration of Variation in the Evolution of Animal Domestication. In : Vigne, Helmer, Peters (eds.), *The First Steps of Animal Domestication. 9th ICAZ (2002)*: 41-8. Oxford : Oxbow Books.
- Rosenberg M.,**
2003 The Strength of Numbers: From Villages to Towns in the Aceramic Neolithic of Southwestern Asia. In Özdoğan, Hauptmann et Başgelen (eds) *Köyden Kente, Yakınoğu'da ilk Yerleşimler*: 91-101, vol. 1. Istanbul: Arkeoloji ve Sanat Yayınları.
- Schmidt K.,**
2008 Göbekli Tepe kazısı, 2007 yılı raporu. Ankara: Kültür ve Turizm Bakanlığı: 163-82.
2007 Göbekli Tepe. *Türkiye'de Neolitik Dönem* (Özdoğan, Başgelen eds): 115-29. Istanbul: Arkeoloji ve Sanat Yayınları.
- Sherratt A.,**
1990 The genesis of megaliths : monumentality, ethnicity and social complexity in Neolithic Northwest Europe. *World Archaeology* 22/2: 147-167.
- Stordeur D.,**
2000 Jerf el Ahmar et l'émergence du Néolithique au Proche Orient : 33-60. In Guilaine J. (ed.), *Premiers paysans du monde*. Paris : Errance.
- Tattersall I.,**
1999 *L'émergence de l'homme. Essai sur l'évolution et l'unicité humaine* (Becoming human). Paris : Gallimard.
- Testart A.,**
2008 Des crânes et des vautours ou la guerre oubliée. *Paléorient* : 34/ : 33-58.
2006 *Des dons et des dieux*. Paris : Errance.
2003 Propriété et non-propriété de la terre. *Etudes rurales* : 165-6 : 209-42.
1998 Révolution, révélation ou évolution sociale. A propos du livre de J. Cauvin: Naissance des divinités, Naissance de l'agriculture. *Les nouvelles de l'archéologie* 72 : 25-9.
1992 La question de l'évolutionnisme dans l'anthropologie sociale. *Revue française de sociologie* XXXIII : 155-87.
1985 *Le communisme primitif*. Paris : Maison des sciences et de l'homme.

- 1978 *Des classifications dualistes en Australie. Essai sur l'évolution de l'organisation sociale.* Université de Lille III : Editions de la maison des sciences de l'homme.
- Willcox G., Buxo R., Herveux L.,**
- 2009 Late Pleistocene and Early Holocene climate and the beginning of cultivation in northern Syria. *The Holocene* 19/1: 151-8.
- 2000 Nouvelles Données sur l'origine de la domestication des plantes au Proche-Orient : 121-39. In Guilaine J. (ed.), *Premiers paysans du monde.* Paris : Errance.