

The Creation of Man and the Evolutionary Record

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If we ask the question, "What if Genesis 1:1-2:3 resembled the evolutionary record?", we can avoid the pitfall of concordantism and search for perspectives which allow us to artistically render a resemblance between the Creation story and the currently postulated evolutionary record. The purpose of this article is to reiterate a recently published perspective that presented a comparison between the six days of creation and six epochs of the evolutionary record. This paper will also apply that perspective in a comparison between Genesis 1:26-30, which depicts the creation of man, and hominid evolution as described by recent scientific publications.

Christian writers throughout the ages have communicated the feeling that the creation story (Gen. 1:1-2:3) expresses both physical and moral truth.¹ Today, such a feeling runs counter to the modern ideal which separates moral and physical meaning, then denies physical meaning to Genesis. Consequently, Christian thinkers have explored new approaches to reestablish physical meaning to the creation story. One approach has been the *concordantist* view, which holds that the Genesis account conveys scientific or natural knowledge.² William Stokes's *The Genesis Answer* and Hugh Ross's *The Fingerprint of God* are examples.³ For some, these comparisons are far from convincing. Why? Concordantists seem to be contemplating the question: What if evolutionary history resembled the creation story? When theory and data from scientific journals do not correspond to a particular reading of the Genesis text, theologically "scientific" descriptions are presented as alternatives. Unfortunately, this sword cuts both ways; opponents use scientific descriptions as evidence against God's creating power.⁴

Are there other ways to recover physical meaning in the creation story? One pathway is to invert the concordantist view and ask: *What if the creation story resembled evolutionary history?* This question opens the door for believers to aesthetically compare these two "origin stories" from novel perspectives. A perspective previously developed

presents a comparison between the six days of creation in Genesis and six epochs of the currently proposed evolutionary record.⁵ This paper will reiterate that perspective and extend the comparison to include a resemblance between the Genesis account of the creation of humankind (Gen. 1:26-31) and hominid evolution as described by recent scientific publications.

Perspective: Appreciating the Creation Story as Modern Poetry

The creation story is anything but modern poetry. However, nothing restricts us from appreciating the "poetic" creation story from a point of view where poetry is not bound by form. The modern regards poetry as a confluence of visualization and allusion. Visual phrases call to mind images. Allusions point to something familiar, such as a work of art, a feeling, or an ideal. Visual imagery and allusions flow together generating and connecting images and ideals, scenes and emotions, and visions and meanings.

The modern approach to poetry provides a tool for analyzing the Genesis account while contemplating the evolutionary record. Phrases in Genesis may be classified as visualizations and/or allusions. Let us consider visualizations first. Visual phrases call to mind images that may be compared to phenomenal features of the evolutionary record. At the same time, phenomenal features of the evolutionary record may "key into" visual phrases in Genesis. For example, day two describes *waters separating from waters*. This could correspond to many different images, except *God declares the water above the dome to be Heavens*. This leads one to imagine an era where the earth separated from the sky. Roughly, *waters separating from waters* resemble the accretion of the planet earth.

The epochs that correspond to each *day* cannot be arbitrary. The creation story presents a distinct sequence of *days* and the evolutionary record may be described as a sequence of *epochs*. This allows us to construct a correspondence from a few starting points. For example, the accretion of the planet earth was followed by, among other things, the formation of the earth's oceans and the appearance of the earliest continental crust. Day three contains phrases such as *"Let the dry land appear"* which resemble early continent formation. The progression from day two to day three images the progression from planetary accretion to continent formation. In this manner, we can identify a sequence of six epochs, with each epoch containing features which generally "match" visual phrases in each Genesis day. These epochs are listed in Table I.

Once six epochs have been bracketed, visualization and comparison reinforce each other

Table I. Comparison of A Genesis Day to An Evolution Epoch

Day	Corresponding Evolutionary Period
One	Formation of solar system and ignition of sun
Two	Accretion of planet earth
Three	Appearance of continents and the earliest life which was photosynthetic and propagated through DNA
Four	Reduction of greenhouse effect by weathering of continental rock and the transformation of the atmosphere by photosynthesis from anoxic to oxidative
Five	The beginning of the eukaryotes to the end of the age of dinosaurs
Six	The age of mammals

until two incongruities become apparent. First, visualizations resemble features of various eras only from certain points of observation. For example, *the appearance of dry land* at the start of the third day resembles the initiation of continent formation (early Archean) only for an observer near the surface of the earth. Second, each Genesis day contains phrases which are not images or which present images that do not match the corresponding epoch. For example, images of *plants yielding seed* at the end of day three do not match the evolutionary era corresponding to the start of

day three. Land plants appeared long after early continent formation. Consequently, descriptive phrases at the end of day three resemble the early Archean only if the phrase, *plants yielding seed*, is regarded as something other than a visualization. But if the phrase is not a visualization, what is it?

The phrase *plants yielding seed* may be regarded as an allusion. Besides continent formation, the early Archean marks the beginning of life which was photosynthetic (*vegetative*) and DNA mediated (*bore according to its kind*). Early life shares both phenomenal and essential features with plant life, and in this sense may be said to be the forebear of today's vegetation. In this, we can see that the *creation of vegetative life* at the end of day three resembles the early Archean. Consequently, the phrase *plants yielding seed* may be alluding to the relevance of this evolutionary epoch to humanity. The allusion connects events that took place during the early Archean with something that everyone can readily identify with.

Genesis phrases which are not visual or which present images that do not match the corresponding era may be classified as allusions. Like the allusion to plant life in day three, these phrases seem to convey, in readily understood terms, the importance of each corresponding evolutionary era to humanity. Allusions include: in day one, *God called the light Day*; in day two, *God called the firmament Heaven*; in day three, *God called the dry land Earth and God created plants yielding seed and fruit trees bearing fruit*; in day four, the creation is to *separate the day from the night and be for signs and for seasons*

and for days and years; in day five, God blessed the creation saying, "Be fruitful and multiply."

The dictionary definition of the word *allusion* is "indirect reference." When used in literature, an allusion points from the dramatic episode at hand to another "situation," typically, a story or character in another work of art. This leads us to expect that allusions should point from the creation story to another work of art. Phrases classified as allusions play on our expectations. These phrases point from the evolutionary record to humanity. The evolutionary record is the "dramatic episode at hand." Humanity is the "work of art." In a sense, allusions answer the question, "How does this epoch relate to me?" In this, allusions may be seen as both paradoxical and meaningful. They are paradoxical because they point from the evolutionary record instead of the Genesis text; and they point to humanity as the pre-existing work of art. They are meaningful in that they relate the importance of each evolutionary epoch to humanity.

The acknowledgment of allusions resolves the two incongruities associated with a comparison between visual phrases in each *day* and features of a corresponding evolutionary *epoch*. First, phrases which are not visualizations or which present images that do not match the corresponding epoch may be classified as allusions. Allusions are meaningful in that they paradoxically relate the importance of the corresponding evolutionary epoch to humans. Second, allusions provide the perspective for an "observer" in connection with visual phrases. For example, in day four, allusions place the observer on the surface of the planet. Where else are *day and night, signs (for festivals) and seasons* celebrated? From this point of view, the creation of the sun, moon, and stars resembles an evolutionary epoch following the earliest appearance of continents and of life.

In summary, the modern definition of poetry as visualization and allusion allows us to look at the creation story from a new perspective, while also contemplating the evolutionary record. We have looked for a sequence of epochs in the evolutionary record which "key into" visual phrases in the sequence of Genesis *days*. Once we outlined a sequence of epochs, we found phrases in each *day* which were not visual or which presented images that did not resemble the corresponding epoch. We classified these phrases as allusions and found that allusions from each *day* had something in common: Allusions appear to relate the importance of the corresponding epoch to humanity. This perspective was used to present a comparison between the six days of creation and the evolutionary record. Now, this perspective will be extended to the creation of man and hominid evolution.

Applying the Perspective to Genesis 1:26-30

Because the creation of man is so compact, allusions will be identified as phrases that relate the importance of the corresponding epoch to humanity. Consequently, one phrase may be classified as both visualization and allusion.

Anthropologists today propose a distinct sequence of developments in human evolution: roughly speaking, first the feet (walking apes); then stone tools and speciations to prehuman (as seen by a more human-like cranium); then better tools and territorial expansion; then speciation to anatomically modern humans (among others); then innovative tools and artistic cultural expression; then the end of the ice age, leading to domestication of plants and animals (separately); then stockbreeding; then complex society and prehistory; then civilization and history.⁶ Although details of geography and timing may change in the future, this sequence will probably remain unaltered.

Does the Genesis account of the creation of humanity resemble human evolutionary history? The account is composed of five movements, each corresponding to a verse from Gen. 1:26-30. The goal of this paper is to examine each verse in relation to the above sequence of eras. Each verse will be quoted from the *Revised Standard Version of the Bible*. Visualizations will be printed in italics. Allusions will be underlined. After a brief discussion of the Genesis text, we will review recent publications on human evolution. Then visualizations and allusions will be examined again while contemplating the evolutionary record. The comparison yields a recognizable resemblance between the Genesis account of the creation of man and the human evolutionary record.

Verse 26: The "Intention of Man" and Early Hominid Evolution

(26)Then God said, "*Let us make man in our image* after our likeness; and *let them have dominion* over the *fish* of the sea, and over the *birds* of the air, and over the *cattle*, and over all the earth, and over *every creeping thing* that creeps upon the earth."

God declares his intention to create humanity. The declaration is found in day six, which resembles the age of mammals. If the declaration is regarded as an act, then we are inspired to examine eras and species ancestral to *Homo sapiens* for something resembling an *intention of man*. To some extent, we can visualize this *intention of man* from our own appearance. For one, we expect "him" to walk. At the same time, the declaration may be considered an allusion, *man was intended to be created*, which relates the importance of the epoch and sets the stage for visual phrases. The visual phrases concern *dominion over animals*, probably referring to diet. The *intention of man* ate meat. Strangely, the juxtaposition of ancestors and meat eating calls to mind a key concept in the scientific search for human origins. Anthropologists propose that diet has been a major factor in the behavior and evolution of the primates.⁷ For example, chimpanzees in the wild use tools to obtain food.⁸

Two important evolutionary sciences explore the origins of humanity: physical anthropology and molecular biology. I will concentrate on the work of physical anthropology (and archaeology), which studies fossil evidence of human evolution, and mention the results of molecular biology later.

Many anthropologists believe that humans evolved feet first.⁹ Footprints remarkably similar to human footprints were found in hardened volcanic ash dating between 3.8 and 3.6 million years ago (Myr).¹⁰ Alterations in habitat due to climatic changes in eastern

Africa may have been the impetus for walking as an adaptation.¹¹ The earliest fossil evidences for walking primates (hominids) were found in Africa and date between 2.9 and 3.8 Myr. In 1979, Donald Johanson and Tim White proposed a new taxon, *Australopithecus afarensis*, to accommodate these Pliocene hominid fossils,¹² which may have been ancestors to later hominids.¹³ *Australopithecus* means "southern ape."

What were *Australopithecus* like? *A. afarensis* walked. They also possessed an array of features characteristic of tree climbers.¹⁴ Their diet was mainly vegetarian, similar to present day gorillas.¹⁵ The brain size of a contemporaneous fossil walking ape, *A. africanus*, was about 440 cm³, closer to the chimpanzee (about 400 cm³) than the human (about 1500 cm³).¹⁶ Like many other primate species, they exhibited sexual dimorphism: the males were large and females small.¹⁷

Hominid fossils with a more human (or less apelike) cranium appeared over a million years after the earliest *A. afarensis* fossil. These were classified as two species within the human genus (*Homo*). The earliest fossil crania representative of the highly heterogeneous taxon, *Homo habilis*, date to 1.8 Myr.¹⁸ Earlier dates (of 2.5 Myr) have been given to recent finds of mandibles which may be classified *H. habilis*.¹⁹ The earliest fossil crania of the other taxon, *Homo erectus*, date between 2 and 3 Myr.²⁰ The relationship between the two species is still debated.²¹ The species differ physically and in territory. *Homo habilis* exhibits more australopithecine features than *H. erectus*. *H. habilis* fossils have been found only in Africa. The earliest *H. erectus* fossil crania have been found in both Africa and Java.²²

God declares his intention to create humanity in day six, which resembles the age of mammals.

The discovery that *H. erectus* in Java has the same radiocarbon date as *H. erectus* from Africa may lead to a reevaluation of the current proposal of "late" migrations of *H. erectus* out of Africa into Eurasia. But this reevaluation will not change the overall picture of the emergence of hominid species similar to humans almost two million years ago. Though both *Australopithecus* and *Homo* walked, the former is considered an ape and the latter human enough that anthropologists agree that they belonged to our genus. What were some features which inspired anthropologists to draw this conclusion?

H. habilis and *H. erectus* exhibited a higher level of brain size and organization compared to *Australopithecus*.²³ Leslie C. Aiello and R.I.M. Dunbar, anthropologists at University College London, proposed one behavioral implication of increased brain size. They first demonstrated that increased neocortex size correlated with larger groups in primates. They concluded that the larger brain of *H. habilis* and *H. erectus* implied larger groups. Since primates maintain social cohesion by grooming, increased group size would have posed problems. Over 20% of waking hours would have been spent grooming. Aiello and

Dunbar proposed that with *Homo*, vocal and gestural communication began to replace grooming. This adaptation set the stage for the evolution of human language capabilities.²⁴

H. habilis and *H. erectus* probably used stone tools. The earliest and most primitive stone tools are called Oldowan and date as far back as 2.5 Myr. These tools give anthropologists insight into their diet. Oldowan tools could have been used to skin carcasses and break fat-laden bones of already scavenged animals.²⁵ Evidence for scavenging has been found in cut and percussion marks, characteristic of stone tools, on fossil animal bones dating between 2.0 and 1.6 Myr.²⁶ An advance in stone tool sophistication called Acheulean, dating from 1.9 to 1.3 Myr, has been associated with *H. erectus*.²⁷ Later *H. erectus* carried this distinctive set of tools out of Africa into western Eurasia.²⁸

In summary, the first hominid to appear was australopithecine over 3 Myr. Between 2 and 1 Myr, several species of *Australopithecus* and two species of *Homo* coexisted in Africa. *H. habilis* and *H. erectus* exhibited features which inspired anthropologists to classify them as belonging to the human genus. *H. erectus* (early specimens often labeled *H. ergaster*) is the only hominid species found outside Africa. After 1 Myr, the range of *H. erectus* included much of Eurasia.²⁹ For example, the oldest *H. erectus* fossil found in China dates to 800 thousand years ago (kyr).³⁰ Regional populations of *H. erectus* were precursors to later developments in the *Homo* lineage.

***H. habilis* and *H. erectus*... are the earliest hominid species in the fossil record showing the possibility of "human-like" behavior and providing evidence of meat eating.**

Turning from this synopsis of hominid evolution back to Gen. 1:26, note how the declaration of intention, *God said, "Let us make man...,"* combines with *"let them have dominion over fish... birds... cattle, every creeping thing."* This combination resembles phenomenal features of hominids of the *Homo* genus. *H. habilis* and *H. erectus* are ancestral species (if not directly, at least as species related to human ancestors). They are the earliest hominid species in the fossil record showing the possibility of "human-like" behavior and providing evidence of meat eating. The motion towards humanity declared in Gen. 1:26 resonates with physical evidence for *H. habilis* and *H. erectus*' larger brain size, stone tools, and the use of stone tools for scavenging meat (and later, hunting). In addition, the phrase, "Let us make man in our own image," may be considered an allusion, because the phrase points out the importance of the evolutionary epoch to humanity.

Verse 27: The Creation of Man and Late Hominid Evolution

(27) So God created man in his own image, in the image of God he created him; male and female he created them.

After the declaration of intention, God creates humanity. This portrayal inspires us to review a wave of speciation events within the regional populations of *H. erectus*, that led to (among others) *H. sapiens sapiens* and *H. neanderthalis*.

The dispersal of *H. erectus* from Africa (and Java?) into Eurasia established partially isolated regional populations throughout the Old World. *H. erectus* remained remarkably stable for hundreds of thousands of years after these early dispersals. For example, the range of dates for *H. erectus*' fossils from Zhoukoudian in China extends from 430 to 200 thousand years ago (kyr).³¹ Zhoukoudian *H. erectus* is notably similar to finds from Africa and Java dating over a million years earlier.

How later species of the *Homo* genus emerged from these populations has been a topic of heated debate.³² Research has focused on Africa, Europe, and China. Gunter Brauer labeled three grades for changes in *H. erectus* starting about 400 kyr. These grades are "early archaic *Homo sapiens*," "late archaic *Homo sapiens*," and "anatomically modern humans."³³ The first two grades show regional variation. For example, early archaic fossils found in Atapuera Spain, dating to over 300 kyr, are distinct from similarly dated fossils unearthed in Yunxian China.³⁴ The Atapuerian hominids bear features common to *H. erectus*, *H. sapiens*, and *H. s. neanderthalis* and the Yunxian fossils to *erectus* and *s. sapiens*. Despite strong similarities to anatomically modern humans, *H. s. neanderthalis*, known as Neanderthals, are classified as late archaic and ranged throughout Europe from 130 to 35 kyr.³⁵ In China, non-Neanderthal late archaic fossils date between 300 and 83 kyr. The first anatomically modern human fossil found in China dates to 67 kyr.³⁶ Early and late archaic *H. sapiens* fossils are typically associated with stone tools bearing strong continuity with the Acheulean "tool kit."³⁷

The earliest evidence for anatomically modern humans has been found in southwest Asia (Near East or Levant) dating between 100 and 92 kyr.³⁸ Sites on Mount Carmel, Israel reveal a curious alternation in strata between anatomically modern humans and Neanderthals, which lead to the conclusion that only one type occupied the site at a time. The alternation suggests that two subpopulations evolved outside the Levant and coexisted in different regions of the Old World for thousands of years.³⁹ Both subpopulations used Mousterian stone tool technology, an Acheulean-like tool kit associated with Middle Paleolithic Neanderthal sites in Europe.⁴⁰

Outside southwest Asia, fossils of anatomically modern humans were found at Border Cave, South Africa and date to between 80 and 70 kyr. Border Cave also yielded the first indication of a new stone tool technology similar to the blade technology of Upper Paleolithic Europe. Dates for Howiesons Port lithic industry range from 75 to 45 kyr.⁴¹ To anthropologists Ofer Bar-Yosef and Bernard Vandermeersch, the biological appearance of anatomically modern humans cannot explain the technical and cultural revolution of the Late or Upper Paleolithic.⁴²

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Perhaps it is noteworthy to mention the contribution of molecular biology to deliberations on the evolution of *H. s. sapiens*. Briefly, the strong "out of Africa" hypothesis proposed in 1987 by Rebecca Cann, Mark Stoneking, and Allan Wilson (at the Universities of California at Berkeley and Hawaii at Honolulu)⁴³ has been discredited.⁴⁴ However, the same data are now being used with different statistical treatments to support a weak "out of Africa" hypothesis, which posits that modern humans appeared as a subpopulation of *H. erectus* and spread slowly over tens of thousands of years. Later, separated daughter populations bearing blade stone tool technologies expanded, producing the African Late Stone Age and the European Upper Paleolithic.⁴⁵

Both fossil evidence and studies in molecular biology support the hypothesis that anatomically modern humans first evolved as a small population in Southwest Asia or Eastern Africa, then, tens of thousands of years later, underwent cultural revolution and population expansion.⁴⁶ Verse 27 resembles the first step, the evolution of anatomically modern humans. The visual phrases, *So God created man and male and female he created them* image the nondescript appearance of humans. The allusion, *God created man in his own image*, relates the importance of this evolutionary epoch. Humans are fully human at this time. However, little or no archaeological evidence of "culture" dates to this first appearance of humans. Evidence for culture becomes abundant tens of thousands of years later. The Genesis blessing in verse 28 echoes the later population expansion and the brilliant cultural innovations of the Late Paleolithic.

Verse 28: The Blessing and the Late Paleolithic

(28) And God blessed them, and God said to them, "*Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth.*"

What does God's blessing of humans imply? Many descendants? Material prosperity? Divine favor? Greater spiritual awareness? We can view this allusion, *God's blessing*, many ways. The allusion sets the stage for considering visual phrases which call to mind territorial expansion, population growth, material advance, and an emphasis on hunting. Evidence for all of these belong to the Late Paleolithic. But that is not all.

Territorial expansion of anatomically modern humans probably began soon after *H. s. sapiens* evolved. The early age of expansion is attested to by the fact that the axis for the

largest component of total human genetic variation runs from east to west.⁴⁷ Daughter populations expanded again thousands of years later. Humans arrived in Australia as early as 50 kyr.⁴⁸ Humans became common in (then frozen) Europe by 35 kyr.⁴⁹ Paleolithic people colonized the Americas around 12 kyr.⁵⁰

The extensively investigated transition from Middle to Upper Paleolithic in Europe may serve as an example of the latter expansion. The transition confounds two events: a change from Mousterian to blade stone tool technologies and the respective appearance and disappearance of human and Neanderthal fossils.⁵¹ Although the simplistic equation of technology and hominids has been abandoned, it remains that no Neanderthal fossils date later than 33 kyr.⁵² Anthropologist Jared Diamond labeled the cultural florescence following human settlement in ice age Europe as "The Great Leap Forward."⁵³ Jewelry was made by 30 kyr and Venus figurines between 27 and 25 kyr. Siberia was colonized around the same time. The earliest needle yet found dates to 23 kyr, along with the earliest bow and arrow. A 17 kyr harpoon and 15 kyr cord have been found.⁵⁴

In summary, the Late Paleolithic era is known for population expansion and cultural innovation world wide. Gen. 1:28 resembles this era. Humans *multiplied* and *filled the earth*. The phrase, *subdued the earth*, images cultural strategies adopted to overcome physical constraints. Bamboo boats may have been used in sea crossing to Australia.⁵⁵ Warm clothing and effective hunting tools were needed to settle ice age Europe. *Dominion over that which can be hunted* resembles the Cro-Magnon food strategy.⁵⁶

But that is not all. In Gen. 1:27, *God creates humans in his own image*. Gen. 1:28 fulfills the preceding verse just as the Late Paleolithic era fulfills the potential of the earliest populations of anatomically modern humans. A creature created *in the image of God* calls to mind "something in nature acknowledging something beyond nature." This image resembles expressions of spirituality found in Upper Paleolithic art, ceramics, and burials.

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There is no doubt that the humans of the Late Paleolithic were aware of "something beyond nature." For example, Bohyslav Klima unearthed a bizarre triple burial of two males and a female. The two males were murdered. The female was highly deformed. The arrangement of the bodies gives the impression that the three were laid out to reenact a real life drama of the woman giving birth. Red ochre was concentrated below the female's pelvis.⁵⁷ The earliest ceramic artifacts from Czechoslovakia are equally evocative. The firing and exploding of figurines may have been the prime function of their manufacture.⁵⁸ We may never know the intent of the burial or the practice of exploding figurines, but many anthropologists are guessing. The phrase *image of God* taps into important themes of this literature.⁵⁹

Verse 29: The Giving of Plants to Humans and the Epipaleolithic/Archaic Neolithic

(29)And God said, "Behold, *I have given you every plant yielding seed which is upon the face of all the earth, and every tree with seed in its fruit; you shall have them for food.*"

In this verse, we can visualize *God giving plants to humans for food*. At the same time, the phrase alludes to the importance of the following evolutionary era to humanity. While plants may have been part of the Paleolithic diet, animals seemed to be more important. Late Paleolithic tools were designed for hunting. Late Paleolithic art represented animals and hunting scenes. However, the Late Paleolithic era came to a close at the end of the last "episode" of glaciation. Due to the nature of the earth's orbit, the current ice age has been periodically interrupted by passages of relative warmth, called interglacials.⁶⁰ The current interglacial ushered in ecological change in southwest Asia over 10 kyr ago.⁶¹ The change established the conditions for a new era in human development, marked by an increased reliance on plants for food.⁶²

The Fertile Crescent, a swath of land which includes the present states of Israel, Jordan, Syria, northern and eastern Iraq, and western Iran, has been the focus of research investigating the origins of agriculture and complex society.⁶³ Several large mounds or "tells" have been excavated. These excavations have provided enough information to overthrow the familiar one-step "Neolithic Agricultural Revolution" proposed in the 1960s.⁶⁴ What emerges is a picture of cultural development which may be broadly described as two-step: containing the Epipaleolithic and Archaic Neolithic in the first step and the Developed Neolithic in the second step.⁶⁵

The Epipaleolithic means the replacement of mobile hunting and gathering societies by sedentary intensive collectors.⁶⁶ By 14 kyr, culturally diverse sedentary villages were common throughout the Fertile Crescent, at locations particularly rich in flora and fauna. Around 12.5 kyr, a new adaptive food gathering strategy appeared within the Mediterranean hill-zone of the Levant. The strategy emphasized the collection of wild cereals and nuts, which were later processed by mill stones. Originally, cereals were confined to rich soils at low elevation. When they colonized hill zones (with the aid of humans), they began to show characteristics of current domesticated grain. The new "gathering and sowing" strategy was practiced by a wide ranging village culture known as the Natufian and would not have been possible but for the coincidence of increasing seasonality and Epipaleolithic ingenuity.⁶⁷

The Natufian culture began as Epipaleolithic and ended as Archaic Neolithic, when stone tools became common for harvesting and grinding grain. Domesticated grain has been found along with these tools. The Archaic Neolithic may be regarded as the cultural product of reliance on plant cultivation. Villages were the centers of cultural activity. The diet included domesticated plants and hunted or semidomesticated animals, such as goats and gazelles.

Gen. 1:29... resembles the Epipaleolithic and Archaic Neolithic eras, when plants were first systematically relied on and cultivated as a food source.

The excavation of Tell Abu Hureyra in Syria by a team led by Andrew Moore may serve as a specific example of the newly formulated two-step "Agricultural Revolution."⁶⁸ The first occupation of the site was almost Epipaleolithic and consisted of pit dwellings with reed roofs. The dwellings were temporary. Stone pestles and milling stones were used to process anatomically wild cereals. Blades, which could have been used for hunting or as part of a sickle, were common. Animal bones ranged from rabbit to onager, with gazelle most common. Freshwater mussel and fish came from nearby Euphrates River. The site was abandoned, then resettled hundreds of years later by an Archaic Neolithic culture practicing agriculture. This culture was labeled PrePottery Neolithic B (PPNB). The economy rested on the cultivation of cereals and pulses. They may have used irrigation in the form of diverted streams. Gazelle, sheep, and goat were common initially. These were probably herded. Later, the number of gazelles declined and the number of sheep and goats increased proportionally. This transition marked the start of the Developed Neolithic, when animals were truly domesticated. Cattle and pigs were added to the settlement's herds early in the sixth millennium BC (8 kyr).

Now, let us examine Gen. 1:29, *plants are given to humans for food*. This divine act resembles the Epipaleolithic and Archaic Neolithic eras, when plants were first systematically relied on and cultivated as a food source. Animals were also cultivated, in that they were herded, but the connection between agriculture and animal husbandry had yet to be achieved. That achievement is the hallmark of the Developed Neolithic and is the real innovation behind the second step of the "Neolithic Agricultural Revolution."

Verse 30: The Giving of Plants to Animals and the Developed Neolithic

(30) And to every beast of the earth, and to every *bird* of the air, to everything that creeps on the earth, to everything that has the breath of life, I have given every green plant for food.

According to archaeologist Frank Hole, goats, sheep, and cattle were probably first domesticated on the margins of the Fertile Crescent, in Anatolia (cattle) and the foothills of the Zagros Mountains (goats and sheep). Domestication implies a willingness and an ability to provide fodder. The introduction of domesticated animals into the Levant occurred rapidly, as seen in the PPNB of Tell Abu Hureyra. An increase in the number of PPNB sites in the Levant followed that introduction. Advances in farming and stock raising techniques contributed to unprecedented population growth during the Developed Neolithic.⁶⁹ The new economy and the population expanded from the Fertile Crescent into Europe and Asia. The Neolithic expansion accounts for the largest principal component of regional genetic variation in Europe and in Asia.⁷⁰

Gen. 1:30 resembles the essence of the productive economy of the Developed Neolithic, an economy which thrives today: *Give fodder to the animals*. It is noteworthy to mention here that the Developed Neolithic in the Fertile Crescent gave rise to complex societies which produced the world's first civilization, the Sumerian.⁷¹

A Note on Genesis 1 and 2

This rendition of a resemblance between the creation of man and the human evolutionary record eerily dovetails into the next origin episode in Genesis. Gen. 1 abruptly ends with a single sentence which keys into the Developed Neolithic. The second origin story in Genesis, the story of Adam and Eve (Gen. 2:5 on), also keys into the Developed Neolithic of the Fertile Crescent.⁷² The creation story, written in the P (or priestly) style, portrays a sequence of events which could not have been observed by a human. At no point in the story is an individual human mentioned. On the other hand, only the first few lines of the story of Adam and Eve, written in the J (or Yahwist) style, depict an origin. These lines serve to set the scene for the subsequent human drama. Because of this, we can imagine the origin in the story of Adam and Eve as an origin which was witnessed in this locale.⁷³ The context of the creation story is cosmological. The context of the Adam and Eve story is anthropological. In this, the transition from Gen. 1 to Gen. 2 stunningly mirrors the transition from prehistory to history that occurred as village cultures of the Developed Neolithic gave way to complex society, then civilization.

Conclusion

Gen. 1:26-30, contemplated from the perspective of poetry, has been compared to current scientific ideas and data concerning human evolution. Modern poetry may be defined as the confluence of visualization and allusion. The Genesis text was examined in terms of visual phrases and allusions while regarding the evolutionary record. The resulting comparison renders a striking resemblance between the Genesis account of the creation of humanity and current scientific proposals on hominid evolution. The comparison is summarized in Table II.

From the earlier comparison of the six days of creation and the evolutionary record, allusions were found to paradoxically relate the importance of a corresponding evolutionary epoch to humanity and to set the point of observation for visual phrases. We applied this finding to a comparison of Genesis and the human evolutionary record. Consider the sequence of allusions: *God intends to create humans; God creates humans; God blesses humans; God gives plants for food to humans; God gives fodder to animals.* Each allusion paradoxically relates the importance of an era of hominid evolution and sets the stage for imaging visual phrases. For example, *dominion over animals* for the *intention of man* may be visualized as simply eating meat, in this case, scavenging. After all, intention is not creation. *Dominion over animals* for the *creation of man* may be visualized as exactly that, a controlling power over animals hinted at in the eerie scenes of Late Paleolithic cave paintings.

In summary, we have found a perspective from which we can render a resemblance between the first chapter of Genesis and the evolutionary record. The rendition is *analytical*, since various phrases in the creation story are classified as visualizations or allusions. The rendition is *aesthetic*, since it speaks to an innate sense of beauty, our ability to recognize resemblances. A wide range of human witness, including Paleolithic art⁷⁴ and Christian religious experience,⁷⁵ similarly appeals to this sense of beauty.

The goal of this rendition of a resemblance is to induce a spark of recognition. *The creation story is an image of the evolutionary record.* As such, this rendition must be considered a work of art, not a reason-based demonstration. With that spark of recognition, the now frustrated feeling that the creation story expresses both moral and physical truth finds refreshment. This rendition of a resemblance suggests an aesthetic and paradoxical complementarity between the two "origin stories" without infringing on the integrity of either sacred text or scientific research.⁷⁶ The resemblance seems real. Yet there is no natural explanation for a resemblance.

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