- Velikovsky, I., Ages in Chaos, Chapter 3, pp. 99–136, Abacus Edition, Sphere Books Ltd., [Where? City? Country?] 1973.
- 4. See any *Journal of Creation*: Instructions to Authors.

## Mature creation and seeing distant starlight

I am writing in regards to Don DeYoung's article in issue 24(3) where he argues for a mature creation as an explanation for the history of Genesis to align with modern cosmological observations. He rightly says that such a view is not refutable, and nor is a time dilation universe. He says also that all creationist worldviews contain some level of mature creation, which I agree with. The problem, though, that he does not address is the issue of false information in starlight. He claims the idea that God 'created the light in transit' is ok because it is equivalent to the mature creation of our sun or even to adult forms of life created on Earth. On some level this may be true, but the 'light in transit' remains a problem in terms of God's truthfulness. No doubt Don believes God to be 100% truthful, yet he sees no problem with false information in the light in transit, excusing it as being nevertheless true in the mind of God. But there is a problem still. In Psalm 91 (and other passages in the Bible) we are told that the heavens tell us of God's workmanship. Is this also only in the mind of God? Are all in the astrophysical heavens part of a big light show that has no reality such as we can discover with the rest of our senses here on Earth? I don't think so. So how do you justify 'light in transit' that does not relate back to real events in the past history of this universe?

If you want to take the approach of the least number of assumptions, an Occam's Razor, a law of economy, then I would say that a time dilation model is a far simpler and better answer. For example, I could construct a cosmogony where the Creator makes the sun, the moon, the planets and all

the stars and galaxies on Day 4 of Creation Week, according to Genesis 1.2 But he slows clocks on Earth during that day only. He makes some galaxies initially and spreads them out throughout the universe, like unfurling a flag or tent, not any stretching of the fabric of space, time or space-time. He continues creating throughout the Earth Day 4 of Creation Week but, as measured by astronomical clocks. that would have taken ten or more billion years of current Earth time. God creates at this point and can do as He likes. All the light we see today has travelled from the distant reaches of the cosmos. It all represents real events that occurred on those stars it came from. Nothing is 'in the mind of God' only. They are all real events. We can believe it to be true and the laws of nature (creation) are valid. After all. they are God's laws.

God simply created during Day 4, while Earth clocks ran nearly a trillion times slower than clocks in the rest of the universe. After Day 4 was finished, He set Earth clocks to run at the same rate as cosmic clocks, and you would not be able tell any difference from astronomical observations. However, that would be untestable today. It would be consistent with all we observe and also with the Genesis text but it would not have any 'light created in transit' assumption. So far in this I have only made one assumption—God created, ex nihilo, for some of the galaxies, at least, and they were created in various stages and during various times of Day 4. But that is quite consistent with the Genesis account, and all we see in the starlight *is* true history.

We don't even need to say He used a general relativistic time dilation mechanism, resulting from an expanding universe that was or was not accelerating at some time in the past. The universe does not need to be expanding at all, it could be static. You would only need to explain the many verses in the Bible which seem to say God spread out the heavens, but a plain reading of those verses would suggest that it was simply like rolling out and setting up a tent, and not that the tent was stretched out like a balloon. You

could not refute that either—even the Tolman test<sup>3</sup> on whether the universe is expanding or static, independent of cosmology, can not distinguish. The data fit either the standard model (expanding) or a static universe just as well, once all assumptions are taken into account. Also quasar oscillations show no evidence of time dilation as a function of redshift, and hence distance, if the cosmological distance interpretation for the Hubble Law is correct.

It seems that there is one fact we can rely on—the Hubble Law applies to galaxies, relating their magnitudes (and hence distance) with their redshifts. But you cannot irrefutably say the universe is expanding from that. Such expansion has never been observed in a lab environment. So a static universe, where the Hubble Law is valid, due to some as yet unknown other mechanism, though many ideas have been proposed, is as good as any. Maybe it is even the simplest.

And if we want to solve the big unknowns, the problems for the standard consensus4 model of the origin and structure of the universe, the LCDM big bang inflation model, then a static universe like that described above could work. In that universe there is no exotic<sup>5</sup> dark matter, no dark energy,<sup>6</sup> no inflation (without a mechanism to start and stop it), no need to assign the source of the cosmic microwave background radiation to the cosmic fireball called the last scattering surface of the big bang (with wrinkles that were too small<sup>7</sup> and casting no shadows<sup>8</sup>) and no expansion.9 All these 'unknowns' of big bang cosmology vanish. You even get a few side benefits—the horizon problem<sup>10</sup> is solved because the universe can be much bigger than we observe, but you just choose an age in astronomically measured time sufficiently long enough—finite but long enough for all the radiation to mix up throughout the whole universe and get a perfect black-body curve from the thermalisation of all the energy confined in the finite universe. Also one has no worries with the flatness problem because God simply creates

a flat Euclidean space for the whole universe. Only where mass density is locally large is that perturbed and that fulfils all the requirements to agree with general relativity measurements done in our solar system.

It seems to me that Don's thesis is to simplify things with 'mature creation' and light created in transit. But if you want a simple fully mature universe, with no false history (which can hardly be described as simple), the one I described above would do. The only time dilation comes directly from God, not from some complex, non-intuitive relativistic effect and/or a model that needs lots of patches and ad hoc assumptions to support it. The only difference, of course, is that most of the problems the big bangers have result from their rejection of anything from the hand of God. Maybe we should take William of Occam's advice

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## Don B. DeYoung replies:

My thanks to Dr John Hartnett for responding to the mature creation article and for outlining a model of cosmological history. I must take issue with the negative term 'false information' which is applied to the data embedded in starlight arriving from distant stars. I readily admit to not know the correct solution to how we see distant starlight in a young universe. However, I fear that technical efforts to solve this problem have the potential to diminish the doctrine of supernatural creation. This includes relativistic cosmology, the divine resetting of clocks, anisotropic light speed manipulation, etc.

I interpret the Creation Week as filled with supernatural, miraculous events which lie entirely beyond our limited understanding of nature. And if this is true, does it not follow that every scientific theory and model constructed to explain the details of the Creation Week are wrong, by definition? I certainly admire the efforts of Dr



Exploding stars are a challenge to the mature creation view (NASA).

Hartnett and others to understand the details of creation events. They use the best that today's theoretical physics can offer, but this is just the problem, the application of today's scientific understanding to supernatural events which occurred during the first week of Earth history.

I by no means imply that we should simply say "God did it" and stop inquiry and critical thinking. Creation research remains an exciting venture. The purpose of the mature creation article is to suggest that this older, traditional explanation for seeing distant starlight remains credible alongside the latest creationist models of cosmology. Just as there are treasures in older literature, there also is continuing value in classical creationist ideas. It is left for the reader to decide which approach to seeing distant starlight best fits Occam's Law of Economy.

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## References

- 1. en.wikipedia.org/wiki/Occam's\_razor.
- See for example, Hartnett, J.G., 2003, A new cosmology: solution to the starlight travel time problem, *J. Creation* 17(2):98–102; creation.com/a-new-cosmology-solution-to-the-starlight-travel-time-problem.

- en.wikipedia.org/wiki/Tolman\_surface\_ brightness\_test; see also arxiv.org/abs/astroph/0509611.
- 4. When has science been decided by consensus anyway?
- The type we have not yet measured in the lab, which gravitates, but does not easily interact with matter.
- 6. That has the effect of an anti-gravity force
- 7. This resulted from the need for them to be the seeds of future galaxies.
- This anomaly was first measured by Lieu, R., Mittaz, J.P.D. and Zhang, S.N., The Sunyaev-Zel'dovich Effect in a sample of 31 clusters: a comparison between the x-ray predicted and WMAP observed cosmic microwave background temperature decrement, ApJ **648**:176, 2006, and has been confirmed by several others as late as 2010: Bielby, R. M. and Shanks, T., Anomalous SZ contribution to three-year WMAP data, MNRAS, 382:1196-1202, 2007; Diego, J.M. and Partridge, B., The Sunyaev-Zel'dovich Effect in Wilkinson Microwave Anisotropy Probe data, MNRAS 402:1179-1194, 2010; Jiang, B-Z., Lieu, R., Zhang S-N. and Wakker, B., Significant foreground unrelated non-acoustic anisotropy on the 1 degree scale in Wilkinson Microwave Anisotropy probe 5-year observations, ApJ 708:375-380, 2010. See creation.com/the-bigbang-fails-another-test.
- 9. creation.com/cosmology-is-not-even-astrophysics.
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