

CAVES IN THE NEOLITHIC AND EARLY AENEOLITHIC PERIODS FROM THE NEAR EAST TO CENTRAL EUROPE

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Interpretive models of the function and significance of caves in prehistoric society are closely related to developments in the field of archaeology and changes in thinking during the 19th and early 20th centuries, which in Central and Southeast Europe continues to have a strong influence on these models to this day. Looking at the period from the Neolithic to the Early Aeneolithic, the paper tests the relationship between archaeological finds, caves' characteristics, and basic functional models of their use (habitation, pastoralism, cult practices). The most important archaeological sites are associated primarily with dark or semi-dark caves, and for the most part show evidence of cult activities. At the same time, the main phases of cave habitation correspond to periods of significant climatic changes with periods of drought. It would appear that cult activities during these periods of climatic disruption occurred only in traditional societies, whereas caves were not used by cultures that were more advanced from a civilisational viewpoint. From a general cosmological viewpoint, the underworld is part of the nonhuman realm and, like the heavens, is reserved for the gods. As a natural archetype in human society, caves were a space for communicating with the gods and, along with archaeological sites from hilltops, may express a knowledge of the mythological *axis mundi* as early as during the Neolithic and Aeneolithic.

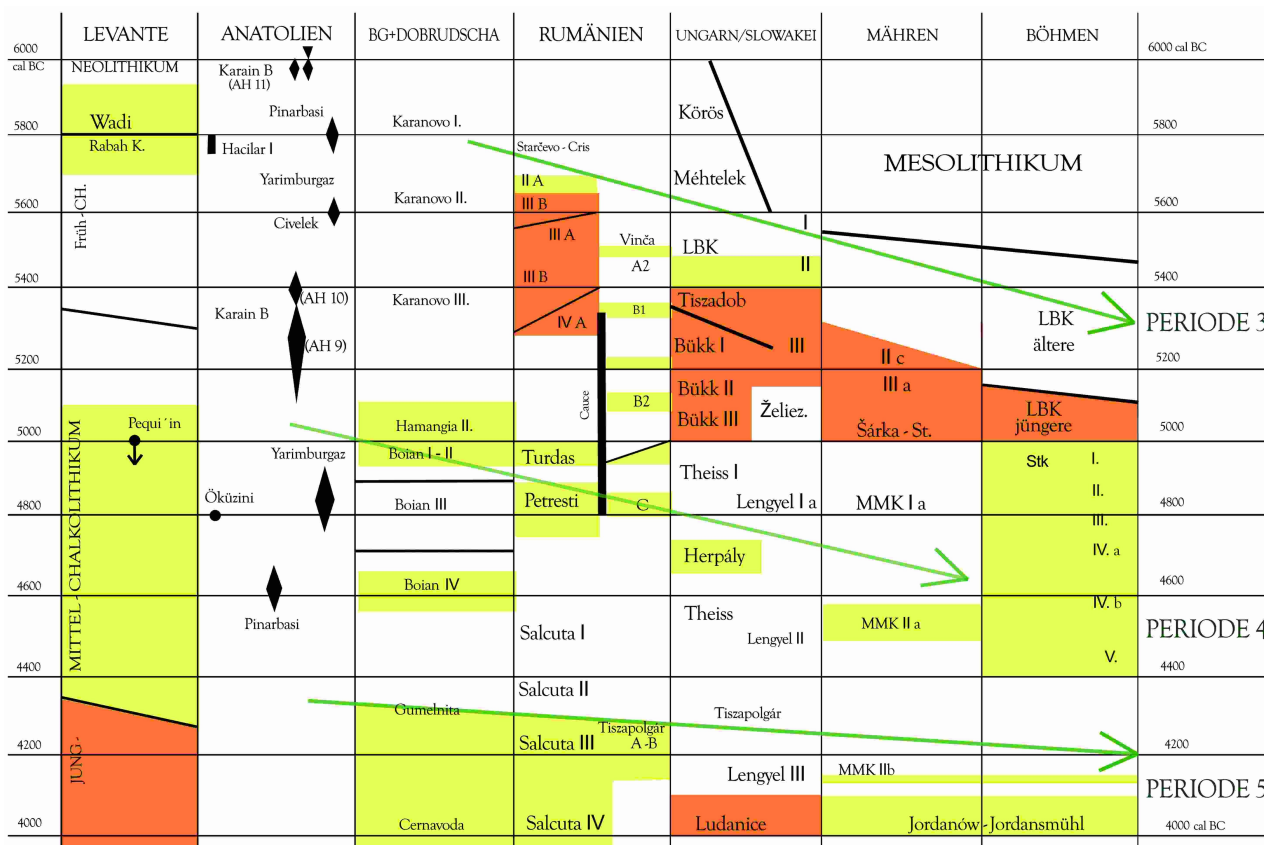


Figure 1. A chronological and geographical overview of the use of caves in the region stretching from the Near East to Central Europe, showing the hypothetical waves of the spread of the cave phenomenon (arrows). Cultures with an especially strong relationship to caves are marked in red (Peša 2011).

1. An interpretation of caves as a socio-cultural phenomenon

From the beginning of archaeological excavations in the 19th century up to the present day, caves as archaeological sites have most often been interpreted as longer- or shorter-term settlements, refuges or shelters for herdsmen; other possible interpretations for caves include cult functions and shelters for social outcasts. I see the beginnings of these

notions of the universal functions of caves in two contexts. Until the second half of the 20th century there was a predominant interest throughout most of Europe in Palaeolithic history, and an interpretive model of Palaeolithic cave settlement was subsequently applied to post-Mesolithic find situations that were often less distinct or even different. Secondly, at the close of the 19th century society in general (including archaeology) viewed caves mainly as a refuge from war or as providing shelter from inclement weather while engaged in agricultural or pastoral

activities away from one's main settlement. Speculations as to the greater importance of cult activities and the symbolism of caves does not appear with greater regularity in the literature until the 1980s, but the image of caves as a place of habitation persists. Using the Neolithic period as an example, the present paper attempts to describe the phenomenon of cave use within the broader chronological context while also providing a functional interpretation of the archaeological evidence in connection with the natural character of caves (Peša 2011).

2. Testing the functional models of caves

2.1. The Levant and Anatolia

The Near East is an important region for the study of caves in many different aspects. At the end of the hunter-gatherer period of the Late Palaeolithic, caves served as more or less seasonal sites that were also used for certain ritual activities. The gradual sedentarization of the people of the Natufian culture added residential objects to cave entrances, with the more important sites probably inhabited for the greater part of the year (Hayonim, Nahal Oren, i.e. Bar-Yosef and Vallada 1991). In terms of morphology, the preference was clearly for bright, spacious and dry caves (Kebara, Shuqba, Erq el Ahmar, Hilazon Tachtit etc.) or the entrance areas of larger, wetter, and darker karst caves or the terraces in front of them (e.g., Raqefet). A similar trend continues in the Pre-Pottery Neolithic (PPN), for which there is clear evidence of more central settlements of long-term use as well as seasonal (summer) sites. The blossoming of Neolithic culture in the Near East during the PPNB and the emergence of large settlement agglomerations is accompanied by the first evidence of a cave cult (Nahal Hemar, Bar-Yosef and Alon 1988).

The Pottery Neolithic can be called a period of transformation of man's relationship to caves. Following the cultural collapse in the southern Levant and the region's partial depopulation at the close of the PPNB, but in Anatolia's Neolithic settlement centres this relationship apparently moved towards the ritualization of the underground world, one possible example of which are the anthropomorphic cave speleothems from the shrine in Çatal Hüyük. In the Late Neolithic, interest in dark and wet caves not well disposed for habitation spread to the southern Levant as well, but archaeologically more significant contexts associated with cult activities are not found in this region until during the Chalcolithic. If we accept the frequently proposed connection between climatic events (indicating, at least in local situations, the desiccation of the landscape) and the profound changes in Neolithic civilisation at the end of the PPNB, then the possibility that agricultural society would turn its attention to karst caves with a permanent circulation of underground water that was essentially independent from external fluctuations seems the logical result of the new threat to society and culture. Cave burials can be seen as early as during the Natufian Culture, when we find not only occasional burials in inhabited caves but also the first smaller burial sites separated from the inhabited area. All known burials are pit

burials, and were apparently marked on the surface. There is no safe evidence of cave burials during the subsequent Pre-Pottery and Pottery Neolithic, nor is there any mention of other human remains. The situation changed during the Middle Chalcolithic at the latest, when the first caves were transformed into graves – i.e. into spaces assigned exclusively for the dead and with the associated cults, with the bodies placed on the surface of caves, either into ossuaries inside underground spaces (Peša 2011, 2011a, with bibliography).

2.2. The Balkans and SE central Europe

A similar picture of the transformation in the choice of caves is offered by the central Balkans and the Carpathian Basin from the Late Mesolithic to Early Neolithic. With the emergence of the Starčevo-Criș II B culture outside of the Mesolithic region near the Iron Gates on the Danube River, the Neolithic population focused its attention on various types of caves (Petrescu 2010), many of which are not well suited or downright unsuitable for inhabitation. A similar trend can be seen throughout the region during subsequent periods all the way to the Middle Aeneolithic. In addition to a highly variable morphology of cave interiors, we also frequently encounter skewed find sets that, with a few exceptions, lack any evidence of chipped or ground tools being processed on site, or in which food remnants are seriously underrepresented. Only two localities show evidence of features that may be considered residential (Devetashkata, Aggtelek – in front of Baradla Cave; Mikov and Dchambazov 1960, Korek 1970). The find contexts and the actual finds indicate that these sites were used intermittently for a long time (at Aggtelek, the Tiszadob group through the Bükk I culture); in my opinion, the evidence points towards a conscious and/or final placement of artefacts, and not towards discarded waste material left behind after the cave was abandoned (Peša 2011).



Figure 2. *Cave in the mountain, or mountain in the cave? Children's drawing from an art contest held by the Cave Administration of the Czech Republic (2010). In prehistoric central Europe, we encounter the connection between the underworld (cave) and sky (mountain) during periods of climatic unrest, as demonstrated by archaeological finds from both borderline worlds.*

2.3. Pastoralism

Pastoralism has been frequently associated with the use of central European caves since the 19th century, but this connection is only rarely based on more specific evidence. By comparison, the caves of the Near East offer abundant materials for study. The oldest known sites (rockshelters) are found in the Pottery Neolithic of the southern Levant (Rosen et al. 2005). In the landscapes of the Near East, rock overhangs and bright caves containing only a limited range of finds related to a mobile way of life and typical layers of ash left over from the burning of dung are to this day associated with a nomadic way of life (e.g., Kuijt and Russell 1993).

We find almost no cave localities in Central and Southeast Europe with characteristics similar to those of the Levant. Although we do encounter caves with thick cultural layers and a large amount of pottery in the potential pastoralist landscape of the Romanian Dobruja (Harțuche 1976), there is no further evidence except in the microregion surrounding La Adam Cave – not to mention the fact that several caves (e.g., Baba, Limanu) are not suitable for providing refuge to livestock. Another presumed pastoralist region in the Neolithic is the karst of Hungary and southern Slovakia, for which – based on the study of the region's most important caves, Domica, Baradla and Ardovo – there exists a hypothesis (Lichardus 1974) regarding winter cave habitation with stabling for livestock. We might counter that the set of animal bones from Domica and Ardovo Caves consists primarily of game (70–80%), meaning that domesticated species including the most common (sheep/goats) strike us as merely supplementary. What is more, none of the many comprehensively explored caves throughout the region yielded layers of ash containing animal dung, which would have indicated the long-term stabling of animals. Also, the model of winter cave habitation and summer pastures in the surrounding countryside does not correspond to the system of transhumance as described for the Near East and Balkans, which by all indications never included dark and wet karst caves.

2.4. Cult and ritual activities

In all regions, the aforementioned change in the significance of caves associated with the emergence of the agricultural civilisation of the Pottery Neolithic was expressed primarily in the choice of new types of caves that had not been sought out previously and that were less suitable or entirely unsuited for habitation. It would seem that these sites may have been visited for their specific natural features – for instance, cave formations featuring various sinterous formations that often were of an anthropomorphic or zoomorphic nature, underground sources water, or the overall character of dark spaces without any sensory stimuli and thus suitable for meditation or for bringing about altered states of consciousness. Whereas the Neolithic find contexts in Balkan caves are generally nothing special, with the onset of the Aeneolithic they become more distinctive, and there is an increase in the thickness of cultural layers and the number of finds, especially pottery (e.g., Devetashkata, Hoților, Românești). In archaeological terms,

the apparently most significant function of caves is as a place of final – probably votive – placement of various items, with vessels (empty or not) later clearly predominating (e.g., Kjuljuk in Bulgaria, Meziad in Romania) (Peša 2011 with bibliography). In the karst regions of the western Carpathians, the intensive use of caves spread at the beginning of the Middle Neolithic. The archaeologically significant Domica, Baradla, and Ardovo Caves are part of an active karst system interlaced by underground streams and contain Neolithic finds exclusively in dark portions of the cave far from the entrance. The specific importance of these caves or of the activities performed therein is evidenced by archaeological finds containing a high incidence of anthropomorphic decorations of vessels, as well as the more frequent incidence of decorated ceramic tableware as compared to open air settlements (Kalicz and Makkay 1977, Šiška 1989, Soják 2003). In the smaller Bükk Mts. caves, the cultural layers contain human bones related both to occasional burials (Büdöspeszt) as well as to potential ritual activities (Istállóskő). In the Moravian Karst, dark caves or caves with decorative cave formations would appear to have been popular for cult activities as well (Koňská jáma, Výpustek).

3. Caves as an archetype of nature in human culture?

Based on archaeological sources, I can say that for the studied area of the Near East, the Balkans, and the SE part of Central Europe there is clearly more information on various forms of cult activities starting in the Neolithic than the mostly unclear evidence of a habitational, economic, or pastoralist character. Settlement activities or shelters outside of permanent settlement structures are related to the economic and social development of society (i.e. archaeological culture) and can be highly variable on the level of individual human lifetimes. If we take into account the period of the past 400 years, practically every generation has experienced some war or period of unrest, but archaeologically speaking these events have left only very imperceptible traces in caves (Peša 2013). A similar situation can be found in Central Europe and further to the east in relation to modern pastoralism, which has left very different and less conspicuous traces than the majority of important Neolithic cave sites.

The conspicuous alternation of periods of intensive use of caves with periods containing no archaeologically documented interest has been repeatedly discussed by researchers (e.g., Matoušek 1996), albeit with uncertain or pessimistic conclusions. The alternation of several centuries of hiatus with another several centuries of more or less continuous usage (Fig. 1) tends to indicate global causes that go beyond the specific local problems of society. Should the majority of important Neolithic caves yield evidence of cult or ritual use, then this would mean that periods of interest in caves are related to the religious topics of the era and the long-term needs of communicating with the spiritual realm. Human culture can be threatened by extensive military conflicts or global changes in climate. Both causes have been felt in the past and continue to have a catastrophic impact primarily on a society's economic and

agricultural potential. As compared to conflicts, climatic changes are reflected either indirectly through changes in settlement structure and topography, or are increasingly documented and thrown into a clearer light by palaeoclimatological research. The strong correlation between unstable climatic fluctuations of the Sub-Boreal period (i.e. Ložek 1998) and an increase in cult practices (not just in caves but also at other natural features) serves to corroborate events from the Late and Final Bronze Age and may offer an explanation for the situation in the Neolithic and Aeneolithic as well (cf. fluctuations between 5200 and 5000 cal BC – Gál, Juhász and Sümegi 2005, Gronenborn 2012).



Figure 3. *The cave as a living being in a mixed-media drawing from an art contest held by the Cave Administration of the Czech Republic (2010). Among the peoples of Mesoamerica or Siberia, the cave's personification with the intangible forces of nature is a part of the cultural consciousness to this day, and fragments of this worldview have been preserved in central Europe as well.*

In response to the question, “If all the cultures from this period were under the same environmental pressures, why didn't they all use caves during this same period?” I offer the following hypothesis: Cultural societies express their identity via cultural norms, through which they define their relationship to extra-cultural phenomena – which, according to cultural definitions, include all that is biological and natural. The stronger a society's socio-cultural sensibilities and the deeper its faith in its mechanisms of cultural development, the lower its need to turn to culturally indefinable and incomprehensible nature and its forces. As is clearly visible from an overview of the cave phenomenon from the Neolithic to the Early Aeneolithic (Peša 2011), the most civilised societies in terms of the most advanced expressions of material culture and social (power) hierarchies – i.e. the inhabitants of large settlements, tells or agglomerations – show only an imperceptible or often no interest in caves – as compared to the agricultural populations of less fertile regions with a lower social and power hierarchy. For these traditional societies, caves may have represented an unchanging archetype of the natural forces that were more than tangible during times of environmental change.

Global climate changes with periods of drought affected first and foremost landscapes with a sensitive ecosystem – of which karst regions and their caves are a perfect example. As the landscape's economic potential declined, the region's underground with its wet spaces (and, in rare instances, underground streams of water) must have appeared all the

more promising. Theories as to the practical importance of such caves as mere sources of water are off target, not to mention the fact that despite their wet character most caves could scarcely suffice as an equivalent source of water. According to the general cosmological division of the world into three planes (the sky and the underworld as the seat of the gods and the earth's surface as the realm of people), caves are part of the non-human realm. This is confirmed among other things by cultural anthropologists' observations from various parts of the world (e.g., Eliade 1971, Brady and Prufer eds. 2005). The underground, with its typical attributes of permanent darkness and the absence of stimuli, differs significantly from man's natural environment and in the mythologies of non-European nations is inhabited solely by gods or demigods that rule the forces of nature associated in particular with rainfall and harvests. In mythology, the main significance of the underworld is as the potential source of all rivers and streams that spring from the ground, as well as all plants that grow out of it. Similarly, on the basis of ethnoarchaeological analogies, caves contain a multitude of meanings as sacral symbols or as diverse parts of comprehensive ideological systems, and when associated with the vagina or the womb of the earth and fertility, they may represent places of transition between different states of existence (Brady and Prufer eds. 2005, Lewis-Williams 2002). What is more, caves' frequent location on mountains or hillsides forms a figurative Cosmic Axis – *Axis Mundi* – connecting the underworld with the heavenly realm (Satari 1981, Matoušek 1999). This connection may in fact be why caves are ascribed the ability to influence the weather and why people have sought the source of winds in the underground, i.e. in the draughts coming from cave (for Mesoamerica, Brady and Prufer eds. 2005, 21 ff; for Central Europe, Peša 2013). Even in the recent past, this vertical view of the world was still a natural, universally valid and respected part of the human awareness of existence (e.g., Eliade 1971). In fact, the concurrent existence of cult activities in caves as well as on hilltops and mountain peaks may represent an archaeologically tangible testament to this Cosmic Axis.

4. Conclusion

It strikes me as likely that because they were accessible natural objects from the underground realm of the universal cosmological model of the world, caves represented primarily a place for man to communicate with the relevant deities that according to the various cultures' mythologies ruled over the natural elements. Thus, during times of climatic pressure, not only actual sources of underground water but perhaps also most other caves in general became places of worship and cult rituals. Of course, this return to natural values as the result of global events could take place in those cultures and societies that retained at least a partial awareness of man being a part of nature. According to our picture of caves, in most cases this therefore did not include highly developed societies with significant social hierarchies and advanced levels of organization – at least not in the studied territory from the Neolithic to the Early Aeneolithic. Also, despite the presumed universality of this interpretation, this does not mean that all caves were

necessarily and unconditionally used merely as places of cult activity or sacrifice. In many cases, specific regional or societal customs or cultural traditions surely played a role as well.

Caves as important cult or religious sites fall within the concept of the sacral landscape, whose universality is documented by geographically remoted analogies (Brady and Prufer eds. 2005). Such a concept of the landscape is closer to the traditional view of the Central European landscape of the Middle Ages and the modern era, and was only recently forgotten by modern society.

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