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## SEARCHING FOR THE UNIFICATION WITH COSMOS AS A CHALLENGE FOR PREHISTORIC BUILDERS

### Summary

This article discusses two archeological sites: the one in Göbekli Tepe in Southeastern Anatolia Region of Turkey, nearby Şanlıurfa Turkey, and the other exciting place in Nabta Playa in the Nubian Desert in Southern Egypt. Both sites were probably the significant spiritual and ritual centers with some signs of being the world's oldest astronomic observatories, what is the subject of analysis in this article. The year round planning of farming procedures wouldn't be possible without the ability to calculate time. Ability to create and use of a calendar were important tasks at the time of transition from nomadic life style to agriculture. However, interpretation of both centers in category of nowadays astronomy, expressed in some publication should be considered as oversimplification.

**Key words:** Neolithic architecture, Prehistoric Astronomic Center, Prehistoric Astrological Center, Harmony of architecture with Cosmic order.

### Introduction

There were two aspects stimulating early humans to observe the sky; one based on their belief in the relationship between macro- and microcosmos and the dependence of human fate of stars, and another based on practical need of measuring time. On the one hand it was this symbolic "language of the sky" created by prehistoric man, who decorated his cave sanctuaries with stars, and not only stars, but constellations, and perhaps symbolic representations of the solstice and equinox (the sign of cross) expressing some understanding of the moon 13 cycles during the course of a solar year<sup>1</sup>. On the other hand the transition from nomadic to a sedentary lifestyle based on the cultivation of plants and pasture created new tasks for the societies involved in this process. People

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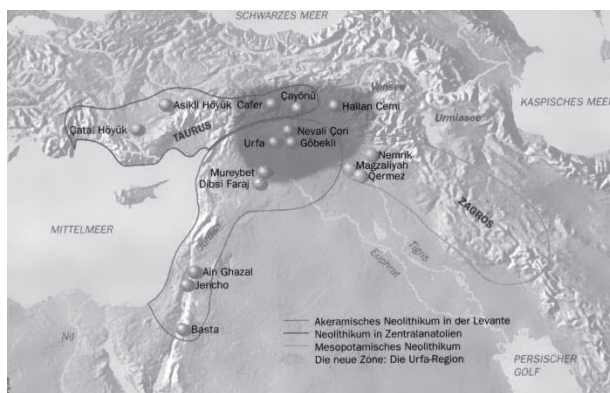
<sup>1</sup> Studies held by Dr Martin Sweatman of the University of Edinburgh's School of Engineering based on different Paleolithic and Neolithic artworks, including the Lascaux Shaft Scene in France, Vulture Stone at Gobekli Tepe, Turkey and Lion Man of Hohlenstein-Stadel from Germany, reveal that already 40,000 years ago humans were keeping tabs on the intricate movements of stars and using them to gain sophisticated insights into the passing of time; <https://www.iflscience.com/editors-blog/prehistoric-cave-art-shows-ancient-humans-used-complex-astronomy> [access: 05.04.2019].

became more dependent on climatic phenomena such as seasonal weather changes and they had to protect themselves from some anomalies. Measuring time is definitely more important for farmers than for hunters and gatherers.

## The world's oldest megalithic cult enclosures in Göbekli Tepe

There is a very significant place, Göbekli Tepe, located on the top of the hill near Balikh river – 15 km north-east from Şanlıurfa in south-eastern Turkey, excavated in 1995-2014 by dr Klaus Schmidt from the German Archaeological Institute of Istanbul. The site appears to have been an important religious and gathering centre in the Epi-Palaeolithic and Neolithic time, which was visited occasionally by selected members of tribal communities of hunters and gatherers, and later on by early farmers, to celebrate together important events. It is located in the middle part of the so-called Fertile Crest – the area, between upper runs of Euphrates, where agriculture and sedentary way of living were born.

### III. 1. The map of Anatolia; Şanlıurfa area with the important Neolithic sites



Source: <http://bagimsizrehberler.blogcu.com/gobekli-tepe-gizemli-kutsal-alan/12707999> [dostep: 15.01.2019].

### III. 2. Göbekli Tepe n. Şanlıurfa, S.-E. Turkey. The circular enclosure E

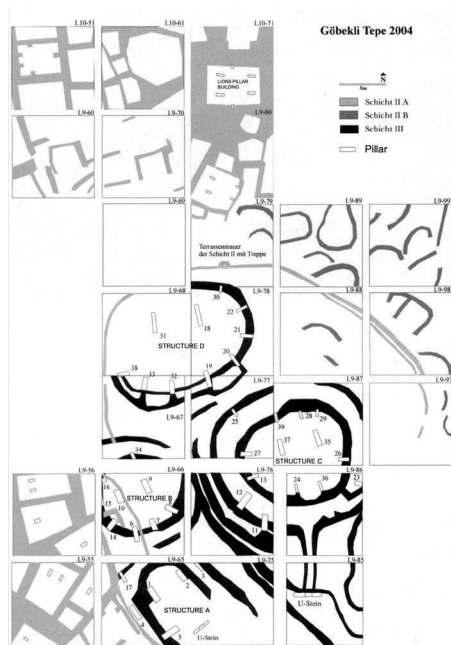


Source: <https://whc.unesco.org/en/list/1572/gallery/&max-rows=18> [dostep: 15.01.2019].

Eight megalithic enclosures used for ritual ceremonies have been uncovered at Göbekli Tepe on the central hill. Moreover, geomagnetic surveys revealed the existence of 20 large enclosures in the surrounding area, including about 200 pillars. They have t-shape form and are fixed into sockets that were hewn out of the bedrock. Some pillars reach height up to 6 m and weight up to 20 tons. The oldest circular enclosure E diameter about 8 m with two cistern-like pits in a place of pillars along central axis. It was hewn in a bedrock at the height of the hill slope overlooking surrounding area.

Archaeologists estimated that Göbekli Tepe complex was developed in two stages. The oldest structures belonged to what archaeologists call the early Pre-Pottery Neolithic A period (c. 9600 – 8800 BCE). Surprisingly, the later remains, which are dated to the Pre-Pottery Neolithic B period (8800 – 7370 BCE), were less elaborated. The earliest levels contain most of ritual enclosures with the T-shaped pillars and animal sculptures, with no sign of dwellings. In the second phase, Pre-Pottery Neolithic B (PPNB), the smaller pillars 1,5 m high were placed in rectangular rooms with floors of polished lime. The site was abandoned after the PPNB-period. The spatial organization of the cult enclosures with huge stones set in a circle and surrounding central pillars, appears to be a presage of the Stonehenge complex in Wiltshire in England, although it is, however, 6000 years older than the famous cromlech. The basic element of their structure was a T-shape stone pillar.

**Ill. 3. Schematic plan of the enclosures A, B, C, D and 'Lionspillars' Building at Göbekli Tepe; the oldest marked black**



Source: Schmidt (2000).

**Ill. 4. View of the cult enclosure B at Göbekli Tepe n. Şanlıurfa, S.-E. Turkey, 8280-7970 BCE**



Source: Archive of German Institute of Archaeology, Heidelberg.

**Ill. 5. View of the cult enclosure D at Göbekli Tepe**



Source: M. Tobolczyk.

In the Göbekli Tepe site, every enclosure had a number (8, 12, 13) of stone T-shaped pillars surrounding a pair of large piers set in the middle.

The oldest LPPNA structure A (see Ill. 3), dating back to 9130 – 8620 BCE, is rather oval in plan with surprisingly straight angled position of pillars. Archaeologists interpreted the T-form of the pillars as anthropomorphic, because some of the pillars have arms and hands sculptured on wider sides, as well as other features, which make resemblance to statues of human-like beings. Nevertheless, anthropomorphic image of Gods was common in many cultures, as well as God's hands turning toward humans in a gesture of helping is well known even from Bible (Kopaliński 2012) Undoubtedly, the abstract form of representation was intentional and symbolic rather than naturalistic. The meaningful sequences of animal representations were depicted on some piers, such as 1. snakes and a ram, 2. a bull, a fox and a crane, 5. a snake, whilst some pillars stayed undecorated. The oval shaped enclosure B of c. 9 m in diameter (8280-7970 BCE) had also overall 12 or 15 pillars in number.

Circular enclosures in Göbekli Tepe indicate some intention to use them for astronomic or rather astrological observations of the sky. However, this purpose was expressed more through general orientation of the enclosure, symbolism of Animal Round and some signs, as well as through symbolism of numbers than by specific intentional position of pillars. The challenge for builders of these enclosures was how to compromise the expected astronomic research.

Because these all primary circular enclosures were multifunctional complexes, serving community meetings with a special focus on occasional ceremonies – religious and secular, their builders had to provide both type of spaces – for sitting, debating and dances, sometimes around open fire. Neolithic astronomical observatory, either related to sun light or moon and stars, required rather open view to the sky. Therefore, most of enclosures were not covered and it was result of function, not technological disability. The most impressive circular enclosure C (7560–7370 BCE) even contained a double row of surrounding pillars, with 12 in each row.

The inner diameter was 13 m, and the outside 20 m. This structure had also a passage – a kind of a “dromos” leading from the South to the centre, aligned with the N-E axis. The similar pattern represented the circular enclosure D with central pair of the vertical T-shaped stone slabs, encircled by number of pillars (Ill. 5.).

A T-shaped pillar found in the building C (Ill. 6) is not only a valuable piece of art, but it also marks an important moment in defining the principles of the composition applied in design. The unknown artist of the relief on this pillar utilized a rhomboidal grid to compose many elements in one unified whole, in the same way as an architect aims to integrate all building elements: walls, pillars and beams into the total structural system of a designed building. The pillar's capital shows five birds arranged around the peak of a mountain on a diamond shaped grid background, which may represent distant hills or net. The lower vertical part of the T-shaped pier depicts representations of a boar and foxes. The arrangement

of birds – two in upward flight, one above the peak and two descending the mountain, can be connected to the passing phases of a year, in the same way as the entire architectural organization of each enclosure.

**6. The pillar with haut-relief of a canid and a boar and birds flying over the pick of mountain; part of the enclosure C**



Source: Archive of German Institute of Archaeology, Heidelberg.

**7. Lionspillars' Building at Göbekli Tepe. Pillar with a haut-relief representing a lion**



Source: Archives of H. Hauptmann.

The symbolism of numbers related to a calendar along with the animal representations, suggest that some pillars might have been placed in such relationship with each other so that, their exposure to the sun or the moon's rays during the winter or summer solstices helped to mark specific worship days, in the same way as it took place in the later Stonehenge complex and many other megalithic structures (Krzak 1994, p. 19-32). If this was the case the Göbekli Tepe would have an important role not only in the ontogenesis of architecture, but also as the cradle of the scientific world. Besides the exception of the structure A, the regularity in arrangements, especially following the transition from the circular to the rectangular plan indicates, however, that the symbolic factors prevailed over the scientific ones.

In the archaeological report of the Göbekli Tepe excavators come to the conclusion that the lack of representations of domesticated animals and only

one representation of a woman being found, show that the place was primarily a hunter – gatherer community, which, latterly, developed into an agricultural one. According to them the importance of Göbekli Tepe is the evidence that the Neolithic people were not simply estranged groups, but they had a sense of community and shared beliefs. The site gives neither any proof of a settled way of life nor of any cultivation in the earlier stages of its development. At the same time the architecture found there is the oldest known in the world and, surprisingly, its character is megalithic!

The question is, however, to what degree was the calendar recurrent circuit important for the work of the hunters and gatherers, e.g. in respect of their hunting ‘seasons’ and their crop plans. Even nowadays huntsmen respect the laws of nature, which are needed for effective animal reproduction. Is it possible that such a cycle of hunting seasons led the Neolithic people to the construction of sophisticated enclosures and the measurement of time? Would they feel so dependent on the weather as the farmers who came later, desperately praying for either more or less rain?

As ancient history testifies the cycle of succeeding dry and rainy seasons, the regular rotation of the sun, the moon and the stars were carefully observed by ancient cultures with agriculturally based economies. Therefore, the cultures of Egypt and Mesopotamia became leaders in the development of the fields of astronomy, mathematics and geometry. The beginnings of astro-symbolism were marked by the so-called Animal Round (which survived until now, in what is referred to, as the signs of Zodiac) which followed the moon’s phases and in this way the ancients created the sun and moon calendar as we know it. The ancient people associated some weather phenomena with the changes of the seasons and tried to express these changes by assigning an animal symbol to each of them<sup>2</sup>.

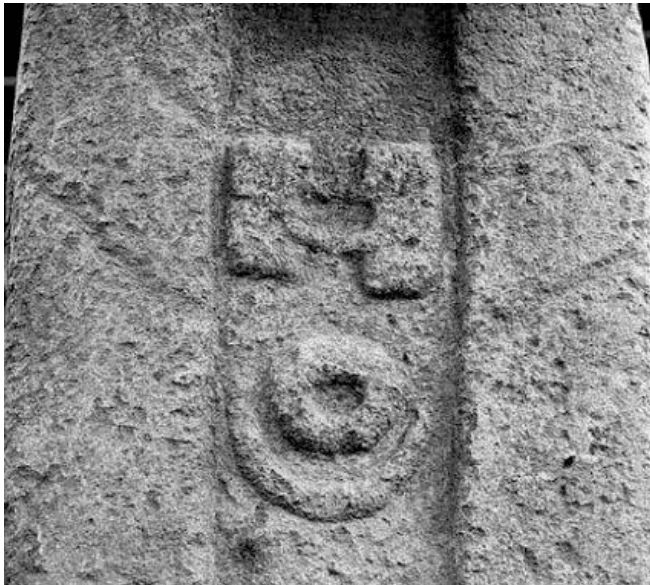
Haut-reliefs found in the Göbekli Tepe depict, amongst others, the hound, lion, and reptile, which belong to a later astro-symbolism. What can be learnt from Rig Veda already was expressed in Gobekli Tepe sculptural representations. This is unbelievable how many things can be explained by the Ancient texts from India. Professor B.G. Sidharth states: “Once again these subsequently discovered pillars and motifs have astronomical symbolism which can be interpreted in terms of the Rig Vedic symbols and concepts. Firstly, in an enclosure (“D”) there are twelve obelisks or pillars, one for each month. These pillars each show the figure of a fox or wolf. The fox or Vrika in the Rig Veda is the moon, this being another meaning of the same word. The

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<sup>2</sup> The Animal Round must have been created in a landscape with a big river and maybe they made it together. In the three cultures Egyptian, Indus and Sumer located along the big rivers, the symbolism of the pattern of seasons is very similar. India has its monsoon and Egypt its inundation. For the Indians the frogs were the signal of the advent of the monsoon and amulets have been found there with depictions of frogs on them. The male goat (Capricorn) marked the half year shift (<http://freepages.history.rootsweb.com>).

Rig Veda mentions that the fox (or she wolf) “having seen me once, slouches away through the houses.” The same line also means, the Moon, the maker of the months, moves through the houses. This is clearly Luni-Solar astronomy. Each of the twelve foxes can be clearly seen to represent a month, Similarly, there is the symbol of the thin crescent Moon being eclipsed by the Sun with a symbol resembling “H” above. This again is a reference to a total solar eclipse in the constellation of Gemini the twins. There are other familiar astronomical symbols like the Scorpion”<sup>3</sup>.

**Figure 8. H and Sun -Moon symbols on pillar 18. According to prof. B.G Siddharth it may represent a solar eclipse once happened in Gemini Constellation**



Source: Alistair Coombs.

Symbolism of animals might have also had totemic implications, identifying related groups of people in tribal societies. In the animals' Pantheon that appeared in the Göbekli Tepe we can identify large birds – types of waders, which we would expect to see at the mouth of a river in the southern regions than to its upper reaches. Was it possible that these hunter and gatherer communities were the ones who first developed writing, as is apparently revealed by the most recent investigation at the above -mentioned site? Was it also possible that those people could erect such amazing and sophisticated

3 Sidharth B.G. (2010), *Precession of the Equinoxes and Calibration of Astronomical Epochs*. [https://www.researchgate.net/publication/45895261\\_Precession\\_of\\_the\\_Equinoxes\\_and\\_the\\_Calibration\\_of\\_Astronomical\\_Epochs](https://www.researchgate.net/publication/45895261_Precession_of_the_Equinoxes_and_the_Calibration_of_Astronomical_Epochs). Professor B.G. Sidharth works in International Institute for Applicable Mathematics & Information Sciences B.M. Birla Science Centre in Adarsh Nagar, Hyderabad – 500 063, India.

structures without any earlier experience in building simple huts? It seems unfeasible.

However, such huge development required the organization of society that was related to a collective occupation like farming and the ritual place could be used for the meetings of tribal groups coming from distant agricultural regions. This site may be proof of earlier agricultural activity having taken place other than that which we have become aware, the signs (i.e. preceding Mythical flood) signs of which remain, as yet, undiscovered.

Göbekli Tepe probably signifies the earliest moment when a calendar similar to our current one was constructed, based on astronomic observations. It indicates the transition from a hunter-gatherer culture to a farming culture. This occurred already in the ninth millennium B.C. From that moment on the numbers related to the calendar became important elements of the architectural canon.

## **Nabta Playa “solar calendar” in the Nubian Desert**

The oldest known megalithic enclosure which primary purpose might have been an astronomical laboratory was discovered by the international Combined Prehistoric Expedition<sup>4</sup> in Nabta Playa in the Nubian Desert. This place located approximately 800 kilometers south of modern-day Cairo or about 100 kilometers west of Abu Simbel in southern Egypt was a very important center of semi-nomadic culture, developed from c. 9000 B.C. up to 3000 B.C. Presently the area is arid, but in prehistoric time, during summer monsoon seasons it was fertile indeed with the evidence of a flourishing culture of people occupied mostly with animal husbandry. The signs of their existence are multiple megalithic structures predated those from the Mediterranean islands and the Stonehenge circle. Some tumuli (mounds of earth and stones raised over a grave) were made of sandstone, and contained the remains of animals: cattle, goats, and sheep. They probably gave special tribute to cows like Egyptian followers and nowadays Maasais.

This earliest stone “solar calendar” built approx. 5500 – 4500 BC has a circular plan with a diameter of approximately 3,6 m formed from small boulders. It helped the people to determine when the solstices occurred as well as rainy seasons. The sandstone slabs of different heights (2- 2,7 m), were transported (probably dragged) to the site from a distant exposed outcrop of sandstone. Each slab is embedded in the soil on top of a mushroom-shaped

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<sup>4</sup> Combined Prehistoric Expedition was organized by Fred Wendorf of Department of Anthropology, Southern Methodist University, Dallas, Texas 75275 and Romuald Schild from Institute of Archaeology and Ethnology, Polish Academy of Sciences, Warsaw, Poland began studying the Holocene archaeology at Nabta in 1974–1975.



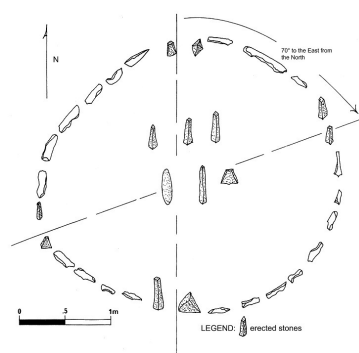
“table rock”. Within the circle bordered by standing slabs there were two intersecting “semi-passages” delimited by upright slabs. Because of very little distance (less than 0,5 m) between opposite slabs the space looking in plan as passageways couldn’t serve ceremonial parades. Discoverers assign them the purpose to observe horizon distinguishing two lines of sight: one north-south (azimuth 358°), the other a seemingly obscure angle at first glance, aligned with 65–70°. The latter is interpreted by some archaeologists as azimuth of sight toward the summer solstice Sun as it was 6,000 years ago<sup>5</sup>.

#### 9. Nabta Playa Calendar Circle, reconstructed at Aswan Nubia museum



Source: Wikipedia Author Raymbetz CC BY-SA 3.0 March 21 2009.

#### 10. North South alignment in the Nabta Playa Stone Circle



Source: [http://www.archaeo3d.com/download/1451901600\\_71bd/814-01\\_ENaaa.jpg](http://www.archaeo3d.com/download/1451901600_71bd/814-01_ENaaa.jpg) [dostęp: 15.01.2019].

Polish archaeologist dr. Stanisław Iwaniszewski<sup>6</sup> disagree with such interpretation of the second passage. His archeoastronomic investigation resulted with different azimuth of the line of summer solistice Sun, not aligned with with 65–70°. At the same time, he expresses opinion, that all archeoastronomical studies of the stone circle omitted the date of passage of the Sun by Zenit. The Cromlech<sup>7</sup> is located the Intertropic area, where this phenomenon can be observed. In his opinion, the azimuth designated by the megalithic slabs is directed towards the sun rising in the days when it passed through the zenith. At the time when Neolithic culture in Nabta Playa flourished and the stone circle was used intensively, the sun passed through

5 The investigation conducted by archaeoastronomer J. McKim Malville with a use of the global positioning satellite confirmed that stones’ composition was aligned with north-south, east-west and with the summer solstice sun as it would have been seen 6,000 years ago. Prof. Malville’s research’s report in the April 2, 1998 issue of “Nature”.

6 Dr. Stanisław Iwaniszewski is Professor of Instituto Nacional de Antropología e Historia in Mexico, Department of Postgraduate Studies in Archaeology.

7 Cromlech (from Celtic *crom* – bent, *lech* – stone) – a circle built from vertically positioned stones, often around the tomb or place of worship. They were erected in the Neolithic and in the Bronze Age, most often in the territories of Brittany, England and Ireland. The first cromlechs appeared in second half of the fourth millennium BC. This was most likely the place of worship and tribal meetings.

Zenit twice—2 June and 16 July. The first passage of the Sun through the zenith was preceded by the heliacally Eastern Star Sirius (the star appeared on the horizon just before sunrise) on 31 May. The second route of the Sun through Zenit, according to Dr Iwaniszewski, happened on 16 July. “In the middle of this month, the rainy season in Nabta Playa began. Perhaps a part of the ritual burials found in the Valley of Sacrifices, which is located in the dry riverbed north of the hill with the stone circle, was associated with the rainy ceremonies”, says the scientist (Zdziebłowski Sz., 2010).

Because Nabta is located nearby the Tropic of Cancer, the noon sun stays at its zenith on two days, about three weeks before and three weeks after the summer solstice. On these days, vertical objects do not cast shadows—what, according to discoverers, was important to prehistoric people. The researchers discovered in that area a basin with numerous megalithic structures placed in various alignments. Their outline is circular, with small openings in the four opposite sides of the circle. There are also two other geometric lines connecting many other stone monuments that lead both northeast and southeast from the same megalith. Some stone monoliths have been probably partially submerged in the lake as water level varied during spring and fall, and so they may have been ritual markers for the onset of the rainy season. The megaliths may once have aligned with Arcturus, the Belt of Orion, Sirius, and a Cen. Reorientations of the northern set of megaliths suggest a response to precession. Excavators who conducted excavations under leadership of Romuald Schild and Fred Wendorf wrote in their publication that the repetitive orientation of megaliths, human burials, and cattle burials toward the northern regions of the sky reveals a very early symbolic connection to the heavens at Nabta Playa, Egypt. They concluded: “The groups of shaped stones facing north may have represented spirits of individuals who died on the trail or locally. A second piece of evidence for astronomy at Nabta Playa is the stone circle with its two sightlines toward the north and toward the rising sun at the June solstice. Finally, the five alignments of megaliths, which were oriented to bright stars in the fifth millennium, suggest an even more careful attention to the heavens. The ‘empty tombs’ and deeply buried table rocks of the Complex Structures provide some of the greatest enigmas of Nabta Playa. The recurrent symbolism of the ceremonial center involves issues that would have been of both practical and symbolic importance to the nomads: death, water, cattle, sun, and stars (Malville, Schild, Wendorf 2008). „The organization of the megaliths suggests a symbolic geometry that integrated death, water, and the sun,” the authors said (Hall 1998).

The Nabta Playa site confirms that from 9000 B.C. up to 3000 B.C. it was inhabited by a developed culture of people who had knowledge of astronomy, the calendar, and the capability to construct the stone megalithic circles. Nabta was once home to a prosperous people, but the climatic change forced them to migrate (perhaps some to northern Egypt, some other groups to lands of

nowadays Kenia and Tanzania). These tribes didn't leave written documents, but thanks archaeological excavations and investigations of mentioned scientists and their teams we can deduct from remains of Nabtians' camps, burials and proto-astronomic structures. This sub-Saharan culture is even considered by some scientists to be the predecessor of the Egyptians' ones developed in the Nile Valley.

Circles of stones in Göbekli Tepe and Nabta Playa indicate that the best possible arrangement for archeoastronomic observatory was cromlech – circular structure built of vertical stone slabs (menhirs<sup>8</sup>). Although the majority of world megalithic structures built in Neolithic and Bronze Era is located in France (1,200 menhirs in northwest France) and Spain, the cromlech type was most popular in Ireland and Great Britain with the most impressive one in Stonehenge. Cromlechs also spread in other regions of Europe, Africa, Asia (mainly India and Japan), in the Americas, Australia and some islands of the Pacific Ocean. In Poland, they can be found in Pomerania in the village at the lower reaches of the Wda river (Krzak 1994).

## Summary

Numerous circular arrangements discovered in the world are explained by some researchers as astronomic laboratories (Hawkins 1965). Of course, these cromlechs had never been used only for the one purpose. They all played role of multifunctional centers. One of strong opponents against very simplified explanation of megalithic circular enclosures as astronomic labs was British astronomer and archaeologist Clive Ruggles. When writing about Stonehenge he stated that there is no reason to suppose that at any stage this site functioned as an astronomical observatory – at least in any sense that would be meaningful to a modern astronomer” (Ruggles 1997). However, it wouldn't be proper to dismiss all astronomical ideas relating to Stonehenge. Ruggles explained: “People in all cultures, used to integrate observed celestial bodies into their own view of the world, linking them inextricably into the realm of politics, economics, religion and ideology. Astronomical symbolism, in form of alignments upon certain horizon rising and setting positions of the sun or moon, was incorporated into a range of prehistoric ritual monuments at various places and times. This associations may often be viewed as closer in nature to modern astrology than modern astronomy. A basic feature of traditional rituals and cosmologies is their astrological insistence that good fortune on earth can be ensured only by keeping human action fundamentally in tune with observable astronomical events” (Ruggles 1997: 204). The same explanation we

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<sup>8</sup> A menhir (from Brittonic languages: maen or men, “stone” and hir or hir, “long”, standing stone, orthostat, or lith is a large man-made upright stone, typically dating from the European middle Bronze Age.

can apply to such famous Prehistoric Centers as Göbekli Tepe and Nabta Playa. They served both religious and secular purposes. People observed Sky in belief that human everyday life is associated with the universal order.

They took a challenge to transfer some principles of this universal order into architecture. That's why some archeologists and anthropologists interpret these earliest circular ritual complexes as Cosmic centers expressing "Axis Mundi" – the believed center of the World, compact composition and some sight alignments with solstice rising or setting sun, helping also to predict some cultivation seasons (Pearson 2013).

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## Poszukiwanie zjednoczenia z kosmosem jako wyzwanie dla prehistorycznych budowniczych

### Streszczenie

W artykule omówiono dwa stanowiska archeologiczne: w Göbekli Tepe w południowo-wschodniej Anatolii w Turcji, koło Şanlıurfa oraz inne intrygujące miejsce w Nabta Playa na pustyni nubijskiej w południowym Egipcie. Jak wskazują rezultaty wykopalisk, obydwa kompleksy architektoniczne były ważnymi ośrodkami rytualnymi. Jednak ich kompozycja i sposób budowy sprowokowały niektórych badaczy do uznania ich za najstarsze centra astronomiczne na świecie. Taka interpretacja jest przedmiotem analizy w tym artykule. Jest oczywiste, że w momencie transformacji od koczownictwa do osiadłego trybu życia i uprawy roli, niezbędna była znajomość kalendarza dla planowania procedur rolniczych. Jednak interpretacja obu ośrodków w kategoriach naukowej astronomii takiej, jaką znamy obecnie, wyrażana w niektórych publikacjach, np. jest nadmiernym uproszczeniem.

**Słowa kluczowe:** architektura neolityczna, prehistoryczne centrum astronomiczne, prehistoryczne centrum astrologiczne, harmonia architektury z kosmicznego porządku.

Afiliacja:

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