

No keeper's brother

*Am I My Keeper's Brother?—
Human Origins From A
Christian And Scientific
Perspective*

Philip Pattemore
New Zealand, 2011

Shaun Doyle

In recent years a very vocal cavalcade of theistic evolutionists has made a rather big splash in evangelical circles. Led by Dr Francis Collins and *BioLogos*,¹ they have sought to reformulate evangelicalism basically from the ground up around evolution. Central to this program has been the origins of humanity—they have blatantly denied the existence of an original human pair based on the ‘obvious’ evidence for common ancestry, and have sought to reshape the doctrines of sin and salvation around this denial.²

However, while there has been a resurgence in theistic evolution in other countries, *BioLogos* and the controversy surrounding them has largely focussed on the American context. Enter into the New Zealand evangelical context Dr Philip Pattemore, Associate Professor³ of Paediatrics at the University of Otago. Unfortunately, he is also the Christian Medical Fellowship of NZ board chairman. He has presented a relatively detailed circa 450-page apologetic for the *BioLogos* trajectory on human origins in *Am I My Keeper's Brother?* However, not only has he reproduced much of the *BioLogos* position, but also much of the mode of argumentation against opposing views, as seen before in the works of Darrell Falk,⁴ Francis Collins,⁵ and Karl Giberson, among others.⁶ Far from a compliment; it is a severe indictment.

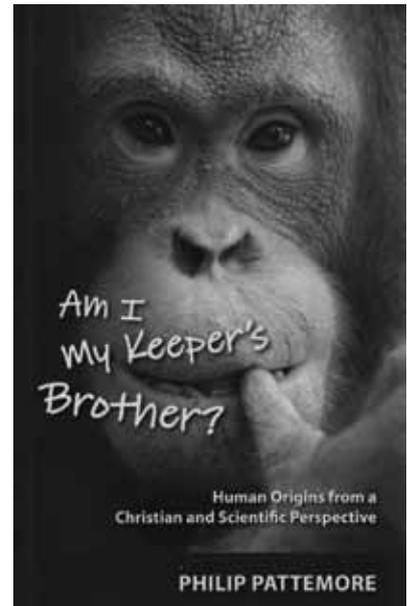
Opponents not worth a reference

Pattemore has produced a book intended (partially) as a rebuttal of Intelligent Design and biblical creationist understandings of human origins. The problem is there is not a *single* citation of *any* material from a biblical creationist, old-age creationist, or Intelligent Design point of view. It's almost expected these days that compromisers will ignore the biblical creationist literature,⁷ but why fail to reference *every other position held by Christians?* Extreme hubris seems the only plausible explanation. Pattemore is not ignorant of this literature. For instance, he knows a term like *baramin* and understands that it often approximates to ‘family’ in Linnaean taxonomy (p. 260), which shows he has read something from biblical creationists. But I can only pick this up because I've read creationist literature on baraminology. A reader unfamiliar with the biblical creationist literature will simply be left with Pattemore's opinion and no leads to follow up to test what he's said.

Misrepresenting opponents

Since Pattemore does not reference his opponents, it should come as no surprise that he knocks down numerous strawmen. A couple of examples will suffice.

First, consider his “Genetic predictions of the Special Creation of Mankind” (pp. 196–197). Pattemore seems to think the prime assumption is that man was “not patterned on any other creature—rather, they were made ‘in the image of God.’” He makes much of this ‘problem’ of creationism later on (pp. 255–261). But why must God be completely novel in his creation of humans? The ancients, who viewed change and novelty with suspicion rather than favour (a viewpoint



still held in many places around the world), certainly didn't think it had to be so.⁸ Moreover, producing large results from small changes evinces a mastery of design that complete novelty does not. If humans are 99% genetically similar to chimps (figure 1),⁹ consider how large a phenotypic difference that 1% has made!¹⁰ There are important *qualitative* differences between chimps and humans, such as the capability of generating *syntactic* language.¹¹ That would be like redesigning a car to drive itself just by tinkering with 1% of its components—clearly not something every intelligent agent can do, let alone an evolutionary process that is mindless *for all practical purposes*.¹²

There is also the ‘reading Genesis scientifically’ (p. 66) canard. Young-age creationists do not read Genesis as *science* but as *history*. Pattemore, like many theistic evolutionists, doesn't seem to understand the difference. It seems that a ‘scientific’ account of history for Pattemore (and others like him) seems roughly to mean an account of what really happened in the physical world. If so, then that is how we understand Genesis 1–11, but why call that ‘scientific’? That just causes concept confusion—science is not history. Science is about repeatable



Image: Wikipedia/ Thomas Lersch

Figure 1. Even if chimps had 99% genetic similarity to humans (though they do not), that would be a testimony to the amazing capacity of the common designer of chimps and humans. It would be like redesigning a car to drive itself just by tinkering with 1% of its components—clearly not something every intelligent agent can do, let alone evolutionary process that is mindless for all practical purposes.

present process; history is about unrepeatable past events. Science can be used in the study of history, but it cannot be the final authority on determining historicity in a universe governed by the God of Scripture since at the very least science cannot constrain how God might act. Science can't 'tell' us how God acted, only people can—and only God is sure to produce a reliable account.

Patronizing opponents

Pattemore's tone towards his opponents is also problematic: "Although the proponents [of young-age creationism] claim the authority of Scripture for these beliefs, their activity is also driven by certain fears or perceived dangers" (p. 35). He then proceeds to list more than half a dozen fears that supposedly drive the beliefs of biblical creationists. Pattemore doesn't claim this only for biblical creationists: "Does Intelligent Design harbour undercurrents of fear too? I suspect it does" (p. 36). He then lists the supposed 'fears' of ID proponents.

Apparently anyone who believes in some form of Special Creation is motivated by fear. Pattemore must be nigh omniscient to know just what motivates his ideological opponents! C.S. Lewis called this 'Bulverism'¹³—the fallacy of pontificating on the motives one's opponents have for their 'obviously irrational' belief before actually disproving their belief.

What of the actual argument?

Pattemore's presentation has numerous holes in it before we even come to consider the truth value of the position he promotes and the arguments he advances for it. What about the substance of his arguments? He covers much ground, and it would take a book to address every point he makes. And though the general argument is not new, there are some relatively unique features embedded that make the general thrust of his argument worth examining in some detail.

Critically real, with a side of Bacon books

Pattemore adopts an epistemology called 'critical realism', which essentially states that the objects of our sense perceptions objectively exist, but that we must remain to some extent critical of our cognitive faculties, as they can be deceived. Our only path to knowledge, then, is continual interaction and 'dialogue' with the thing known so as to check and recheck our biases against reality.¹⁴ The dual emphasis of acknowledging an objectively real world *and* that our cognitive framework can lead us astray in interpreting it is commendable.

Pattemore also adopts a Baconian 'two books' approach to science and theology, where 'science' and 'theology' are two different books authored by the same God, and thus are authoritative in their own field. Interestingly—considering how summarily Pattemore dismisses ID philosophy—a leader in the ID movement, William Dembski, has also adopted this Baconian paradigm in favour of ID.¹⁵

However, this 'two books' notion does not gel well with Pattemore's critical realism or with the doctrine of *sola scriptura*.¹⁶ In practice, it sets up 'science = evolution' as about the 'real world', and the Bible is just 'religion'. Therefore, in practice it seems that 'critical' applies to Scripture and 'realism' applies to evolution. *Sola scriptura* however, gels well with notions of critical realism because it also affirms that men are not always reliable, though God always is. Therefore, while human-discovered truth can correspond to reality just as much as the Bible can, intrinsic trust is given only to revealed truth.

Pattemore chides biblical creationists for setting up this 'revealed truth' vs 'discovered truth' distinction as producing 'two types of truth' (pp. 36–37). But the issue in the distinction is not between different 'types of truth' but between differing levels



Figure 2. The ‘antipodean heresy’ is the idea that humans lived on the opposite side of the globe who were not sons of Adam. It has oft been claimed that this notion caused the church to oppose Columbus’ proposed voyage west to reach India, though it is without historical basis.

of reliability in the two sources of information—something Pattemore considers commendable (pp. 42–44). Rather, it is the Baconian ‘two books’ notion that creates two types of truth, and does it by effectively divorcing theology from the ‘real world’ of history and science.

Bad church, worse history

He claims the church has a rather vexed history with science over the antipodes,¹⁷ geocentrism, and racism. The first is completely false—the ‘received opinion’ came not from the Bible but from Augustine, whose theology on the point was good, but his geography was bad.^{18,19} This was falsified by *Christians* before Columbus first set sail (Bartholomew Diaz rounded the southern tip of Africa in 1488—four years *before* Columbus sailed west to try and reach India) and didn’t impact the Christian hegemony of Europe.²⁰ The second was the result of reading Ptolemaic cosmology into the Bible,²¹ and the third was also reading modern notions of race into the Bible—actually racism was aided by anti-biblical notions, including ‘pre-Adamites’ and evolution itself (figure 2).²² In all three cases the

problem was not the Bible but the ideas men brought to the Bible. However, deep time and evolution directly contradict the Scriptures.

Genesis 1–11, pagan parody?

Pattemore argues that Genesis 1–6 is an essentially ahistorical parody of ancient pagan mythology.²³ However, why would an ahistorical parody work better as a refutation of pagan myth (and a precedent for the Israelite work week) than factual history? There is no indication that the pagans didn’t believe their ‘myths’ were actual history—in which case if Genesis were an *ahistorical* parody would be a dramatic *failure* in polemics. However, even some who reject the ‘factual history’ reading of Genesis 1–11 also reject the notion that it is primarily a polemic—it appears more didactic than polemic in intent.²⁴ Neither is this interpretation found in the Bible—the people and events of Genesis 1–11 are *always* treated as having really existed/happened.

Pattemore also calls Genesis 1–11 ‘proto-history’, which seems to mean that it’s essentially a few ‘once upon a time’ historical notions presented in a largely symbolic framework conventional to the day. Only the most basic particulars of the narrative should be treated as historical.²⁵ This is a common argument,²⁶ though obvious questions arise—how do we know which particulars are ‘basic’ (and thus historical) and which are not? Why was the ‘symbolic framework’ conventional? Why accept Genesis over the pagan renditions? While we in the ‘scientific’ West might consider the lack of gods in Genesis a desirable thing, many non-westerners even today would consider the cosmic picture Genesis paints unsettlingly and implausibly *empty*. Who is right? This all of course assumes Genesis is easily comparable to these other pagan myths, which is disputable.

The pattern of evolutionary paternity

Pattemore then spends three sections detailing the evolutionary ‘paternity case’, though most of his substantive argument is in section 6. Section 4 deals mainly with physiology, where a few basic canards are presented (invoking ‘bad design’ and a lack of ‘qualitative difference’ between us and apes as reasons to reject special creation—arguments that have been dealt with many times before²⁷). Section 5 sets out some basic genetics. The centrepiece of Pattemore’s case for evolution is in section 6, which we might term the genetic ‘pattern of paternity’—notions such as ‘shared mistakes’ in non-functional DNA, nested patterns of genetic insertions, and protein sequence similarities. In essence, it is the ‘molecular homology’ argument. This argument posits that there is a recognizable nested pattern to the genomes of organisms (including primates) that reflects what we would only expect assuming evolution. This argument is analogous to plagiarism—the same unusual spelling mistakes in two papers suggest a common source.

There are a number of problems with this argument.²⁸ Firstly, analogy and homoplasy (similarity not due to common ancestry) plague the analysis far more than Pattemore acknowledges—many ‘patterns’ in the molecular data simply do not fit the evolutionary scheme.²⁹ Secondly, some ‘changes’ may not be changes at all. Functionality is being found in more and more non-coding DNA, including ‘pseudogenes’ and ‘retroelements’, which means the shared features may actually reflect a common *function* rather than common ancestry.^{30–33} Thirdly, some changes may not be *random*—they may be the result of preferential mutation: e.g. mutational hotspots³⁴ or designed variation.³⁵ The fact is that we simply do not know enough of how the genome works to understand its semantics, especially

with respect to non-coding DNA. In all these cases the ‘plagiarism’ analogy breaks because the shared idiosyncrasies are found not to be entirely random. And if this analogy breaks, so does Pattemore’s central argument for common ancestry.

Moreover, evolutionary *pattern* is only as convincing as the *process* posited to explain the pattern, and here evolution falls down miserably. Genetic *degradation* is the inexorable norm,³⁶ not the addition of radically new features and systems (e.g. an innate ability for syntactic language).³⁷ Moreover, evolutionary analyses of the genetic data evince a systemic evolutionary bias.³⁸ Unless a viable mechanism can be produced, evolutionary ‘patterns of paternity’ are interesting speculations based on a vastly incomplete understanding of the genome which amount to nothing more than the fallacy of affirming the consequent. Common ancestry is not the only way to explain these patterns.

Unoriginal sin, inconsequential death

Section 7 is the obligatory section on Adam, Original Sin, and salvation. Consistent with his belief in evolution, Pattemore rejects the historicity of Adam and Eve. This unsurprisingly leads him to reject Original Sin and sin-death causality (with respect to physical death, at least), though he acknowledges that Paul believed Adam existed. But this entails that Paul is wrong—Pattemore also rejects biblical inerrancy, disqualifying him as an evangelical.

However, he doesn’t think this really matters for Paul’s argument in Romans 5:12–21. He considers Paul’s use of Adam in Romans 5 to be an incidental rhetorical device to contrast with forgiveness in Christ—the historicity of Adam is apparently irrelevant to the point Paul is making. At this point Pattemore is against not only the history of interpretation but even

the consensus of *modern* commentators.^{39,40} Moreover, a simple reading of Romans 5:13–14 clearly shows that Paul makes much of Adam not in an abstract sense but as *an integral part of a theologically significant historical framework*. The argument is so grounded in history that extracting a historical Adam leaves the whole argument in tatters.

Pattemore’s handling of physical death is even worse. He acknowledges that 1 Corinthians 15:20–22 rather clearly makes Adam the cause of *physical* death since the solution to ‘death’ in Adam is *bodily resurrection* in Christ⁴¹: “But it seems as though Paul is talking in 1 Corinthians about physical death when he contrasts it with resurrection from the dead” (p. 295). He then tries to sidestep Paul’s argument by appealing to Genesis 3 (p. 296). But Genesis 3 doesn’t help him—a part of the judgment on Adam is *returning to the dust*, which is clearly *physical death*.

Soulless humans?

Section 8 is a discussion of the notion of the human soul as it relates to evolution and the Bible. Pattemore advocates (with many theistic evolutionists today) physicalism⁴²—the idea that humans possess no immaterial soul that can be distinguished from the body. The implication is that we cease to exist upon death, and resume our existence once we are raised.

To refute the notion of an immaterial soul Pattemore puts much effort into (re)defining the terms used for ‘soul’ and ‘spirit’ in Scripture (*nephesh*, *ruach*, *psyche*, and *pneuma*) in physicalist terms. There are dualist responses to this that he doesn’t interact with,⁴³ but the point is somewhat moot—he hardly deals with passages where these terms are not present or important that still seem to suggest our continued disembodied existence after death: e.g. Luke 23:42–43; Philippians 1:23;

2 Corinthians 5:8; Jesus’ answer to the Sadducees’ question about the resurrection (Matthew 22:23–33, Mark 12:18–27, Luke 20:27–40); the conscious ‘souls’ of martyred saints before their resurrection (Revelation 6:9–10); and even the rather enigmatic account of Saul, Samuel, and the witch at Endor (1 Samuel 28). Pattemore only mentions one of these passages (Matthew 22:31–32), though without comment beyond that it’s about resurrection. It is, but the form of the argument is rather involved, and Jesus’ stated punchline is not ‘and they will be raised from the dead’ but rather ‘Abraham, Isaac, and Jacob are currently alive’, with the unstated implication in context being that they are *awaiting resurrection*. Ironically, one of the best recent defences of this view comes from New Testament scholar (and theistic evolutionist) N.T. Wright,⁴⁴ whom Pattemore approvingly cites as rejecting the notion of a disembodied soul:

“Recent scholarship (eg NT Wright in *Surprised by Hope*) has tended to affirm rather than the New Testament hope is the resurrection of the body, and that there is little consistent biblical or scientific evidence for the existence of a disembodied soul” (p. 354).

And this is the quote he uses to prove his point about Wright’s belief (p. 354):

“... do we have immortal souls, and if so what are they? Again, much Christian and sub-Christian tradition has assumed that we all do indeed have ‘souls’ that need ‘saving’, and that the ‘soul’, if ‘saved’, will be the ‘part’ of us that ‘goes to heaven when we die’. All this, however, finds minimal support in the New Testament, including the teachings of Jesus, where the word ‘soul’, though rare, reflects when it does occur underlying Hebrew or Aramaic words that refer, not to a disembodied entity hidden within

the outer shell of a disposable body, but rather to what we would call the whole ‘person’ or ‘personality’, seen as being confronted by God ... In other words, the idea that every human possesses an immortal soul, which is the ‘real’ part of them, finds little support in the Bible.”⁴⁵

However, this needs to be compared to this statement from the same book:

“... all the Christian departed are in substantially the same state, that of restful happiness. Though this is sometimes described as ‘sleep’, we shouldn’t take this to mean a state of unconsciousness. Had Paul thought that, I very much doubt that he would’ve described life immediately after death as ‘being with Christ, which is far better’. Rather, sleep here means that the *body* is ‘asleep’ in the sense of ‘dead’, while *the real person—however we want to describe him or her—continues*.

“This state is not, clearly, the final destiny for which the Christian dead are bound, which is as we have seen bodily resurrection. But it is a state in which the dead are held firmly within the *conscious* love of God and the *conscious* presence of Jesus Christ, while they await that day [emphases added].”⁴⁶

Wright seems rather confused. He clearly affirms a disembodied intermediate state between death and resurrection and yet has no time for an ‘immaterial soul’ or ‘substance dualism’.⁴⁷ However, a conscious disembodied intermediate state entails some form of substance dualism.⁴⁸ Whence the inconsistency? Wright argues against *Platonic* dualism⁴⁹ but at times seems to think he has thereby refuted *all* forms of substance dualism.⁵⁰

Clearly, Pattemore has misrepresented Wright to a certain extent; whatever Wright is, he is no physicalist. There are plenty of Christian

physicalists more consistent than Wright on this topic that Pattemore could have referenced, and yet didn’t.⁵¹

In another ironic twist, though, Pattemore seems to reproduce Wright’s error of subsuming all forms of substance dualism under Platonic dualism. He thus seems to consider Platonism and physicalism as the only live options. However, while the doctrine of the intermediate state entails a form of substance dualism, it is not Platonic dualism. Unlike Platonism, which views this disembodied state as a *desirable permanent* state, Paul viewed it as a *temporary* state of *nakedness* (2 Corinthians 5:2–4). It is in one sense better (for Christians) than our existence in a *fallen* world and in *corrupted* flesh because we come to rest in God’s presence (Luke 23:42–43, 2 Corinthians 5:8, Philipians 1:23). However, in such a state we are distinctly *less* than we were created to be—a disembodied state is not proper for humans. Thus we seek a *more permanent* embodiment (2 Corinthians 5:4) when our corrupted flesh is raised incorruptible and immortal (1 Corinthians 15:51–54). This dualism bears little relation to Platonic dualism. It arises for different reasons, serves a different purpose, and has a drastically different estimation of the value of a disembodied state.

Pattemore only acknowledges such a view once, and only in passing without refutation (p. 350). He doesn’t seriously interact with any dualistic view that propounds bodily resurrection as a desirable final state.⁵² For what he considers “stray[ing] deeply into theological and philosophical territory to examine the notion of the soul” (p. 358), this is a massive omission. No *orthodox* Christian view has anything other than bodily resurrection as the desirable final state (1 Corinthians 15), therefore the debate he is having is not one among different Christian views—he’s debating with a pagan Greek thinker.⁵³

Theistic evolution = informed theism?

One of course would expect Pattemore’s summary of the issue to be in favour of theistic evolution, and so it is. However, what is striking is not the conclusion, but the way in which every other view is represented. Theistic evolution is ‘informed theism’ (p. 378), whereas everything else is ‘creationism’. The rather clear implication is that ‘creationists’ are *not* informed. This can be taken in two ways—either creationists simply have never interacted with any serious evolutionary arguments and so are not equipped to produce any informed responses, or belief in creationism *per se* is a sign of ignorance, regardless of what evolutionary literature they may have interacted with. Neither option is good, the first being gross incompetence, and the second being hubristic prejudice (which in turn leads to gross incompetence). Unfortunately, the second option seems more plausible—he seems to think skepticism of evolution is the *sine qua non* of irrationality.

The end of the matter?

For all the detail the book attempts to go into concerning the human origins issue (it would take a book to refute everything), *Am I My Brother’s Keeper?* is just one more vapid authoritarian ‘apologetic’ for theistic evolution. There are simplistic errors, facile misrepresentation of opponents, unfounded psychoanalyzing of his opponents’ motives, and a complete lack of reference to any *Christian* literature promoting views he attempts to rebut. In terms of content, any heterodox theology goes so long as the orthodoxy of evolution is preserved. Is this fair and scholarly? No. It’s not even original. It merely follows uncritically a long line of bad polemics associated with *BioLogos*.

References

1. Cosner, L., Evolutionary syncretism: a critique of BioLogos, creation.com/biologos, 7 September 2010.
2. Carter, R.W., The Non-Mythical Adam and Eve! Refuting errors by Francis Collins and BioLogos, creation.com/biologos-adam, 20 August 2011.
3. In New Zealand, this is the second-highest academic rank.
4. Williams, A., Taking firm hold on an illusion: A review of *Coming to Peace with Science* by Darrel R. Falk, *J. Creation* 20(3):45, 2006; creation.com/falk.
5. Weinberger, L., Harmony and discord: A review of *The Language of God* by Francis S. Collins, *J. Creation* 21(1):33–37, 2007; creation.com/collins-review.
6. Cosner, L., Theistic evolutionary doublespeak: A review of *The Language of Science and Faith* by Karl W. Giberson and Francis S. Collins, *J. Creation* 26(1):20–23, 2012; creation.com/theistic-evolutionary-doublespeak.
7. Bell, P.B., The portrayal of creationists by their evolutionist detractors, *J. Creation* 16(2):46–53, 2002; creation.com/portrayal-of-creationists.
8. Holding, J.P., ‘Not to Be Used Again’: Homologous Structures and the Presumption of Originality as a Critical Value, 29 November 2006; creation.com/homologous.
9. It is unlikely that the similarity is anywhere near this high; see Cohen, J., Relative differences: the myth of 1%, *Science* 316(5833):1836, 29 June 2007 | DOI: 10.1126/science.316.5833.1836; and Anderson, D., Evolutionists abandon the idea of 99% DNA similarity between humans and chimps, creation.com/similarity-myth, 10 August 2007. However, even a 1% difference is no help for evolution—Batten, D., Haldane’s dilemma has not been solved, *J. Creation* 19(1):20–21, 2005; creation.com/haldane.
10. Wieland, C., Furry little humans? *Creation* 24(3):10–12, 2002; creation.com/furry-little-humans.
11. Cosner, L., Project Nim: Can a chimp learn language? 18 December 2011; creation.com/nim.
12. Theistic evolutionists may argue that evolution in their scheme cannot be cast as ‘mindless’. However, since theistic evolutionists consider *naturalistic* processes sufficient to explain biological origins and change there is no *practical* difference between theistic evolution and atheistic evolution.
13. Lewis, C.S., *God in the Dock: Essay on Theology and Ethics*, Eerdmans, Grand Rapids, MI, pp. 271–277, 1970.
14. For an introduction to critical realism from a biblical creationist perspective, see Kennard, D., A nuanced Lakatos philosophy of theology and science; in: Snelling, A.A. (Ed.), *Proceedings of the Sixth International Conference on Creationism*, Creation Science Fellowship and Institute for Creation Research, Pittsburgh, PA, and Dallas, TX, pp. 31–41, 2008.
15. Dembski, W., *The End of Christianity*, B&H Publishing Group, Nashville, TN, chapter 8: ‘Two Books’, 2009.
16. Weinberger, L., Whose god? The theological response to the god-of-the-gaps, *J. Creation* 22(1):120–127, 2008; creation.com/gaps.
17. The ‘antipodean heresy’ is the idea that humans lived on the opposite side of the globe who were not sons of Adam.
18. Augustine *did* object to the notion of antipodean humans based on this, and because he knew that only sons of Adam could be saved and God would not create irredeemable humans (*De Civitate Dei* 16.9). Augustine was right in his anthropology; he was wrong in his geography.
19. He also claims that Augustine was equivocal on the sphericity of the earth, citing Ferrari, L.C., Augustine’s cosmography, *Augustinian Studies* 27:129–177, 1996, in support. However, this has been challenged in the literature: Nothaft, C.P.E., Augustine and the shape of the Earth: A critique of Leo Ferrari, *Augustinian Studies* 42(1):33–48, 2011. Pattemore may be excused for not knowing about this reference at the time of printing, but it was incumbent on him to do his due diligence on the author of the paper he cites. Leo Ferrari was indeed a credentialed Augustinian scholar, but he was also a flat-earther (Leo Charles Ferrari, w3.stu.ca/stu/sites/nble/f/ferrari_leo_charles.html, as at 18 July 2013). Ferrari also admits that his position was counter-consensus, which while not falsifying his position in itself, certainly suggests that his flat-earth views could have distorted his reading of Augustine’s cosmography. Nothaft shows, I believe conclusively, that this is indeed the case. Further, almost all church scholars who commented on the shape of the earth affirmed its sphericity, as conclusively documented in Russell, J.B., *Inventing the Flat Earth: Columbus & Modern Historians*, Praeger, 1991 (see also creation.com/flat-earth-myth).
20. The Portuguese had in fact been progressing down the west coast of Africa for decades before even Diaz’ journey. See Davidson, M.H., *Columbus Then and Now: A Life Reexamined*, University of Oklahoma Press, Norman, OK, p. 70, 1997.
21. Schirrmacher, T., The Galileo affair: history or heroic hagiography? *J. Creation* 14(1):91–100, 2000; creation.com/gal-affair.
22. Wieland, C., *One Human Family*, Creation Book Publishers, Atlanta, GA, 2011.
23. Weeks, N., Problems in the interpretation of Genesis 1–11: Part 1, *Creation* 2(3):27–32, 1979; Weeks, N., Problems in the interpretation of Genesis 1–11: Part 2, *Creation* 2(4):22–26, 1979.
24. E. g. Walton, J.H., *The Lost World of Genesis One*, Kindle version, IVP, Downers Grove, IL, locations 981–985, 2009; see review by Statham, D., *J. Creation* 24(3):24–26, 2010; creation.com/genlostworld.
25. See e.g. Collins, C.J., *Science and Faith: Friends or Foes?* Wheaton, IL, 2003; Wenham, G., Gordon Wenham, *Genesis 1–15*, Word Biblical Commentary series, Waco, TX, p. 91, 1987.
26. Batten, D., Catchpoole, D., Sarfati, J.D. and Wieland, C., Is Genesis poetry/figurative, a theological argument (polemic) and thus not history? 30 November 2007; creation.com/fh.
27. On ‘bad design’, see e.g. Sarfati, J., *By Design*, Creation Book Publishers, Brisbane, 2008; Gurney, P.W.V., Is our ‘inverted’ retina really ‘bad design’? *J. Creation* 13(1):37–44, 1999; and Sarfati, J., *Refuting Evolution 2*, Creation Book Publishers, Atlanta, GA, chapter 7, 2011. On ‘the lack of qualitative difference between humans and chimps’, see e.g. Wieland, ref. 10, Anderson, D., Chimps and humans—are we really the same kind? creation.com/chimps-and-humans-are-we-really-the-same-kind, 4 April 2008; and Batten, D., The biological classification of humans, creation.com/man-the-creature, 30 June 2013.
28. Woodmorappe, J., Are pseudogenes ‘shared mistakes’ between primate genomes? *J. Creation* 14(3):55–71, 2000; creation.com/pseudogene.
29. Bergman, J., Does homology provide evidence of evolutionary naturalism? *J. Creation* 15(1):26–33, 2001; creation.com/homology2.
30. Williams, A., Astonishing DNA complexity demolishes neo-Darwinism, *J. Creation* 21(3):111–117, 2008.
31. Doyle, S., Large scale function for ‘endogenous retroviruses’, *J. Creation* 22(3):16, 2008; creation.com/functions-erv.
32. Carter, R.W., The slow, painful death of junk DNA, *J. Creation* 23(3):12–13, 2009; creation.com/junkdna-death.
33. Tomkins, J., The junk DNA myth takes a well-deserved hit, *J. Creation* 25(3):23–27, 2011; creation.com/junkdnamyth.
34. Terborg, P., An illusion of common descent, *J. Creation* 24(2):122–127, 2010.
35. Terborg, P., The design of life: part 4—variation-inducing genetic elements and their function, *J. Creation* 23(1):107–114, 2009; creation.com/vige-function.
36. Sanford, J., *Genetic Entropy and the Mystery of the Genome*, 3rd edn, FMS Publications, New York, 2008.
37. Carter, R.W., Can mutations create new information? *J. Creation* 25(3):92–98, 2011; creation.com/mutations-new-information.
38. Tomkins, J., How genomes are sequenced and why it matters: Implications for studies in comparative genomics of humans and chimpanzees, *Answers Res. J.* 4:81–88, 2011.
39. Cosner, L., Romans 5:12–21: Paul’s view of literal Adam, *J. Creation* 22(2):105–107, 2008; creation.com/romans5.
40. See also Smith, H.B., Cosmic and universal death from Adam’s Fall: an exegesis of Romans 8:19–23a, *J. Creation* 21(1):75–85, 2007; creation.com/romans8.
41. Cosner, L., Christ as the last Adam: Paul’s use of the Creation narrative in 1 Corinthians 15, *J. Creation* 23(3):70–75, 2009; creation.com/1-corinthians-15.
42. Also known as ‘soul sleep’ or ‘Christian mortalism’
43. Cooper, J.W., *Body, Soul, and Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate*, Eerdmans, Grand Rapids, MI, 1989.
44. Wright, N.T., *The Resurrection of the Son of God*, SPCK, London, pp. 415–429, 2003.
45. Wright, N.T., *Surprised by Hope*, SPCK, London, p. 39, 2007.
46. Wright, ref. 45, pp. 183–184; emphases added.
47. Wright, N.T., Mind, Spirit, Soul and Body: All for One and One for All: Reflections on Paul’s anthropology in his complex contexts, ntwrightpage.com, as at 5 August 2013.
48. If I exist consciously in the intermediate state, then such existence must be *apart from my body* since I am not capable of conscious existence in my body when it is physically dead. Therefore, my identity is not defined by or reducible to my body. Whether we call that in which my identity persists a ‘soul’ is irrelevant—that my ‘me-ness’ exists at all apart from my body means it inheres in some immaterial mode of existence distinct from my body. When separate from the body it doesn’t have to be a great or autonomous existence, but it is still existence *apart from the body*, which is sufficient for substance dualism.
49. An extreme form of substance dualism that sees the soul as autonomously immortal and better off without the body. This is a Platonic and Gnostic idea, not a biblical one.
50. Rickabaugh, B.L., Responding to NT Wright’s Rejection of the Soul: A Defense of Substance Dualism, www.academia.org, as at 5 August 2013. Cited with permission.
51. Just to name two: Corcoran, K.J., *Rethinking Human Nature: A Christian Materialist Alternative to the Soul*, Baker Academic, Grand Rapids, Michigan, 2006; and Green, J.B., *Body, Soul, and Human Life: The Nature of Humanity in the Bible*, Baker Academic, Grand Rapids, MI, 2008.
52. For example: Alcorn, R., *Heaven*, Tyndale House Publishers, Coral Stream, IL, 2004. See also Cosner, L., An eternal perspective on creation: Lita Cosner chats with Randy Alcorn, writer and founder of Eternal Perspectives Ministries, *Creation* 34(2):40–43, 2012; creation.com/alcorn.
53. Or at best a sub-Christian syncretism with Platonism that views ‘going to be with Jesus when we die’ as our final state—on which see Alcorn, ref. 52, pp. 475–482.