“Darwin, meet God.” “Pleased to meet you.”

Daniel Berleant

An essay and supplement to the book

The Human Race to the Future:

What Could Happen

—and What to Do

Published by Lifeboat Foundation (1st ed. 2013)
“Darwin, meet God.” “Pleased to meet you.”

Lightning struck an employee of the Creation Museum on Aug. 21, 2013 in Petersburg, Kentucky. He was clearing visitors from a “zip line” ride boarding area due to the approaching storm. Knocked to the ground and transported to a nearby hospital, luckily he was not seriously injured. Some probably would have preferred lightning to strike a prominent evolutionary biologist instead. Indeed, conflict between religious opposition to evolution, and the scientific evidence for it, periodically boils over, often into public school controversies. A case in point was the famous 1925 trial State of Tennessee v. John Thomas Scopes — the “Scopes Monkey Trial.” More recent examples focusing on textbooks seem to surface periodically, especially in Texas, which has significant disbelief in evolution, and buys enough textbooks to influence textbook content nationwide.

Most people are surprised to learn that, despite the conflict, science and religion are easily reconciled with respect to evolution and other evidence of ancient existence. This resolution is achieved by the omphalos (“belly button” in Greek) principle. Philip Gosse named it in his 1857 book Omphalos: An Attempt to Untie the Geological Knot. Fifty years later his son would write, “Never was a book cast upon the waters with greater anticipations of success than was this curious, this obstinate, this fanatical volume … This ‘Omphalos’ of his, he thought, was to … fling geology [and its fossil evidence of evolution] into the arms of Scripture …”

A hundred years after Omphalos appeared, Martin Gardner, in his 1957 book Fads and Fallacies in the Name of Science, commented, “…it presented a theory so logically perfect … that no amount of scientific evidence will ever be able to refute it.” Even the influential biologist Stephen Jay Gould weighed in, in 1987 rhetorically asking, “But what is so desperately wrong about Omphalos?” Traditionally underappreciated, and all too often ignored to this day by scientists and theologians, most of whom have never even heard of it, one can only ask, “Why?!” The answer is obviously not its irrefutable logic and simple elegance. It might be because it is deeply unsatisfying to anyone hell-bent on a clear decision for one side or the other. Going with the logic and elegance perspective, let us learn more.

What is the omphalos principle? And why “belly button”? 

Let’s start with the navel question. Some believe Adam and Eve were the first people, created directly by God. Being human, they would likely have had belly buttons, but not having grown inside a mother, they never needed them. Extending this idea, many, things show evidence of a past seemingly at odds with de novo biblical creation. Even if the first humans had no belly buttons, the first trees no annual growth rings, and so on, were the first rocks created with no surface wear? The first oceans with no salt? Even more challenging observations abound. Human genomes show evidence of different population
splits at numerous time points in the ancient past. Different species show genomic evidence of common ancestry at different times in the even more ancient past. Rocks appear to have been solidified long ago from hot magma, built from layers of sediment deposited over eons, crystallized in veins out of ancient superheated water in which they were dissolved, etc. Ancient light from far-away stars sparkles in the sky nightly. And of course there is the classic creationist dilemma of fossils, biological remnants of long-past ages.

Solution

The omphalos principle steps in and explains all this evidence with a few strokes of the pen: As Chateaubriand put it in 1802 (over 50 years before Gosse’s book), “God might have created, and doubtless did create, the world with all the marks of antiquity and completeness which it now exhibits.” The universe could have begun 13.82 billion years ago, as cosmologists have concluded; or as some believe, it could have been created de novo in six days, but in a form that meets scientific criteria for looking like it started in a big bang 13.82 billion years ago. There is no way, scientifically, to tell the difference. There never will be. Logically, there couldn’t be. That’s the omphalos principle in a nutshell, and it really does reconcile the science and religion of creation.

Of course, there are some details that could be elaborated. Also various objections have been made, all of which have been rebutted. We won’t delve into it here, but a web search on “omphalos” will reveal further reading if you are interested, because although the omphalos principle is obscure, it is not that obscure.

With the logical case for the omphalos principle essentially unbreakable, why not call upon it whenever social controversy threatens to pit science against religion? From the standpoint of religious creation doctrine, invoking the omphalos principle renders scientific results no longer a mortal, logical threat. From a scientific perspective, creationism is no longer a failure of rationality. Yet it appears that, foolproof though it is, neither religious nor scientific forces are particularly enthusiastic about the omphalos principle, nor have they been since Gosse's book was first ignored over 150 years ago. Nevertheless, social controversies become significantly easier to solve when, for example, the schoolbook question shifts from how to save young minds from the evils of corruption, to the much less emotional question of whether the omphalos principle is best mentioned in biology or social studies (or philosophy) class.

A mystery — and a prediction

The omphalos principle does what it is supposed to do. The biggest remaining mystery, then, is why it is so obscure and little used. Largely ignored in Gosse's time, it remains largely ignored in ours. The various criticisms offered over time fail to explain the reluctance to adopt, use, and benefit from the
principle. A typical criticism is to claim that God would never do that. The problem with arrogantly second-guessing God is that no one can be certain what God would or would not do. More likely, the reluctance explains why such criticisms, though unconvincing, continue to reappear; they are excuses, not real objections with weight. Hence the following hopeful prediction. Science, philosophy, and religious thinking will gradually grow more sophisticated and wise over time. If this happens we can expect awareness of the logic and social usefulness of the omphalos principle to increase in both the science and religion communities, finally leading society to a happy understanding of their intrinsic compatibility.

**The future of religion — act II**

We've just used logic to save the creation story. Now let's use it to save the God concept itself. It can be done. The result has, to say the least, a non-traditional twist. Yet if a trend of increasing logic characterizes the future of religion, conventional faiths may find themselves adapting, eventually recognizing a common, unifying theme. A dream? Maybe…

**Dream world**

Are you really reading this, or are you just dreaming that you're reading it? How can you tell for sure? You can't, as noted for example by famous philosophers Zhuang (369–286 BCE) and, much later, Descartes (1596–1650). As Zhuang put it, “Once upon a time, I, Zhuang Zhu, dreamed I was a butterfly, fluttering hither and thither, to all intents and purposes a butterfly … Soon I woke, and there I was, veritably myself again. Now I do not know whether I was then a man dreaming I was a butterfly, or whether I am now a butterfly, dreaming I am a man.” You've woken from dreams before, and though what you are experiencing now likely seems more vivid, or at least more realistic, maybe it is just a more vivid, realistic-seeming, and longer dream from which you will at some point awaken into some other reality. Logically, it's a genuine possibility. Personally, I suspect it won't happen, but I could be wrong.

A variation of the Cartesian dream world is that the universe is not your dream but that of someone else — God. That has the advantage of not being so solipsistic (see chapter 20), and many people would prefer this variation, which has intriguing similarities to…

**Matrix worlds**

In the iconic movie The Matrix, ace computer hacker Neo is offered a choice. He could stay within the comfortable world he has always known, but which he is informed is merely a simulated world (called the “Matrix”) inside a powerful computer. Or he could choose to exit the Matrix and experience a bleak, but at least true, reality of rebellion against the intelligent machines who nefariously keep humans’ bodies in tanks of liquid with cables connecting their brains to the Matrix, where they think they live. Although The Matrix is perhaps the best known example, simulated realities were also explored in such works as the movie The Thirteenth Floor and the sci-fi novel Simulacron-3.
Today, some Singularitarians, believers in a coming “singularity” or radical transformation of the world as we know it, envision uploading their minds into computers within their (and our) lifetimes as a way to mentally survive the death of their bodies. But when an uploaded mind faces the possibility of death within a simulated world running on a powerful computer, it is facing a genuine extinction of beingness — a real death. Even though a world might be simulated, it feels real to its inhabitants and, indeed, doesn't that make it effectively an alternate reality? This brings us to...

The Sims

This famous computer game runs on a home computer. It simulates a world, populated by artificial people who live their lives under the watchful guidance of the person running the software. Far from the Matrix, the Sims is a hollow facade, vastly beneath what anyone would consider necessary to be a genuine simulated world. The people in it, for example, are far too simple to have a mind, whether simulated, uploaded, or in any other form. The Sims, as an example of a current, commercial world simulation technology, is therefore just a start. Like other technologies, world simulators will doubtless improve with time. If mind uploading becomes possible, then a future generation of The Sims will contain — Matrix-like — conscious and feeling minds.

Simulated universes

Could we be living in an advanced Sims-like universe and not know it? If so, what is the likelihood of such a scenario? And, how does this loop back to the issue of logic and its future impacts on religious belief? Let's tackle those three questions in order.

Might we live in a simulated universe? Consider the evidence so far.

- A dream is an environment simulated by a mind, and it's been known since Descartes that, whether it seems strange or crazy or anything else, there is no known proof that you don't live in a dream. Perhaps you will wake up and find out in a few minutes, or when you die. Or maybe not. We just don't know for sure.

- Environments can be simulated not only in a mind (dreams), but in a computer (The Sims, The Matrix). Computers are getting more powerful and able to simulate more and more complex worlds. There is no proof that simulations of a complexity akin to what is depicted in The Matrix will remain out of reach indefinitely.

- Given these proofs of concept, the most obvious conclusion is that, yes, it is possible we live in a simulated universe and don't realize it.

Given the possibility, what is the likelihood we actually do live in a simulation? Literally billions of people dream every night. That's a lot of simulated worlds. The Sims software can be run by anyone as a tablet app, etc. If this game gets powerful enough to rate as a genuine simulated world, then there will be
large numbers of simulated worlds, running in people's computers instead of in dreams. So, our familiar universe will contain an increasing quantity of smaller, simulated worlds. And that's just on Earth — there are billions of extraterrestrial planets out there as well, containing who knows what.

To sum up, the number of simulated worlds (dreams now, and in the future presumably computer simulations) is much greater than the number of universes (just one) we believe to be real. Thus, if you picked a universe randomly, it would probably be a simulation, since the collection of universes to choose from has so many more of them.

In the next step the logic gets slightly dicier. You might or might not reach the same conclusion, but here goes. In a manner reminiscent of Fisher's fiducial inference method (see also chapter 30), let us pick our own universe, and consider it a random sample from a set of universes consisting of a base universe and the numerous simulated universes it could contain. Is ours the base universe or one of the simulations? Very probably one of the simulations, because there are so many of them. The conclusion is that our universe is most likely one of the many simulations (dreams, computer programs, or whatever) contained in an underlying base universe. Just as ours contains dreams and computer programs, ours would be a dream or program contained in another.

What are the future impacts on religious belief? Much could be said about this. Luckily a very concise summary is possible. So let us summarize.

1. The universe need not be lawful, in that it does not have to follow its own internal physical laws 100% of the time. Miracles and other arbitrary events could occur because a dream or software simulation can write its own story without the requirement that it be 100% consistent.

2. Souls, life after death, even reincarnation, parapsychology and other ethereal constructions cannot be ruled out: see 1.

3. A supreme creator (God) could be the entity doing the dreaming or computer simulation.

4. In most cases a religion cannot be proven false: see 1.

That’s a start. Where does it end?

References

7. Z. Zhuang, Zhuang Zhu dreamed he was a butterfly, in Chapter 2 of *Zhuangzi*, English translations currently available.

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