

The Biblical Creation Report and Science

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The biblical creation report can be taken literally, as being divinely inspired, and can at the same time be harmonized with modern natural science including evolution of the universe, life, and humanity. As all languages are flexible and often ambiguous, one can, in this endeavor, abstain from reading either anachronistic scientific facts or ancient pagan myths into the biblical text. The key for this is found in the all-encompassing love of God who fully respects all humans as genuine personalities bearing responsibility. In place of an allegedly only-correct interpretation, compatibility of divine revelation with any experience-based theory of origin and function of the universe, the earth, life, and humankind is here proposed. As an example, a possible scenario of harmonization with the scientific origin theories generally accepted today is sketched.

1. The prejudice of warfare between science and the bible

In the Old Testament, the Ten Commandments are doubtlessly of central importance.¹ The Sabbath commandment is there backed up by referring to creation in six days (Exodus 20:11):²

For in six days the LORD made heaven and earth, the sea, and all that is in them, and rested on the seventh day...

Modern science measures the ages of the universe and of the earth³ not in days but in billions of years.⁴ Many therefore believe that the biblical text attributes to God assertions incompatible with reality. Thus they take any claim of biblical infallibility to be refuted. Any church basing its teaching on the bible is accused of warring against science.⁵

Others are not willing or so irresponsible as to disavow the undisputably fruitful consequences of biblical teachings worldwide. As the biblical texts addressed prescientific people, one tries to show that they must therefore reflect the way of thinking and the cultural environment of those recipients. Writers and readers of 2000 and more years ago couldn't have had any modern knowledge in the realms of the origins of the universe and of life. In revealing himself, God therefore used anthropomorphic⁶ language on purpose, in order to let those people understand his essential theological message. Starting with these considerations, in themselves correct, interpreters have often rashly concluded that this necessarily implies an accommodation even to ancient errors.

Others again consider such an accommodation to be going too far. They want to stick to the full inerrancy of scripture based, e.g., on Jesus' words in the sermon on the mount (Matthew 5:18):⁷

For truly, I say to you, until heaven and earth pass away, not an iota, not a dot, will pass from the Law until all is accomplished.

Scripture texts such as 2 Peter 1:19-21 point into the same direction:

¹⁹ And we have something more sure, the prophetic word, to which you will do well to pay attention as to a lamp shining in a dark place, until the day dawns and the morning star rises in your hearts, ²⁰ knowing this first of all, that no prophecy of Scripture comes from someone's own interpretation. ²¹ For no prophecy was ever produced by the will of man, but men spoke from God as they were carried along by the Holy Spirit.

Many of these Christians, endeavoring to take every biblical statement literally, as divinely inspired, and therefore as fully reliable, have unfortunately surrendered to young earth creationism (YEC), believing the bible to teach creation within six 24-hour days. Where they see a contradiction between their interpretation of a biblical text and their understanding of scientific pronouncements, they accuse science of error.⁸

Although these three world-views contradict each other fervently, they share *one* thing, the conviction that bible and science are at loggerheads with each other. This is a fatal starting point. But in what follows, a possible alternative to this warfare model is being proposed.

2. Harmonization — a necessary alternative

This "faith war" has very serious consequences for those affected by it. Children of parents or teachers devoted to one of the three world-views mentioned are particularly endangered. Those atheistically brought up or influenced may consider "religion" a psychological consolation for the timid or ignorant, at best. However, for their own sentimental pleasure ("wellness"), they might often become esoteric consumers of slogans, practices, or products of any odd religion, without caring about the truth question. But, as a rule, they tend to progressively harden themselves against the lifesaving biblical gospel.

Many children of supporters of an absolute accommodation might often continue to go along with the rituals and customs of their own or any church they happen to like, without much thought. But others might soon ask themselves what use a god-of-the-gaps is for everyday life, as science will be able to close any remaining gaps of knowledge anyway. And how shall any biblical statement of church teaching be established, as their truth content will continue to be questionable, at the mercy of theologians' disagreements?

Children growing up in YEC circles are bound to run into an unsolvable conflict sooner or later, usually in elementary school already, but certainly in high school and college, and often they will end up deciding to ignore either the bible or science. In the former case they risk losing their eternal life, in the other case they possibly ruin their chances of success in this life at most.

But there is an alternative to the warfare model, namely trying to find a harmony or concordance between the bible text and scientific reality.⁹ "Accommodationists" reject this, charging the so-called "concordists" with wanting to read modern science into ancient texts, in order to prove the bible to be scientific and forcing an imaginary inerrancy on it, thus discrediting it with their god-of-the-gaps. Such charges ignore important realities.¹⁰

In fact, there is indeed the possibility of the biblical text not contradicting scientific facts, although it doesn't "teach" any such facts unknown at the time. The key for an irreproachable harmonization lies in God's boundless desire to save, combined with the liberty to reject salvation he has given humans in creating them and the ambiguity of linguistic expressions.¹¹

Throughout, the bible makes it very clear that God's desire to save and the wooing of his love extends to *all* humans of *all* times and cultures. It is therefore to be expected that the messages he revealed to his prophets addressed the first hearers, but equally all who were going to read these texts, perhaps later by millennia and in completely different cultures and societies. They all should have the opportunity of understanding his revelation easily. The only condition, for the last as for the first recipients, should be a trusting faith, an opening of the hearts to God.

3. The key — responsibility in accordance with creation

How can someone in ancient (or modern) times understand a biblical text? When Jesus addressed the crowds, he used parables, which he then explained to his disciples in private (Matthew 13:10-16):¹²

¹⁰ Then the disciples came and said to him, "Why do you speak to them in parables?" ¹¹ And he answered them, "To you it has been given to know the secrets of the kingdom of heaven, but to them it has not been given. ¹² For to the one who has, more will be given, and he will have an abundance, but from the one who has not, even what he has will be taken away. ¹³ This is why I speak to them in parables, because seeing they do not see, and hearing they do not hear, nor do they understand. ¹⁴ Indeed, in their case the prophecy of Isaiah is fulfilled that says: «You will indeed hear but never understand, and you will indeed see but never perceive. ¹⁵ For this people's heart has grown dull, and with their ears they can barely hear, and their eyes they have closed, lest they should see with their eyes and hear with their ears and understand with their heart and turn, and I would heal them.» ¹⁶ But blessed are your eyes, for they see, and your ears, for they hear..."

Without personal faith in God and his Christ it is impossible to be saved. An unambiguous explanation given someone who doesn't *want* to believe will only harden his heart ever more and thereby harm him. A parable not yet understood, however, can subconsciously or consciously stimulate a person to become aware of his or her sin and lostness and to search for the way of salvation.

God doesn't want any forced submission of a person: he is yearning for a personal love out of a free decision. As humans are gifted with a capability to think, even the logical compulsion of an unambiguous

proof of God would interfere with their freedom of decision. In this way, one's relationship to God would become that of a marionette to its wirepuller. But God is looking for a love relationship like the one of an optimal marriage. Therefore, Jesus avoids "proofs" in the modern sense.

How are these different aspects of divine revelation brought down to a common denominator in the biblical text? Linguistic ambiguity and redundancy make it possible.

Every language is flexible, such that a given word or longer expression in many cases can have several different meanings. In order to find its interpretation relevant in a given immediate context, the wider context must be taken into consideration: always in the paragraph, often in the book, occasionally in the entire bible as a whole; often in the language used and possibly in related languages; and in addition in the society and culture at the time of writing. The legitimacy of any extrabiblical points of comparison, of course, depends on a correct attribution of the time and cultural environment. Unfortunately, in various theological systems or ecclesiastical traditions, this applies but inadequately or not at all. With an incorrect attribution of the "*Sitz im Leben*",¹³ the conclusion as to the meaning sought will be either wrong or irrelevant.¹⁴

In various contexts, a word having more than one meaning may also be used on purpose for an ambiguous statement, such as in humor, irony, parables, prophecy. In biblical prophecy, deliberate ambiguity is quite widespread, for often God wants to both tell the first hearers something, and point to a later fulfillment. A conspicuous example is found in Isaiah 7:14:¹⁵

Therefore the Lord himself will give you a sign. Behold, the virgin shall conceive and bear a son, and shall call his name Immanuel.

The first hearer, Ahaz, was obtaining a "sign" directly fitting his own time and circumstances, although he might not have seen much of a miraculous sign in the son of a young woman. But for him, an unmistakable exhortation to repent resulted from Isaiah's statement. Matthew, however, quotes this prophecy, applying it to Mary and her first son Jesus, born through an entirely unrivaled miracle.¹⁶ Multiple fulfillments of prophecies belong to the messianic backbone of the bible.

Also, many facts relevant for a meaningful harmonization of a text expression are detected much later, be it by archeological relics found or by scientific research done. Nevertheless, both kinds of sources will always remain more or less incomplete, such that occasionally false conclusions are drawn which have to be corrected later.

These many obstacles to an appropriate interpretation, however, certainly cannot thwart God's intentions. As a remedy, he built in redundancy by repeatedly pointing out the same truth he wants to reveal, more or less frequently, depending on its importance. In various fields, redundancy denotes a doubling or more frequent repetition of the same or complementary information, in order to ensure an important function in an environment prone to interference or damage.¹⁷ Apart from the biblical text and human languages in general, the perhaps most impressive cases of redundancy can be seen in biology, where vital functions are always served in multiple ways, in order to make them as safe as possible.

4. Statements and their interpretations

Is it always the case that there is *only one* correct interpretation of a set of givens, or may there occasionally be different possible views? It is clear to every natural scientist that often observations are interpretable in different ways. Should the interpretation of biblical texts be an exception? All three types of expositors mentioned, who see contradictions between scientific findings and a biblical text taken "literally" seem to ignore this fact. What does it really mean to take a text "literally"? Isn't this often just the interpretation which happens to first occur to some people on the basis of their knowledge, traditions, and even perhaps prejudice? Two important cases taken from the creation report in Genesis 1:1-2:4 may illustrate two types of alternative possibilities of interpretation.

How to interpret the dragon in Revelation?



R. Koser-Michaëls, in: *Märchen der Brüder Grimm* (T.Knaur Nachf., Berlin, 1937), 383

(A) The Hebrew noun *raqia*¹⁸ in Genesis 1:6-8 is often translated "firmament", although at least some reliable English translations¹⁹ replace it by "expanse" or add a footnote saying "literally, expanse":

⁶ And God said, "Let there be an expanse in the midst of the waters, and let it separate the waters from the waters." ⁷ And God made the expanse and separated the waters that were under the expanse from the waters that were above the expanse. And it was so. ⁸ And God called the expanse Heaven.

Following the Latin Vulgate, the King James Version used "firmament" for *raqia*[^], which has been retained even in the New King James Version.²⁰ *Raqia*[^] designates a thin, extended layer. The verb *raqa*[^], "to spread", from which the noun *raqia*[^] is derived, designates the covering of a support with a thin layer of a substance no matter of what nature. Not solidity but covering of a substrate and thinness is the basic idea, as confirmed by related words.²¹ Flying creatures move (literally) "on the surface of the *raqia*[^]",²² certainly not on a "firmament" denoting a solid dome. The expanse (*raqia*[^]) could designate the relatively thin layer the atmosphere forms around the earth.²³ The ancient Hebrews knew the the water cycle²⁴ and would immediately recognize the *raqia*[^] between the waters as the air space between the ocean and the clouds.

Those attempting to support the idea that *raqia*[^] designates a solid dome over a flat earth by biblical arguments have mainly tried to do so as shown below, but the word *raqia*[^] can certainly, and with good reason, be translated "expanse", without anachronistically²⁵ requiring a knowledge of later science.

(1) Ezekiel uses *raqia*[^] for the "expanse", which he saw in his vision of God (Ezekiel 1:22-26):

²² Over the heads of the living creatures there was the likeness of an expanse, shining like awe-inspiring crystal, spread out above their heads. ²³ And under the expanse their wings were stretched out straight... ²⁵ And there came a voice from above the expanse over their heads... ²⁶ And above the expanse over their heads there was the likeness of a throne, in appearance like sapphire; and seated above the likeness of a throne was a likeness with a human appearance.

Following the Greek Septuaginta, which used *steréōma* for the Hebrew *raqia*[^], the King James Version translated "firmament", which is retained even by NKJ, by Scofield and others. The reliable versions ESV and NIV²⁶ have "expanse".

Thus, what is the *raqia*[^], an expanse (called "heaven" by God²⁷) or a solid dome? Here, the text deals with a vision in which Ezekiel relativized: "the likeness of a *raqia*[^]". In his first vision, he saw "visions of God", and in the second, similar vision, "the hand of the Lord GOD fell upon" him.²⁸ Furthermore, God insists that "Heaven is my throne",²⁹ and Jesus maintained that no human has ever seen God.³⁰ Thus, a vision cannot imply directly seeing God, and it hardly tells us something about the world view of the seer or of his contemporaries.

(2) Certain similarities to Ezekiel's vision of the throne of God are found in Revelation 4:6:

...and before the throne there was as it were a sea of glass, like crystal. And around the throne, on each side of the throne, are four living creatures, full of eyes in front and behind...

In the "sea of glass, like crystal", some see a reason to interpret the *raqia*[^] in Ezekiel's vision as a solid thing, though none of the two texts is talking about a dome. John, as well, relativized, "like crystal", and maintained that it was a vision while he "was in the Spirit".³¹

(3) The Hebrew verb *raqa*[^], "to spread", may also designate hammering of gold leaf³² or stamping with the foot.³³ But here, as well, something is spread out, metal or earth, and in fact in most cases, *raqa*[^] is translated "to spread out", "to stretch out". In Job,³⁴ a poetical text, Elihu said concerning God: "Can you, like him, spread out the skies, hard as a cast metal mirror?" It certainly doesn't follow that Elihu or anyone else believed cloud covers were as solid as metal.³⁵

(B) As a second example for different possible interpretations of the same text, the activities attributed to God in the creation report (Genesis 1:1-2:4) shall be considered, in particular the Hebrew verbs *bara*[^]³⁶ ("to create") and *asah*[^] ("to make"). Of course, like any other text in the bible, this one, as well, primarily focuses on theological truths. But indirectly, it also says something about *how* God created. Certainly nothing is revealed which could be taken as a direct prophecy of modern science. The first recipients of the text couldn't have understood it. But what *is* said can also be interpreted in a way that does *not* conflict with later knowledge. This results in a legitimate and meaningful harmonization without anachronisms, in contrast to such caricatures as "concordism" or "god-of-the-gaps".

The Hebrew verb *bara'* ("to create") occurs three times only in the six-"days"-work of Genesis 1:

- 1. heavens and earth (1:1);
- 2. animals in water and air (1:21);
- 3. humans (1:27).

The word exclusively designates an activity of God, when he produces some novel object or reality, which never existed before.

The Hebrew verb *ʿasah* ("to make") is used for activities of God *or* of humans, in the creation report (1:1-2:4) for

- 1. the expanse between ocean and clouds (1:7);
- 2. the light of sun, moon, and stars (1:16);
- 3. the land animals (1:25);
- 4. humans (1:26);
- 5. all of the creation work of God (2:3).

When humans "make" something, it always takes some source material and time. This concept of "making" therefore connotes a *development*; some pre-existing object is changed in the course of time into something new. *Evolution* stands for the English word development; cosmic and biological evolution³⁷ are two special cases of development.

"To create" *by* "making": God (Hebrew *'Elohim*) "...rested from all his work that he had *done* in *creation*" (2:3); the same statement is made (2:4) for the LORD God (Hebrew *Yahwe 'Elohim*): "...the heavens and the earth when they were *created*, in the day that the LORD God *made* the earth and the heavens", which marks the transition from the creation report to the history of Adam. God also *creates* every human individual *by developing* him or her.³⁸ Thus, God is continually active in creation. However, it will be hardly possible in each case of his creating to find out with certainty what is the novelty that never existed before.

Creation and evolution, just like creation and individual development, go hand in hand. They are natural processes, but in these, God creatively determines, guides, or permits, whatever he wants to occur. In this way he was, is, and remains the Designer-Creator.

In what follows, an outline of a non-anachronistic harmonization shall be sketched.³⁹

5. The heavens and the earth – one day

The creation report begins in Genesis 1:1 with the words:

In the beginning, God created the heavens and the earth.

"*The heavens and the earth*" is an established biblical phrase for the entire material universe.

"**Heavens**" stands in the plural: there are different "*heavens*" in the bible:

- 1. the *heaven of the air* (the expanse⁴⁰ or atmosphere, where the birds fly, between the ocean and the clouds, out of which it rains);
- 2. the *heaven of the stars* (the universe outside of the atmosphere, in which the stars are);
- 3. the *heaven of God's presence* (the invisible world, in which God is, which also permeates the entire visible world⁴¹).

The "heavens" in (1:1) comprise the heaven of the air and the heaven of the stars, but not the uncreated heaven of God's presence.

"**Earth**" (Hebrew *'eret*) designates not only the planet Earth, but is also used for the mainland, a given land or smaller region, the ground, or humanity.⁴²

The creation report is divided into "**days**", and at the first occurrence of the word (1:5), God says what he defines as a "day" and therefore has planned in this way:⁴³ on the one hand, "light" (1:5a), on the other hand, all that has happened so far (1:5b, "first day"⁴⁴):

God called the light Day, and the darkness he called Night. And there was evening and there was morning, the first day.

"Day" doesn't necessarily designate the same period on each occurrence; in the creation report, it is:

- 1. the *light part* of the day (1:5a; 1:14a,16,18);

- 2. a day of 24 hours (1:14b);
- 3. a period of undefined length (1:5b; 2:4).

To supposition that the counting of the seven days of the creation story requires taking them as 24-hour days is not compelling. Certainly God said in the Ten Commandments (Exodus 20:10-11):

¹⁰ ... the seventh day is a Sabbath to the LORD... ¹¹ For in six days the LORD made heaven and earth...

Did men and saurians live together?



R. Koser-Michaëls, in: *Märchen der Brüder Grimm* (T.Knaur Nachf., Berlin, 1937), 59

But God's creation "week" is the model, the human work week the reflection, so it doesn't automatically make 24-hour days of the creation "days". God's time units need not be identical with the human ones. There also was "a Sabbath of... rest for the land", a "Sabbath" which comprised a year, not a single day; like the 24-hour sabbath, the sabbath year was "made for man, not man for the Sabbath".⁴⁵

The creation account contains many other indications of long creation "days", e.g. in the third "day": With a surfacing of the *mainland* (1:9) within 24 hours, the gigantic mass movements wouldn't just have produced a tsunami, but would have melted the earth's crust and vaporized all oceans.⁴⁶ And in the same third "day", the mainland, on God's order, sprouted its entire vegetation (1:11),⁴⁷ including fruit trees which require years of growth before producing fruit.

A "**beginning**" is often understood to be a point in time. But in Hebrew, it designates a period of an undefined length.⁴⁸ In this period of time (in 1:1 literally "*In* the beginning"), God created the universe including stars, sun, earth, moon. In order to produce a stable earthly environment, this process must necessarily have taken billions of years.⁴⁹ Immediately following (1:2), the earth already had a "deep", a sea of water: the earth had already cooled down sufficiently. God gave the natural laws; he did not suspend them while he created.

6. The light and its development

With respect to the light, many see problems in the creation report because they believe God created the sun on the fourth "day". But God said what he defined as "**light**" (Hebrew *'or*, Genesis 1:3-5):

³ And God said, "Let there be light," and there was light... ⁵ God called the light Day, and the darkness he called Night...

The light *came to be* — in a natural process of unspecified length.⁵⁰ Now, for the first time, sufficient light intensity got through the previously impermeable layer of dust and vapor down to the ocean. The source of light, of course, was the sun which existed already.

The plants of the third "day" needed sun light, but not necessarily any direct sunshine: they could grow below a covered sky. During a very long time period, they produced sufficient oxygen to provide for the needs of the higher animals, in particular.

The opinion that Genesis claims that sun, moon, and stars came into being on the fourth "day" is a widely held misunderstanding. On the fourth "day", not "to create" (*bara'*) is used, but "to make" (*^asah*), i.e. further "to develop" some pre-existing entity. Sun and moon are called "**lights**" (Hebrew *ma'orim*, singular *ma'or*, meaning "luminary, lamp, source of light"). The light of the first "day" (1:3-5) and the daylight of the day-night cycle (1:18), however, is called "**light**" (Hebrew *'or*, a different word).

God didn't "set" these light sources into some solid dome,⁵¹ but "*gave*"⁵² them "*in[to]* the expanse" (*raqi^a*) of the atmosphere (1:17). Here, nothing happened to the luminaries themselves, but to the earth's atmosphere, which now allowed the incoming light rays to penetrate all the way down to the earth's surface. The purpose of this change is given explicitly (1:14-18): as these lights could now be seen from a standpoint on the earth's surface, they served as a means for temporal and geographical orientation, namely for higher animals and humans appearing in the fifth and sixth "days".

Thus, the illumination of the earth's surface proceeded in the following steps (where *raqi'a* is written for the "expanse" of the atmosphere):

- 1. first, it was completely dark, due to a hot atmosphere saturated with vapor and dust (Genesis 1:2);
- 2. further cooling of the earth reduced the density of the cloud cover by rain and dust being washed out, increasing the light until a day and a night side of the earth could be distinguished (1:3-5);
- 3. when the temperature fell below the dew point, the water above the *raqi'a*, i.e. the cloud cover, began to separate from the water below, i.e. the ocean (1:6-8), and plants could develop fully, producing oxygen (1:11-12);
- 4. a massively increased oxygen content produced a change in the *raqi'a* (1:14-17).

7. Water, air, and land animals after their kind

In the fifth "day", the second case of an explicit "creating" (*bara*) is found, and the oceans were filled with a swarming of large and small animals (Genesis 1:21):

So God created the great sea creatures and every living creature that moves, with which the waters swarm...

As the first of the water animals created by God, ostentatiously dangerous "great sea creatures" are named: the Hebrew *tanninim* is usually translated "serpents, dragons, sea monsters", occasionally "whales". Virtually all rapidly moving water animals, especially the large ones, depend on eating animal prey, as only food rich in protein can provide them with sufficient energy. Thus, biological death existed with these first higher animals already.⁵³

Fast movement in water or air⁵⁴ requires sensory organs to monitor the environment, organs for movement, and nerve tracts with a central nervous system to coordinate movements with sensory perceptions, as well as a blood⁵⁵ circulation for rapid delivery of oxygen to all these organs. This entire system continued to develop, during the further course of evolution, into more and more complex sense and psychological ("soulish") functions. The text continues (1:22):



Sharks cannot be vegetarian

J.Y.Cousteau, P.Cousteau, *Haie*
(T.Knaur Nachf., München, 1971), 88

And God blessed them, saying, "Be fruitful and multiply and fill the waters in the seas..."

God "blessed them, saying...": blessing and talking to creatures are indications of their possessing functions the bible calls "soul". These animals are called "living creatures", literally "**living souls**".⁵⁶ God "created" them (*bara*): although in their bodily dimension they were the evolved descendents of earlier animals, their *soulish dimension* was a novel reality created by God.

God created the animals "**according to their kinds**" (Genesis 1:21): some erroneously deduce from this that every "kind" (not necessarily in the modern sense of species) originated by means of a special creative act by God, independently of any other "kind". But on the contrary, the concept of "kind" itself (Hebrew *min*) has the primary meaning of "splitting off", "separation", "descent". It emphasizes the *derivation from a common origin* and a *permanent separation from it*.

In modern Hebrew, *min* designates sectarians and is used for Jewish christians, who are of Jewish origin but, by their christian conversion, deviated from the traditions of the Jewish majority and cannot therefore be received back into their original community again. In an analogous way, a new biological species originates by splitting off from an existing species as soon as the individuals of this new population cannot any more produce fertile descendants with the individuals of the original species because they changed too much (through evolution).

The context, as well, points to *reproduction*,⁵⁷ thus descent: God told these animals to reproduce and fill the oceans. The same designation, "according to their kinds", is used for plants (1:11-12) and for terrestrial animals (1:24-25), which were "brought forth" by the earth itself (1:12 and 24). In the case of

the terrestrial animals, the text adds, "²⁴ ...And it was so. ²⁵ And God made the beasts of the earth according to their kinds..." (1:24-25). "It was so": within the course of the fifth and sixth "days" they filled the earth, hardly within 24 hours each.

The most meaningful interpretation of the expression "according to their kinds", bringing all aspects together, is *descent from common ancestors by evolution*, a process in which God created (1:21), developed ("made" in 1:25), and let the natural mechanisms (loaded with chance variations) occur, which he himself had brought into being in the first place.

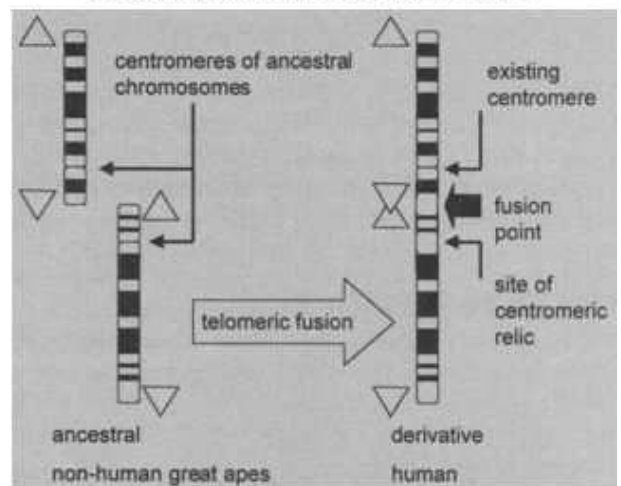
The **flying animals** are usually identified with birds (Genesis 1:20-21):

²⁰ ...and let birds fly above the earth across the expanse of the heavens." ²¹ So God created ...every winged bird according to its kind...

But the word translated as "birds" literally means "flyer": it is derived from the verb "to fly"⁵⁸ and designates any flying animal, including, e.g., bats and insects.⁵⁹ Although birds appeared later than terrestrial animals, there were flying insects very early, probably even before the first amphibians crept onto the land.

Just as earlier the mainland produced plants when it was sufficiently prepared for it, it later produced **terrestrial animals**. The land itself is designated as the causal element which gave rise to their being "*brought forth*".⁶⁰ These new "living souls" must have come out of the oceans, which immediately previously were described as "*swarming*" with "*living souls*" (1:21). No new dimension was created. As a tree of descent suggests,⁶¹ the terrestrial animals descended from aquatic ones coming out onto the dry land. They inherited not only their corporeal functions but their soulish, psychological ones, as well. So they didn't need a new blessing in order to fill the earth. God then "made" (Hebrew *^asah*) these animals, i.e. he "developed" them (1:25), adapting them to their new environment.

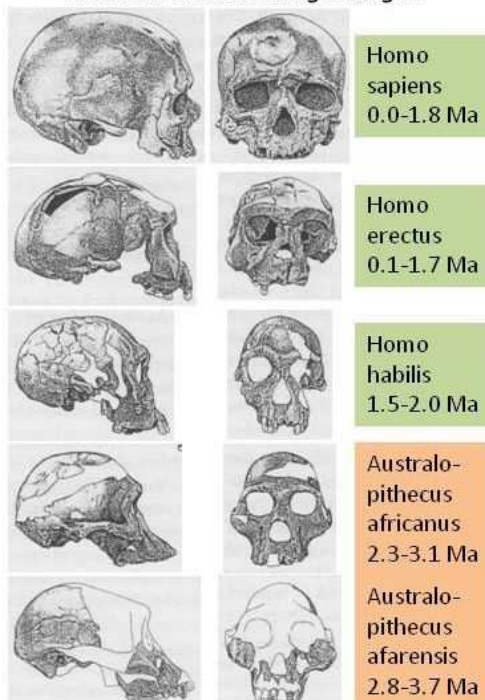
Origin of human chromosome 2



G. Finlay, *Homo divinus: The Ape that Bears God's Image*, Science & Christian Belief 15 (2003), 17

8. Humanity

Hominid skulls and age ranges



I. Tattersall, *The Fossil Trail* (Oxford Univ. Press, 1995), Australopithecus skull sideviews mirror-inverted

The **genesis of humanity** occurred in two steps. God declared he was going to "make" (prepare) humans,⁶² and then he "created" them (Genesis 1:26-27).⁶³

²⁶ ... "Let us make [*^asah*] man in our image, after our likeness..." ²⁷ So God created [*bara*] man in his own image, in the image of God he created him;...

Apparently, God first prepared humanity by means of an evolutionary process (tree of descent, 2:4) from ancestors (1:26): a **pre-existing creature required a further preparation** (*^asah*), in order to become what God destined man to be. In principle, the human body is built like an animal one, and the sentient (psychological) aspects are a refinement of the "soulish" functions given other "*living souls*" already (the animals, 1:24). Ecclesiastes calls "the children of man... but beasts",⁶⁴ like the "livestock" of Genesis 1:24.

But then God **created** man "**in his own image**", when pre-existing hominids⁶⁵ were given the *spiritual dimension*. As this dimension belongs to the invisible world, it could not be derived from the visible one only. Humans are characterized by aspects of both worlds, just as every child is both a psycho-somatic ("soul-body") organism, and an individual spiritual creation by God. The "*image of God*" implies the ability to enter into a *per-*

sonal faith relationship with God and then, as a vice-regent, to represent God before the creation. This presupposes humans to be **persons**, and this implies language, free will, responsibility, abstract thinking, logic, creativity, conscious planning, designing⁶⁶ of tools, dominating and protecting the earthly creation.

With this third explicit act of creation, there again was a new divine blessing, combined with the assignment to fill the earth (Genesis 1:28-31):

²⁸ And God blessed them. And God said to them, "Be fruitful and multiply and fill the earth..." ³⁰
 ...And it was so. ³¹ ...the sixth day.

Filling the earth did indeed occur: *it was so* — namely within the same sixth "day", which must have contained a long human history. In accord with this blessing and assignment to reproduce, this act of creation is additionally characterized by a special sanctification of sexuality given humans in the initial creation order (1:27):

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

It says: "**male and female** he created them".⁶⁷ One would be mistaken to think this refers to Adam and Eve, as "he created him" collectively designates humanity. Saying "male and female", God also emphasized that he blessed these people such that they would fill the earth. At the same time, the close **personal love relationship** between a man and his wife is **sanctified** to serve as a metaphor for the relationship between God and his people and between Christ and his Church.⁶⁸

Cave paintings 40.000 years ago - horses (Lascaux)



<http://en.wikipedia.org/wiki/Lascaux>

9. The sabbath — the creation report as a family tree

After the end of the sixth "day", the seventh "day" is described (Genesis 2:2-3):

² And on the seventh day God finished his work that he had done, and he rested on the seventh day from all his work that he had done. ³ So God blessed the seventh day and made it holy, because on it God rested from all his work that he had done in creation.

A more literal rendition would be:

- 1. "in the seventh day" instead of "on the seventh day" (God's work continued in the seventh day);
- 2. "his mission" or "his assignment" instead of "his work" (God sent his Word, his Son, and commissioned him to create the universe⁶⁹);
- 3. "he ceased" instead of "he rested" (Hebrew *shabat* not only means Sabbath and resting, but here rather ceasing⁷⁰ from his "mission" of preparing a habitable earth).

Colophon ["toledot"]
of a cuneiform tablet



P.J. Wiseman, *New Discoveries in Babylonia about Genesis* (Marshall, London, 1936)

God doesn't get tired⁷¹ and has no need to rest after work: here, as well, the conclusion from the human work week to the divine creation "week" fails.

The entire creation report of Genesis 1:1-2:3 is then summarized as follows (Genesis 2:4):

These are the generations of the heavens and the earth when they were created...

"Generations" stands for the Hebrew noun *toledot*, which is derived from the verb *holid* ("to generate, to beget"). In the bible, **Toledot** is a "technical term" for lines of descent and family trees. Literally, it means "procreations"; it could also be translated "genealogy, lines of descent, posterity" — but also "table of nations", or "history of origin, family tree, phylogenetic tree", as in biological evolution.

These biblical family trees may be branched or linear; they name either individuals or peoples. They focus on what is essential from God's point of

view; often they omit some or many generations or even entire lines of descent. Similarly, it is to be expected that biological phylogenetic trees contain gaps and missing lines, but here it is a consequence of incompleteness or uncertainty of the discoveries to date. In all other places,⁷² the Hebrew *toledot* ("generations") designates lines of descent, family trees, or tables of nations, so it stands to reason that the *creation report* (1:1-2:4), as well, can be understood in the sense of a *family tree*.⁷³

10. Adam not the first human being

The conclusion of the creation report reads (Genesis 2:4):

These are the generations of the heavens and the earth when they were created, in the day that the LORD God made the earth and the heavens.

Translated as literally as feasible, this would be:

These are the generations
 —^{4a} of the heavens
 —^{3a} and the earth
 —^{2a} in their being created
 —¹ in the day
 —^{2b} of developing Yahweh God
 —^{3b} earth
 —^{4b} and heavens.

אלה תולדות		These are the generations
השמים	4	of the heavens
והארץ	3	and the earth
בהבראם	2	in their being created
ביום	1	in the day
עשות יהוה אלהים	2	of preparing God Yahweh
ארץ	3	earth
ושמים:	4	and heavens

The dashes with the superscripts mark the calculated symmetry of the sentence construction, which argues against a division of the sentence in its middle.

The center of the construction

— 1. "in the day"

is enclosed by three brackets, one inside the other:

— 2. "in their being created... of developing Yahweh God";

— 3. "and the earth... earth";

— 4. "of the heavens... and heavens".

This shows that 2:4b-25 is not a "second creation story", but constitutes, together with 1:1-2:4a, a *continued narration*.⁷⁴ These two sections (1:1-2:4a — 2:4b-25) contain different

...contents (generation of heaven and earth — call of Adam),

...ways of expression ('*Elohim* — *Yahweh 'Elohim*,⁷⁵ etc.),

...spaces (universe and earth — southern Mesopotamia),

...climates (all from desert to rain forests and from oceans to mountain ranges — a lowland without rain, irrigated by rivers and canals) and

...time periods (13.7 billion to a few thousand years ago — a few thousand years ago).

For a long time, the traditional interpretation of the creation report was taking Adam as the first human being. Before the development of the modern dating methods since about 250 years, this was usually thought to be obvious. But today, the biblical text must be investigated more carefully in this realm, if one doesn't want to have a warfare of faith against science.

The Hebrew word '*adam* means "*human being*" or "*humanity*", and God gave the man he specially elected a few thousand years ago the proper name "*Adam*". How the Hebrew term '*adam* is to be interpreted has therefore to be found out with the help of the actual context. Apart from the immediate context, the Greek Old Testament translation of the second century BC,⁷⁶ as well as quotations of Old Testament texts in the New Testament are helpful.⁷⁷ In Greek, the name "Adam" is clearly distinguished from the general designation "human" (*ánthrôpos*).

Such an investigation shows that in Genesis 1:26-27, *man in general* (i.e. humanity) is meant, while 2:7-4:1, and 4:25-5:1a, and 5:3-5 deal with *the specific individual by the name of Adam called by God*.⁷⁸ The New Testament authors may perhaps have believed that Adam was the first human being, but God prevented them from formulating it this way, even where they were writing of Adam and of the first

humans in the same context. Paul mentions Adam several times. At least in some cases, he quoted Adam's history or hinted at it. But actually he was just referring to the accepted Old Testament text, in order to apply a theological argument. Where Paul was talking of the contrast between Adam and Christ, he took both as representatives⁷⁹ of humanity — Adam as the typical representative of all humans in the fallen state, and Christ as the normative representative of humanity in the state of full sanctification to God.⁸⁰ Similarly, when using the name "Adam", Luke, and Jude simply referred to the Old Testament texts, without implying anything about whether or not Adam was the first human being.

Jesus quoted the creation of humans as "male and female" (Genesis 1:27) and becoming "one flesh" (Genesis 2:24, Adam and Eve) in the same context (Matthew 19:4-9). Here, he discussed divorce, therefore joining the two references relevant for an original indissolubility of marriage. But he didn't say anything about whether the two texts were talking about the same event, nor did he name Adam.

Romans 5:12-21 has been misused to support the false dogma of the inheritability of sin.⁸¹ But for Paul, neither any biological inheritance of sin and death⁸² nor any time sequence was in view, but the contrast between two human collectives in the context of the eternal security of the believers in Jesus. "...[D]eath spread to all men because all sinned" (Romans 5:12), not because they all would descend from Adam.⁸³

In conclusion, it can be said that a **biological evolution of humanity** (as far as body and soul are concerned) is compatible with a later **historical Adam**. The creation of humanity in God's image can then be placed into the time period most plausibly indicated by archeology, fossils, and genetics.⁸⁴ But on the basis of Genesis 2-5, *Adam and Eve* lived only a few thousand years ago in the land of Sumer in southern Mesopotamia.⁸⁵

Creation and evolution are therefore **two aspects of the same events**: evolution of the universe and evolution of living organisms largely occurred by natural processes, which natural science can investigate — and should do so according to God's will, cp. Genesis 1:26-28; 2:19-20. But the Creator stands behind *all* natural processes, including randomness, guiding everything according to his will and through his own natural laws.⁸⁶

¹ I thank Hans Zahnd for valuable discussions of bible texts.

² Unless indicated otherwise, the English Standard Version (ESV, 2007) is quoted. The word "LORD" written in all capitals in certain versions always stands for God's specific name Yahweh (Hebrew *JHWH*).

³ The earth, in the sense of our own planet, is a name and should actually be capitalized.

⁴ 13.7 billion years for the age of the universe, 4.56 billion for that of the Solar system.

⁵ This warfare thesis was invented by J.W.Draper, *History of the Conflict between Religion and Science* (London: H.S.King, 1875) and A.D.White, *A History of the Warfare of Science with Theology in Christendom* (London: Macmillan, 1896). Unfortunately, it remains unexplainably influential to this day, even though it has been refuted long ago, e.g. by J.Orr, *Science and Christian Faith*, in *The Fundamentals* 4, 95 (1915).

⁶ Anthropomorphic (Greek *ánthrōpos*, human, and *morphê*, form, shape, outward appearance): described in the way it appears from an everyday human point of view, such as when we say today, "the sun sets". The Greek letter *eta* is here written as *ê*, *epsilon* as *e*, *omega* as *ô*, *omikron* as *o*.

⁷ The "Law" here includes the entire Old Testament.

⁸ P.Rüst, *A Textbook Critical of Evolution* (2007), www.aneste.ch/files/JunkSche1.e.pdf.

⁹ Cp. e.g. A.Held, P.Rüst, *Genesis Reconsidered* (1999), *Perspectives on Science and Christian Faith (PSCF)* 51/4, 231, www.aneste.ch/files/GenReco.pdf; P.Rüst, *Early Humans, Adam, and Inspiration* (2007), *PSCF* 59/3, 182, www.aneste.ch/files/EarlyHumAd.pdf.

¹⁰ P.Rüst, *Accommodationism's Illusion of Solving Biblical Problems* (2004), *PSCF* 56/3, 235, www.aneste.ch/files/Accommod.pdf.

¹¹ P.Rüst, *Dimensions of the Human Being and of Divine Action* (2005), *PSCF* 57/3, 191, www.aneste.ch/files/DimHumBe.pdf; P.Rüst, *Phenomenological Language in Ancient Revealed Narrative* (2006), *PSCF* 58/2, 164, www.aneste.ch/files/Phenomenol.pdf.

¹² In verses 14-15, Jesus is quoting Isaiah 6:9-10.

¹³ Literally "seat in life", which approximately stands for applicability in practical reality.

¹⁴ G.J.Wenham, *The Pentateuch*, in: D.A.Carson et al.(eds), *New Bible Commentary* (Leicester, England: UCCF, 2004); P.Rüst, *The Pentateuch dissected and revised* (25 Nov 2002), listserve of the American Scientific Affiliation, www.aneste.ch/files/PentatDissect.pdf.

¹⁵ For a detailed interpretation see, e.g.: P.Rüst, *Immanuel, Gott with us* (2007), a Christmas message about Isaiah's Immanuel prophecy, www.aneste.ch/files/Immanuel-e.pdf.

¹⁶ For "virgin", Isaiah 7:14 uses the Hebrew *ʾalmah*, which generally designates a "young woman", but also, in particular, a virgin. But Matthew 1:23 uses the Greek *parthénos*, which can only designate a virgin (the Septuagint, the Greek translation of the Old Testament from the second century B.C., as well, has *parthénos* in Isaiah 7:14).

- ¹⁷ In science, it is an established practice to reduce uncertainties by means of repeating experiments or observations, yielding redundant information.
- ¹⁸ The roof-shaped sign ^ stands for the Hebrew letter ^ayin, a guttural sound resembling ng.
- ¹⁹ E.g. the ESV, the NIV, and the New Scofield Reference Bible (1967).
- ²⁰ New King James Version (NKJ, 1982).
- ²¹ Some Hebrew words related to *raqia*^ are: *raq*: (1) thin, light, (2) a little, only; *raqiq*: flat bread; *riqqu*^im: hammered flat (cp. Numbers 16:38). Assyrian words: *rakaku*: make thin; *rukku*: sheet, leaf. Arabian words: *raqqa*: to be thin; *marquqa*: flat peasant bread; *rakaáh*: to spread out a dye; *rukáh*: extension of a surface. A Syrian word: *riqo*^: to make thin. A *raqia*^ may be a thin layer of gold covering an idol (Isaiah 40:19), but also a vegetation covering the land (Isaiah 42:5).
- ²² Genesis 1:20: "...let birds fly above the earth across the expanse of the heavens." The Hebrew ^al-*pni*, here translated "across", is literally "on the face" (^al often means "in front of", *panim* usually "face"), "in front of", "across", "on", or "in", but *not* "under". In any case, it doesn't require *raqia*^ to be a solid firmament, *under* which the birds fly. The sunlit atmosphere looks to us like a blue backdrop, "across" which we see birds flying. Cf. A.Held, P.Rüst, *Taking Genesis as Inspired* (2000), *PSCF* 52/3, 212, www.aneste.ch/files/GenInspired.pdf.
- ²³ Specifically, its lowest layer, the troposphere, in which the weather is produced.
- ²⁴ Ecclesiastes 1:7 and 11:3.
- ²⁵ Anachronistic, anachronism: a statement that doesn't fit the time under consideration.
- ²⁶ New International Version (1984, US).
- ²⁷ Genesis 1:8.
- ²⁸ Ezekiel 1:1 and 8:1.
- ²⁹ Isaiah 66:1.
- ³⁰ John 6:46; 5:37; cf. 1:18.
- ³¹ Revelation 4:2-3.
- ³² Exodus 39:3.
- ³³ Ezekiel 6:11.
- ³⁴ Job 37:18.
- ³⁵ Further arguments in support of a solid celestial dome are derived from the myths of pagan neighbor nations of ancient Israel, which the authors of biblical texts supposedly adopted as "general knowledge". Yet such myths must certainly be of secondary importance in the interpretation of biblical texts, as compared with the *biblical* context itself. Such mythologization is found, e.g., in P.S.Seely, *The Firmament and the Water Above* (1991), *Westminster Theological Journal* 53, 227.
- ³⁶ The apostrophe stands for the Hebrew letter 'alef, a virtually soundless guttural.
- ³⁷ Biological evolution both in the sense of species evolution and of individual development.
- ³⁸ Isaiah 43:6-7: "⁶ I will say to the north, Give up, and to the south, Do not withhold; bring my sons from afar and my daughters from the end of the earth, ⁷ everyone who is called by my name, whom I *created* for my glory, whom I *formed* and *made*."
- ³⁹ A.Held, P.Rüst, *Genesis Reconsidered* (1999), *PSCF* 51/4, 231, www.aneste.ch/files/GenReco.pdf; P.Rüst, A.Held, *Der Genesisbericht und die Evolution* (2003), www.aneste.ch/files/GenEvo.pdf.
- ⁴⁰ Expanse: Hebrew *raqi*^a, cp. (A) in section "4. Statements and their interpretations". Heavens of the air: Genesis 1:7 (clouds), 1:20 (birds); heavens of the stars 1:17 (sun, moon, and stars).
- ⁴¹ Cp. Isaiah 66:1.
- ⁴² This fact also represents one pillar of the biblical basis for a local interpretation of Noah's flood, cp. C.A.Hill, *A Time and a Place for Noah* (2001), *PSCF* 53/1, 24; C.A.Hill, *The Noachian Flood: Universal or Local?* (2002), *PSCF* 54/3, 170; C.A.Hill, *Qualitative Hydrology of Noah's Flood* (2006), *PSCF* 58/2, 120; A.E.Hill, *Quantitative Hydrology of Noah's Flood* (2006), *PSCF* 58/2, 130. Notwithstanding YEC opinion, the second letter of Peter doesn't demand a worldwide flood, either: P.Rüst (2008), *Noah's Flood and 2 Peter - Young Earth Creationism Violates the Biblical Context*, www.aneste.ch/files/Noah'sFlood+2Peter.pdf.
- ⁴³ "Naming" characterizes authority, power to define the object named and to have it at one's disposal (cp. 2:19).
- ⁴⁴ Literally *Yom 'eghad* (where "gh" stands for the Hebrew letter *ghet*, which sounds like "ch" in the German "ach") means "one day", not "the first day".
- ⁴⁵ Leviticus 25:4; Mark 2:27; 2 Peter 3:8.
- ⁴⁶ The same thing would happen in a world-wide flood piling up mountains containing fossils. Masses of rock simultaneously slipping past each-other worldwide would, by friction in the earth's crust (and mantle), melt the rocks and vaporize the oceans.
- ⁴⁷ By means of a long previous geological, chemical, and biological evolution, the mainland had been gifted by God with the required properties to do so.
- ⁴⁸ An undefined length of time, in fact, an eternity, is given for the beginning of John's gospel, which unmistakably comes back to the beginning of the creation account: "¹ In the beginning was the Word, and the Word was with God, and the Word was God. ² He was in the beginning with God. ³ All things were made through him, and without him was not any thing made that was made" (John 1:1-3). The beginning of 1 John 1:1, on the other hand, is formulated differently: not "In the beginning...", but "...from the beginning..."

- ⁴⁹ P.Rüst, *Das Weltall - auf den Menschen abgestimmt* (2000), VBG-Fachaufsatz 1/00, www.aneste.ch/files/Weltall.pdf; P.Rüst, *Created in Eons* (2007), www.aneste.ch/files/CreatedEons.pdf.
- ⁵⁰ It doesn't say God "created"! Whereas English translations have "let there be" and "there was", the Greek Septuaginta (*genêthêto* and *egéneto*), as well as German translations make it clear that no direct divine activity is indicated.
- ⁵¹ As even some otherwise reliable modern translations erroneously suggest, following the Latin Vulgate.
- ⁵² Hebrew *natan*.
- ⁵³ At least animal death cannot be a consequence of human sin: P.Rüst, *Plants Only for Animals? - A Young Earth Creationist Argument Contradicted by the Bible* (2008), www.aneste.ch/files/PlantsforAnimals.pdf.
- ⁵⁴ For the flying animals see below.
- ⁵⁵ Or hemolymph.
- ⁵⁶ Hebrew *nefesh ghayah*, where the noun *nefesh* means "soul, living being, life, self, person, desire, passion, appetite, emotion", and the adjective *ghayah* "alive, living" (the expression is a female singular, i.e. collective).
- ⁵⁷ "Be fruitful and multiply" (1:22).
- ⁵⁸ The Hebrew verb *ʿoof* means "to fly", the noun *ʿof* derived from it therefore means "flyer"; thus it designates any flying creature.
- ⁵⁹ Leviticus 11:13-23.
- ⁶⁰ The Hebrew verb *yatza'* ("to bring forth") occurs in the causative stem (hiphil) *totze'*, und designating the bringing forth as being caused or brought about (namely, by the land).
- ⁶¹ Genesis 2:4, cp. the meaning of the Hebrew *toledot* (history of origin, generations, family tree) in section 9, "The sabbath – the creation report as a family tree".
- ⁶² The bracketed words in italic font are not in the original, but have been added to elucidate the translation.
- ⁶³ The Hebrew word *'adam* in Genesis 1:26, translated "man", is a collective, meaning "humanity". In 1:27, the Hebrew adds the article, *ha 'adam*, "the man", but this need not point to a specific man, e.g. Adam, for with the meaning "the humanity (mentioned)", the article *ha* would also have to be added, as a backward reference to *'adam* in 1:26. Cp. P.Rüst, *First Man versus Adam in Genesis* (2008), PSCF 60/3, 206, www.aneste.ch/files/FirstManOrAdam.pdf.
- ⁶⁴ Ecclesiastes 3:18-20: "¹⁸ I said in my heart with regard to the children of man that God is testing them that they may see that they themselves are but beasts.¹⁹ ...as one dies, so dies the other. They all have the same breath...²⁰ ...All are from the dust, and to dust all return." At least, the Hebrew *behemah* (livestock) is used, not *ghay* (beasts, all untamed, wild and dangerous animals). Genesis 1:24 names both groups of animals.
- ⁶⁵ The last common ancestor between man and the ape most similar to man, the chimpanzee, lived at least 6 million years ago. All descendants of this last common ancestor on the human side are called hominids. Apart from modern man, all of them died out.
- ⁶⁶ Not just manufacturing tools, but also abstractly dreaming them up and joining components into a complex assembly.
- ⁶⁷ The Hebrew terms *zakar* ("male") and *nqevah* ("female") used in Genesis 1:27 emphasize the sexual relationship, in contrast to the usual designations *'adam* ("human or Adam"), *'ish* ("man, husband"), *'ishah* ("wife"). Similarly, the New Testament has the Greek terms *ársen* ("male") and *thêlys* ("female") for the sexual emphasis, in contrast to the usual designations *ánthrôpos* ("human"), *anêr* ("man, husband"), *gynê* ("woman, wife"). Luther's translation in Genesis 1:27, "...schuf sie einen Mann und ein Weib" is clearly in error.
- ⁶⁸ Ephesians 5:25.
- ⁶⁹ 1 Corinthians 8:6: "...Jesus Christ, through whom are all things..."; John 1:1-3: "¹ In the beginning was the Word [*namely, Christ*]...³ All things were made through him..."
- ⁷⁰ Cp. Joshua 5:12: "And the manna ceased [*shabat*] the day after they ate of the produce of the land. And there was no longer manna for the people of Israel..."
- ⁷¹ When God gave Moses the "tablets of the testimony", he concluded his instructions with another reference to his rest after the creation (Exodus 31:16-17): "¹⁶ Therefore the people of Israel shall keep the Sabbath, observing the Sabbath throughout their generations, as a covenant forever. ¹⁷ It is a sign forever between me and the people of Israel that in six days the LORD made heaven and earth, and on the seventh day he rested and was refreshed". When we read, "he rested and was refreshed", it sounds like he needed some recovery, which would be incomprehensible. The Hebrew *nafash* ("refresh", related to *nefesh*, "soul") makes more sense if taken to indicate God's feelings after having ended what he was doing in the first six "days". He now had finished placing the foundation for the covenant of his love towards his people and was expecting their confirming it by their obedient responding love, which would have filled him with great joy, thus refreshing him. Of course he knew that meanwhile Israel had made the golden calf, but now he was ready to initiate his way of salvation he had in mind from the start. God "does not faint or grow weary" (Isaiah 40:28) by what he does. In a different sense, however, he does get wearied, when he must support his people's sins of externalized religion (Isaiah 43:24).
- ⁷² In addition to Genesis 2:4 (the heavens and the earth): Genesis 5:1 (Adam); 6:9 (Noah); 10:1 and 32 (sons of Noah); 11:10 (Shem); 11:27 (Terah); 25:12 (Ishmael); 25:19 (Isaac); 36:1 and 9 (Esau); 37:2 (Jacob).
- ⁷³ P.J.Wiseman, *New Discoveries in Babylonia about Genesis* (London: Marshall, 1936); V.P.Hamilton, *The Book of Genesis Chapters 1-17* (Grand Rapids MI: Eerdmans, 1990).

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- ⁷⁴ On the basis of the different names used for God, the theological liberalism supposed that these two sections represent two different (and conflicting) creation stories written by different authors.
- ⁷⁵ Hebrew '*Elohim*', "God", and *Yahweh* '*Elohim*', "the LORD God".
- ⁷⁶ The Septuagint.
- ⁷⁷ None of these ancient authors and translators knew anything about modern science, e.g. about the early dates of genuine humans, so that it would certainly be noteworthy if a consistent theory of humans before Adam ("pre-Adamites") harmonizable with the biblical text can be found at all. Furthermore, the idea of pre-Adamites, postulated for various reasons, goes back at least as far as the 1640s, cf. D.N.Livingstone, *Adam's Ancestors* (Baltimore: Johns Hopkins Univ.Press, 2008).
- ⁷⁸ It is true that in Genesis 5:1, the Septuagint translated "*autê ê bíblos genéseôs anthrôpôn ê êméra epo'iêsen o theôs tôn Adam kat' eikóna theou epoiêsen auton*". But ESV has: "This is the book of the generations of **Adam**. When God created **man**, he made him in the likeness of God", like other faithful translations. In 5:2 all have: "named them **Man** when they were created". Genesis 5:1b-2 is a parenthesis, referring back to the creation of humanity in the image of God in Genesis 1:27, rather than talking about Adam. Although the Septuagint is an important translation, it is not decisive for interpreting the Old Testament itself.
- ⁷⁹ Or archetypes.
- ⁸⁰ The same consideration applies to 1 Corinthians 15:45, where Paul quotes from the Septuagint translation of Genesis 2:7. There, the (non-inspired) Septuagint erroneously interprets: "*The first man Adam* became a living being" (which Paul quotes), while the Hebrew just says: "*the man* became a living creature".
- ⁸¹ In German, "*Erbsünde*" ("inherited sin") is used for "original sin".
- ⁸² In Romans 5:12, spiritual, not bodily death is in view. Adam must have known what bodily death is, otherwise he wouldn't have understood God's warning, "...in the day that you eat of it you shall surely die" (Genesis 2:17), and his bodily life continued after his fall.
- ⁸³ Biblical theology postulates that all humans living today are created in God's image, whether or not they descend from Adam. But science, as well, confirms in genetics and archeology that all humans living today constitute a single biological species.
- ⁸⁴ This must have happened somewhere between 150.000 and 40.000 years ago. A more precise dating is very difficult, because it requires a comparison of corporeal and psychological realities (available to scientific scrutiny, the latter at least tentatively), on the one hand, with spiritual reality (beyond any scientific testability), on the other hand.
- ⁸⁵ Cf. D.R.Alexander, *Creation or evolution - do we have to choose?* (Oxford, UK: Monarch Books, 2008).
- ⁸⁶ A detailed description of the possibility of this occurring, including "God's hidden options", can be found in P.Rüst, *Creative Providence in Biology* (2001), PSCF 53/3, 179, www.aneste.ch/files/ProvBiol.pdf; P.Rüst, *God's Sovereignty in Creation - a reply to Howard Van Till* (2002), PSCF 54/3, 215, www.aneste.ch/files/GodSvrCr.pdf.