

Communication to a young-Earth creationist

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Abstract

This article is a response to a young-Earth creationist (XX) who differs with my views as to how the Earth was formed as well as how life on Earth was formed. We finally reached a point in our email communications that he wrote a message to me in which he expressed where he stood as a Christian and why he disagreed with my viewpoint and my interpretations. This article is intended to be helpful if you are dealing with Christians who have his same viewpoints. What is said by XX is in fonts that are colored red and black, and my response is in green.

XX:

You have said several times that the Creation account was written so primitive Hebrews could understand it, and now that we know all about science, we know better. Does that claim stand up to the evidence? I am using KJV because it is widely recognized to be the most accurate word for word translation of the best sources we have from the Hebrew to English, and will add my amplification to the text with my best knowledge of science beliefs today.

KJV: Genesis 1:¹ In the beginning God created the heaven and the earth.

In the beginning of time [yes, it says time had a beginning (not God, but the creation), Time is just a chunk out of eternity in which God has existed forever in the past and in the future [At least I think that is what the Bible teaches]. God is eternal, not time.] God created [spoke into being “ex nihilo”, not a quantum flux] the heaven [note it is singular, but in Hebrew it is always/often used that way to refer to space/volume. Basic science supposes, for material substance to exist three things have to coexist: time, space and substance. God formed time, in the “beginning”, God formed space, created the “heavens”.] and the earth. [Because the concept of time and space were simple, next it is going to elaborate on a description of substance.]

² And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.

And the substance was without form [Today we know the only substances without “form” are water, gas, and plasmas. The ancient Greeks thought the most fundamental unit of substance was “atoms”. They would have understood these words to be saying God formed the atoms and they were without form. I now think our understanding would better be represented by a plasma of quarks, leptons, protons, and all of those other 200+ subatomic particles.] and void [It is widely recognized that the “void” being referred to here is void of meaning, all of these subatomic particles were not organized into any meaningful structure, which is why I refer to it as a swirling, gases cloud of a plasma.]

³ And God said, Let there be light: and there was light.

And God said, Let there be light [The presence of light requires structure be applied to the void. I am not sure how the ancient Greeks would have understood this. I have no idea what their concept of light generation was. In my now archaic concept, electrons move from energy level to energy level emitting photons of light with each leap. But, you cannot generate light until the energy levels are organized.] and there was light [So the presence of light recognizes that the atoms were organized from the plasma at this time.].

And then God continues to tell the story how He divided the substance for the earth from the substance He would form the rest of the solar system and galaxies from, how he formed darkness and separated it from the light. And, the rest of His forming task. He used language that could be understood by the ancient Hebrews, Greeks, Australian Aborigines, American Aborigines [my personal identifying ethnic social group], Maasai, Fulani, and Hindus. And, even the scientists of today's world.

We do not need to purport ourselves to be OK (Omn-Knowledge) and worse yet to be okay with being OK. Only God is always being and has all knowledge.

Personally, I know it is the custom in Christian circles to separate one's beliefs about their salvation from their beliefs about the origin of the universe and man, but I cannot understand the dichotomy [believing the Scriptures for one and not the other]. If God is all-powerful and all-knowing enough to win the battle with Death for Himself and us, I trust He has enough grasp on linguistic ability and adequate vocabulary structure to accurately communicate with me on how He originated the earth and man which He claims to love. If I

choose not to believe His origin account, how can I believe His redemption account? Maybe it too was a falsified account to placate the ancient world. That is the only believable account that I can imagine for a person [scientist as you say you are] to support.

What you have written above makes sense to you because like the early people, you have not had any modern advanced astronomy/physics training although you had a beginning chemistry course in high school, but I am not sure whether you had a physics course. Nevertheless, you have done enough reading of science to know the vocabulary, such as plasma of quarks, leptons, protons, and all of those other 200+ subatomic particles.] **as well as the existence of galaxies.**

You also said And God said, Let there be light [The presence of light requires structure be applied to the void **which is also a correct interpretation. You further said** He divided the substance for the earth from the substance He would form the rest of the solar system and galaxies from, how he formed darkness and separated it from the light. And, the rest of His forming task. He used language that could be understood by the ancient Hebrews, Greeks, Australian Aborigines, American Aborigines **[my personal identifying ethnic social group]**.

So, in a sense the Holy Spirit through God's guidance produced a story (a) that inspired Moses to write what would make sense to someone like you who has not had advanced training in physics, chemistry, and astronomy and (b) a story in which it was NOT necessary to give the same evolutionary order of life that is indicated by the fossil record in the geologic column.

The following image shows in the left column the order that is observed in the geologic column and in the right column the biblical order.

Evolutionary Order	Biblical Order
Life in ocean before land plants	Land plants before life in ocean
Simple plants before fruit trees	Fruit trees, the first plants
Land animals before flowering plants	Flowering plants before animals
Small animals first land life	Cattle before creeping things
Dinosaurs evolved into birds	Birds before land animals
Land reptiles evolved into plesiosaurs	Flying animals before land animals
Land reptiles evolved into pterosaurs	Marine animals before land animals
Land mammals evolved into bats	Flying animals before land animals
Land mammals evolved into whales	Whales before land animals
Death of the unfit produced man	Man was the cause of death

What was important in the time of Moses was not to tell the science and the origins of the “heaven” and Earth or the evolutionary order of life that we know today, but to answer a problem of what early people were facing.

That is, the Bible was written mostly by Hebrews, but one Greek (Luke the physician), who lived in a time and culture in which scientific knowledge was not available. At that time these biblical authors had the total freedom to write with inspired words that had meaning to the people of that time without having scientific accuracy. In science, I

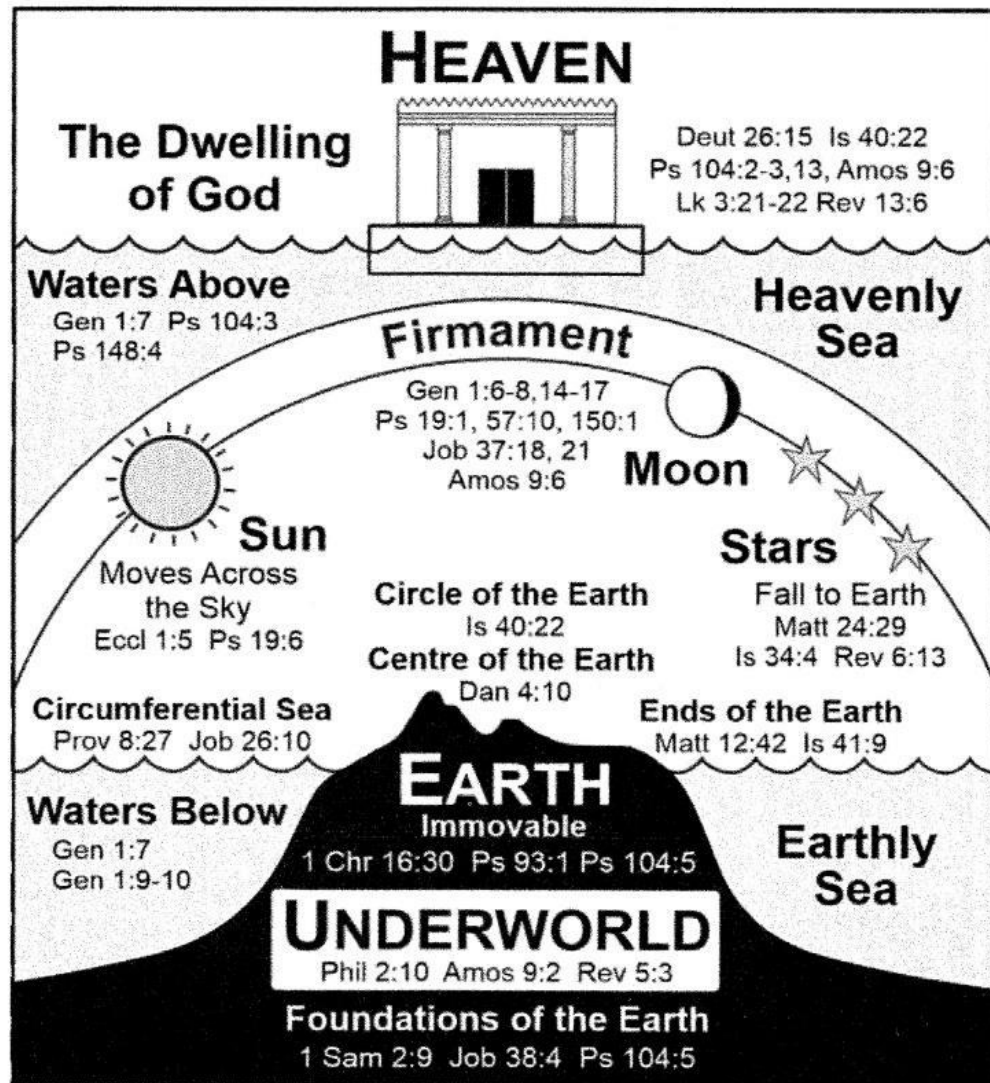
have to write using words that have precise meaning that cannot normally be interpreted with other meanings. Biblical writers needed only to write good theology and to use words to convey what they wanted to express in various forms such as poetry, parables, metaphors, and exaggerations (e.g., taking a log out of someone's eye), whatever, to tell their stories and to make the points that they wanted to make and in ways that made sense at that time in history. They used words and numbers with symbolic or sacred meanings rather than precise scientific or arithmetic meanings as we do today.

I agree with Conrad Hyers, a Presbyterian minister, who says that the issue being faced by the early people was not how the universe, Earth, and life were created but by the beliefs of their neighboring tribes who thought that the gods that they worshiped were BAD and were out to get them. These gods included night, water, sun, moon, stars, plants, and animal gods, and these early people had to make daily sacrifices to idols of these gods if they wanted to survive.

But Moses, the author of Genesis, said: These are not gods. There is only one God and He made all of these objects and they are all GOOD.

In that early time and culture, the science that they believed was in a 3-tier universe as shown in the following image in which this universe is supported by the biblical verses that are cited in the image.

2. Ancient Science (3-Tier Universe)



So, I now come back to your statements:

And God said, Let there be light [The presence of light requires structure be applied to the void ... He divided the substance for the earth from the substance He would form the rest of the solar system and galaxies from, how he formed darkness and separated it from the light. And, the rest of His forming task.

From what I have read about the Big Bang model its beginning began with an enormous explosion that generated light. Light is in the form of energy that scientists say are specific quantities in photons. This light was not visible by humans by means of telescopes because plasma was generated in the first stage of the Big Bang through which light could not penetrate. It was not until the plasma expanded and cooled enough to allow electrons and protons to form from the plasma that eventually united to become hydrogen atoms that space was created through which light photons could penetrate to be seen by the human eye via telescopes. So, darkness was separated from light.

Later in time and farther out in the expansion of the Big Bang, gravitational attraction, through the laws of gravity that God created, hydrogen atoms were concentrated in sufficient masses that they began to fuse to make helium atoms in stars. This fusion process also generated energy that radiated as photons of light so that humans can see this fusion-place as a star. Eventually billions of stars are attracted to each other by gravity and swirl to make galaxies.

Physicists know the atomic structure of atoms and how the nuclei of atoms can contain protons and neutrons with orbiting electrons at different outer shells of energy that are described in an atomic chart with hydrogen having an atomic number 1 and then on up to iron at atomic number 26 for iron, to 92 for uranium, and 102 for nobelium, for example.

The fusion process from hydrogen to helium does not stop when most of the hydrogen fuses. Instead, gravity

forces the helium to fuse in a complex way to make lithium and then goes on to make beryllium, boron, carbon, on up the line to form iron. In each fusion process protons and neutrons are packed into the nucleus of each kind of atom, and energy is released in each step. But when iron is reached the packing is so dense that there is no space to pack any more protons and neutrons in the nucleus. Iron then becomes generally the most stable element that is created and forms the core of our Earth. However, gravitational forces still operate, and the star goes through a red-giant stage and eventually becomes a white dwarf or a neutron star.

But, in some places, if even larger masses of hydrogen occur in space, the star forming process occurs in these places as well to make helium from hydrogen by fusion. In such a place, the rate of fusion accelerates to the point that a supernova explosion occurs with so much energy that protons (and neutrons) are driven into atom nuclei to make elements of greater atomic number than iron (#26) and form heavier elements like gold (#79) and uranium (#92). That supernova explosion scatters hydrogen and all other kinds of newly created atoms into space as “star dust.” Then, the star production process starts all over again. In this new place, by gravity a second-generation star is produced that contains gold and uranium and can also provide the gold and uranium that is found in the solar system of planets with the Earth containing gold and uranium atoms. Thus, scientist know that our sun is a second-generation star and not formed on Day 4 of the Genesis Week. That is, the Bible was not written to be a science textbook. It was written to give us good theology.

You said:

In my now archaic concept, electrons move from energy level to energy level emitting photons of light with each leap. But, you cannot generate light until the energy levels are organized.] and there was light [So the presence of light recognizes that the atoms were organized from the plasma at this time.].

So, you have some of the science concepts right. Light is emitted from atoms when electrons move from lower shells around an atom's nucleus to higher energy shells and then fall back to the lower energy shells to give off light. That falling-back energy is fixed for a particular atom and the distance of the fall for each kind of atom creates kinds of light that have definite wave lengths that can be detected in a telescope by suitable methods. The aurora lights (the northern lights) that are seen in winter time have colors of red and green because of collisions of protons expelled from the sun during sun-spot activity into the North Pole atmosphere, and they collide with nitrogen and oxygen and produce colors characteristic of these two elements.

Also. those definite wave lengths tell us that there are traces of gold and uranium on our sun. Other nearby stars in our Milky Way galaxy that happen to form with lower mass do not have any gold or uranium.

You then said:

We do not need to purport ourselves to be OK (Omni-Knowledge) and worse yet to be okay with being OK. Only God is always being and has all knowledge.

Yes, of course, this is true. God is an awesome Creator and humans are not likely ever to learn how God did all the processes in His creation. But Jesus said the following in Luke 10:27:

Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind; and, Love your neighbor as yourself.

The phrase “with all your mind” is not in the Torah. Jesus added it. On that basis, you and I are commanded to use our minds and gain knowledge and that knowledge can be modern science that is NOT written in the Bible. So, you and I need to read the Bible using wisdom and see what is written there that applies to our culture and time and not to the time in which the early people and Moses lived in.

You then said:

Personally, I know it is the custom in Christian circles to separate one's beliefs about their salvation from their beliefs about the origin of the universe and man, but I cannot understand the dichotomy [believing the Scriptures for one and not the other]. If God is all-powerful and all-knowing enough to win the battle with Death for Himself and us, I trust He has enough grasp on linguistic ability and adequate vocabulary structure to accurately communicate with me on how He originated the earth and man which He claims to love.

Yes, I agree that God has this linguistic ability and adequate vocabulary to communicate with humans, but God in the time in which Moses wrote Genesis, humans were not ready to understand the vocabulary that was needed. Now, you and I have the necessary vocabulary.

You then said:

If I choose not to believe His origin account, how can I believe His redemption account?

You can because the Bible is not a science textbook but teaches us good theology and if you understand that God has given us two books to read – Bible/theology and science/nature and that the Bible answers the questions of why and who and science answers the questions of where, when, and how, there is no conflict between the Bible and science. Both are from God and true, and God is not a liar.

I hope that what I said above helps your understanding. I am sure that you are a fine Christian. You are doing the best you can to follow Jesus as I am trying to do so as a scientist.

Agape,

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