

THE SIGNIFICANCE OF CAVES IN THE POST-FLOOD HISTORY OF MANKIND

EMIL SILVESTRU, PH.D.
ANSWERS IN GENESIS CANADA
5 – 420 ERB ST. W, SUITE 213
WATERLOO, ON N2L 6K6
CANADA

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ABSTRACT

Caves have been a shelter and a site for religious sanctuaries for humans living shortly after the Flood. Cave art emerged as a result of human habitation of caves and their interpretation as entrance to the womb of a primordial mother goddess, holding the secret of animal souls. Dating of cave art performed either stylistically or “technically” (radiometric and other lab methods) is far from congruent, resulting in serious disagreements amongst scientists. In the meantime, nobody seems to have addressed the question of why cave artists made no use of speleothems, though they skilfully used wall relief to layout their art. Nevertheless many speleothems located close to cave art have features that shouldn't have escaped the trained eyes of the ancient cave artists. This strongly suggests that those speleothems were not present when the artists were at work. This at its turn casts a serious doubt on the thousands of radiometric datings of speleothems, which yielded many ages far older than those of the paintings. And there is yet another problem with the age of cave art: if it is as old as claimed by specialists, it means it had survived virtually unchanged for at least ten times longer than the Egyptian hieratic art. This is most unlikely since tools and social behaviour did change significantly. There is a simple solution to all these contradictions: a Young Earth speleogenetic model, according to which caves – rapidly excavated by hydrothermal solutions coming from inside the earth, as a result of the great geological changes induced by the Flood - became available to humans only after the Flood. Noah's descendants used caves gradually, according to their availability and the pattern of human dispersion. Hence their different use, from mere shelters to religious sanctuaries. Caves appear to have played a major role in the survival of important human groups during the Ice Age, thus contributing to the repopulation of the planet

INTRODUCTION

The only natural shelters for humans, caves are found in most myths and traditions around the world, regardless of the knowledge of building some civilizations are known to have had.

Egypt is one such civilization, which although had little contact with caves (rare in that part of the world) believed that the Nile had its source inside a cave from where the Nile god poured the waters out of two amphorae. A huge snake was coiled around the cave to protect the sources.

The Phoenicians believed that the god of rivers was dwelling inside a cave. Eshmun, another of their gods (Adonis for the Greeks) had his sanctuary in front of a cave near the town of Afka. The river Nahr Ibrahim flows out of this cave.

In the Assyro-Babylonian mythology of the Flood, the king Yimia is told by the supreme god Ahura to take one thousand men and one thousand women, pairs of each animals and plants and retreat in a sealed cave in order to survive the flood brought by a demon. Later, in the same area, the god Mithra was performing the secret sacrifices of bulls inside a cave. Zoroaster, the founder of an Iranian religion is said to have spent seven years alone inside a cave.

To the Indians caves were very important as places of meditation and for sacrifices to the gods. When natural caves were not available, they would dig them.

In Afghanistan, the 10,000 grottoes of Bamiyan represent a true subterranean city. Legend holds that inside one of them the great Vyassa wrote the famous Vedic poems.

Caves have always been a part of Greek mythology and culture: Zeus was born in Lassiti Cave in Crete, the lion of Nemeea (killed by Hercules) was hiding in a cave, Orpheus entered the kingdom of the dead through a cave near Tanairon, to claim his beloved wife Euridice from Hades.

The Romans used caves in different ways: Thus Crassus, by order of Julius Caesar, walled the entrances to the caves in which the Aquitanians were hiding in 56 BC. During the Lemuralia celebrations, they believed that if one went to the mouth of a cave and spoke the magic words "*mundus subterraneus patet*" ("open subterranean world") the shadows of the dead would come out and stay among the living for nine days.

In modern times caves have been used for various purposes, from preparing cheese in France, Italy, and the Czech Republic, to accommodating whole weapons factories (like the Michalova Cave in Bohemia, used by the Germans during WW II). Most recently, caves gained public attention due to their use by the terrorists in Afghanistan (who, unwittingly revealed their location by showing a small cave entrance in the background of the now famous footage of Bin Laden).

The earliest use of caves as shelters (and religious sanctuaries) depended on two main factors: (a) availability of caves and (b) motivation. Both these issues cover vast arrays of evidences and are linked to an enormous body of interdisciplinary knowledge embedded in long-established, often-challenged models of interpretation. Basically, almost every subject of the present paper could be developed into a self-standing paper. However, I chose to hardly "scratch the surface" of most issues, offering instead a general presentation of a seldom approached domain in creationist research. I strongly believe this is a significant issue for a better understanding of the post-Flood population dynamics and the establishment of art as a form of human expression.

NOTE: my use of standard geochronological and anthropological nomenclature as well as the radiometric ages frequently mentioned does not mean that I endorse them. Unfortunately, until a viable creationist alternative is available, their use is inevitable.

WHEN DID HUMANS BEGIN TO USE CAVES AS SHELTERS?

This of course raises two questions:

1. Did caves exist before the Flood?

I have previously addressed this issue [27, 29] and concluded that proper karst did not develop before the Quaternary period i.e. caves did not exist (or were small and rare) in the pre-Flood world. Before the Flood, there was no reason for humans to use rock shelters, as the climate was probably milder and they possessed the knowledge to build shelters. There is no Scriptural evidence for pre-Flood human habitation of caves and Genesis 4:17 clearly states that the very first human dwelling was a city. Later some people moved to tents (Gen. 4: 20). The word "cave" appears 30 times in the Scriptures—29 times in the Old Testament. It is first mentioned in Genesis 19:30 as the dwelling place of Lot and his daughters. That means that roughly 300 years after the Flood, caves in the Middle East were available to humans.

2. Could caves survive the Flood?

If I am wrong and caves existed before the Flood, they would have been flooded, all internal karsting processes would have stopped and widespread destruction would have affected the highly sensitive speleothems. Such features however are not present, except for very few littoral caves known to have been subjected to ocean level oscillations. Also, large amounts of marine sediments would have been deposited in the caves and the remains of marine animals should be common in present caves, but they are not. Marine sediments are only found in littoral caves.

Thus my answer to the question in the title of this section is: **HUMANS ONLY STARTED USING CAVES AS SHELTERS AFTER THE FLOOD.**

TYPES OF EVIDENCES OF HUMAN HABITATION / USE OF CAVES AND ROCK SHELTERS

Humans used caves either as shelters or as religious sanctuaries. One cave seldom played both roles, most probably because permanent habitation (especially continuous open fires) deeply affected those deeper parts of caves that would usually be chosen as religious sanctuaries. It is also possible that the systems of beliefs did not allow the use of the same cave as habitat and sanctuary.

1. Habitation evidence

This includes most of the items found in caves, from tools (mostly made of stone and bones), to hearths and even human remains. Human footprints represent important, sometimes isolated, evidences. The absolute majority are preserved in soft clay. There are few significant exceptions of which the completely lithified footprints in the cave Ghetarul de la Vârtope in Romania are the most outstanding, being dated to about 22.4 Kyr [15]. Human footprints are sometimes associated with, or even superimposed by cave-bear footprints. One splendid, yet little known example comes from another Romanian cave—Ciurului Izbuç—where over 400 human footprints have been found and investigated. They belonged to a man, a woman and a child who may have penetrated the cave to hunt the very cave bear that left the superimposing footprints [24]. The cave-bear bones found at this locale may well prove they were successful. Although exceptional by number and preservation in this particular case, such traces are rather common and they reveal the fact that humans fiercely fought for caves with other cave dwellers. The cave bear (*Ursus spelaeus*) was the most frequent such dweller; sometimes the cave lion (*Felis spelaea*) and cave hyena (*Crocuta spelaea*) were also present alongside humans. While all these three mammals disappeared by the end of the Pleistocene, humans, as we know, left caves to follow a different destiny.

The oldest tools found in caves appear to be the ones in Longgupo Cave in China, where stone artefacts were found next to “hominid” remains which have been dated to 1.96 to 1.78 Myr [31]. Many more-recent tools and other artefacts have been discovered in caves worldwide (see map in Fig.1).

Art associated with burial was found in Twin Rivers Cave, Zambia. They consist of pigments and paint grinding tools and are considered to be 200 to 350 Kyr old [1, 10]. According to the discoverers, the pigments were used both for body painting and for rituals, hence pointing out to “people who were perhaps using symbols far earlier than we expected” [5]. This may as well imply “the use of language” [6].

Finally, there are paintings in a number of caves and rock shelters that are believed to be non-religious. Probably the oldest among them are (at least for the time being) the painted slabs in Fumane Cave, near Verona in Italy. The animal and human figures depicted on these slabs have been dated between 32 and 36.5 Kyr [11].

2. Worshipping evidence

This category includes most of what was preserved in caves as “palaeoart”. Although not all scientists believe that some form of religious belief was the primary purpose of these paintings, I have little doubts that cave paintings were part of elaborate religious rituals centred on the concept of “Mother Goddess Earth” as the source of all living creatures.

There are three different kinds of palaeoart—“petroglyphs” technically speaking—recorded on cave (and rock shelter) walls or/and individual cobbles or slabs: (a) paintings; (b) engravings; (c) bas-reliefs.

(a) Paintings are either simple outlines (drawn with charcoal or mineral pigment) with no pigment fill, or true paintings with outlines, crafty charcoal shadings and sometimes vivid pigment fills.

The most revered and first amongst wall paintings are the ones in the Chauvet Cave in southern France. They have been radiocarbon dated at 32 to 35 Kyr [6]. The artistry of the Cave Chauvet paintings is remarkable, not only through the firm, almost one-stroke drawing but also by an amazing use of perspective and lighting.

(b) Engravings are usually made on soft limestone surfaces. In most cases they are found alongside paintings (possible “drafts” as the frequent corrections or even erasures—in contrast with the paintings—suggest). In some cases they are superimposed on paintings, like in the same Chauvet Cave [6, p.121]. Of the many engravings I have seen, the ones of horses in the cave Isturiz-Oxochelaya (in

the French Pyrenees) have impressed me the most, because of the powerful expression and the skilful use of the cave wall microrelief.

(c) The bas-reliefs are usually made of soft, pliable clay attached to the walls or even large blocks. The most famous ones are the bear and feline figurines in Montespan Cave and the bisons in Tuc s'Audoubert Cave, both in the French Pyrenees.

No speleothems (especially stalagmites and stalactites) have been reported thus far as part of cave art. I see this as a strong argument that they have formed after the artists left. I had the opportunity to see a number of caves in France in which new wall speleothems – flowstone – partly or completely covered ancient paintings. This became a serious conservation problem and triggered thorough scientific investigation in which I was involved for a short period. On the other hand, there is a wealth of radiometric datings performed on speleothems from the close vicinity of cave art. Many of the alleged ages are much older than the ones attributed to cave art. I find it very difficult to believe that the experienced eyes of the ancient artists failed to identify any speleothem suitable for "artistic improvement". To my knowledge, no one has addressed this issue thus far.

RELIGIOUS SANCTUARIES OR THE FIRST ART GALLERIES?

When first discovered, cave paintings were considered to be recent artefacts, created by some eccentric character. As a better understanding of caves and their history was available, they become widely recognized as early manifestations of human intellect. Although at some locations, intentional layout of animal bones (like four cave bear skulls positioned in the shape of a cross found in Pesteră Recea Cave in Romania) clearly points to some kind of ritual, there is still no agreement among specialists as to the purpose of cave paintings, engravings and bas-reliefs. Some consider them as elements of magic/religious cults while others believe they are simple artistic expressions at the dawn of human culture.

In my view—which I share with quite a number of predecessors—there is little doubt these complex representations are deeply rooted in religious beliefs. The small population of humans descended from the occupants of the Ark had a clear system of beliefs from the beginning since their ancestor—Noah—“walked with God” (Gen.6: 9). They also had a clear, imperative task: “Be fruitful and multiply and fill the earth” (Gen. 9:1). But as they spread out and lost contact with each other, their religious inheritance may well have started to dilute, with more direct and pressing issues, like survival by multiplication (which was still a godly commandment) becoming priorities. If such was the case, women and their reproductive function could become one of the most important elements of their values. It is most probable that this was the reason why the earliest statues ever discovered - the so-called “Venuses” - strongly emphasize the female features. Now, one may reasonably assume that plants and many animals (that have burrows in the ground or live in caves) drew our ancestors' attention, especially as they grew remoter from their point of origin—the Middle East, towards the ultimate female (metaphorically speaking)—the planet itself -, which delivered them from her womb. In a way we may see this as an attempt to relieve—by “amnesia” and refocusing - the burden of the Adamic sin.) It was in that same womb that the secret of animals' souls would be found. No wonder caves were associated with ritual (and graphic for that matter) entrances to Mother Earth's primordial womb. If humans had the courage to penetrate deep enough, reproduce the animals' looks and ritually hunt them, they believed the real hunting would be successful because power was somehow gained over those animals.

Evidence for this is provided by the bisons in Tuc d'Audoubert Cave and the bear and felines in Montespan Cave, located deep inside those caves, in places accessible only through extensive crawling and even swimming. Furthermore, there are numerous human footprints around the bisons, suggesting ritual dancing [21]. The bear and felines in Montespan Cave are literally poked with spear pits, an irrefutable evidence for ritual hunting [4]. A great number of paintings in various caves depict animals with arrows or/and spears in their bodies as well as dying hunted animals.

Another serious argument in favour of the sacred character of most cave art is its positioning in areas of maximum sound resonance in the respective cave rooms. Studies have proven this in three painted caves in the French Pyrenees [22] and it is most probable that this particular setting was due to chants accompanying the ritual hunting.

In the same line of reasoning, one must consider the recurrent presence of various representations of what appears to be masked humans, collectively termed “sorcerers” or “shamans” (most famous are the

ones in the caves Trois Frères and Chauvet). Their presence alongside the most frequently hunted animals leaves little room to other than religious interpretations.

As one may have already noticed, all examples in this section come from European caves. And this raises an interesting question:

WHY IS CAVE ART ALMOST EXCLUSIVELY CONFINED TO EUROPE?

Let us begin with numbers: Europe has over 300 “decorated” caves (from Spain to the Urals), with the majority being found in France, Spain and Italy. Some more-recent cave paintings, very few actually, have been found in Brazil, at a locale called Pedra Pintada (near the town of Monte Alegre) and are estimated to be at least 11 Kyr old [25]. These paintings are completely different, very schematic and have no apparent connection to either the style or the motivation of the European ones. No other caves I know of have paintings within this range of age. Of course, there are the famous Saharan rock paintings but they are not connected to caves and therefore are not of interest to this paper.

It appears then, that the question in the title above is justified. Is there an answer to this question? Let’s rephrase it: “Why is Egyptian art almost exclusively confined to Egypt?” Now the answer is clear to any educated person: “Because it was created by Egyptians as part of their *civilization*.” Here is the magic word: “civilization”. Back to cave art, one may confidently state that the paintings, engravings and bas-reliefs in those European caves are the expression of an ancient European civilization. Sure enough, this is not the picture mainstream anthropology and history of art offer us! Conceptually, civilization is associated with the first *sedentary, agricultural Neolithic* peoples and by accepting a Pleistocene (Palaeolithic) civilization, the entire beautifully written and illustrated mainstream anthropology is seriously undermined. Man has evolved, we are obsessively told and a civilization as early as the Palaeolithic doesn’t fit the evolutionary schedule! Take the case of the Chauvet Cave paintings: when first investigated by specialists, their artistry convinced everybody they “must be younger than the ones at Lascaux and Altamira, because they are *more evolved*.” “Stylistic dating” was being used and that was unanimous until carbon dating “proved” them wrong: the Chauvet paintings are twice as old as the ones at Lascaux and Altamira (already considered the pinnacle of palaeoart) [6, p.110].

A serious conflict emerged from this: on one side the established and revered mainstream anthropologists desperately hold to their evolutionary view of human culture according to which art emerged at the end of the Palaeolithic. The following quote describes their approach: “*Archaeology is what the most powerful practitioners, usually professors, say it is*” [17, p.49].

On the other side is a rapidly growing group of “taphonomists” (from the Greek word “taphos” meaning “death”; it refers to all the complex transformations artefacts in the archaeological record have undergone, including the subjective elements introduced by researchers and their biases). Theirs is a completely different – still evolutionary - approach, based on techniques of “direct dating” which yielded results that blew apart traditional archaeology. The ages they have revealed for long-established tenets of anthropology, for example, pushed the moment of the birth of art way back into the Middle Palaeolithic. Taphonomists’ attitude and approach were bluntly expressed by Bednarik [3, p.880]: “...*momentous changes, taphonomic logic and metamorphology are looming on the distant horizon, promising us a science instead of an archaeology*”. The taphonomic approach not only proved some rock art to be much older than believed; it also proved that what was stylistically believed to be Palaeolithic rock art at Coa, Portugal, was in fact less than 3 Kyr old [3].

Taphonomists’ answer to the question in the title here is very different: “...*this art could not possibly have been endemic to caves*” [2, p.70]. Therefore cave art *appears to be* confined to South-Western Europe only because the caves in this area have survived the destructive periglacial processes (especially breakdown) that must have wiped away cave art in the rest of Europe [2]. This is patently false because thousands of caves in Europe, with similar to identical “art-inviting” morphologies have survived glaciation and have no trace of cave art. That’s not all! There is no reason to believe, taphonomists say, that rock art was not wide spread worldwide and limited only to caves. Only that it did not survive outside caves because of much poorer conservation conditions.

Of all the taphonomic literature I consulted one thing emerges recurrently: while beautifully and sophisticatedly argued, their approach seems to completely ignore ethos, motivation, and spirituality as a whole. I believe the primordial womb argument makes more sense and also provides an acceptable motivation, whilst “taphonomically” speaking it appears rock art was a sort of everyday, popular form of

entertainment during the Palaeolithic and the world must have been a brightly painted place. If so, the extreme scarcity of rock art in the southern hemisphere (much less affected by the Ice Age) still needs to be explained.

There is another issue that needs explanation: longevity. Leroi-Gourhan—the guru of classical anthropology—pointed out that there are about 2,188 anthropomorphic and zoomorphic figures identified in French, Spanish and Italian caves [16]. If taphonomists are right in their reinterpretation of cave art in South-Western Europe, this rather meagre typology covered 600 human generations with very little variations [2, p.70]. Now this is huge compared to the other case of longest art conservatism we know of: Egyptian *hieratic* art, preserved virtually unchanged for over 3 millennia (about 60 generations). How then could an art so clearly defined as the South-Western European cave art survive virtually unchanged for ten times longer than that? I believe such conservatism is a strong argument in favour of religious significance attached to cave art and if so, the taphonomic view of popular art has little logic left to back it.

Back to the issue of longevity: even if exclusively motivated by religion, I believe a 30 Kyr persistence of cave art is very difficult to accept, especially since most archaeologists—and taphonomists for that matter—agree that tools and social behaviour have changed much, much faster. To my understanding, the accepted age of cave art and its conservatism are irreconcilable. And since conservatism is a fact everyone can see, the assigned age must then be wrong. It would not be the first time, and surely not the last, when highly sophisticated lab technologies turn out to rely on defective assumptions. There exists a solid and well-documented literature regarding the issue of reliability of “absolute dating” and alternative methods (thermoluminescence, fission tracks, dendrochronology etc.). Their main point is that they should not be taken as infallible. Furthermore, the weight of direct dating of rock art is based on radiocarbon dating and it is commonplace nowadays how frequently new corrections to the method are being introduced. In fact different taphonomists, using different methods, calculated significantly different ages for the same items [3].

In order to clarify the issue of cave art’s peculiar geographic patterns, I believe we should focus on a different interpretation:

THE POST-FLOOD EVOLUTION OF KARST LANDS AND THEIR USE BY HUMANS

After the Flood, an intense global circulation of hot, chemically aggressive solutions (generically called *hydrothermal solutions*, [HTS]) had dissolved massive amounts of the newly formed karst rocks (soluble rocks in which caves are found today i.e. limestones, dolostones, rock salt, rock gypsum), deep below earth’s surface. Thus, large cave systems were created in a very short time (probably centuries). As Flood waters receded and the newly emerged land began its agitated post-Flood history (uplifts, erosion, mountain range folding etc.) hydrothermal activity diminished and so did cave formation. The once deeply buried cave systems raised closer to the surface while the surface relief rapidly entrenched itself into sediments. As a consequence large parts of the caves were opened to surface and drained. Some surface streams and rivers that flowed over karst rocks were readily swallowed by caves, becoming permanent subterranean rivers. They then reshaped the hydrothermal caves and combined with the CO₂-rich seepage waters gave them the familiar looks of today.

In the model proposed by Oard [20] the first 500 years after the Flood had much higher precipitation, due to intense evaporation of a much warmer ocean, than the average recorded in later periods. Given the post-Flood magmatism and intense gas input into the oceans and atmosphere due to gas seeps [28, 29], the precipitation must have been significantly more acidic than in present times. This is clearly confirmed by the background acidity recorded in many ice cores, especially in the northern hemisphere [7, 8, 9], which is constantly higher than at present. More acidic precipitation means more intense and rapid karsting processes. These processes would later slow down considerably with the onset of the Ice Age only to increase at its the end to a rate even higher than we see today, due to the colder, more aggressive melt waters.

All of the above are solid reasons to believe that within 500 years after the Flood, caves were widely accessible to humans on every continent, somewhat more frequently in the Northern Hemisphere’s temperate climate zone. As the post-Flood adjustment of mountain chains was still active, one would expect that the first caves started forming on continental shields [29]. Areas with the large extent of limestone—like China (which hosts the world’s largest limestone terrains—over 1 million km²) were probably the very first to offer caves suitable for habitation. The oldest inhabited cave known thus far

(Longgupo) is in China. Another important cave connected to early habitation is Zhoukoudian, also in China (see map in Fig.1).

The next suitable area would be the African Shield i.e. its southern half which has the largest extent of limestones. And it is there that important human cave habitation evidences have been found in a large number of caves (see above, also see map in Fig.1).

As the American cordilleras were still active, one would expect that the first caves available to humans on the American continent were again in shield areas. Sure enough, the only caves with evidence for early human habitation were found in the North American shield, in Yukon's Bluefish Caves [5] and the Brazilian Shield, Pedra Pintada. Later, caves like Pendejo (New Mexico) provided shelter while the North American ice sheet was still holding the continent in its grip [18].

By the time the Ice Age approached its maximum extent in the Northern Hemisphere, many of the caves formed in the orogenic areas, especially in Europe, became accessible to humans. At that time, one would expect a widely diversified interpretation of the religious beliefs more or less rooted in the now remote historical Noahic experience. Let it be mentioned that there were many inhabited caves in the areas neighbouring Noah's landing site. The most important appear to be Kafzeh, Kebara, Skhül and Tabun in present-day Israel [23, 19] and Shanidar in northern Iraq [12]. The human remains found in these caves are mixed (neandertals and modern humans, even hybrids [13], proving the two human types lived synchronously [30]), very much like the ones in the Atlantic France and Spain [14]. This I believe is good evidence that caves became shelters for humans not in the early moments after the Noahian landing but much later, as the cold climate announcing the Ice Age was settling in. Even more so since these Near East caves – very small in size and more rock-shelters than true caves - may well have formed only in the early stages of the Ice Age. It is likely that the early post-Flood humans reused the ark's huge amount of wood to create shelters and therefore the need for natural shelters (due to environmental stress and lack of building resources and /or knowledge) became significant only after the Babel episode.

Western European caves – abundant in the Pyrenees and north of them – played a more special role. After humans arrived on the Atlantic Ocean shore (at the end of what was a long and eventful journey west from Asia Minor), the Alpine glaciers rapidly advanced with the onset of the Ice Age and probably sealed the mountain passes that would have allowed the return towards warmer conditions. Consequently the human population was more or less confined to this territory, and under the pressure of the advancing cold, numerous caves started being used as shelters. This geographic isolation led to a relatively homogenous culture within which the famous cave art - that very much defines it - flourished. The fact that the only non Indo-European live language – the Basque – is located mainly in the Pyrenees [26] is, in my opinion, a significant argument in favour of such an isolation, even more so since the so-called "Basque Country" is home to many painted caves. Not until the Alpine glaciers receded enough to leave the passes free, did Indo – Europeans penetrate Atlantic France and Spain, marking the beginning of a new ethnogenesis which would eventually lead to the modern western European peoples.

CONCLUSIONS

Excavated mainly by hydrothermal solutions associated with the Flood, caves became accessible to humans only after the Flood and not simultaneously but rather selectively, first on the continental shields and later within orogenies.

Human dispersion after the Tower of Babel event resulted in the rapid loss of the original religious beliefs. It is very likely that some of the emerging new beliefs saw caves as an entrance to a primordial mother goddess' womb. Consequently they became religious sanctuaries of an animistic cult centred on the mystery of the souls of local game. This may have led to the rise of cave art.

Caves also became shelters for human groups that moved into the temperate climate zone, most probably during the onset of the Ice Age, inducing a serious environmental pressure, even in areas with milder climate. The first habitation probably occurred in Asia and then in Africa. This does not at all support the "out-of-Africa" model of the peopling of the earth.

The use of caves by humans was probably conditioned by three main factors:

- availability: caves first became accessible on the continental shields within centuries after the Flood
- intensity of the environmental pressure (mainly the rapidly cooling climate, some 5 centuries after the Flood)
- limitation of alternatives, especially through closing of migration routes (like for example the closing of mountain passes by advancing glaciers)

Thus, some human groups became isolated and developed a highly specific culture, of which the western European cave paintings is the most striking.

Given the frequent use of wall relief details in the layout of paintings, the fact that no stalgmities and stalactites have been integrated in cave art strongly suggest they were actually not present at the time the ancient artists were at work. This is in stark contrast with the radiometric ages attributed to many neighboring stalagmites and this contradiction has not been addressed until this paper. A simple solution would be to place the formation of the speleothems after the accomplishment of the paintings, thus conforming to a Young Earth speleogenetic model.

The 30 Kyr of virtually unchanged cave art represent a conservatism one order of magnitude longer than any other known such pattern, and during a period in which tools and social behaviour have changed repeatedly. This is another issue avoided by standard anthropology, yet simple to explain in a Young Earth, post-Flood speleogenetic model.

After the Ice Age, isolation came to an end, massive migrations brought new ways of life and humans left caves for ever, starting a sedentary life and with it, the germs of modern civilizations. One can extensively speculate on how would the modern world look if God's wonderful creation didn't include caves as physical and spiritual shelters in times of dire needs...

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Figure 1: Some of the most important caves connected to human history (compiled from various sources). NB: not all caves are referred to in the text.

AFRICA

- BB: Blombos Cave, South Africa
- KR: Klasies River Caves (South Africa)
- MO: Motopo Caves (Zimbabwe)
- TR: Twin Rivers caves (Zambia)

ASIA

- SKKT: Skhul, Kafzeh, Kebara and Tabun (Israel)
- SD: Shanidar (Iraq)
- GB: Golobuny Cave (Urals, Russia)
- KP: Kapora (Shulgan Tash) (Urals, Russia)
- DK: Dinktai Cave (Aldan River, Siberia, Russia)
- LG: Longupo Cave (China)
- ZH: Zhoukoudian (China)

EUROPE

- CH: Chauvet Cave (France)
- CI: Ciurului Izbuc Cave (Romania)
- FU: Fumane Cave (Italy)
- L&A: (Lascaux, France and Altamira, Spain)

NORTH AMERICA

- BF: Bluefish Caves (Yukon Territory, Canada)
- DC: Daisy Cave (Channel Islands, California)
- DH: Daugherty Cave (Virginia)
- PJ: Pendejo Cave (Colorado)

OCEANIA

- G&W: Golo and Wetef Caves (Gebe Island, Moluccas)
- NG: Caves in Northern Guinea
- NS: Caves in the Northern Solomons

SOUTH AMERICA

- GU: Gitarrero Cave (Peru)
- PP: Pedra Pintada Cave (Brazil)
- PY: Pikimachay Cave (Peru)

