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**GÖBEKLI TEPE & NORTE CHICO:  
STRUCTURAL MONUMENTALISM  
AND  
PROTOCOLIZATION MANIFESTATIONS  
IN PRE-POTTERY SOCIETIES**

*This publication covers the specific phenomenon of monumental structures in such Pre-Pottery communities as Göbekli Tepe (Anatolia Region, X-IX millennium B.C.) and Norte Chico (Central Peru, IV-III millennium B.C.). The discovery of the above-mentioned sites has altered the existing viewpoints on civilization processes, therefore this publication is a step towards seeking new answers.*

*Of all the key approaches mentioned in this publication, the author advocates the concept of communicational network as a driving force in complex societies. Transregional intercultural exchange of information during ritual feasts and religious practices in similar monumental sanctuaries appears to be a plausible incentive to innovation and, in the end, to civilization.*

**Key words:** Pre-pottery Neolith, monumental architecture, civilization processes, communal rituals, information networks, complex societies, Göbekli Tepe, Norte Chico.

The issue of the rise of civilization dominates the historical-cultural surveys during the past century along with the search for the initial outburst. K. Wittfogel, M. Sahlins, E. Service, P. Skalnik, R. Carneiro and many others propose completely different approaches, yet sometimes it looks like they all use different categories for the same algorithms. Generally, in keeping with the G. Childe's ideas, they proceed from the recognition that urbanization was an essential and pivotal moment of the rise of the early civilizations; that hierarchy arises from the accumulation of production surplus; and that such accumulation is made possible due of sedentism and crop agriculture [9, p. 186-190, 198-210 ; 12, p. 121-127 ; 15]. Thus, up until recently historians, anthropologists and archaeologists embraced the idea that considerable social transformations or monumental architecture (except, perhaps, simple menhirs) could not have existed in pre-agrarian communities. However, approximately twenty

years ago the revolutionary (as G. Childe himself would put it) discoveries in both the Old and New Worlds shattered the existing picture. Henceforth, the historico-cultural algorithms, which only fifty years ago were believed to be axiomatic, today appear to be an erratic formula in need of several fundamental corrections.

The study of the ancient societies is traditionally guided by politogenesis and state-building or goes along the lines of economic and productive complexity. However, yet another important aspect exerted its direct influence on the above-mentioned factors and quite often served as an alternative for either of them. We are referring to a *complex communicational network*, which brings us closer to the idea of Noosphere (according to the apt terminology of Teilhard de Chardin and V. Vernadsky) [5, p. 68-70; 13, p. 161-165]. In this case Noosphere is understood as a *global dynamic system of information connections of Homo Sapiens*

[9, p. 189]. Speaking about the alternative lines of the development of human self-organization, the synergetic approach has already proved itself in both archaeological research and theories of civilization [2 ; 6 ; 8 ; 11].

Consequently, the following questions remain to be answered: Has the crop agriculture really been the crucial prerequisite for the development of complex social ethnopolitical forms? Could social stratification and monumental architecture have existed in pre-agrarian communities? Is it true that the advance towards civilization is chiefly defined by state-building processes (first of all, by hierarchy and “exploitation”, championed by the Marxists)? Do complicated religious forms stem from the complication of political forms and economic-cultural dynamics, or maybe the complication of religious forms is itself a driving force for the latter? Do all early civilizations indeed require irrigation (“hydraulic hypothesis” of K. Wittfogel) or proneness to conflict (ideas of R. Carneiro)?

This publication seeks to answer those questions, or, rather, to draw upon the answers and to clarify the definition of the problem. First of all, the author needs to outline his own views. The author seeks to substantiate the idea that *it is the tighter network of communication connections appearing as early as in pre-agrarian societies that promoted intensive trade and economic relations as well as interregional religious and ideological system which gradually led to hierarchy and more complex social forms.*

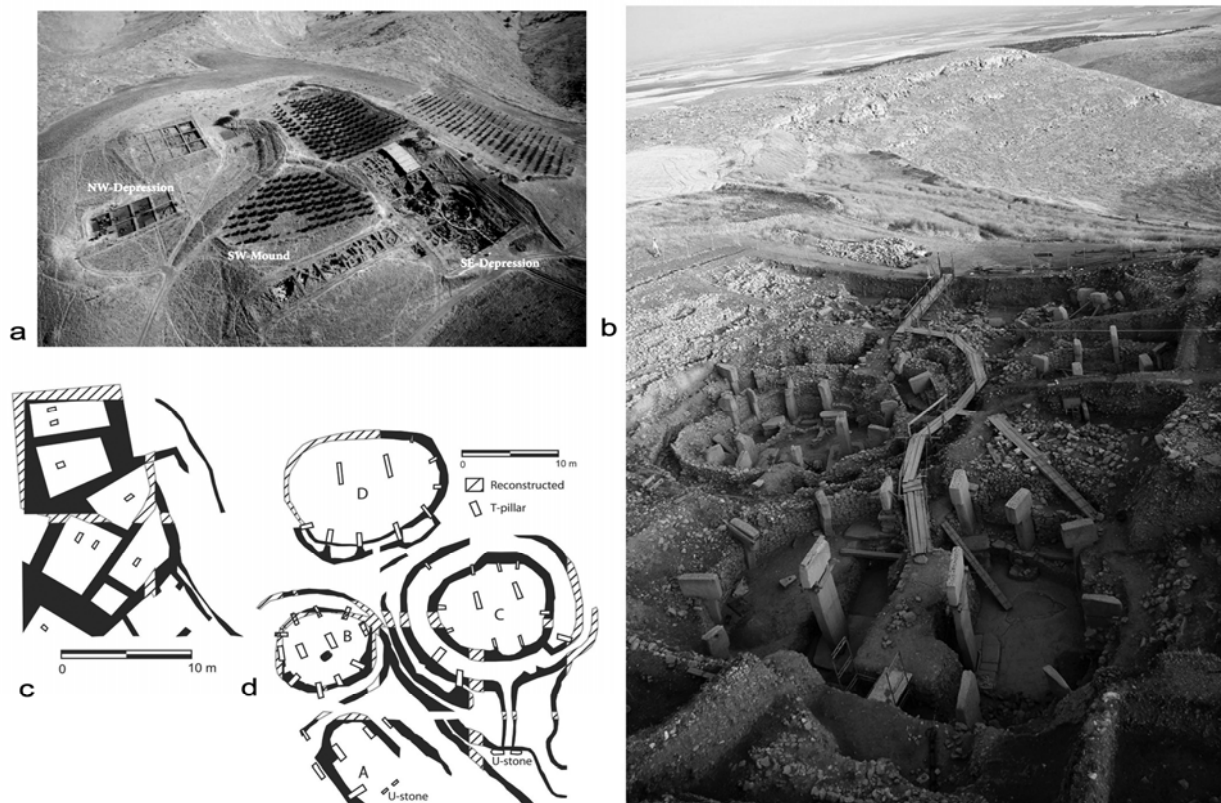
We shall begin from looking at the Neolithic sites of Anatolia and Transcaucasia, more specifically the sites that date back to Pre-pottery Neolithic A (*protoneolithic* in M. Chmykhov classification [18]). M. Özdoğan proposes to radically revise our views on the Neolithic age: “up until the last decade of the XX century the academic society held an extremely simplified understanding of the Neolithic age (...) Yet, the Neolithic proved to be more complicated and diverse. Henceforward such definitions as “social stratification”, “social organization”, “intensive interregional interaction”, “trade specialization”, or such complex technologies as “pyrotechnology”, “metallurgy”, “monumental architecture” or “communal structures” – in other words, everything deemed to be impossible for such an early period – are not an extravagancy when applied to the Neolithic today, since they are backed by specific archaeological evidence” [43, p. 582-583].

The excavations during the last three decades shed more light on such outstanding sites as Jericho and Mureybet. Besides, stunning observations were made at such early sedentary settlements as Çayönü, Nevalı Çori, or Cafer Höyük [43, p. 581-601], which all date back to the early IX millennium B.C., when agriculture was still incipient and was practiced alongside with gathering and nascent horticulture. It is surprising, therefore, to find evidence of systemic building in pre-pottery communities, whose harvests were accidental and could not be forecasted [20]. Considering the above-mentioned, one comes to think that sedentism actually was the underlying condition for reproductive economy and not the other way round [36, c. 31].

The Neolithic man regarded a sedentary settlement as a centerpiece of Cosmos [21, c. 624 ; 59]. Invoking Merlin Donald’s ideas about theatres of memory [26], T. Watkins observes that architecture came to be a powerful novel “syntax” of the systems of symbolic representation. Consequently, “the ability to construct settlements, houses and public buildings that represented constructs of the world that they inhabited allowed new kinds of human society to evolve” [59, c. 6].

Proceeding from this assumption, E. Banning challenges the widespread tendency to cite Neolithic “temples” and “sanctuaries”, given that “Although some special buildings in the PPN of southwest Asia may well have been nondomestic and the locus of unusual concentrations of ritual activity, especially mortuary ritual, the interpretation of every Neolithic building that shows any evidence of spectacular art or unusual architectural features as a specialized shrine is problematic. <...> Seemingly mundane things, such as houses, could be sacred and that some sacred things, such as amulets, can be far from awe inspiring” [21, c. 624]. But even the above-mentioned sites include non-residential constructions of marked sacral role.

It is especially true in case of the sensational archaeological site discovered some twenty years ago and called the first temple complex by Klaus Schmidt, the leader of the excavations. We are referring to the Potbelly Hill, Göbekli Tepe, not far from the Urfa city in the Southeastern Anatolia Region. Several stone walls encircle vertical T-shaped pillars/steles dug into the ground, each measuring 2 to 5 m in height [Fig. 1], occasionally embellished with elaborate animal reliefs [52]. The excavations are led by the German Archaeological Institute, and the baton has been picked up by the colleagues of K. Schmidt (now, sadly, deceased),



**Fig. 1. Göbekli Tepe: general presentation of the monument**

- a) Göbekli Tepe hill (Photo: Erhan Küçük. DAI Orient Department)
- b) General excavation view (Photo: N. Becker, © DAI; [42])
- c) Layer II structure plan (late) (K. Schmidt drawing [21])
- d) Layer II structure plan (early) (K. Schmidt drawing [21])

Jens Notroff and Oliver Dietrich (whose works<sup>\*</sup>, as well as comments in the publications by C. Mann, D. Luis-Williams, D. Boric, T. Collins, E. Banning etc. have greatly benefited this article [21 ; 23 ; 27 ; 38 ; 41 ; 42 ; 53 ; 58]).

The lower layer of the site is composed of several open circular stone enclosures. So far, enclosures A, B, C, and D have been unearthed best. The unearthing of the enclosures E, F and G, which are much less in size, is under way. The geophysical survey indicates that there are over ten similar structures more. All of them circular, although the walls are shaped differently (the wall of the enclosure C presents helical twirls, while the walls of the enclosures B and D are elliptical); the number of the T-shaped three-meter pillars embedded in the walls, as well as the presence of pictograms and their iconography also varies [52]. The most notable and constant feature, however, is the sole presence of these pictograms, mostly representing animals, – predators, hoofed mammals, rodents, birds and arthropods [54, c. 183-209]. It is also interesting that within

enclosure there are two central T-shaped pillars of about 5 m in height which, judging from the central pillars found *in situ* in the enclosure D, were supported by means of stone props [53, c. 250-253].

K. Schmidt believed this site to be a cult assemblage, which, in essence, is a *network of megalithic sanctuaries*, although we personally believe the term “megalithic” to be inappropriate when referred to accomplished cult buildings similar to the Eneolithic temples found on Malta. In our opinion, *cyclopean structures* would be more relevant. While the renown megalithic temples of Ggantija or Mnajdra sites were built around the IV<sup>th</sup> millennium B. C. (see [28]), the geometrically precise and symbolically decorated structures of Göbekli Tepe date back to the X<sup>th</sup> millennium B. C. [27, c. 41].

The excavators note, that “since neither domesticated plants nor animals are known from the site, it is clear that the people who erected this monumental sanctuary were still hunter-gatherers, but far more organized than researchers dared to think 20 years ago” [42, c. 684]. In other words, at the very dawn of the agrarian way of life accomplished cult buildings spring up, complete

<sup>\*</sup> On this occasion, I would like to thank mr. Dietrich and mr. Notroff for their help and for sent materials

with anthropomorphic idols [Fig. 2a-c] (suggestive of certain religious beliefs of their makers) and elaborate zoomorphic reliefs and high-reliefs [Fig. 2d-f], indicative of the long standing artistic heritage as well as of a non-productive professionals class – priests-artists or shamans enjoying considerable authority and interregional influence [54, c. 213 ; 53, c. 254]. The latter can easily be demonstrated by calculating the labour effort required to build such an impressive assemblage. It is to be borne in mind that the foraging bands of the X<sup>th</sup> millennium B.C. could not have numbered in hundreds, unlike the settlements of the Pre-Pottery Neolith B.

K. Schmidt, J. Notroff and O. Dietrich consider Göbekli Tepe to be a central location of the cult of the dead [54, c. 212-214]. "...it is clear that the pillar statues in the centre of these enclosures represented very powerful beings. If gods existed in the minds of Early Neolithic people, there is an overwhelming probability that the T-shape is the first known monumental depiction of gods" [53, c. 254].

K. Schmidt concluded, that if "...each space demarcated by pillars was frequented by one or more «clans» <...> could it be, then, that the occurrence of Aswad, el-Khiam, Helwan, Nemrik and Nevalı Çori arrow heads in the PPN debris at Göbekli Tepe is not due to (long distance) trade but results from visits by «allochthonous» human groups to perform their rites in their «own» enclosure?" [54, c. 211]. Therefore, what we have here is *a complex stratified pre-agrarian society* (or, rather, hunting and horticultural society) characterized by class and professional specialization, hierarchy, monumental artistic experience, abstract and symbolic communication system and integrated coordination of dispersed communities. The latter helped a small group of priests engage hundreds of people in non-subsistence works, specifically, in the construction a temple complex according to a plan.

"These people must have had a highly complicated mythology, including a capacity for abstraction. Following these ideas, we now have more evidence that Cauvin [25] was right in his belief that *the social systems changed before, not as a result of, the shift to farming*" [42, p. 684] (italics added by D.K.).

This earliest temple complex had existed for about a thousand years and then, for unknown reasons, was deliberately backfilled. Later it continued to operate as a cult center, but in a new way, more traditional for the society of that time.

Layer II is dated back to Pre-pottery Neolith B, 8800-7200 B.C.. Its rectangular "honeycomb" structures with paired two-meter pillars in the center, strongly resemble the contemporaneous buildings of Çayönü, Nevalı Çori and not yet unearthed Karahan Tepe [Fig. 5-1]. K. Schmidt believes these structures to be non-residential, just like the circular enclosures of Layer I, while E. Banning claims that the constructions of both layers were intended for every day use. In either case, it is highly probable that Göbekli Tepe was the first monumental complex of unprecedented scale and significance.

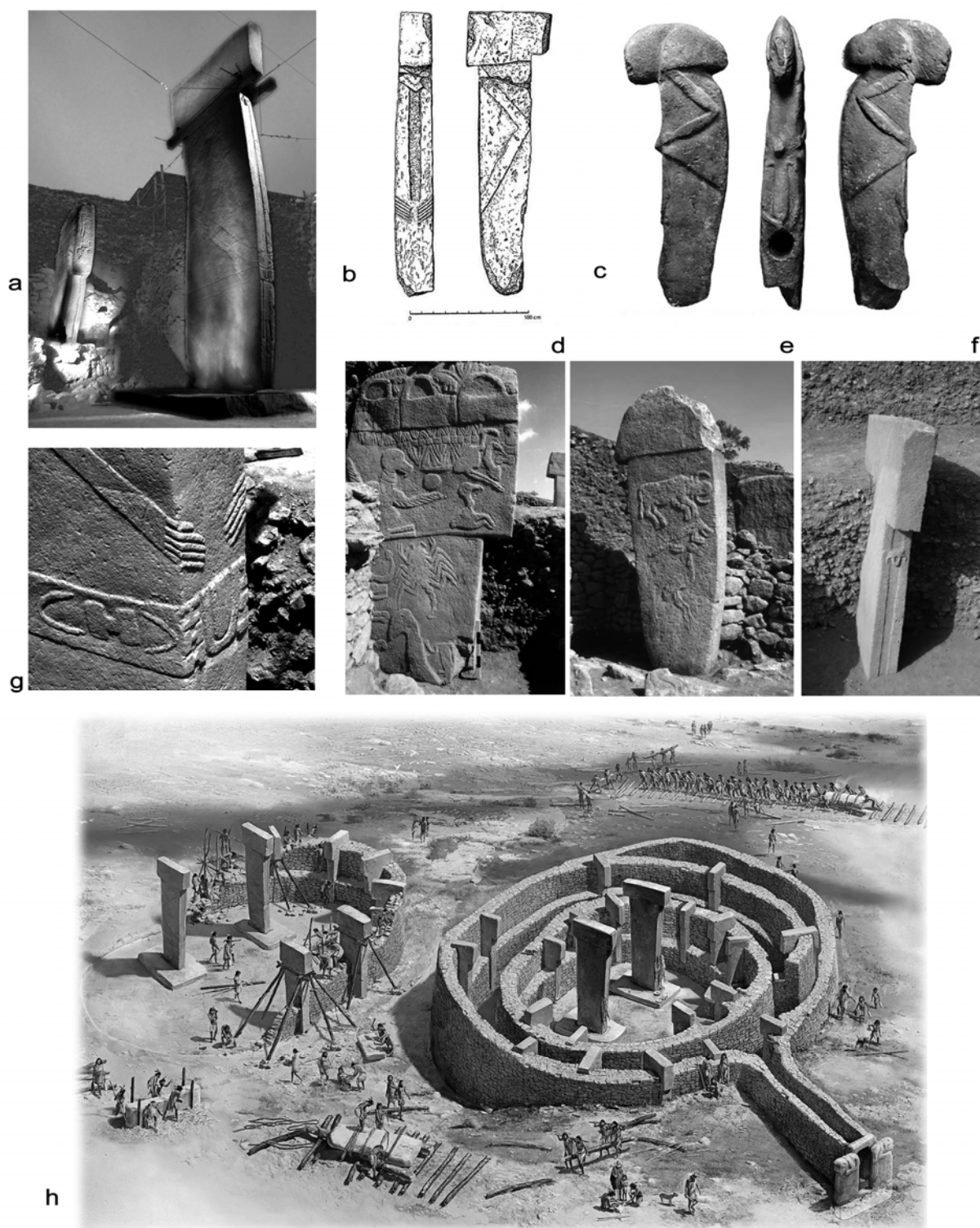
As Trewor Watkins puts it, "...sedentary hunter-gatherer communities of the beginning of the Neolithic period were the first in human history to construct systems of symbolic representation using their buildings in combination, no doubt, with rituals and prescribed behavior patterns" [59, p. 15]

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Another subject of this contribution is Central Peru in Pre-Columbian America.

In this region, transition to crop agriculture happened much later than in the Old World and even in the communities of North America, while vegetable crops were cultivated here as early as in the VIII millennium B. C. [29 ; 46 ; 49]. In IV millennium B. C. the locals also cultivated the cotton crop. However, according to M. Moseley and D. Sandweiss, fishing prevailed in this region for a long time [40 ; 48] – the coast of Central Peru is still the world leader for anchovy and other small-sized fish. Hollowed-out gourds served the local people as tableware, therefore pottery appeared here just at the beginning of the II millennium B. C., like metallurgy as well, which was a logical development of fire technologies practices. Meantime, at the turn of the III millennium B. C., that is, still in the pre-pottery period when the society depended on fishing and horticulture, this region witnessed the emergence of dozens of settlements with monumental architecture – massive platform mounds, pyramids and peculiar circular "plazas" or "arenas" [22 ; 32 ; 44 ; 47].

The "gem" of this region was Norte Chico region located along the Supe, Fortaleza and Pativilca rivers. It appears that the protourban centers located along the Supe river (Aspero, Caral, Huaricanga) exhibit the most archaic pieces of monumental architecture, while the actual cultural layer in other regions may be even older.



**Fig. 2. Göbekli Tepe. Details**

- a) Layer III, enclosure D; центральна Т-подібна колона P31 (Photo: N. Becker, © DAI).
- b) T-shaped anthropomorphic stele from Nevalı Çori (by G. Gaupman).
- c) Compare: T-shaped anthropomorphic stele from Adiyaman-Kilisik.
- d) Layer III, enclosure D; T-shaped stele P43 (Photo: Berthold Steinhilber).
- e) Layer III, enclosure A; T-shaped stele P2 (Photo: Ch. Gerber, © DAI).
- f) Layer III, enclosure D; stele P31 bukranium (Photo: I. Wagner, © DAI).
- g) Abstract symbolism ("belt"-detail of T-shaped stele № 18, enclosure D).
- h) Artistic reconstruction of the site construction (<https://taboodada.files.wordpress.com>)



In general, the late pre-ceramic period of the Central Andean region is characterized by significant convergence of cultural centers located in various landscapes. “Corporate architecture” (term coined by M. Moseley), cult practices and subsistence economy were the distinctive parallel features of the littoral settlements, as well as of the settlements in the valleys and in highland. Charles Stanish points out the certain signs of mutual contact between these early complex societies, although it is impossible to find a dominant one. Thus, apart from Silva Esteban, who believed that Peruvian littoral of 2300 B.C. witnessed the emergence of priestly statehood, hardly anybody agrees that centralized political power could have existed in the pre-pottery period [55, p. 48].

Let us focus on the sensational urbanistic center of Caral, discovered through the efforts of Ruth Shady Solis [24 ; 30 ; 37 ; 50] [Fig. 3]. According to R. Shady, the people who built the early urbanistic masterpiece of Caral in Norte Chico – as well as the congenial complexes in Aspero, Huaricanga, Porvenir, Caballote etc. between 3200 and 2700 B. C. (*late archaic period*) – did not know either ceramics or sustainable crop agriculture. They intensively practiced horticulture and fishing; unfamiliar with flax or hemp, they cultivated cotton crops (with the help of irrigational techniques), established exchange and trade relations with distant communities, etc.. [31 ; 37 ; 46 ; 50]. That alone constitutes the unique character of the cultural genesis of the ancient Peruvians on a worldwide scale. Although human communities had long inhabited the Norte Chico valley, [31, p. 1020], and although quite a number of littoral fishermen did not abandon their living areas, by the end of the IV millennium B. C. Norte Chico witnessed a novel, entirely unprecedented phenomenon.

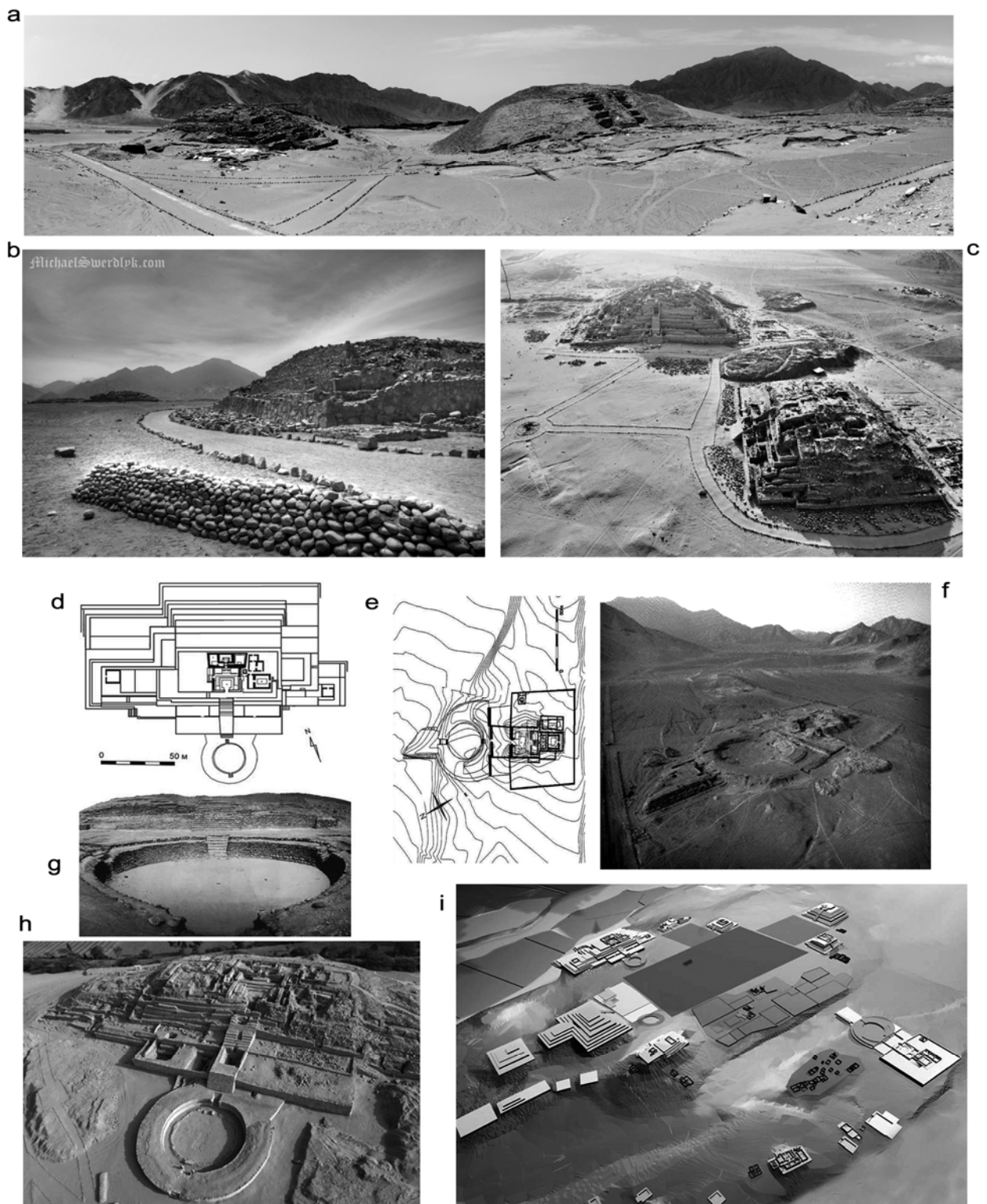
Radiocarbon calibrated analysis demonstrated that the oldest organic samples found on site – such as ornamented gourd bottles, cotton fishing nets or reed “bags” *chikra* – date back to 2700-2630 B. C. Yet, this does not dismiss the chance that the foundation stones were laid much earlier – as early as in the middle of the IV millennium B. C., which is when the

littoral population migrated to the valleys of Norte Chico. The early horizon of the coastal Aspero dates back to 3300 B. C., however, even if Caral wasn’t the first amongst the monumental structures of Norte Chico, it was definitely one of the largest and most important nodal points in the local network of pre-pottery urbanistic centers.

It is problematic to clearly determine the complexity level of a pre-pottery community of this kind. On the one hand, as Yu. Beryozkin puts it, “the Supe and other valley Norte Chico settlements of the second half of the III millennium B.C. could have comprised an ethnopolitical community similar to a precarious confederation of dozens of large communities 10-15 thousand people each. Homogeneous monumental architecture is found both at the littoral and inland settlements, contradicting the hierarchical principles on a regional scale” [1, p. 20].

On the other hand, absence of a chief or a warlord does not equate to egalitarianism or democracy; neither Yu. Beryozkin nor C. Stanish examine the *network connections between the policies*. However, Yu. Beryozkin did point out the specific structural properties of Norte Chico monumental architecture and the local cultic ornaments (particularly those found on fabrics) which will be reflected in the later political environment; he concludes that “the local religious professionals had long been organized into a stable corporation transmitting the traditions from one generation to the next” [1, p. 20].

On the site of the above-mentioned Göbekli Tepe, believed by its diggers to be the first sanctuary and interregional centre of (totemic) ritual practice, no evidence of dwelling houses, even temporary ones, was found. While the dwelling remains in the urbanistic centre of Caral are abundant, the monumental platform structures (comprising the *huaka*-pyramids) were not intended for domestic or public use. R. Shady is convinced that the Norte Chico pyramids are the sanctuary complexes in fact, appearing to be the oldest temples on the continent found to date [50]. Furthermore, given the scope and structural properties of the monumental buildings of Norte Chico [Fig. 4], the high degree of complexity of this horticultural and fishing society becomes evident [46, p. 546].



**Fig. 3. Pre-ceramic center of Caral (Central Peru)**

- a) Caral urbanistics panorama (Photo: Marlon Dutra)
- b) Caral pyramids (Photo: Michael Swerdlyk)
- c) Caral pyramids (from «The Lost Pyramids of Caral» movie).
- d) Great Temple complex plan (Caral “upper town”, sector E).
- e) Temple of the Amphitheatre plan (Caral “downtown”, sector L) (by Walter Wust).
- f) Temple of the Amphitheatre (Photo: Walter Wust)
- g) Ceremonial stage-plaza under the Great Temple.
- h) Great Temple (Photo: Chris Kleihege)
- i) Monumental structures center general plan (gráfico: PEACS).

The excavation data confirms the marked status inequality that existed among the members of this society. According to R. Shady, the complex was exclusively inhabited by the priestly elite (possibly subdivided according to ritual, economical and astronomical specializations) on a permanent basis [37 ; 50]. It appears that the general population (which was not engaged in extensive agricultural works, but lived on horticulture and maritime food resources) resided here on a seasonal basis, while the reed huts could have belonged to visitors (worshippers?) from distant regions, in which case it could have been a so-to-speak “catechumen’s area” rather than the “slums”. Yet, M. Moseley points out that archaeologically it is very difficult to determine for how long the people had been continuously residing in their dwellings [40].

The decline of the thriving center in the Supe valley happened just as suddenly as in Göbekli Tepe, which also resulted in backfilling of the cultic buildings and in further changes in subsistence economy (as well as in population). In Anatolia, the one possible reason could have been the climate crisis of 6200 B.C., which brought about catastrophic consequences for the economy of the Middle Eastern communities and took down the traditions of Pre-pottery Neolith. The similar circumstances are observed on the Peruvian coast.

Specialists on cultural genesis in Pre-Columbian America led by D. Sandweiss found traces of *El Niño* in Norte Chico and determined that approximately in 1700/1600 B.C. the Peruvian littoral suffered a terrible natural disaster – an earthquake accompanied by a storm surge and followed by torrential rains and sandstorms [49]. The abrupt changes in sea fauna and in valley climate entailed the decline of the unique and complex pre-pottery society where social stratification and craftsmen as well as trade and cultic networking existed. Several generations afterwards it will be replaced by traditional agrarian ceramic societies [49, p. 1363].

### Summary

To complete this introduction to the problem, we attempt to answer what made the early sedentary communities on both continents build monumental network complexes such as Göbekli Tepe and those found in the Norte Chico region.

Yu. Beryozkin pointed out that monumentality and labor effort observed in Pre-pottery Central Peru greatly surpass those observed in the Early Dynastic Mesopotamia, while the Central Peruvian region was much more sparsely populated. In his view, “one crucial circumstance which could explain how small communities could build gigantic monuments appears to be the existence of phratries in these communities.

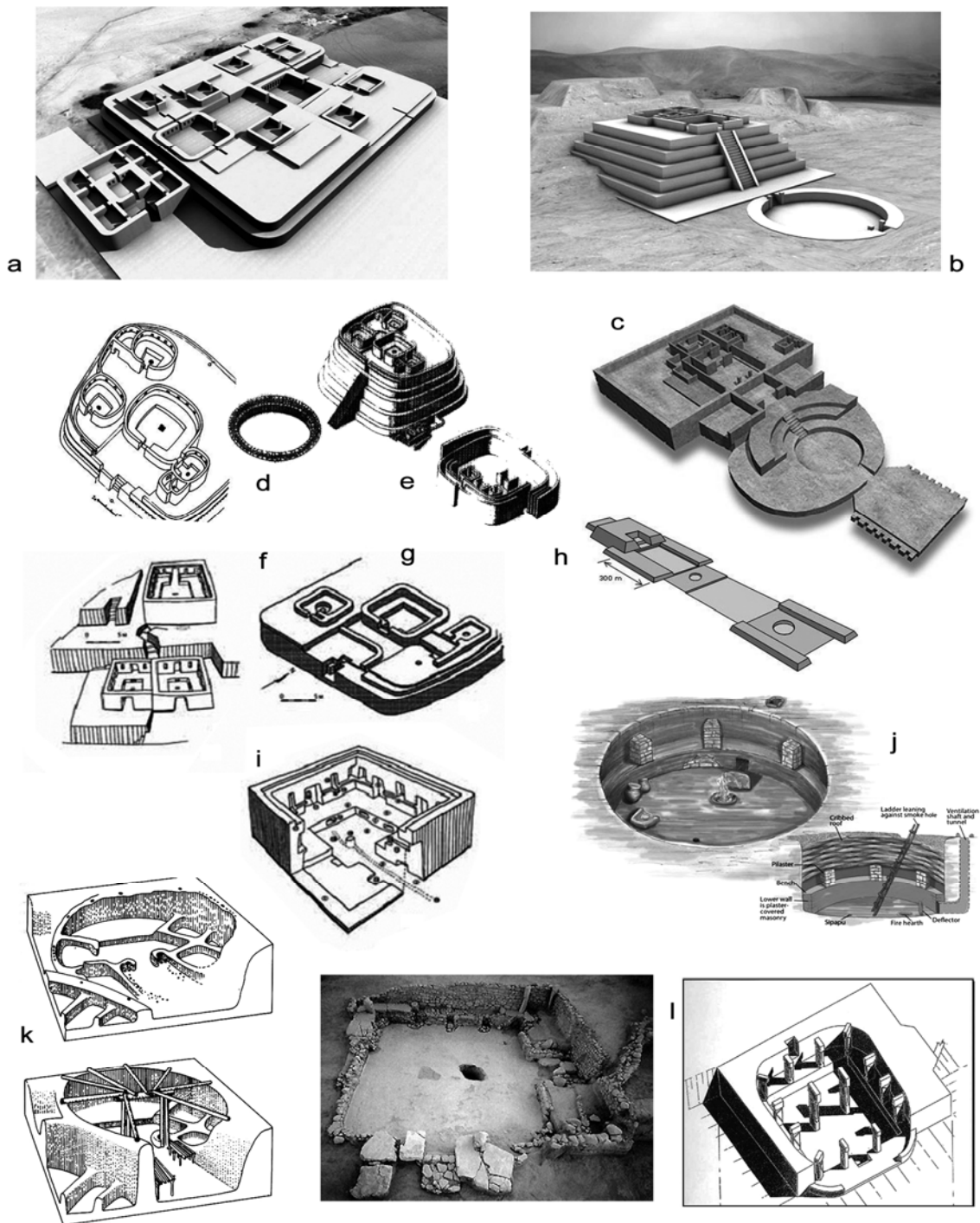
All the Central Andean communities were permeated by the dual organization principle. <...> Dual organization implicates cooperation and competitive relationships. These could have contributed to the escalating labor expenditures required to build structures for communal religious worship”. [1, p. 37-39]

Such large-scale building required enormous long-term effort which obviously cannot be explained by use of force or common religious reverence. The latter, though, is a popular argument in studies of archaic architecture. Particularly, Y. Joye and J. Verpooten believe that, since humans are biologically prone to awe and reverential fear of all things large (and high, above all else), the monumental cultic structures naturally inspired awe in wider public [35, p. 57]. According to the newest research [33], reverential fear was a significant social factor supposedly contributing to the acknowledgement of the power structure (it is worth mentioning that the same is true for the relationship between the living and the dead). This feeling is often instigated by *impressiveness* and *grandeur*, though these qualities are not necessarily characteristic of the monument itself; they may pertain to the surrounding landscape, or the time and effort required to build the monument; the distance traveled to deliver the building materials, the weight of the stone blocks or their rarity; and finally, the enormous human effort.

According to the cited above D. Keltner and J. Haidt, this should always be borne in mind when considering ancient cultic structures, especially monumental ones. P. Wason and M. Baldia believe that leadership and hierarchy developed as a by-product of something else, created for religious reasons. Thus, religious cult should be considered primordial among other factors of complex social organization development. “Religion inspired people to build monuments, which in its turn fostered the enhancement and institutionalization of leadership” [17, p. 225].

Indeed, it is not to forget that the researchers emphasize the *religious function* of Göbekli Tepe and Caral involving significant *regular* circulation of household articles and cult artefacts from distant regions. We are not referring to trade *per se*, rather, to the archaic practice of religious pilgrimage [42, p. 690-692; 36, p. 29-31]. Consequently, objects from fairly distant archaeological areas do come to light here.





**Fig. 4. Ritual-communal buildings of Pre-ceramic cultures**

- a) Sechin-Bajo platform structure approximate reconstruction (by Constantin Rahn)
- b) Aspero *huaca* approximate reconstruction (by J.Q. Jacobs)
- c) Caral Amphitheatre ceremonial structure plan (by Lizardo Tavera)
- d) and e) Mito/Kotosh tradition: la Galgada ceremonial center plan
- f) and g) Mito/Kotosh tradition: "Crossed Hands" temple plan [1, Fig. 5]
- h) Mito/Kotosh tradition (?): Sechin Alto ceremonial center plan
- i) Mito/Kotosh tradition: el-Silencio, r. Santa [1, Fig. 5]
- j) Compare: *kiva* — clan ceremonial structure of *pueblo* people  
([http://www.crowcanyon.org/EducationProducts/pueblo\\_history\\_kids/glossary.asp](http://www.crowcanyon.org/EducationProducts/pueblo_history_kids/glossary.asp))
- k) Old World: Mureybet settlement building # 47 (PPN «B»)
- l) Old World: Nevalı Çori settlement building (PPN «B») (Photo: H. Hauptmann)

Apart from the common religious aspect, meetings in these ritual centres obviously were of culturogenic importance; K. Schmidt directly identifies the experience sharing as one of the consequences of the ceremonies conducted within the site stone walls [54, p. 211-212], both in terms of hunting and new ways of subsistence and survival under rapidly changing climate conditions. "...In concordance with Hayden's thoughts, it seems obvious that repetitive feasts of the amplitude implied at Göbekli Tepe must have placed stress on the economic production of hunter-gatherer groups. Maybe in response to the demand, new food sources and processing techniques were explored. In this scenario, religious beliefs and practices may have been a key factor in the adoption of intensive cultivation and the transition to agriculture" [42, p. 692]. In our opinion, the same applies to the Peruvian monumental centres.

*Evidence suggests the deliberate character of the structural network of these sites. Those were the nodal points of transregional and transcultural communication network, solidified by rituals and ritual feasts involving the network member communities [60].*

We venture to suggest that cult and communication networking could be the basic tenet of civilization. J. Henrich observed that the monumental cult structures served as material evidence of accumulated collective commitments to a sacral leader or a religious system itself, as well as *effective visualization* encouraging *prosocial behaviour* [34, p. 27] (we would also like to point out the similarity of communal cult buildings of the Pre-pottery period with the ethnographic data on the Puebloan meeting houses, the so-called *kivas* [Fig. 4-j]).

On the other hand, we can quote Trewor Watkins, who underscores the driving force of the communication factor in human cultural genesis. In general, the utter need for verbalization of the communicative model can be questioned: T. Watkins and M. Donald believe that the Anatolian population of the X millennium B.C. built a *mnemonic-communicative scheme* by means of monumental symbolism. Consequently, this is not the case of exalting the elite minority or primitive reverence for certain supernatural characters, but rather of the so-called *theatres of memory* [58, p. 97-98; 59, p. 12-15].

To outline our views on the boom of monumentality in pre-pottery societies of Anatolia and Peru, we venture to bring to focus the transformation of the human mentality due to the incipient sedentarization (not ensuing from the economic changes) and the external factor of climatic chaos. These entail an outburst of religious feelings resulting in enormous efforts to construct a quality visual manifestation (a pledge of positive communication with dead ancestors). At the same time, under crisis conditions for human existence, the communities establish interregional contacts and reinforce the exchange network of goods and worship allowing to attract the required workforce for building purposes [41 ; 45]. The nodal point (or points, like in the Central Peru) of this network becomes a center for cult and ceremonies of the larger community, as well as its monumental nucleus. The knowledge required for its support and development is passed to further generations among the members of a professional caste of priestly shamans, who gradually become secular elite.

Regular common ritual meetings in the above-mentioned cult centers also allowed for interregional cultural exchange. This may explain the simultaneous circulation of domesticated crops in the Fertile Crescent (it is of note, that the earliest-dated grains of einkorn – dated between X-IX millennium B.C. – were found in Kara-cadag (Black Mountains), several kilometers from Göbekli Tepe [36, p. 30]).

To quote Trewor Watkins, "cultural communities evolved the means to develop and use complex and multi-layered systems of symbolic representation <...> that spoke of the community's shape and form, in which the essential dramas, rituals and myths could take their meaning. <...> For the first time, communities inhabited the kind of rich, symbolic world that we take for granted" [59, p. 19-20]. Subsequently these *theatres of memory* (term coined by T. Watkins and M. Donald) became the network centers for trade, information exchange and worship. In our opinion, this is the primordial sign of civilization, which either accumulates enough energy for further progress, or dies away, or seeks to find momentum in such artificial forms of social cohesion as war or irrigation works. These two, however, cannot serve as necessary prerequisites for civilization.

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D. Korol

## GÖBEKLI TEPE AND NORTE CHICO — PRECERAMIC STRUCTURAL MONUMENTALISM AND PROTOCIVILIZATION MANIFESTATIONS

*The article deals with two examples of monumental structures in preceramic societies such as Göbekli Tepe (Anatolian PPN, X-IX mlln BC) and Norte Chico (Central Peru IV-III mlln BC). These two centers really changed traditional historical views, so one needs now some new approaches on civilization processes in the past, so this paper tries to propose some.*

*Author cites several key-theories about proposed monuments. Our own position is close to cultural-informational network approach. We believe that the basis of early civilizations grounds not on the irrigational works and not on the conflict/confrontation moments, but on the wide-regional connections via specific religious centers.*

*It is a possibility, that some external climatic stresses could provoke some special need in extra-large visual manifestations within both societies. That could explain why so little amount of people wasted their time and resources on such a monumentalism. But much more important, that they should had established regular meetings and feastings within these ancestral shrines, when cultural and social exchange took place.*

**Keywords:** preceramic Neolith, monumental architecture, civilization process, communal rituals, informational network, complex societies, Göbekli Tepe, Norte Chico.