Science and Religion:

A proper perspective through an understanding of Hebrew sources

Adam Penrod

The Age of the Earth, evolution, and the origins of the universe have been viewed, through our knowledge of science, as a direct challenge to the claims of the Hebrew Bible, specifically the Torah. The challenges of science are relatively new. At one time Science, philosophy, and theology worked hand in hand to establish the necessity and reality of a Divine Creator. In our modern world a division between these three disciplines has caused anarchy in the human perspective of our world. These former allies (science, philosophy, and religion) have now become bitter enemies; each one vying for supremacy over the other.

Science's authority is based on fact. It seeks to speak about things we know through observation. The Torah is seen as a mythology because of disagreement between the so-called creation myth with the facts of our origins as taught through scientific study, theory, and facts.

The Beginning of Conflict

The first place where the Torah and scientific knowledge seem to conflict with one another is with the creation account in Bereishit (Genesis). In the first chapter of Bereishit we are told that God created the world (in fact the universe) in seven days. According to science the earth is approximately 4 billion years old and the Universe a little older at 13-14 billion years.

For many years Christian creationists have gone head-to-head with science. Many on both sides of this debate have reasoned: if the universe is 13-14 billion years old and the earth 4 billion years old then clearly the creation account cannot be true. Thus, proponents of the Bible discount science and many scientists discount Bible.

Over the years creationism has lost more and more footing as scientific knowledge has developed. More discoveries have been made and evidence upon evidence has piled higher and higher on the side of science. Although some scientific theories or specific ideas can be challenged on a few points here and there, science has proven itself beyond a reasonable doubt to be a trustworthy source of information concerning our universe.

A new movement called "Intelligent Design" has developed that approaches science in a more conciliatory manner. While at the same time arguing against those theories that they feel are not scientifically verified. Members of this group are open to "Old Earth"

theories and are willing to accept many claims made by science. However there have been important areas where this group has challenged some claims made by scientists.

Intellectual "Do Over"

In many ways "Intelligent Design" is an attempt to "take back" a mistake made by those believers in the Bible who completely discounted scientific claims in favor of a "literal" interpretation of certain biblical passages in the book of Bereishit. Perhaps it is finally becoming apparent that the creation accounts in Bereishit were never meant to be understood as they have been. Once a proper understanding of these verses is accomplished, the rift between science and religion almost magically disappears. This proper understanding is best attained by relying on the ancient understanding of these verses as had by the guardians of the Torah—the Jewish people.

Torah in Its Own Words

The Torah begins - typically this verse has been translated as "In the beginning God created the heavens and the earth. This translation is part of the problem. If we take this translation as correct, we are to believe that God created the heavens and the earth at the beginning of time and the following verses are a chronological ordering of that creation. Here, it would seem, we are already trapped with the creationists—science must be wrong if we are to believe the Bible.

That is why it is fundamentally important that we understand the first chapter of Bereishit correctly. Without a correct understanding of the text, we are forced to defend an untenable proposition—that science is false. Scientists may theorize incorrectly, and facts may be misunderstood, but science as a self-correcting and self-testing discipline cannot be said to be overall, false.

To free ourselves from the self-made prison let us look at the first verse. The Hebrew word (Bereishit) is typically translated as "In the beginningThere are several problems with this translation. According to RashiBereishit is a grammatically unusual choice as a word to begin the Torah with. According to Rashi it is difficult to understand this word in its plain sense—therefore he begins with a Midrashic explanation. Following the Midrashic explanation Rashi offers us what he considers to be the best plain translation of the verse as "In the beginning of God's creating the heavens and the earth," Rashi Understands Bereishit as "In the beginning of…" and not "In the beginning." What's the difference?

Misunderstood Verse

"In the beginning" denotes an absolute beginning—a starting place from which everything else proceeds. "In the beginning of" denotes the beginning of a particular act or thing. Beyond even this difference of translation it is clear that we are dealing with two separate terms. Bereishit is translated as "In the beginning of." Is this merely a choice of how to translate a particular word? The answer is no. If we want to say "In the beginning" we would say (Berishonah) not "Bereishit." Berishonah denotes the very first moment or at the very first.

A curious aspect about the word "Bereishit" is that minus the preposition? (beit), which means "in" or "with," the word reishit never appears in the Tanach without another word following it "Reishit" means "beginning of..." for example "in the beginning of the rule of Jehoyakim," "beginning of his kingdom" "first fruits of your grain (lit. beginning of your grain) and so forth.

Keeping this in mind it is strange that Bereishit is not attached to another word. The pattern is that reishit is not a word that can stand by itself. It requires a word attached to it so that we know what "beginning of…" refers toIn the first verse of Bereishit the word (bara) "he created" (which is a verb-past tense third person singular) follows Bereishit. If we were to translate both words literally, we would have "In the beginning of he created…" Obviously, a word is missing. In the beginning of "what" God created the heavens and the earth? To clarify the difficulty let us look at the entire verse as it would translate literally. Keep in mind that bara "he created" an? Elohim "God" are combined to form "God created" since "he" and God are both third person and it is understood that God is the person who is creating. The verse translates literally as: "In the beginning of….

As strange as it may sound that is the literal translation of the first verse of the Torah. This is why Rashi seeks a non-literal Midrashic explanation of the verse (which we won't go into here). Still, Rashi still wants to give us the best plain meaning of the verse and in order to do that he must ask us to consider the word bara not as "he created" but as "Creating." With this reading the verse can be understood as "In the beginning of God's creating the heavens and the earth." This gives us a way of understanding the verse minus the conflict with science.

One might ask, "Aren't we still dealing with the same situation—isn't this verse still talking about the very first act of creation?" The answer is no. In our first translation "In the beginning God created the heavens and the earth," we are told that in the beginning, presumably of everything (see below), God created the heavens and the earth. With this new translation "In the beginning of God's creating the heavens and the earth," it is clear that we are not dealing with the beginning of everything—merely with the beginning of the (process) creating of the heavens and the earth. Therefore, it is possible that there

were things that were created before this (such as the creation of water) that are not mentioned explicitly in the text.

A similar example of this is, "When Hashem first spoke with Hose according to Rashi: "That is to say, in the beginning of Hashem's speaking with Hoshea." The verse is not meant to indicate the very first time that Hashem spoke with Hoshea, but when he began to speak to him, "And Hashem said to Hoshea go and, take for yourself a wife..."

Rashi's Everything

According to Rashi one might argue that there are places in the Torah where sometimes a word is implied although not explicitly spelled out. Perhaps, Rashi says, someone will interpret Bereishit bara Elohim as "In the beginning of HaKol (everything) God created..." The Hebrew word HaKol, they will say, is implied and should be understood to be naturally a part of the sentence. We see examples in Scripture where a word is missing but the reader understands that it is part of the verse. Rashi offers examples of this: "Because [He] did not shut my [mother's] womb..."and it does not specify who it is that closed the mother's womb. Similar to this, "He carried the riches of Damascus, but it does not say who carried them, and "will one plow with cattle" and it does not specify if a man plows with cattle. Similar to this, "declaring from the beginning the end" and it does not specify that it [means] declaring from the beginning [of a matter] the end [of a matter].

It is Rashi's view that anyone who believes this is the case ought to be astonished at their suggestion. The missing word that those who make this suggestion is HaKol (everything). If this word was to be added and the verse read as "In the beginning of everything God created the heavens and the earth," then how do they explain that water exists before the very first act of creation? In the very next verseit says "And the earth was formless, and void and darkness was upon the face of the deep and the spirit of God hovered upon the face of the water." If we put these two verses together as the missing word people might suggest then Bereishit 1:1-2 would look like this: "In the beginning of everything God created the heavens and the earth. And the earth was formless, and void and darkness was upon the face of the deep and the spirit of God hovered upon the face of the water." What sense is this? Nowhere are we told when the waters are created, and the Heavens are a combination of fire and water. How can the Heavens be created without their constituent elements already existing? Simply put, it is impossible for the Heavens to exist unless water exists first and since it is never specified when water was created it is impossible for us to say that the first Chapter of Bereishit intends to give us a chronological record of creation.

Conclusion

If the Torah is not attempting to give us a chronological order of creation, then is there really tension between science and religion? It does not appear so—at least not on this issue.

The question of science and religion ranges over several major topics. This paper was meant to examine one part—the age of the earth according to Science and Bereishit. If the age of the earth is no longer an issue then we have cleared one hurdle between reuniting Science and Religion as true allies. Other issues that drive a wedge between Science and Religion (really Judaism) [such as chance and evolution] will be presented in the future.

The Hebrew Bible is known amongst the Jewish people and Noachides as the Tanach. These books are the same books that are in the so called "Old Testament" of Christianity. The books are the same although the number of books (in the Christian Bible, for example, the book of Kings is numbered in two parts I and II Kings while in the Jewish understanding it is counted as only one book) and their order are different.

Torah is the first five books of the Tanach. These books are Bereishit (Genesis), Shmot (Exodus), Veyekra (Leviticus), Bamidbar (Numbers), and Devarim (Deuteronomy).

By typically it is meant in Christian translations of the Torah.

Rashi (Rabbi Shelomo Yitzchaki) 1040-1105 C.E. is the name used to refer to the "father" of biblical commentary. Rashi's method was to look for the plain meaning of the text (what it literally meant) and where that was impossible Rashi often resorted to a Midrash (an extra biblical text that may contain history, parabolic teaching or even expanded versions of already existing biblical stories) that makes the text sensible. However, he will also give the "best" simple or plain understanding possible.

Tanach stands for Torah, Nevaim (Prophets) and Chituviim taking the first letters of each word spells TaNaCh.

Reishit is a compound word, meaning it is a word that does not exist independently, but must have another word attached to it.

Jeremiah 26:1

Genesis 10:10

Deuteronomy 18:4

Meaning the beginning of what?

This is simply how Hebrew grammar works.

It might seem strange that Rashi would suggest that we ignore a word in the Torah (especially if we consider the origin of this Torah to be divine) and replace it with another word altogether. The Hebrew words and are the same word only with different vowels. Both words have three letters in common (beit) (reish) and (aleph). The Hebrew word has an additional vowel (vav). The Hebrew letter vav serves two main purposes in Hebrew. It either serves as a conjunction (and, but) or it serves as a vowel (although it can also serve as a consonant). In Hebrew it is possible to have the same vowel whether the vav is present or not. Therefore, both pronunciations (of the same word) are possible. It is possible because vowels in Hebrew are not written. The system of vowelization that we find in Hebrew, which is a series of dots and dashes under the consonants, is a system that was created by the Masorites in the 600-1000 C.E. Without this system of vowelization it would not be possible to read the Torah at all since, as this example demonstrates, an infinite number of pronunciations become possible. Add to this the fact that in an actual Torah scroll Hebrew letters are not separated, the Torah, without the tradition of vowelization, would be completely unintelligible. It is also important that we keep in mind that Rashi is not suggesting that the tradition for this word's pronunciation is incorrect, only that there is an additionally correct pronunciation that is helpful to us in understanding this verse.

Hashem means literally "the name" and is used in place of referring to God's unique name.

Hoshea is the prophet Hosea in most English translations.

Hosea 1:2

Job 3:10

Isaiah 8:4 Amos 6:12 Isaiah 46:10 Bereishit 1:2

Rashi contends that (Hashemayim) "heavens" is a combination of two Hebrew words?? (aish) "fire" and (mayim) "water." Whether "water" is to be taken literally or figuratively and what exactly water (if taken literally) was here is an entirely different discussion.