
Creation Answers

Who writes this newsletter?

This newsletter is produced by Wayne Spencer on a Quarterly basis. Its purpose is to bring creation research within the reach of Christians and provide up-to-date reliable information on creation issues. Wayne Spencer is a creation author and former teacher who has presented papers at the International Conference on Creationism and has published in various creation publications, such as the Creation Research Society Quarterly, Creation magazine, the Journal of Creation, and Origins (from the Biblical Creation Society, UK).

This newsletter is meant to help people plug into creation resources and get informed about creation and evolution. It is provided free of charge on request. Using the free Adobe Acrobat Reader is necessary for viewing the newsletter. There are no restrictions in copying this newsletter or passing it on to others. To request to be placed on the e-mail list, send a request to wspencer@creationanswers.net.

More information on Wayne Spencer's education and publications can be found on the creationanswers.net web site. You'll also find many other resources. <http://creationanswers.net>
Also see the [AnswersBlog](#)

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A Personal Note from Wayne Spencer

Greetings,

In this issue I continue a series on the Big Bang. The Big Bang is a very technical topic but I think it is one of those ideas that you have to stand back and get the bigger picture to realize the issues with it. As Christians we need not be intimidated by modern science. Not because science is a bad thing, but just because in matters of origins it can be misguided. Also, science has its limitations and there are many limitations of Big Bang theory. There is still plenty of room for faith in God's word in a high tech rational world. Science has not disproven the Bible or miracles.

I'd like to encourage readers of this newsletter to email me and let me know what you think about my newsletter and my website. I hope they are encouraging to your faith.

Recently in August I attended the International Conference on Creationism. This time I did not present a paper. I did review a paper for it. It takes more than just the author to publish good research. It takes reviewers also. I am currently working on a new paper on the topic of comets, something I have not published on before.

Wayne Spencer, M.S., Physics

Missing Links of Big Bang Theory

Creationists have long mentioned the problem of “missing links” in fossil evidence supporting evolution. Though many have been proposed, there are still a lack of the transitional forms evolution requires. I see Big Bang Theory as having a similar problem though the details are very different.

In previous articles on the Big Bang, we have looked at assumptions made by scientists about the universe. We addressed the universe coming into existence as a spontaneous event as the Big Bang claims, versus God creating it from nothing. The biggest weaknesses of the Big Bang idea to me are the unprovable assumptions it is built on. But to understand the issues we need to look at the science and get the “big picture” of what science can and cannot explain.

The book, *Dismantling the Big Bang* by Alex Williams and John Hartnett has many great insights into the problems with Big Bang theory. There is a fundamental question to consider before delving into the science of the Big Bang. *What does it mean for science to explain something?* In origins science you deal with one-time events of the past which you cannot go back in time to measure or take pictures of. So the events of the past are an unknown. How then do you explain such an event or events? What science does is to explain the unknown from the past in terms of something known in the present. Because the events of the past are not repeatable, you cannot be as conclusive about past processes as you can about processes occurring today. Today we can do experiments and repeatably confirm what actually happens. But in the science of origins you cannot be as certain. You have to try to show the plausibility or likelihood of a certain event or process in the past. You cannot really prove scientifically that a certain event in the past happened.

Does Big Bang Theory explain the unknown from the past in terms of something known in the present? In many cases the answer is clearly no. It often explains the unknown in terms of another unknown. A number of theories have been proposed to support Big Bang ideas that are totally theoretical and have no observational evidence to support them. Many aspects of the Big Bang are completely outside anything human beings could expect to demonstrate by experiment.

Big Bang theories often ignore one important scientific law that is well known and well understood, in order to propose that something happened in a special way in the origin of the universe. So for example, it is proposed that the universe could come about from a quantum fluctuation in space, in a manner similar to some particle physics experiments where certain particles may come into existence spontaneously. There is some experimental evidence that may support the existence of what are called “virtual particles” in space that come into existence briefly and go back out of existence but interact with photons and electrons. These virtual particles can seem to cause a sort of temporary violation of conservation of energy. But these virtual particles do not explain where the vast amount of energy came from in the Big Bang. Some physicists think that the universe could start somehow out of this seething “quantum foam” of particles in empty space. But quantum effects on a tiny subatomic scale do not apply on a larger scale according to any known physics. One of the main reasons is that these quantum processes and the virtual particles, are extremely short-lived. So how could it provide a vast energy to sustain the formation of the universe? Scientists do not really have an answer to this.

Thus Conservation of Energy is an unsolved problem in Big Bang Theory. The Big Bang really just ignores Conservation of Energy. Conservation of Energy says that

though matter and energy can be interconverted from one form to another, the total amount of matter-energy in the universe is a constant. Applying quantum theory and virtual particles as above is applying quantum physics inappropriately in my opinion. In a particle physics experiment where you are dealing with a limited amount of energy and events on the atomic scale, certain spontaneous events are possible. The Heisenberg Uncertainty principle allows for certain small scale events that would seem to normally be impossible. But for the universe to form, somehow a vast amount of energy must be given to the expansion. The small scale events observed by scientists in particle experiments are the known from today, but the spontaneous origin of matter and energy in the Big Bang is an unknown. So the known from today, the particle physics experiments, are not really a valid analog for explaining the origin of the universe in the beginning. It is only hoped to be a valid analog. That it is a valid analog is something taken by faith by physicists.

Another example is the issue of how did the universe start to expand when it was a singularity? Note that there is significant debate over whether the Big Bang did begin with a singularity. But many scientists would agree that projecting the matter of the universe backward in time to the beginning necessarily implies it would start with a singularity, in Big Bang theory. There *are* singularities we observe in the universe, they are called Black Holes. There is well known theory on Black Holes and there is very good observational evidence for their existence. Black Hole theory does not really presume anything about origins, it comes out of the physics of gravity. Sometimes reality really is strange. But if the universe began as a singularity and it acted like a Black Hole, it couldn't possibly expand. So why would the initial universe expand? Scientists call the initial universe a "naked singularity" because it has to have

properties different from any known phenomena we can observe, in order to expand. So again, they attempt to explain the unknown in terms of another unknown, because there is nothing known like the theory proposes. This is not really a scientific explanation.

Stages in the Big Bang

Below are a list of stages in the Big Bang as listed in Williams and Hartnett's book on the Big Bang.

Stage A - The Primordial Singularity

I have already mentioned the singularity. This is really beyond what science can investigate. It is the starting point of the Big Bang. It is not known how expansion would start, it is just assumed to start.

Stage B - Inflation

This is a period of extreme expansion, to get the universe going. The universe is believed to expand in size by about 10^{26} times, which means 100 million billion billion times (by some estimates). This incredible expansion is believed to have happened in a time from about 10^{-36} second to about 10^{-32} second. This is an extremely tiny moment of time. It's a kind of instant universe. To me it seems like a secular unbeliever's equivalent of a Christian believing God just spoke the universe into existence with a word. However inflation does not complete the universe. Some Big Bang models propose this expansion was made possible by the Higgs Boson (or "God particle"), which was in the news in July of 2012. To see an article I wrote on the God particle [CLICK HERE](#). The inflation process is believed to explain how the universe could be so uniform in density. It also cools the universe down dramatically. The inflation concept is accepted by many cosmologists and physicists today.

The book by Williams and Hartnett says the following about the inflation theory: ***'It appears that the big bang was not big***

enough—another “bang” was needed, which accelerated an unimaginable process into an unimaginably unimaginable process.’

Stage C - From Energy to Matter

After the Inflation period ends the universe is still much too hot for atoms to be stable. But, some nuclei begin to form, including hydrogen, helium, and lithium. These are the three smallest atoms and the first three elements in the periodic table. Protons and Neutrons join together first, then after a few hundred thousand years, the temperatures drop to the point that electrons can remain in atoms without flying apart. Stage C is the process by which energy is converted into atoms.

Stage D - Decoupling and the CMBR

This stage refers to the decoupling of radiation and matter. Before this the light and radiation make the expanding universe look like a sort of fireball. After this stage the “fireball” cools down, the radiation dims out, and the universe becomes transparent. After the radiation has dissipated, what you have is mostly hydrogen gas, and some helium, and traces of lithium expanding. The expansion continues and a faint “glow” is left from the primeval fireball that comes to be known as the Cosmic Microwave Background Radiation, or CMBR. The CMBR is sometimes called the 3 degree radiation because it is like the radiation that would be given off by atoms at a temperature of about 3 degrees above Absolute Zero. There is very clear and unambiguous evidence that the CMBR radiation exists. The CMBR is believed to be evidence for the Big Bang. I would say there may be other explanations so I do not consider it evidence for the Big Bang.

Big Bang scientists tend to take the CMBR as a confirmation of the ideas of Physicist George Gamow from 1961. But Gamow actually proposed something different. He originally proposed the

background radiation would have an effective temperature of 5 Kelvin, then he revised the number to 50 Kelvin. But somehow when it was first measured in 1964 at near 3 Kelvin that was taken as agreeing with Gamow. On the other hand, earlier, in 1926, Sir Arthur Eddington argued that because all of space is essentially bathed in starlight, interstellar space would have an effective temperature of about 3 degrees Kelvin. So the CMBR may agree better with the older concept from Eddington. Eddington’s idea does not explain everything about background radiation in space but the point is the Big Bang is not necessarily the only possible explanation. Other explanations have sometimes been proposed by astronomers.

Stage E - Origin of the Galaxies and Stars

After the Big Bang expansion has led to great diffuse clouds of gas, what happens then? The Big Bang expansion does not really explain how matter becomes organized into large structures. It does not explain how galaxies or stars form. In fact, the uniform idealistic expansion of the universe in the Big Bang is not really conducive to forming anything. Not only are many stars organized into galaxies, but there are clusters of clusters of clusters of galaxies. There are large filament-like structures and great voids, as well as great “walls” of galaxies. There are also large clusters of galaxies moving at unusually high speeds. More could be said about the structure of the universe.

These structures are difficult to explain when the universe is assumed to have had an extremely uniform beginning. Even the simple observation that galaxies and stars are all spinning is a challenge to Big Bang Theory. Uniform expansion would not produce rapid spins or large superclusters. So what organized the matter of the universe? Gravity alone is not sufficient to explain all the structure in the universe. Thus various exotic ideas have been proposed. Once again these are unknowns that cannot be verified. So one

unknown is put forward to explain another unknown.

One famous physicist, James Trefil, said ***“There shouldn’t be galaxies out there at all, and even if there are galaxies, they shouldn’t be grouped together the way they are....”***

If a hot cloud of gas in space cools it will contract, but there is a limit to how much it can contract. Gravity may cause it to pull together to a point, but again there is a limit because as it compresses by gravity, the gas pressure will stop the collapse. Thus it is well known that gas left to itself in space, is “stable against collapse.” This means gravity alone will never form a star from free gas. So, something else must happen to compress the gas strongly so that it would be dense enough to form a planet or a star.

For it to become a star, the gas must be compressed a great deal so that the internal temperature rises to millions of degrees. This can allow nuclear fusion to start, thus forming a star. But what could cause the gas to compress enough to form a star? One possibility proposed is a supernova explosion of another star. A supernova shockwave can be very powerful, so it is thought these shockwaves striking clouds of dust and gas could trigger star formation. Whether this works is not certain because in such clouds you cannot actually observe a star forming, since the cloud hides it.

Stage F - Origin of Planets

The formation of planets is an issue I have spent much time studying. [Click here to go to a list of some of my papers on this topic.](#) In addition to the limits on what gravity can do against gas pressure mentioned above, there are other problems with planet formation theories. They require unrealistic assumptions about the dust disks around stars. The disks tend to dissipate before the planet can form. Today there are many known examples of planets around other stars (called exoplanets). But these

systems are different from our own solar system and they actually show how special our own solar system is. Our system was designed to be a safe and stable “neighborhood” for our planet to reside in. For a planet to support life, not only does the planet have to have just the right properties, but it seems the star has to be essentially matched to the planet. If both the star and the planet do not have the right properties, there could be no life.

Missing Links in Astronomy

I believe there are missing links in astronomy. They are not about fossils, but they are unsolved problems about many different steps in Big Bang theory. Other issues could be thought of as missing links or unsolved problems. Origins theories based on naturalistic assumptions that leave out the possibility of Creator tend to lead to an overestimate of what science can actually explain.

You could say that as a Christian I am trying to explain an unknown also, in thinking about how the universe began. But there is a difference because I have another source of information from the One who was there in the beginning—the Bible. The Bible is not a cosmology textbook, though it has certain implications that are related. As a Christian, I am trying to explain an unknown in terms of something known. What is known is the starting assumptions that we get from Scripture. Then when we do science from that foundation, it can guide science in a more profitable direction. In many ways a prevailing Christian worldview had important influence on the development of modern science. This doesn’t mean Christians cannot make mistakes in science but it can help move science in the right direction.

Review of “Flight” Video

Illustra Media, who has produced some well-known video programs on Intelligent Design, has released a new video on birds. The title is “*Flight: The Genius of Birds.*” This new program is well done and is something I would recommend seeing. This particular program is apparently the first in a new series called “*The Design of Life.*” I think the video would be very suitable for young people middle school aged and up. Young-aged creationists have long addressed bird flight as an evidence of design and a problem for evolution. This video is the first major program from the Intelligent Design Movement on the subject to my knowledge. This is very welcome. Bird flight is certainly a very good topic for addressing design.

The program addresses a number of important issues that make birds exceptional examples of design. Topics addressed include development of a bird embryo in the egg, the musculature of birds for flapping the wings, the general light weight balanced body design of birds, the tiny velcro-like hooks in feathers, the unique capabilities of hummingbirds, the long distance migration of the Arctic Tern, and behavior of starlings in flying in large groups. These are what I would consider the primary topics addressed; other topics are mentioned briefly. The program is 63 minutes long, which is somewhat longer than some other Illustra Media videos. All the topics are explained very well by Paul Nelson and by the scientists taking part. Yet to me it seems this is a topic that almost demands multiple programs on flight because there is so much that could be said about this topic. The program left me wishing there was more on some topics. The parts that stand out to me are the parts on the body design of birds, the hooks in feathers, and the segment on hummingbirds. The segment on hummingbirds is a must-see!

There are certain topics addressed in the program very briefly where much more could be said. One of these is the issue of the evolutionist claim that birds evolved from dinosaurs. There is much that creationists have written about this topic that is not brought up in this program. There are many problems with birds evolving from dinosaurs that are not addressed. For example bird eggs and skeletons may be somewhat like that of some dinosaurs, but the dinosaurs birds allegedly evolved from have the wrong hip structure. Also, the program does not discuss the unique “flow-through” lung design of birds, which is unlike those of dinosaurs. Then there is the issue of feathers evolving from dinosaur scales. Feathers are vastly different from reptilian scales and highly specialized for flight. It is hard to imagine a plausible scenario for feathers evolving from dinosaur scales. A half-evolved feather would not get a bird in the air. The issue of dinosaurs evolving into birds is briefly mentioned and there are some animations describing evolutionary theories about it. But the only point made is basically that design is not considered in these theories. This is a valid point but it really does not do justice to scope and scale of the problems with the concept of birds evolving from dinosaurs.

Another important issue about flight not addressed in the video is that by evolution, flight would have to evolve separately at least four different times. There are four means that flight works in the living world, one by birds, another by the flying reptiles (of the dinosaur era), one by bats, and another by insects. These four groups of flying creatures are so different from each other that there simply is no plausible common ancestor that could fly. Therefore evolutionists have to say that flight evolved four separate times, in four unrelated evolutionary processes. Then you have the problem of how is it likely that such specialized abilities would evolve four different times?

I do not point out these things to say not to see the video. I would recommend this new video to anyone. But I would say there is much more on this topic that people should be aware of. I would recommend for example some of the presentations and books from creationists Dr. David Menton and Dr. Jonathan Sarfati, for example. To obtain a copy of the video, I'd recommend going to [Randolph Productions](#).

Creation Research 2013

In August the Seventh International Conference on Creationism took place in Pittsburgh, PA. It was a great conference and was well attended by over 400 people. This year a couple of new things were done, one was that there were live webinars during the sessions and this allowed questions from viewers on the internet during question and answer times. There was also a panel discussion for all attendees to go to. The topic was about impact craters and how it relates to a young age creation view of Earth history. On my blog on September 18 I wrote about what Creation Research is and tell about some of the exciting new things from the conference. [Go to the AnswersBlog](#) for more.