

A distorted map

Mapping the Origins Debate: Six Models of the Beginning of Everything

Gerald Rau

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Gerald Rau has a Ph.D. in plant breeding from Cornell University and is the founder and chief editor at Professional English International Inc., based at National Chung Cheng University in Taiwan. His professional background and qualifications are in biology, science education, horticulture, plant breeding, and international agriculture, and he has previously taught biology courses at Wheaton College and Trinity Christian College (both in Illinois, USA). Rau has no formal qualifications in history, philosophy, biblical studies, or theology.

According to the author, the book is intended to be

“... a simple map to help high school or college students find their way through hotly disputed territory, to guide their journey from the one-sided and greatly oversimplified arguments they have heard in science textbooks or church sermons to the depth of scientific, theological and philosophical literature that exists” (p. 13).

Rau’s methodology includes objectively presenting and comparing the six basic models used to explain the age-old questions regarding the origins of life, the universe, and everything.

Methodology

In chapter 1, Rau sets out the foundational issue of the whole debate and every related question: the

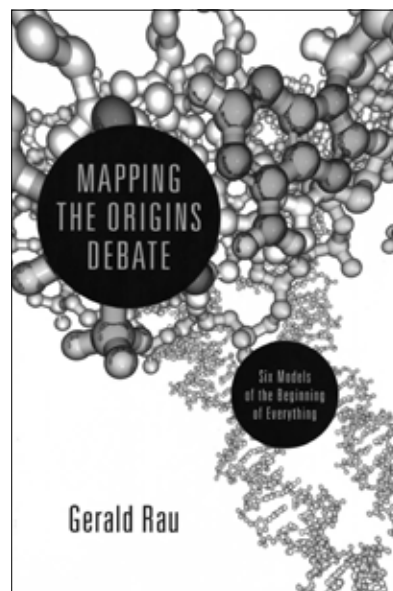
importance of acknowledging the lens through which we select, examine, and interpret the data we employ as evidence in support of our beliefs and in opposition to others’ beliefs.

“... the presuppositions implicit in a person’s philosophy determine the perspective from which he or she views the data, leading to different logical conclusions about which explanation best fits the evidence” (p. 20).

Rau rightly begins from a worldview perspective and acknowledges that a person’s worldview and personal philosophical presuppositions directly affect the way we understand both science and the origins debate in general. He recognises that most people find it difficult to define science because it is applied in many different contexts including theoretical science, experimental science, observational science, and historical science. Rau suggests it involves three components (1) empirical evidence, (2) logical inferences, and (3) necessary presuppositions. He goes on to explain that true objectivity in science is not possible given that individual scientists work from the perspective of one particular theory, which affects what data is collected and how it is interpreted. He adds that

“... objectivity and consensus will be easier to obtain in the experimental sciences than in the historical sciences, particularly those like origins that are closely connected with our philosophical commitments” (p. 26).

Rau also raises the important question of whether science is the only way of knowing, and in this book he takes the approach that there is “a unity of knowledge—a reality that can be known” (p. 27) although we may use different approaches to procuring that knowledge.



In chapter 2, Rau outlines the six basic models that he wishes to evaluate and compare. They are as follows: naturalistic evolution (NE), non-teleological evolution (NTE), planned evolution (PE), directed evolution (DE), old-earth creationism (OEC), and young-earth creationism (YEC). The chapter also includes a brief discussion of intelligent design and its relationship to the aforementioned models. The points of comparison for his investigation of the competing models of origins include: (1) the origin of the universe, (2) the origin of life, (3) the origin of species, and (4) the origin of human beings. These topics are the subjects of chapters 3–6, which all follow the same format: Rau begins by discussing the relevant evidence or data and then examines how each model interprets this data.

Cosmology

Concerning the origin of the universe, all models accept the standard big bang model except the YEC one. Evidence includes observed redshifts in starlight and Hubble’s Law, the cosmic microwave background radiation (CMBR), the relative abundance of light

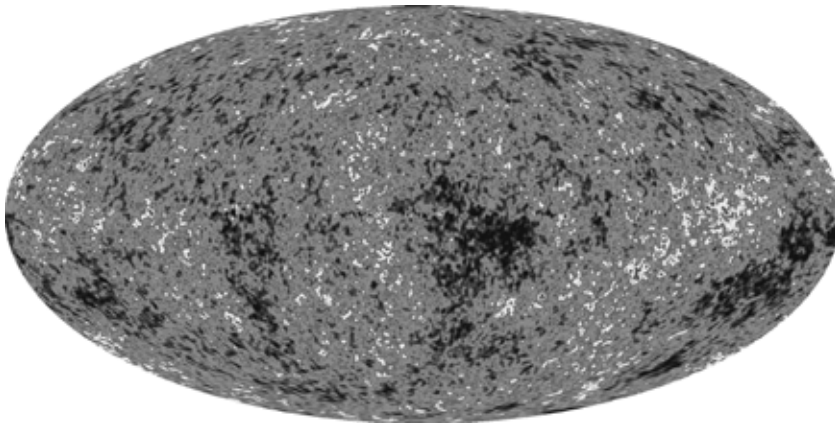


Figure 1. According to the big-bang model, the CMB is meant to be homogeneous and isotropic, but the observational evidence reveals something quite different.

elements, and fine-tuned universe. Unfortunately, Rau skims over the many problems and discrepancies with all big bang models, although he does highlight the non-observation of dark matter, dark energy, and inflationary period but that's it.

Rau compares how each of the six models interacts with modern cosmology from its beginning at the singularity, the big bang and stellar nucleosynthesis, and on to issues of fine-tuning. He barely discusses inflation, let alone the problems with it. He also makes this spurious claim: "On a large scale, the universe appears remarkably uniform and homogeneous" (p. 71). This uniformity is known as the cosmological principle. However, in a footnote (33), Rau notes that YECs disagree and merely "contend" that galaxies are banded in concentric circles around the original nearby centre, and this gives the appearance of homogeneity, suggesting that this is merely their own eccentric interpretation. Yet, in reality, all the observational evidence goes against the cosmological principle. The universe contains many 'clumpy' areas and 'voids' and the Sloan Digital Sky Survey (SDSS) indicates that galaxies are distributed in concentric shells around our own galaxy, and the shells of galaxies appear to be more dense closer in and less dense further out.¹

In addition, the Wilkinson Microwave Anisotropy Probe (WMAP) data produced detailed maps of the cosmic microwave background radiation but rather than showing an isotropic universe, they revealed a cosmic north and south pole and a cosmic equator!²

When dealing with the YEC approach to cosmology, Rau presents a superficial description of Russ Humphreys' 'white hole' cosmology which includes time dilation as well as the possibility of a Euclidean (timeless) zone.³ Moreover, no references to other contributors to YEC cosmology (e.g. John Hartnett or Jason Lisle) can be found.

Evolutionary theory

Regarding the origin of life, the things that require an explanation include the initial appearance of life from non-life, the encoding and transmission of genetic information, and the apparently irreducible complexity of living things.

On the origin of species, the data in question includes the dating and sorting of fossils—both vertically and geographically—and their apparent 'progression' from simpler to more complex. Rau acknowledges the lack of transitional forms and the appearance of what seem to be explosions of rapid speciation as well as evidence of mass extinctions.

Other data covered includes genetic complexity, selection and mutation, population genetics, and homeotic genes, as well as genetic similarities and symbiosis.

Rau rightly points out that the term 'evolution' has been defined and used in different ways: (1) change over time, (2) change in frequency of alleles in a population, (3) common descent, (4) speciation, (5) origin of higher order taxa, (6) origin of all living organisms by undirected natural processes, and (7) the neo-Darwinian synthesis. Proponents of evolution often employ a bait-and-switch technique by first utilising definitions (1) and (2) to demonstrate that evolution has been observed, and then, after switching to the other definitions, asserting that biological evolution is an observed fact.

With respect to the origin of human beings, the major evidence consists of 'hominid' fossils and similarities between human beings and chimpanzees. Rau highlights the relative sparsity of human-like fossils. There are less than 100 significant fossils that are dated at more than 200,000 years (according to the evolutionary timescale) and most are merely partial skulls. Only four have significant skeletal remains. In addition, there are about 50 skeletons of Neandertals or modern humans. Again, the author goes on to explain how the different views interpret the above data, but his treatment of the YEC interpretation is extremely superficial. This is a serious oversight because the YEC interpretation is quite different to the others. Moreover, he does not cite or reference (even in the bibliography) any of Marvin Lubenow's extensive work on this very subject.⁴

There is a strong passive-aggressive attitude toward the YEC view throughout the book. Regarding scriptural interpretation, he presents these snide and hyperbolic comments:

“Many advocates of YEC are totally convinced that their interpretation of Scripture is correct, and they therefore call all others compromisers, deceived by the lies of Satan, who substitute the changing ideas of science for the eternal, unchanging truth of the Bible” (p. 148).

None of these comments are supported with actual references to YEC writers. While YECs are no doubt convinced of their interpretation of Scripture, so are all those who disagree with them! He continues:

“At the same time theistic evolution proponents representing various models claim it is YEC that is violating hermeneutical principles by forcing on Scripture a scientific interpretation that was never intended, and they criticize creation advocates for ignoring what they consider to be the plain facts of science, thus placing a stumbling block in the way of scientists who might otherwise be more open to Christianity” (p. 149).

Again, no substantiation is provided. In reality, the opposite is the case: YEC writers have repeatedly highlighted the hermeneutical gymnastics and exegetical fallacies employed by those who reject the traditional interpretation of creation in six literal days.⁵

In addition, Rau—like many other YEC critics—misrepresents the YEC hermeneutical method as ‘literalism’ and then goes on to highlight the many places in Scripture that YECs

do not adopt a literal interpretation. But this a straw man argument. Interpreting the days of creation as literal 24-hour days does not mean that one must adopt a literalistic hermeneutic. YECs routinely employ the standard historical-grammatical exegetical method, and it is the judicial application of this method that leads us to interpret the creation days as normal literal days.

Distorted presentations

Chapter 7 is titled “What we can learn from each”. In it, Rau attempts to summarise the positive evidence that has been marshalled in support of each view that cannot be dismissed by the other views. In support of naturalistic evolution, Rau cites the whale evolutionary sequence and big bang cosmology. However, with respect to whale evolution, none of the so-called ‘transitional forms’ (*Pakicetus*, *Amubulocetus* and *Rodhocetus*) stand up to scrutiny. Rather, they reveal a pattern of extremely wishful and imaginative thinking, if not outright fraud.⁶ For example, *Pakicetus* was presented on the cover of *Science* in 1983 as a whale-like creature when only an incomplete skull had been found. When the rest of *Pakicetus* was found in 2001, it was nothing like a whale!

Similarly, regarding the evidence for big bang cosmology, Rau gives the impression that the theory has made a string of accurate and detailed predictions including the existence and temperature of the cosmic microwave background radiation (CMBR). Yet, he fails to mention that numerous other scientists also predicted the existence of, and indeed a more accurate temperature for, the CMBR without reference to big bang cosmology.⁷ He also fails to mention the

numerous other direct observations that big bang cosmology cannot explain including quantised redshifts, disparate redshifts of physically connected stellar objects, the clumpy distribution of the observed universe, the existence of cosmic poles and a cosmic equator (discussed above) and the failure to detect dark matter despite it supposedly being the predominant ingredient of the universe.

Rau also provides a brief discussion of the contributions of YEC scientists to the scientific debate. He begins by pointing out that they have been instrumental in highlighting flaws in the other views and in bringing to light evidence that is well-known in the scientific community but has been slow to find its way into textbooks and the popular press. In addition, Rau acknowledges that YECs have proposed their own scientific models in cosmology, plate tectonics, the Ice Age, and catastrophic events such as the eruption at Mount St Helens, although he adds that this work has largely been ignored by the mainstream scientific community. Rau states that “[i]n recent years” (p. 161) YEC scientists have established their own peer-reviewed scientific journals and the accompanying footnote (9) cites *Answers Research Journal* published by Answers in Genesis in the USA. Given that the *Creation Research Society Quarterly* has been published by the Creation Research Society continuously since 1964, and the *Journal of Creation* (formerly *Creation Ex Nihilo Technical Journal* and then *TJ: The In-depth Journal of Creation*) has been published by Creation Ministries International continuously since 1984, one has to wonder at the quality and depth of Rau’s research—especially with respect to the YEC view.

Philosophy and epistemology

Rau is quite right to point out that—when discussing the origin of life—YECs (and OECs) have to

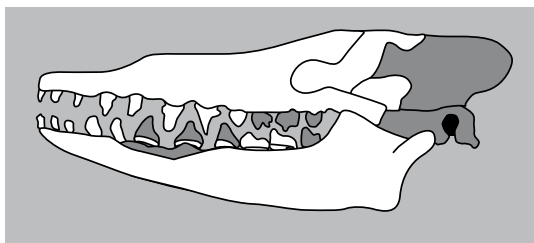


Figure 2. *Pakicetus* was presented in the media as a whale-like creature when only an incomplete skull had been found. But when the rest of *Pakicetus* was found years later, it was nothing like a whale!

admit that they have no scientific explanation or mechanism, and nor do they need one because, as Genesis 1 teaches, the origin of life was an explicit supernatural act of God Himself. Moreover, Rau notes that the evolutionary models are no better off because they too have no viable scientific explanation. ‘God did it’ and ‘nature did it’ are both religious explanations! He also shows a healthy scepticism regarding scientific objectivity:

“Science is not the totally objective, dispassionate search for truth that some believe it to be Much good research is not funded because it does not meet [specific] criteria, and researchers who present results at odds with the viewpoint of the funding institution are not likely to get funded again” (p. 173).

Rau points out that each position is ultimately based on “different philosophical presuppositions that are outside the realm of science” (p. 176). According to Rau, the key presupposition is the definition of science itself. He appears to think that it is possible to define science in a way that allows the possibility of the existence of, and interaction with, a supernatural realm. However, in my view, the problem is not the definition of science but the constraints imposed by naturalism and materialism. Science, by definition, excludes the supernatural. But why should we limit the acquisition of knowledge to scientific enquiry? This *a priori* excludes—with no scientific basis—any possibility of the supernatural realm and any possibility of supernatural revelation. In other words, naturalistic and materialistic epistemological presuppositions automatically exclude any evidence or inferences that point to an Intelligent Designer as the Creator of the universe and all life within it. This approach illegitimately precludes all other views except naturalistic evolution. Nevertheless, Rau is mostly right in claiming that “[t]here is a war going

on, but it is not a war between science and religion. Rather, it is a war about what science is, a war that is philosophical more than religious” (p. 189). I would say that the war is actually about knowledge and how it may be acquired, i.e. the branch of philosophy called epistemology. It is also religious in the sense that all positions have faith in their own epistemological assumptions and presuppositions.

Conclusion

Rau matter-of-factly recites many of the claims and arguments made by proponents of the various views, and one gets the impression that he presupposes the truth and legitimacy of the science behind all these claims. Moreover, he only occasionally provides actual references to specific published works. This makes it very difficult to check on the veracity and accuracy of his presentation of each view.

Rau’s goal in *Mapping the Origins Debate* is to guide students through the competing claims of each position and to introduce them to “the depth of scientific, theological and philosophical literature that exists” (p. 13). Unfortunately, Rau has only partly achieved this goal. On the positive side, the book has an appendix containing extensive charts that tabulate the differences between all six views for easy comparison. A second appendix attempts to summarise each view’s interpretation of the Genesis account. This summary is so brief (amounting to only two pages) that it is practically useless.

Again, Rau’s lack of direct citation and reference to original works give me the impression that we are simply getting Rau’s very limited understanding of the different views and their interpretation of the data. Indeed, the bibliography—consisting of a mere nine pages—is completely inadequate for a work that covers so much ground.

In addition, there is a fatal flaw in Rau’s methodology. Although he acknowledges the inherent limitation of assuming a naturalistic and materialistic epistemology, his choice of things to compare are all material elements! This loads the debate in favour of the evolutionary views that adopt naturalistic and materialistic mechanisms. But what about non-material phenomena such as language, emotion, morality, and the notion of thought itself?

Rau does not provide any analysis or conclusion regarding which view is best or which has greater claims to truth and validity, but his presuppositions reveal his preferred position. One thing is certain: he is not advocate or proponent of the young-earth creationist’s view.

References

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2. Williams, A. and Hartnett, J., *Dismantling the Big Bang*, Master Books, Green Forest, AR, pp. 135–136, 2005.
3. Rau appears to have got his information from a brief summary article published in the Institute of Creation Research newsletter *Acts & Facts* rather than Humphreys’ book *Starlight and Time* or his *J. Creation* articles.
4. See especially Lubenow, M.L., *Bones of Contention*, Baker Books, Grand Rapids, MI, 2004.
5. Kulikovskiy, A.S., *Creation, Fall, Restoration: A Biblical Theology of Creation*, Mentor, Fearn, Ross-shire, UK, 2009.
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7. Assis, A. K.T. and Neves, M.C.D., History of the 2.7K Temperature Prior to Penzias and Wilson, *APEIRON* 2(3):79–87, 1995.