

# Modern science in creationist thinking

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As six-day creationists, can we know what God did when he created this vast universe? If we agree that God created the universe, and it was created in a form that is essentially like we observe today—a mature creation—very large, tens of billions of light-years across—very old in appearance, in terms of processes we observe—then we have two possibilities within the creationist worldview:

- 1) God created everything 6,000 years ago and we cannot know how He did it in Creation Week but somehow we can see the whole visible universe, including "... events which lie entirely beyond our limited understanding of nature"<sup>1</sup>; or,
- 2) God created everything 6,000 years ago and we can (in principle) know how He did it in Creation Week as much as we are able to see the whole visible universe.

We can take the position that we cannot know how God did it because it was supernatural and beyond our understanding. However, we should not make untenable claims such as that supernovae (exploding stars) represent death and hence must have occurred after the Fall. (A supernova is a light show resulting from exploding gas. It cannot be construed as death in the biblical sense.<sup>2</sup>) Or even the claim that modern physics (that developed post-1905, starting with Einstein's three papers published in *Annalen der Physik*, which dealt with the photoelectric effect (quantum theory), special relativity and Brownian motion) is all wrong. One idea that has developed is that modern quantum theory, modern special and general relativity and hence modern astrophysics and cosmology, which include both of the latter, are wrong. Some creationists even reject these modern ideas, preferring only classical physics, while others claim we cannot even know the physics of this universe.

## Operational or historical science

But there is a big difference between repeatable, operational science and something that is extrapolated back into the unknown unobservable past, what has been called in creationist circles 'historical science'. The science done in the lab, which includes modern-clock tests of special relativity, hence of modern physics, yields reliable repeatable results that are consistent

with that theory. It was because of the very notion that the Bible promoted a consistent reliable creation, hence consistent laws of nature, that modern science developed in the first place. It is because those laws are stationary that we can know anything at all about the universe by our own observations.

If we are to make the assumption that we cannot know, or that the laws of nature we test in the laboratory are not the same as those we observe elsewhere in the cosmos (excluding the idea that what we do know is incomplete), then we have no basis to test any hypothesis about the universe. Taking that idea further, since we cannot travel to the nearest star, why not suppose that the laws of nature and the structure of the universe are such that all stars lie within a four-light-year radius of Earth? That idea could never be disproved because it is always possible to say the laws and structure of the universe are consistent with this notion. And we would not have a light-travel-time problem.<sup>3</sup>

At the 6<sup>th</sup> International Conference on Creationism in Pittsburg, 2008, there were presentations revolving around the rejection of most of modern physics, e.g. trying to find a model for the simplest atomic species without quantum theory. This does not seem to be appropriate as it ignores the last one hundred years of research.

If position number 2) above is taken, a straight-forward reading of Genesis as true history, we would not need to say that everything in the universe must be 6,000 years old, as measured by processes in their own frame of reference. That is not contradictory of the creation timeline. But those processes measured by Earth clocks must have taken less than 6,000 years to happen. God's creation is knowable and understandable (at least those aspects limited to the physics we know today) to us as humans. He made the universe in a way that is rational and reasonable, and the efforts since the development of modern science, say, over the last thousand years, have revealed a lot of truth. (Of course along the way we have had to throw out a lot of error.)



**Figure 1.** While working in the Swiss patent office in Bern in 1905, Albert Einstein developed and published his ideas on special relativity, the photoelectric effect (for which he won the Nobel prize in 1921) and Brownian motion.

## Modern science is reliable

Modern physics, by and large, is reliable; we can test relativity with GPS satellites and even with Earth-bound

modern atomic clocks. Every time we use a device with a laser, we are using something developed from quantum theory. But that is not the same thing as understanding what happened in the cosmos, in the past, billions of years ago, based on the assumption of the constant speed of light and the size of the universe. It is not so clear, and we cannot interact with the universe like we can with our experiments in the lab.<sup>4</sup> The former is not really repeatable science and hence it is very weak in its predictive power.

But position number 2) above is another way of saying that we can trust the Lord, we can trust modern science, where it is testable, and we can, in principle, know what God did. One of the reasons is that the laws of nature are God's Laws; He created them. Although the idea of many biblical miracles is that they involve highly unusual rates of change (changing water into wine, calming a storm, etc.), these miracles are the exception, not the rule.

So this is not about the rejection of 'millions or billions of years' *per se*; it is really about the truthfulness of God's Word. We really should not even use terms like 'young-earth creationism' (YEC) or 'old-earth creationism' (OEC); we could instead adopt 'biblical creationism', or to be clearer 'straight-forward history in Genesis biblical creationism' (SHGBC).<sup>5</sup> Because surely it is about bringing people back to a clear understanding of the veracity of the Word of God, from Genesis all the way through. 'Young earth', meanwhile, implies its age is young compared to the supposed long geologic ages, which are contrary to the Genesis timeline. And so often arguments from the other side are a caricature of the creationist position, or a straw man argument, but some may have been once held by creationists. We should hold ourselves to a higher standard. We will never satisfy the sceptics who reject the idea that God's Word can be relied upon, but we must challenge those who 'put their heads in the sand' over the last hundred years of modern science.

### Starlight travel time problem

If we accept all observations about the universe, realizing they are tainted with certain assumptions, which may be wrong then creationists have a starlight-travel-time problem. This is true if we believe only 6,000 years have passed since the creation of the most distant light sources, and that they were all created at that time, as measured by normal Earth clocks, and we hold to the convention that the timer was started when the star was created. But if the timer was started when the light first arrived on Earth, when someone first saw the event, then this is the Anisotropic Time Convention,<sup>6</sup> and there is no light-travel-time problem. There is nothing to answer. Or if Earth clocks ran slow during Creation Week compared to all other clocks in the cosmos, there would be billions of years of process going on out there, and plenty of time for light to get here in the past 6,000 years. This is a relativistic effect and relates to both Humphreys' model

and mine.<sup>7,8</sup> In all cases the universe is large, and normal, testable physics applies. It also allows for a certain starting point we could call 'mature creation', as the place where God started. The only difference is we do not know which is the correct model or time convention. Maybe none of them are, but we should keep looking within the realms of modern testable physics.

### References

1. Hartnett, J.G. and DeYoung, D.B., Mature creation and seeing distant starlight, *J. Creation* **25**(1):47, 2011.
2. *Death only applies to nephesh chayyāh*, translated 'living soul' or 'living creature' with the breath of life; see [creation.com/the-fall-a-cosmic-catastrophe](http://creation.com/the-fall-a-cosmic-catastrophe).
3. There are notions that the universe must be no more than 6,000 light-years in radius, to the most distant galaxy, because the universe is only 6,000 years old, and even that all stars must not be more than a few light-days away, because Adam was created only two days after the stars were, and he could see stars. The problem with these ideas is that we have a repeatable method of measuring parallax of about a thousand stars from the earth as it traverses the sun, and we can measure those distances by that method, which you could say is a direct method, based on what we know of reliable science on Earth. The ESA satellite Hipparcos mapped a hundred thousand stars in the galaxy, all of which were more distant than two light-days. Hipparcos also confirmed Einstein's prediction of the effect of gravity on starlight.
4. [creation.com/cosmology-is-not-even-astrophysics](http://creation.com/cosmology-is-not-even-astrophysics).
5. But doesn't quite roll off the tongue like 'YEC' does.
6. Lisle, J.P., Anisotropic Synchrony Convention—A Solution to the Distant Starlight Problem, *Answers Research Journal* **2**:191–207, 2010; [answersingenesis.org/articles/arj/v3/n1/anisotropic-synchrony-convention](http://answersingenesis.org/articles/arj/v3/n1/anisotropic-synchrony-convention).
7. Humphreys, D.R., *Starlight and Time*, Master Books, Colorado Springs, CO, 1994; Humphreys, D.R., New time dilation helps creation cosmology, *J. Creation* **22**(3):84–92, 2008.
8. Hartnett, J.G., A new cosmology: solution to the starlight travel time problem, *J. Creation* **17**(2):98–102, 2003, [creation.com/a-new-cosmology-solution-to-the-starlight-travel-time-problem](http://creation.com/a-new-cosmology-solution-to-the-starlight-travel-time-problem); Hartnett, J.G., *Starlight, Time and the New Physics*, Creation Book Publishers, Brisbane, 2007; Hartnett, J.G., A 5D spherically symmetric expanding universe is young, *J. Creation* **21**(1):69–74, 2006; I recommend the second edition of the book, where a misinterpretation of the type of time dilation the model involves has been corrected.

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