

Harmony and discord

A review of
*The Language of God:
A Scientist Presents
Evidence for Belief,*
by Francis S. Collins
The Free Press,
New York, 2006

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Francis Collins is one of the world's leading geneticists, well known for heading the Human Genome Project (and bringing it to a successful completion ahead of schedule and under budget). He is also a Christian, who came to faith as an adult finishing his second doctorate. He has written this book out of a deep concern over the common misconception that faith and science are incompatible. Nothing could be further from the truth, he says, and begins by presenting some of his personal saga.

Personal story

Collins was not raised in a 'religious' home—even when he was sent to a local church choir to learn music, his parents admonished him to beware of the theology! Indifference toward religion matured into outspoken scepticism in college. After completing a doctorate in chemistry at Yale he went on to medical school, and there decided to research the topic of religion, to make sure his atheistic beliefs were well grounded. He came in contact with the writings of C.S. Lewis, and for the first time encountered a reasoned case for faith. He came away from his study with the opinion that it was more reasonable believe than to disbelieve in the existence of God, and that agnosticism was simply fence sitting. Collins rests his personal story at this point, and goes on to consider the arguments regarding God's existence.

Moral Law

The argument which most impressed Collins was Lewis' exposition

of the 'Moral Law' case for the existence of God. The argument runs something like this:

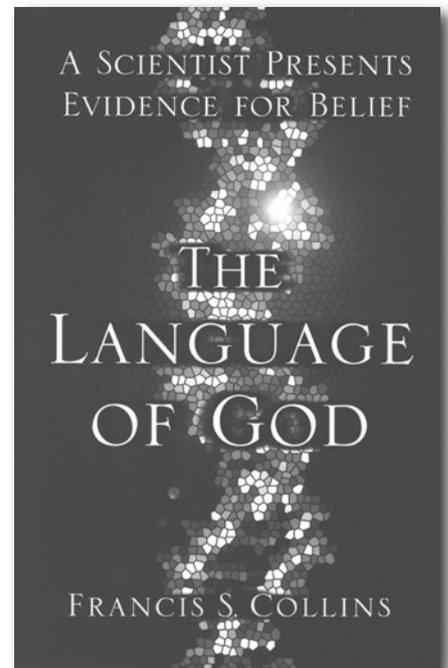
- (a) All men have some sense of right and wrong.
- (b) Naturalism cannot explain (a).
- (c) Therefore, something outside nature is responsible for (a).

Collins spends most of his time defending (b). He focuses on the issue of altruism and sociobiology's claim to naturalistically explain this phenomenon. Even if sociobiology is correct that altruism among ants is with the purpose of preserving their own genes, Collins suggests that this same argument breaks down when applied to complex populations (p. 28). 'Furthermore, for the evolutionary argument about group benefits of altruism to hold, it would seem to require ... hostility to individuals outside the group' (p. 28). While there is room for debate both as to Lewis' formulation of the case and Collins' supporting arguments, it is nevertheless good to see such a prominent figure as Collins willing to present arguments against sociobiology's reductionism.¹

Objections and answers

Collins next responds to several objections to belief in God, which were important for him in his life. He responds to the notions, first, that God is a delusion for wish fulfilment, and second, that God is discredited by evils committed in the name of religion. Collins' answers are good, but lack detail because at this point he is merely defending a general belief in God, not Christianity in particular.

Third, Collins tackles the problem of pain and suffering. He settles rather uncomfortably on the position that suffering is necessary to build moral character. This fails to answer the basic problem, why would a good God create us in such a way as to require suffering to achieve moral perfection? This problem can only be answered by a proper interpretation of the Fall, which recognizes that pain and suffering were *not* created by God as part of his 'very



good' creation, but were rather a consequence of the Fall. Sadly, 'suffering is necessary' is the position that theistic evolutionists are often forced to adopt, showing how a failure to appreciate the historical Fall of man in Genesis 3 cripples effective apologetics.

Fourth, Collins deals with whether miracles are rational. Collins rightly points out that 'a discussion about the miraculous quickly devolves to an argument about whether or not one is willing to consider any possibility whatsoever of the supernatural' (p. 51). An atheistic worldview by definition rejects the possibility of miracles,² and the opposite is true for theists. At this point, Collins fails to note a key point as to why an atheist and a theist can agree about some science (such as the cause of the tides) and yet disagree over other scientific issues (how old the seas, beaches and moon are)—there is a difference between operational science and origins science. Creationists can agree with Collins' comments on miracles where he cautions,

'... it is crucial that a healthy skepticism be applied when interpreting potentially miraculous events, lest the integrity and rationality of the religion perspective be brought into question' (p. 51).

But it would have been helpful if Collins had pointed out that there is a difference between accepting God's authoritative revelation when it speaks of specific miracles on the one hand, and applying scientific (as well as biblical) evaluation to uninspired *claims* of supernatural activity on the other hand.³ Failure to distinguish these situations causes confusion because it tends to mix origins science with operational science.⁴ Confusion on this point is typical of anti-creationist literature,⁵ and hints at problems to come.

Big bang

Using the topic of miracles and natural law⁶ as a bridge, Collins dives into science and origins. Collins uncritically accepts and summarizes the standard big bang story (pp. 71–78),⁷ then discusses the Anthropic Principle. Collins suggests that there are essentially 'three possible responses to the Anthropic Principle': (1) there exists a virtually infinite number of universes (a 'multiverse'), and we happen to live in the one suited to life; (2) we live in a lucky universe suited for life; or (3) we live in a universe precisely tuned for life by a creator.⁸ Collins certainly prefers option (3) and throws out a few arguments against the first two, but tries hard to avoid dogmatism. He concludes that

'... there is nothing inherently in conflict between the idea of a creator God and what science had revealed. In fact, the God hypothesis solves ... questions about what came before the Big Bang, and why the universe seems to be so exquisitely tuned for us to be here' (p. 81).

The problem is that the big bang is incompatible with what God has *said* that He did, and Collins brings up the Genesis-as-poetry position, a theme he returns to later.

Origin of life

Collins continues the mainstream evolutionary story of the origin of life. He believes faith was needlessly

damaged when science produced a naturalistic explanation for the origin of the universe. He says faith should not be shaken by the revelation that modern biology can explain life naturalistically. However, not only is it untrue that the universe is 'explained' by naturalism⁹ (Collins himself was cognizant of at least a few of the gaps left by the big bang), but, as we find out from Collins' discussion, the origin of life is far from having a naturalistic solution. Collins' account includes the Miller–Urey experiment¹⁰ and amino acids on meteorites¹¹ as the high points of origin-of-life research: 'Beyond this point, the details become quite sketchy' (p. 90). As both of the high points are quite unhelpful toward explaining a naturalistic origin of life, the rest must be 'sketchy' indeed. Collins concludes that no 'naturalistic explanation for the origin of life is at hand', but he warns against inserting God into the gap of scientific knowledge, as he expects the gap to be closed sometime in the future (pp. 92–93). However, the only people who invoke a 'god of the gaps' argument are evolutionists knocking down creationist straw men; creationists actually appeal to what we *do* know about chemistry, biology and information theory.

Fossils

Collins gives a cursory overview of the fossil record, claiming that the order is what you would expect from evolution,¹² and that 'missing links' are not good arguments against evolution because they are arguments from ignorance. He does not consider that the choppy fossil record is exactly what a creation model would predict, or that Darwin thought that the fossil

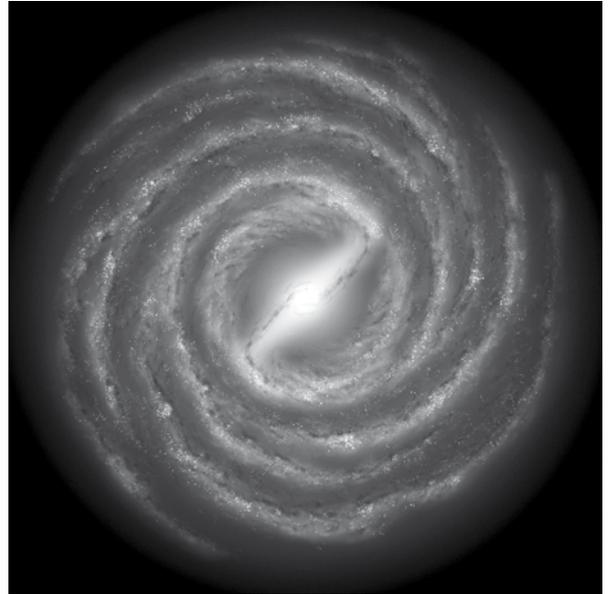


Image by R. Hurt (SSC), JPL-Caltech, NASA

Collins uncritically accepts the standard evolutionary account of the cosmos, except that he suggests that the addition of God into the story may help solve additional questions about 'what came before the Big Bang'. This sounds curiously like the god-of-the-gaps theology he later (inaccurately) accuses creationists of holding to.

record should be full of the links, and agreed that their absence was a serious objection to the theory. Collins claims that whales are an example of a species where the transitional fossils have filled in the gaps, but he does not respond to creationist criticisms of the proposed intermediate sequence.¹³

Evolution and DNA

Collins marvels that Darwin proposed natural selection before the discovery of its mechanism, DNA, and states that this is a remarkable confirmation of evolution. Actually, this was a confirmation of natural selection, and natural selection only. Creationists of course accept natural selection.¹⁴ Collins goes on to give a description of DNA—his specialty—and concludes that there are more reasons than ever to be in awe of God's work in nature. That is certainly true; but what is inspiring is the true (operational) science of DNA, not molecules-to-man evolution, for which Collins has provided no new arguments.

Collins tells the story of his own work in genetics in chapter 6,

culminating in the Human Genome Project. We can rejoice with him in the great new window this opened for him on God's creation. Unfortunately, Collins takes this opportunity to fill the rest of the chapter with standard Darwinian arguments. He views the similarities between genomes and the genetic phylogenies as great confirmations of evolution, pseudogenes as problems for creationists and non-functional ('junk') DNA stretches as evidence of common descent (but by the same reasoning, it is curious that theistic evolutionists are never bothered that their god left junk DNA and faulty genes in the genome). On this last count, Collins does cautiously note that perhaps 'our discounting of them as "junk DNA" just betrays our current level of ignorance' (p. 136). These so-called pseudogenes likely have much more functionality than was originally supposed;¹⁵ but, even supposing that much of the 'junk' DNA does turn out to be nonfunctional, this could simply be the result of decay since the Fall,¹⁶ and thus cannot be conclusive either for or against evolution. The genetic phylogenies argument for evolution (including the similarities in pseudogenes or 'silent genes') is also problematic, for sometimes the genetic phylogenies *cross* the evolutionary phylogenetic lines.¹⁷

Getting the facts straight

After establishing his strong belief in evolution, Collins sets down several possible ways to react to the interface of science and faith. Before he gets into the specifics, we already know where he's heading: he frequently quotes Augustine (pp. 83, 152, 156), claiming him for a 'loose' interpretation of Genesis, and also mentions Galileo and the geocentric controversy in several places (pp. 59, 85, 153–156) as a lesson against literalist construction of Scripture. First, it should be pointed out that Augustine was a convinced young-earth creationist even though he did allegorize other aspects of the creation account,¹⁸ so he does

not quite fit the role into which Collins is pushing him. Second, the Galileo example has problems as to both the history and the theology that Collins is referring to. From a historical perspective, the geocentric controversy was more the result of an unhealthy reading of Aristotle into the Bible than it was the result of misreading Scripture itself,¹⁹ and the conflict between Galileo and the church was not on biblical grounds at all.²⁰ From a theological perspective, Collins has set up a straw man, making it appear as if creationists have no understanding that there are metaphors and poetry in the Bible; we certainly recognize this, but we argue that a proper hermeneutic requires that Genesis be understood as *history* rather than *poetry*.²¹

Atheism

The first option for dealing with evolution and Genesis is atheism, which is when 'science trumps faith', Collins says (p. 159). Collins ends up quoting none other than Stephen Jay Gould to the effect that science is not able to adjudicate the question of God's existence. The problem with Gould (which Collins glosses over) is that he reaches his conclusion only by stating that religion (God) never interacts with the physical world. Ironically, a profile of Collins himself, in the anti-Christian *Scientific American*, praised him because he 'strives to keep his Christianity from interfering with his science and politics'²² (but they never have a problem when antitheists let their atheistic religion dictate their science and politics).

Creationism

The second option is young-earth creationism (YEC), which is when 'faith trumps science', according to Collins (p. 171). Collins appears superficially familiar with YEC

arguments: fossils formed during the Flood, radioactive decay rates have not been constant, and the Second Law of Thermodynamics precludes evolution (p. 173). Collins brushes off all these arguments without argument, and without as much as a footnote for more in-depth treatment. Obviously, he is not to be bothered by actually refuting creationist arguments, perhaps indicating that he is not well-read on the subject.

Within a few pages, he states that YEC proponents have spent the 'last half century' attempting to refute evolution, and in frustration, 'some YEC advocates have more recently taken the tack of arguing that all of this evidence has been designed by God to mislead us, and therefore test our faith' (p. 176). Once again, Collins' lack of references is annoying, for I would be intensely curious to see to whom Collins is referring. Certainly there is no one who says this in the mainstream of creation research and ministry; it sounds more like Neo-Platonists²³ than any creationists I have ever heard of. Tossing in a bizarre minority position, with no evidence that anyone holds this, appears to be a 'guilt by association' and 'poisoning the well' tactic for marginalizing creationists as a whole into a lunatic fringe.

Intelligent Design



Collins joins a host of other writers in citing Galileo's conflict with church leaders as a warning against allowing Scripture to influence science. However, a careful examination reveals that this popular form of the Galileo story is not historically accurate.

The third option is Intelligent Design (ID), which is when ‘science needs divine help,’ according to Collins. Collins takes ID’s arguments seriously, and delineates three propositions which he believes are basic to ID. First, evolution is atheistic and theists should oppose it; second, evolution cannot account for the ‘intricate complexity of nature’; third, if evolution cannot explain the complexity of nature, then there must be a designer ‘who stepped in to provide the necessary components during the course of evolution’ (pp. 183–186). (ID advocates would object to the arrangement of these points, as it tends to emphasize the religious rather than scientific side of ID.) Collins then focuses in to critique ‘irreducible complexity’, a concept he believes confuses the ‘unknown with the unknowable’ (p. 188). Collins’ arguments (discussing blood clotting, the eye, and the bacterial flagellum) are mostly based on the unreliable Ken Miller.²⁴

Collins theologically objects to ID in that it, first, creates a ‘God of the gaps’, and second, implies the Creator must have been ‘clumsy’ to have to keep intervening throughout geologic time to make his creatures turn out right. From a YEC perspective as well, theological grounds are the weak spot for ID, because by intentionally avoiding the identity of the ‘designer’ they have nowhere to turn for answers. When we are operating from a biblical standpoint, however, the geologic timescales disappear, and the ‘God of the gaps’ problem evaporates. As Alvin Plantinga has explained, the ‘God of the gaps’ is deistic, not Christian, for it postulates a basically naturalistic world and *only* invokes God at certain awkward points (a ‘large scale hypothesis to explain what cannot be explained otherwise, i.e. naturalistically’²⁵).

‘BioLogos’

Collins finally considers theistic evolution, which he believes is ‘science and faith in harmony’. He thinks that theistic evolution would be much more popular if it only received as much

publicity as the more ‘divisive’ creationists and ID advocates, and Collins suggests a new name, ‘BioLogos’, to improve theistic evolution’s appeal (p. 203). He says that he has found theistic evolution a ‘satisfying’ and ‘consistent synthesis’ of faith and science (p. 200). Collins reports that this view avoids the pitfalls of the other views, such as ‘God of the gaps’ arguments, by dealing with the questions which science was not intended to answer anyway (p. 204). He fails to note that a robust theism which allows God any involvement in His creation will impinge on the realm of science at some point; Collins’ own Moral Law argument, for example, intrudes into the realm of sociobiology. There is no way to relegate religion and science into separate domains of ‘respectful noninterference’²⁶ without turning God into something even less than a deist’s deity. The only question is, will we accept God’s revelation of where He has directly acted in the world, or will we arbitrarily pick and choose where we can accept God’s action (for example creation of a Moral Law, but not of man’s mind itself)?

Collins does not deal with the perennial problems for theistic evolution, namely, the problem of death before sin, and the problem of theodicy for a deity using evolution.²⁷ Collins does address the objection,

‘Doesn’t a compromise of Genesis 1 and 2 start the believer down a slippery slope, ultimately resulting in the denial of the fundamental truths of God and His miraculous actions?’ (p. 209).

He responds, ‘While there is clear danger in unrestrained forms of “liberal” theology that eviscerate the real truths of faith, mature observers are used to living on slippery slopes and deciding where to place a sensible stopping point’ (p. 209).

But then the question becomes whether it is ‘sensible’ to stop where the theistic evolutionist Christian stops. Can one consistently reject the Genesis account as history while still holding to such a basic essential as the Resurrec-

tion, for example?²⁸ Collins also fails to explain how the rest of the Bible treats the people, events, timeframes and sequences as real history, not myth or allegory.²⁹ This is a serious problem for Christian theistic evolution proponents.

Personal message

In his final chapter Collins returns to his personal odyssey. After coming to the conclusion that there was a God, Collins recalls, ‘I spent considerable time trying to discern His characteristics’ (p. 219). After some time of considering his options, he was finally most impressed by the perfection that God must possess, and Collins’ inability to meet that standard of perfection. ‘Into this deepening gloom came the person of Jesus Christ’ (p. 220). Collins then explains the claims of Christ, His redemptive sacrifice, and the way it all fit together to make sense to him (although overlooking the connection of ‘the Last Adam’ coming to conquer death, ‘the last enemy’, brought by ‘the first man, Adam’ in 1 Cor. 15:21–22, 26, 45). Collins concludes with a personal note to readers. He encourages believers that science and faith are compatible and that faith makes sense; he challenges sceptics to consider the arguments for God and faith.

‘Don’t put off a consideration of these questions of eternal significance until some personal crisis or advancing age forces a recognition of spiritual impoverishment’ (pp. 132–133).

Conclusion

All Christians, creationists included, can find much to like in *The Language of God*. Collins’ personal story is fascinating. His intention in writing the book is excellent: to spread the word that faith is reasonable. Like Collins, we want to see an end to the widespread false impression that faith and science are incompatible. However, we must sadly conclude that most of Collins’ arguments—his means to the laudable ends that we all want to further—are going down the wrong

path. Instead of creating a harmony between faith and science, theistic evolution subsumes the authority of Scripture to the authority of the latest scientific paper, leaving philosophical confusion in its wake.

References

- For development of the moral argument, see Craig, W.L., The Indispensability of Theological Meta-ethical Foundations for Morality, *Foundations* 5:9–12, 1997, online at <www.leaderu.com/offices/billcraig/docs/meta-eth.html>, 13 December 2006; and Sarfati, J., Bomb-building vs the biblical foundation, 24 December 2004 <www.creationontheweb.com/content/view/2207>.
- But ironically, atheism cannot provide an epistemological basis for believing in uniformity of nature, while Christian theism does: see Sarfati, J., Correcting a severe misconception about the creation model, 31 December 2004 <www.creationontheweb.com/content/view/2208/#science>, and Sarfati, J., Miracles and science, 1 September 2006, <www.creationontheweb.com/content/view/4622/>
- See as an example Sarfati, J., *Near death experiences? What should Christians think?* 11 July 2000, <www.creationontheweb.com/content/view/3823/>.
- For further discussion, see Sarfati, J., *Who's really pushing 'bad science'?* <www.creationontheweb.com/naturalism>; Batten, D., *'It's not science'*, 28 February 2002, <www.creationontheweb.com/notscience>; Sarfati, ref. 2.
- See Steel, A., The tower with many flaws: A review of *Tower of Babel: the evidence against the New Creationism* by Robert T. Pennock, *Journal of Creation* 14(2):41–46, 2000.
- Note that in a biblical worldview, there is no dichotomy between miracles and natural law that entails that only the former is God acting: natural law is our description of God's ordinary way of sustaining creation, and miracles are our description of His extraordinary involvements in His creation (Colossians 1:15–17).
- Collins does not even acknowledge that there could be scientific objection to the big bang cosmology, but see Hartnett, J., and Williams, A., *Dismantling the Big Bang*, Master Books, Green Forest, AR, 2005.
- It seems that it would have been easier to say 'designed for life', but Collins seems to go out of his way to avoid using the catchword 'design,' lest he be linked to the Intelligent Design (ID) movement. ID has been a major proponent of the Anthropic Principle as an argument for design in the book and documentary, *The Privileged Planet*. See Henry, J., Designing the earth without a designer: A review of *The Privileged Planet* by Guillermo Gonzalez and Jay W. Richards, *Journal of Creation* 18(3):58–60, 2004.
- See Hartnett and Williams, ref. 7.
- The experiment, rather than showing how life could have formed, instead did more to highlight the problems with abiogenesis. Bergman, J., Why the Miller–Urey experiment argues against abiogenesis, *Journal of Creation* 18(2):28–36, 2004.
- This is trivial for origin-of-life research, because the building blocks themselves are unstable for forming life. Sarfati, J., Origin of life: instability of building blocks, *Journal of Creation* 13(2):124–127, 1999.
- But see Woodmorappe, J., The fossil record: becoming more random all the time, *Journal of Creation* 14(1):110–116, 2000.
- Sarfati, J., *Refuting Evolution*, chapter 5, Master Books, Green Forest, AR, 1999; Sarfati, J., *Refuting Evolution 2*, Master Books, Green Forest, AR, pp. 135–142, 2002; Woodmorappe, J., Walking whales, nested hierarchies, and chimeras: do they exist? *Journal of Creation* 16(1):111–119, 2002; Gish, D.T., *Evolution: The Fossils Still Say No*, Institute for Creation Research, El Cajon, CA, pp. 198–207, 1995.
- Years before Darwin published, creationist Edward Blyth authored publications describing natural selection in 1835 and 1837. Eiseley, L., Charles Darwin, Edward Blyth, and the theory of natural selection, *Proceeding of the American Philosophical Society* 103(1):94–114, 1959, reprinted in *Darwin and the Mysterious Mr. X: New Light on the Evolutionists*, E.P. Dutton, New York, 45–80, 1979.
- See further Walkup, L.K., 'Junk' DNA: evolutionary discards or God's tools? *Journal of Creation* 14(2):18–30, 2000; Woodmorappe, J., Pseudogene function: regulation of gene expression, *Journal of Creation* 17(1):47–52, 2003; Woodmorappe, J., Pseudogene function: more evidence, *Journal of Creation* 17(2):15–18, 2003.
- Walkup, ref. 15.
- Woodmorappe, J., Are pseudogenes 'shared mistakes' between primate genomes? *Journal of Creation* 14(3):55–71, 2000; Woodmorappe, J., Potentially decisive evidence against pseudogene 'shared mistakes', *Journal of Creation* 18(3):63–69, 2004.
- Sarfati, J., *Refuting Compromise*, Master Books, Green Forest, AR, chapter 3, 2004.
- See Faulkner, D., Geocentrism and creation, *Journal of Creation* 15(2):110–121, 2001. Also see the essay by Russell Grigg, The Galileo 'twist', *Creation* 19(4):30–32, 1997, which turns Collins' lesson from the Galileo affair on its head.
- Schirmacher, T., The Galileo affair: history or heroic hagiography? *Journal of Creation* 14(1):91–100, 2000.
- Sarfati, J., ref. 18, chapter 1; Ham, K., Wieland, C., and Mortenson, T., Are (biblical) creationists 'cornered'? *Journal of Creation* 17(3):43–50, 2003.
- Beardsley, T., Where science and religion meet, *Scientific American* 278(2):18–20, February 1998.
- See Rudwick, M.J.S., *The Meaning of Fossils*, University of Chicago Press, Chicago, IL, pp. 33–35, 1985.
- On Miller generally, see Woodmorappe, J. and Sarfati, J., Mutilating Miller: A review of *Finding Darwin's God*, by Kenneth R. Miller, *Journal of Creation* 15(3):29–35, 2001. For specific responses to his arguments on irreducible complexity, see Behe, M.J., In defense of the irreducibility of the blood clotting cascade, <www.arn.org/docs/behe/mb_indefenseofbloodclottingcascade.htm>, 31 July 2000; Behe, M.J., A true acid test: A response to Ken Miller, <www.arn.org/docs/behe/mb_trueacidtest.htm>, 31 July 2000. See also DiSilvestro, R., Rebuttals to common criticisms of the book *Darwin's Black Box*, <www.leaderu.com/science/disilvestro-dbb.html>, 9 August 2006.
- Plantinga, A., Methodological naturalism? *Perspectives on Science and Christian Faith* 49(3):148–149.
- Borrowing the terms from Gould, S.J., *Rocks of Ages: Science and Religion in the Fullness of Life*, Ballantine, New York, p. 5, 1999.
- For an overview, see Ham, K., The god of an old earth, *Creation* 21(4):42–45, 1999, and Batten, D., (Ed.), *The Answers Book*, CMI, Australia, pp. 41–44, 1999; 2006.
- For example, see Ruse, M., *Can a Darwinian Be a Christian? The Relationship Between Science and Religion*, Cambridge University Press, Cambridge, UK, p. 96, 2001, 'eviscerating' the resurrection; and my review in *Journal of Creation* 19(2):42–25, 2005.
- Batten, D. and Sarfati, J., *15 Reasons to take Genesis as History*, CMI, Australia, 2006.