

Genesis, Creation, and Evolution

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In this talk we're going to answer three questions:

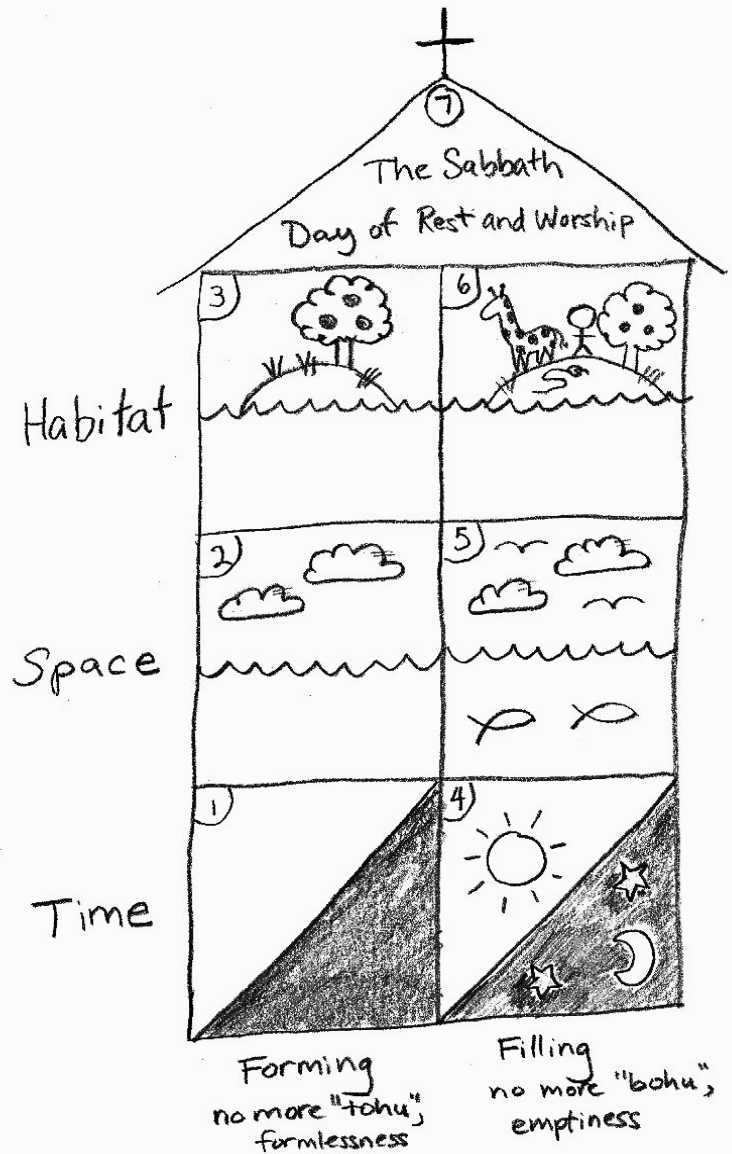
(1) What does the Creation Story really mean?

(2) How much of the Creation Story is figurative, and how much historical?

(3) Has "Evolution" Disproven God?

I. What is the meaning of Genesis 1?

Not primarily Science but Theology:



The key theological points:

(1) God created the world from nothing, in a point of time, in an organized way.

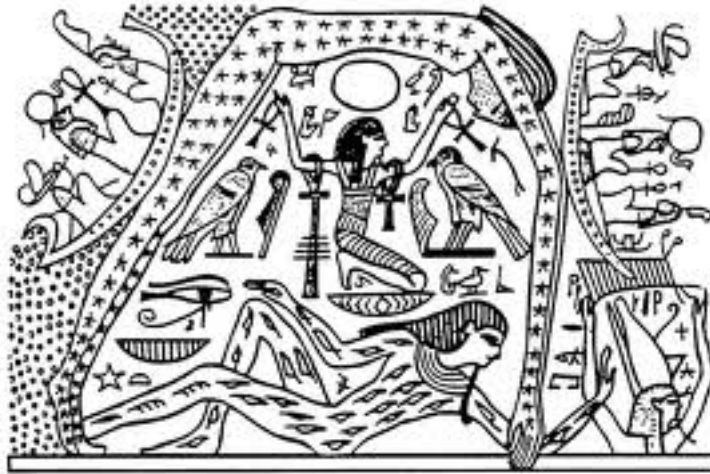
(2) The universe is not divine.

(3) Mankind is at the zenith of the created order, a representative of God and even Son of God

(4) The universe is intended as a place for worship

Compare Egyptian creation stories:

Earth, Sky, Sun, Moon are all gods--> Universe is divine, worthy of worship



This typical Egyptian icon of creation shows the female sky god, *Nut*, arched over the male earth god *Geb*, held up by the god *Shu* (the Egyptian "Atlas"). The sun god *Amon-Re* is portrayed on both sides of *Shu*, sailing up her legs in the east (left), and sailing down her arms in the west (right). The message is clear: every major element of the cosmos is a god, and must be worshiped.

Compare Babylonian creation stories:

World made from dead body of a chaos monster.

Humanity made from dead body of slain god, as slaves to do menial work for gods.

Universe is accidental

Mankind are good-for-nothing slaves of the gods.



This ancient carving shows one of the Babylonian gods (*Marduk*?) attacking the primordial chaos monster (*Tiamat*) at the beginning of time. *Tiamat* is defeated, and the corpse is split to form the universe.

Genesis has a radically different worldview!

II. How much is figurative and how much historical?

- a. God created the universe out of nothing. *Creatio ex nihilo* (CCC §296-298)

Creation out of nothing was considered absurd and ridiculous by most scientists until the work of astronomer Edwin Hubble in the early 20th century gradually led to the “Big Bang” theory—that the whole universe suddenly burst into existence at a point in time. The “Big Bang” was strongly resisted by scientists because of its theological implications—it sounded too much like, “And God said, Let there be light!” Einstein foresaw it early in his career, but doctored his equations in order to avoid it. Later he admitted he had not been fully honest, and he accepted the “Big Bang” view. The embarrassment the Big Bang caused to the scientific community is well-documented by the renowned astronomer Robert Jastrow, (who is himself an agnostic) in the best-seller, God and the Astronomers, available here: <http://amzn.to/y3BonQ>.

- b. Beyond this, even the Fathers debated how literal Genesis was.

Most Church Fathers took Genesis in a straight-forward historical fashion, but St. Augustine viewed creation as an instantaneous event, and Genesis 1 as an accommodation to created intellects. For a compilation of the patristic teaching on creation, see William Dembski et al., The Patristic Understanding of Creation <http://amzn.to/ymNDg1>

- c. The key encyclical : *Humani Generis* by Pius XII (<http://bit.ly/bcOAKB>)

- i. The Body may have evolved: Its evolution can be debated, but it has to be a *balanced* debate

Unfortunately, there tends not to be a balanced debate in our culture. Because scientific materialism is entrenched as almost a religion within academic circles, any presentation of evidence against evolutionary theory provokes a strong negative response. This was documented for popular audiences in the movie Expelled with Ben Stein: <http://amzn.to/wS9g6A>

- ii. The Soul is created: The human *soul* is individually created and infused by God, not evolved.
- iii. An Historical Adam and Eve: One first human pair, not many pairs (no *polygenism*)
- iv. An Historical Original Sin: The first sin is not a myth or parable.

- d. Within these parameters, several possible positions are acceptable (for now):

- i. Literal Creationism (Genesis is literal; modern theories are wrong)

There is a small Catholic creationist organization called The Kolbe Center for the Study of Creation: <http://www.kolbecenter.org/> Among several books that present a Catholic case for a literal reading of Genesis, see Fr. Victor

Warkulwiz, The Doctrines of Genesis 1-11: <http://amzn.to/waOYkF>

ii. Various Accomodationist views: Day-Age theory, Gap theory, etc.

1. One of the most interesting: Israeli physicist Gerald Schroeder.

Gerald Schroeder, a rabbi and an astrophysicist from Israel, has several books arguing for a convergence between Scripture and science. He presents a case for understanding the time frame Genesis 1 in terms of theory of relativity in his book, Genesis and the Big Bang: <http://amzn.to/zo0EYp>

iii. Theistic Evolution (Genesis is figurative; creation happened *via* evolution)

Perhaps the best-known Catholic theistic evolutionist in America is Kenneth Miller, author of Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution: <http://amzn.to/yesvlb>

III. Has "Evolution" Disproven God?

a. First, let's be clear on what is meant by "Evolution"

- i. That the earth is old --> not necessarily a problem
- ii. That every living thing came from a common ancestor--> not necessarily a problem
- iii. That everything (living and non-living) arose by law and chance—without direction from God or any other intelligence --> "Atheistic Evolution"—> this is a problem

Happily, a one-hour lecture by the world-renowned Christian philosopher Dr. Alvin Plantinga is now available free online, in which he discusses the three points above from his own unique perspective: <http://bit.ly/xBvhUs>

b. Atheistic Evolution gets three big F's on it's report card

i. The Fine-Tuning of the Universe

There is a tremendous number of resources documenting the phenomenon known as "fine-tuning", which is closely related to the "anthropic principle," the concept that the universe seems strangely designed just for human beings. This web site does a good job of summarizing the evidence: <http://bit.ly/3wS29w>. This video on the subject is a personal favorite of mine: <http://amzn.to/yeoBNq>. The book Rare Earth by Peter Ward and Donald Brownlee covers much of the same data: <http://amzn.to/wZssrE>

ii. The First Living Thing

Many books have been written detailing the tremendous complexity of even the simplest living organisms. Two reliable ones are by the agnostic Michael Denton (<http://amzn.to/zAYEKA>) and the Catholic scientist Michael Behe (<http://amzn.to/yK1RZs>). The DVD "Unlocking the Mystery of Life" presents the

same information in a very accessible format: <http://amzn.to/xH3vd0>

- iii. The Fossil Record, especially the Cambrian Explosion

Again, the challenge of the Cambrian Explosion for atheistic evolutionary theory has been extensively documented. The video Darwin's Dilemma does a good job of summarizing the evidence: <http://amzn.to/znfDEj>

IV. Does anything in science support the message of Genesis (cosmos as a place of worship)?

- a. Scientists are discovering a convergence of the factors needed for life and the factors needed to observe the universe.
 - i. The atmosphere we need for life happens to be transparent.
 - ii. Our position in the galaxy is optimal for both life and observation
 - iii. The relative sizes and distances of the sun and the moon are necessary for life, but also permit eclipses, which are important for scientific discoveries.
 - iv. There seems a to be a conspiracy (or a providential plan) to make the earth so that we could both (1) be alive and (2) gaze at the universe.

Psa. 8:1 O LORD, our Lord, how majestic is your name in all the earth! You whose glory above the heavens is chanted...

Psa. 8:3 When I look at thy heavens, the work of thy fingers, the moon and the stars which you have established; **4** what is man that you are mindful of him, and the son of man that you care for him?

Psa. 8:9 O LORD, our Lord, how majestic is your name in all the earth!

I am summarizing here work of philosopher Jay Richards and the astrobiologist Guillermo Gonzalez, from their book Privileged Planet (<http://amzn.to/y8Xszy>) also available as a DVD (<http://amzn.to/yeoBNq>). The book Rare Earth by Ward and Brownlee makes some similar points: <http://amzn.to/wZssrE>

Important Quotes:

Pius XII:

“Some imprudently and indiscreetly hold that evolution, which has not been fully proved even in the domain of natural sciences, explains the origin of all things ...” (Pius XII, *Humani Generis* 5)

Benedict XVI:

“In particular, to me it is important, first of all, that *to a great extent the theory of evolution cannot be proved experimentally*, quite simply because we cannot bring 10,000 generations into the laboratory. That means that there are considerable gaps in its experimental verifiability and falsifiability due to the enormous span of time to which the theory has reference.

“A second thing that was important to me was your statement that the probability is not zero, but not one, either. And so the question arises: How high is the probability now? *This is especially important if*

we want to interpret correctly the remark made by Pope John Paul II: 'The theory of evolution is more than a hypothesis.' When the Pope said that, he had his reasons. But at the same time it is true that the theory of evolution is still not a complete, scientifically verified theory."¹

"If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down." Charles Darwin, *Origin of Species*

"Evolution...must be gradual when it is being used to explain the coming into existence of complicated, apparently designed objects, like eyes. For if it is not gradual in these cases, it ceases to have any explanatory power at all. Without gradualness in these cases, we are back to miracle..." Richard Dawkins, *River Out of Eden*

"To grasp the reality of life as it has been revealed by molecular biology, we must magnify a cell a thousand million times until it is twenty kilometers in diameter and resembles a giant airship large enough to cover a great city like London or New York. What we would then see would be an object of unparalleled complexity and adaptive design. On the surface of the cell we would see millions of openings, like the port holes of a vast space ship, opening and closing to allow a continual stream of materials to flow in and out. If we were to enter one of these openings we would find ourselves in a world of supreme technology and bewildering complexity..." Michael Denton, *Evolution: A Theory in Crisis*

"The impossibility of gradual functional transformation is virtually self-evident in the case of proteins...[to make small changes] in isolation would be bound to disrupt all the complex intramolecular bonds throughout the molecule, destabilizing the whole system and rendering it useless...proteins are indeed like sentences, and are only capable of undergoing limited degrees of functional change through a succession of individual amino acid replacements." Michael Denton *Evolution, A Theory in Crisis*

"The simplest bacterium is so damn complicated from the point of view of a chemist that it is almost impossible to imagine how it happened". Scientific American 2/91, "In the Beginning", Harold P. Klein of Santa Clara University, chairman of a National Academy of Sciences committee that recently reviewed origin-of-life research.

"The number of intermediate and transitional links, between all living and extinct species, must have been inconceivably great. But assuredly, if this theory be true, such have lived upon the earth." Charles Darwin, *Origin of Species*

"The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. The evolutionary trees that adorn our textbooks have data only at their tips and nodes of their branches; the rest is inference, however reasonable, not the evidence of fossils." –Stephen Jay Gould, Harvard paleontologist

"No wonder paleontologists have shied away from evolution for so long. It never seems to happen...evolution cannot forever be going on somewhere else." –Niles Eldridge, paleontologist.

¹ Pope Benedict XVI, in *Creation and Evolution: A Conference with Pope Benedict XVI in Castel Gandolfo* (trans. Michael J. Miller; San Francisco: Ignatius, 2007), 162 (emphasis added).