

‘Surely God would never have chosen to create this way’: attempting to dismantle an ancient theodical canard

A review of
Darwin’s God: Evolution and the Problem of Evil
 by **Cornelius Hunter**
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I suspect that readers of *TJ* share a common frustration when listening to some evolutionists. In particular, materialists often seem oblivious when they have pushed away from empirical shores, and begin paddling in the sea of metaphysical subjectivity. In his recent book, *Darwin’s God: Evolution and the Problem of Evil*, Cornelius Hunter targets this dilemma. He argues that the cornerstone of Darwinism-type dogma is not its supposed hard evidence, but rather its metaphysical assumptions. The claim that evolution is theology-free is the great myth of our time, claims Hunter, with there often being more metaphysics in evolutionism than in many church sermons.

Primary thrust of the book

Like the Intelligent Design Movement (IDM), Hunter’s primary thrust is to peel back the layers of rhetoric in the origins debate to lay bare the philosophical rubrics which are central to metaphysical naturalism. In this sense, his book is only secondarily about the problem of evil, and as such he can be excused for spilling much ink prepar-

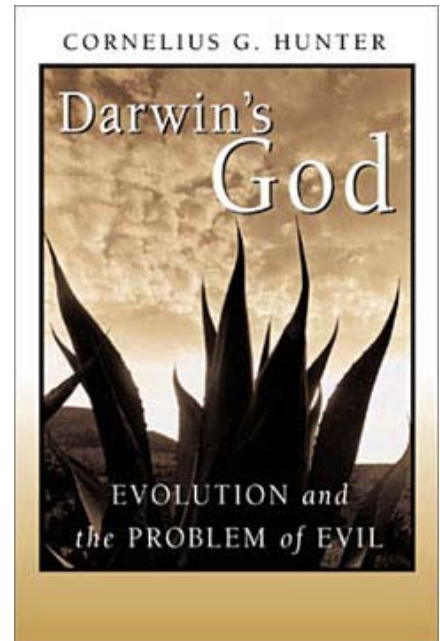
ing the way for theodical matters.

Though Hunter does break some new ground, longtime subscribers of *TJ* will see much of his work as redundant, having long known that evolution’s main impetus has always been rooted in nonscientific premises—those which serve as a metaphysical filter through which all the allegedly hard scientific data is interpreted. Such ‘proofs’ show that evolutionism passes the most stringent tests, and is now so firmly grounded that only mindless dogmatists would demur.

But Hunter points out that such tests are arbitrary, if not idealistic, and fail to meet any meaningful criterion of specificity. There is yet to materialize an objective, unambiguous method for assessing Darwinian-type claims regarding the legitimacy of particles-to-people evolution. The elastic quality of neo-Darwinism usually amounts to mere just-so scientism that can accommodate any conceivable scenario. But such explanations and alleged proofs are mere unwarranted extrapolations, based on question-begging or unfalsifiable premises, often boiling down to hasty generalizations hiding behind prestige jargon.

Role of negative theology in advancing Darwinism

In the 13th century, Alfonso the Wise is purported to have said: ‘If I had been present at the Creation, I would have given some useful hints for the better ordering of the universe’. Similarly, evolutionists hold certain presuppositions regarding how the



creator might reasonably be expected to create, and Hunter contends that negative theology continues to play a major role in advancing the Darwinian worldview.

For example, in evaluating orchids, Stephen Jay Gould perceived them to be jury-rigged from spare parts, concluding that orchids are not the product of ‘an ideal engineer Thus they must have evolved from ordinary flowers.’¹ Hunter laments that the uncritical thinker will miss such tacit leaps from theological premises to scientific-sounding conclusions. Such a move is not the exception, but the rampant rule according to Hunter.

Also in Hunter’s cross hairs is the common extrapolation by Darwinians of using small-scale changes (e.g. finch beaks) as strong evidence for large-scale changes (birds descending from dinosaurs).² But true science should question the legitimacy of whether slight variations in already existing complex organisms can be extrapolated to account for the initial origins, and nearly limitless increase, of information complexity required by evolutionism. But Darwinists have no problem making this leap, typically finding support in things like artificial breeding or bacterial resistance to pesticide.

Creationists do not deny such

changes, but rather rigorously hold the line between what's assumed and what's proved. They claim that all observable speciation and genetic changes appear to have limits, and that small-scale changes hardly demonstrate that new organs and substantially more complex body plans could arise by blind processes. Attempts to demonstrate evolution in the lab (cf. *Drosophila*) often result in sterility or a decrease in overall fitness, and artificial breeding usually results in the loss of genetic information; not exactly strong suits for classic Darwinian theory. The information issue is vital—the changes we observe *reduce* this, whereas particles-to-people evolution requires the *gain* of encyclopedic quantities of information.

Highlighting the implicit circularity in modern Darwinism, Hunter notes that homologies are often claimed to be 'powerful evidence for evolution yet [they] rely on evolution for their very identification' (p. 29). Darwin himself, an expert in barnacles, assumed the evolution of the *Ibla* and *Proteolepas* in order to 'prove their evolution' (pp. 54–55). Question-begging presuppositions also abound, for example, when assuming penguin wing vestigiality,³ or in claiming the universal genetic code as 'evidence' for evolution while side-stepping the larger issues of the code's origin and existence, or in reasoning that liver fluke parasites must have evolved *because* the host evolved (pp. 33, 38, 106ff).

Hunter also uncovers something akin to the 'argument from credulity'. Creationists are often chastised for being too quick to suggest a supernatural element in nature's economy; the common god-of-the-gaps canard. We are constantly being told to not assume divine causation since a naturalistic explanation might be on the horizon. But shouldn't this metaphysical sword cut both ways? In other words, metaphysical naturalists should likewise restrain from robotically filling alleged gaps with charges of dysteleology, since an explanation might be on the horizon.⁴

Consider Hunter's treatment of pseudogenes—those DNA sequences



The Giant Panda, Ailuropoda melanoleuca, found in the forest areas of west-central China and subsisting mainly on bamboo. The panda's 'odd' forelimb arrangement has an enlarged wristbone 'digit' commonly called the panda's 'thumb'. Evolutionists have argued that this arrangement is bad design, and so the panda would not have been created but must have evolved.

that resemble genes and appear to be nonfunctional. A first semester logician would realize not knowing an organ's function does not prove that there is none—'absence of evidence is not evidence of absence'. In fact, more and more functions of so-called junk DNA are being discovered all the time.⁵

Dysteleology

But evolutionists routinely trumpet non-functionality (and hence dysteleology) simply because there is *no presently known* purpose, and they in fact trot out a never-ending litany of similar entities as 'proof of evolution', unaware of the unscientific nature of such claims. Such claims include Berra's, that certain whale bones are 'surely of no value'; or Ridley's, that the recurrent laryngeal nerve is surely inefficient; or the common mantra that 'the mammalian eye is wired all wrong'.⁶ But consider the once-weighty list of organs previously considered vestigial.⁷ The advance of operational science has truncated this list so severely, revealing functionality (and thus strongly suggesting design),

that a little more epistemic modesty seems in order before decrying the non-functionality of some present entity.

Hunter also addresses matters of falsifiability.⁸ Evolutionists, as hinted earlier, have made much fanfare in recent years over the universal genetic code (UGC), or homology applied at the biochemical level.⁹ When synthesizing proteins, nearly every living thing employs the same code to decipher the stored information in DNA. For neo-Darwinians, this code's supposed universality indicates that all the fruit on the tree of life share a common ancestry. Famed evolutionists like Crick and Orgel, however, pondered whether evolutionism really predicted the UGC, wondering further why we do not find several codes in nature. In fact, since 1979 exceptions have been found. Not surprisingly, evolutionists claim that their theory can accommodate such variations. But how legitimate is it, asks Hunter, to be able to claim both scenarios as supporting evidence? If all conceivable scenarios can be given an evolutionary interpretation, then the legitimacy of the theory must be called into question.

On another flank, Ridley and

other evolutionists have employed the UGC not just as support for evolution, but as an actual apologetic *against* a creator. Why they ask, if species were created independently, is the UGC preserved across the palette of life? Metaphysical naturalists think it odd that the creator would use similar coding or body plans in creation, and then claim that evolution provides the *only* reasonable explanation for this phenomenon.¹⁰ But clearly Ridley, Futuyma *et al.* are unwarranted in assuming that if the creator fashioned all living things independently, then he is under some cosmic mandate to employ completely different genetic codes in every different species. This assumption that an omnipotent being cannot repeat genetic patterns is clearly arbitrary and gratuitous at best, and naïve question-begging at worst. Either way it is metaphysical, hinging upon a certain view of God, and not the result of science. Hunter wryly quips that perhaps God graciously used ‘homologous structures so that scientists could more easily analyze his creations and figure out how biology works’.

Fixity of species

Addressing the notion of the fixity of species, Hunter contends that the Linnaean principle of *Nullae species novae* was deeply imbedded in the pre-Darwinian, Victorian mind set. The notion here is that God used some ideal, Platonic-like, templates for all creatures, allowing for no morphological deviation. If true, then the documented emergence of any new species would mean not just the collapse of the dogma of fixity of species, but also might open the door to dispensing with the creator commonly attached to that maxim.

Hunter holds, as creationists have for decades, that the turning point for Darwin was not any positive confirmation of developmentalism, for example, of something like reptile-to-avian transpeciation. *Au contraire*, the shift was chiefly brought on by the untenability of a key element in dominant creation model of his day, namely the fixity of species. Darwin’s post-Ga-

lápagos ruminations suggested, *inter alia*, that the *Nullae species novae* idea was no longer defensible. Thus, it was not the dispassionate assessment of the raw data that pointed Darwin toward a more naturalistic-friendly paradigm, but rather it was a latent metaphysical impulse conditioned by a particular synthetic construct of the creator’s method.

This *non sequitur* and straw man still enjoys uncritical acceptance today. The argument goes something like this: God must make species absolutely fixed; but tortoise shells differ, industrial melanism has occurred, and vastly differing varieties of dogs have been bred in recent history; therefore a creator does not exist.¹¹

Negative theology

Hunter’s main thesis, again, is to counter such logic; to demonstrate that Darwinian-type views are not predicated upon scientific ideas *per se*, but rather upon the alleged failure of religious ones. Calculated to deny a divine hand in creation, this theodical argument has been robustly applied by many, and usually takes some form of the following argument:

Since the created order does not seem very good (cf. Gen 1:31), evolution must therefore be true; or at very best the creator is evil or incompetent. Surely a truly loving creator would have

employed some less-bloody, less-wasteful method by which to bring about the natural order.

It is this supposed incongruity between God and nature’s dystelologies which has made evolutionism more appealing to many; not because molecule-to-man progressivism enjoys strong empirical confirmation. This trajectory of *negative theology* has become an essential rubric of modern evolutionary thought. It stems from *a priori* notions about the attributes of the creator adhered to by classic Christian theism; a being believed to be infinitely wise, powerful and good.

But it is not just non-theists, according to Hunter, who have been influenced by negative theological considerations. Theodosius Dobzhansky, Terry Gray, Howard Van Till, and Ken Miller, have made peace in varying degrees with an evolutionary theodicy. Common to all these thinkers is that they exhibit no discernable uneasiness in believing in a creator who can employ any level of prelapsarian pain, disease, death, and extinctions to bring about the natural order.

Miller, who considers himself a Catholic, upon contemplating the alleged non-functionality of pseudogenes, concludes that they reveal a creator who made serious errors, wasting millions of base pairs of DNA on a blueprint full of junk and scribbles. Similarly, Mark Ridley believes it unbecoming of a wise



Some argue that since the created order does not seem very good (cf. Gen 1:31), evolution must therefore be true; or at very best the creator is evil or incompetent. This argument is invalid as it does not take into account the Fall.

creator that whale bones be used to support reproductive organs when they are clearly ‘adapted for limb articulation’; and that such would not be expected if whales originated independently of other tetrapods’. Gould, similarly, wonders:

‘Why does our body, from the bones of our back to the musculature of our belly, display the vestiges of an arrangement better suited for quadrupedal life if we aren’t the descendants of four-footed creatures?’¹²

Berra triumphantly claims that the passage of a fishlike stage by the embryos of the higher vertebrates is not explained by creation, but is readily accounted for as an evolutionary relic. Futuyma believes the facts of embryology ‘make little sense except in the light of evolution’, and is also non-plussed that ‘God’s plan for humans and sharks require them to have almost identical embryos’, concluding that ‘a perusal of any major animal phyla makes evident just how impoverished is the imagination of the Creator’. The critical thinker, however, will detect the enormous metaphysical pillars necessary to support the above assertions, which at bottom are mere non-scientific pontifications camouflaged in scientific lingo. They are largely supported by forged embryo diagrams.^{13,14} But in lieu of any compelling rationale for why the creator should be beholden to any creaturely criteria for optimality and unique design, evolution merely shadow boxes straw men.

Some areas of minor concern in Hunter’s book

To this point Hunter’s book, while not terribly original, is worth being digested. His even-tempered spirit, clarity, and attempt to build a case pulling data from diverse disciplines are envied by the present reviewer. However, there are a few areas of concern. Let me address some very minor areas, before moving on to areas of deeper gravamen. First, a few residual misnomers surround Hunter’s section on *The Bridgewater Treatises*, the highly significant early-nineteenth

century 8-volume series, endowed by Reverend Francis Egerton, eighth Earl of Bridgewater.¹⁵ Hunter claims the treatises were authored by eight eminent scientists, but it would be more precise to state that among the pool of those selected, four were scientist/physicians, and four were ministers with a healthy interest in science.¹⁶

Also, there seems to be a conflation in Hunter’s mind between the ideologies of William Buckland and fellow *Bridgewater* author, William Kirby.¹⁷ But on closer inspection, the two can hardly be said to be cut from the same theodical cloth. Buckland was an accommodationist of the first order, not taking the creation days as literal, denying the Genesis Flood as a global, catastrophic singularity, and not believing that the Fall ushered in death or natural evils.¹⁸ Kirby, on the other hand was a young-earth creationist and pioneering entomologist, who spent five years researching for his *Bridgewater* volumes.¹⁹ In direct contrast to Buckland, Kirby held to a literal six-day creation, that all creation was implicated in the Curse, and he also believed in a penal, global, catastrophic Flood.²⁰ He believed in a golden age when ‘the generations of the world were perfect and healthful’; this was the creation God called ‘very good’.²¹ For Kirby the current fierce enmity between man and beast reflects the curse. The original natural order was vegetarian, with no creature meant to feed on another.²² If Adam had not sinned, ‘this sad change would probably have never taken place.’²³ The ‘primeval earth ... afforded man a pleasant and delightful recreation ... without ... toil and weariness’.²⁴ But due to:

‘... that sad event, [God] pronounced a curse upon the ground, and predicted that it should produce in abundance noxious plants for the annoyance of the offending race of man.’¹⁹

As with any ‘great alteration ... in the moral condition of man, a corresponding change affects his physical one’,²⁵ wrote Kirby, which explains the ‘appearance of death and destruction’ subsequent to ‘the harmony and goodwill’ which had previously existed

between man and animals.²³ He approvingly quotes the following statement:

‘God made not death, neither hath he pleasure in the destruction of the living. For he created all things that they might have their being; and the generations of the world were healthful: and there is no poison of destruction in them, nor the kingdom of death upon the earth.’²⁶

Touching upon extinctions, Kirby wrote that geologists have discerned from the fossil record cataclysmic changes indicating ‘that the climate must formerly have been warmer than it is now’.²⁷ Further reference is made to ‘the then state of things’,²¹ for example, where the instincts of predatory animals were restrained.¹⁹ Regarding the question of predation, Kirby held that carnivores must ‘originally have eaten grass or straw like the ox, and neither injured nor destroyed their fellow-beasts of a more harmless character’. Despite the growing geological consensus to the contrary, Kirby held to a golden age simply because this ‘appear[ed] clearly from the terms of the original grant’,²⁸ and that this original paradisiacal state, according to Isaiah 11:6–9 and 65:25, will be reinstated in the Eschaton.²⁹

Looking at these statements, one can see that Hunter has made a few misjudgments. First, he alludes to Kirby as one who was able to find ‘signs of a happy God in even the most extreme examples of parasitic behavior’ (p. 133). Such words fit someone like William Paley perfectly, but hardly dovetail with Kirby.

Second, Hunter includes Kirby in that group of panglossian Victorians, who did not see nature as bearing any penal scars and who turned a deaf ear to the groanings of Romans 8. But Kirby, as seen above, clearly aligns himself with Paul, seeing natural evil as intrusive and penal.

Thirdly, in referencing Romans 8:22 and Buckland in the same context, Hunter seems unaware that it is Buckland, not Kirby, who recasts Paul’s words. In a famous pamphlet, Buckland wrote that the ‘pains and penalties’ of Romans 8:22, are ‘strictly and exclusively limited to the human race’.³⁰ He

later adds that,

‘... the dispensation of death throughout all the inferior races of God’s creatures, is a matter which Scripture does not teach us to associate in any way with the consequences of the fall of our first parents from Paradise’.³¹

Here, Buckland presages the eisegesis of future progressive creationists.

Thus, it is clear that Buckland gives very little weight to the impact of the Fall on the natural order, while Kirby sees it as essentially the defining factor to explain the present crimson nature of nature. So, Hunter miscategorizes Kirby on two counts, and misconstrues both Kirby and Buckland on Romans 8. The reason Hunter is not aware of the above-quoted material is that he apparently never consulted the *Bridgewater* volume of Kirby! Instead, he references a posthumous edition of Kirby and Spences’s, *An Introduction to Entomology*, strongly suggesting that Hunter thinks this was Kirby’s *Bridgewater* contribution. Because he builds his historical backdrop almost exclusively from secondary sources (Gould in this case), Hunter is open to such errors. My suspicion is that similar loopholes will be found by those who will be only too happy to find any excuse to ignore the stronger aspects of Hunter’s case. In other word, if Hunter is sloppy in areas of historical details, why assume that he is precise in others matters.

Three areas of major concern in Hunter’s book

Gnosticism

Hunter claims that Gnosticism is a theodicy of sorts, but in the last decade of studying theodicy I have not encountered any recognized theodicy who refers to ‘the Gnostic theodicy’, or who suggests that Gnosticism was in any sense a structured theodicy (p. 129). Yet Gnosticism figures prominently with Hunter’s assessment of the Cambridge Platonists (pp. 122–123).³² In noting their concern over the so-called ‘bungles’ in nature,

Hunter perhaps draws an ill-advised parallel between these Anglican divines and ancient Gnosticism. Yes, both groups drew sharp contrasts between the spiritual and material realms—but the fact that neither an elephant nor a tube of toothpaste can ride a bicycle is not sufficient warrant to draw a host of other comparisons. The differences vastly outnumber the similarities, and thus Hunter should have used some general description like ‘radical dualism’.³³ Nonetheless, Hunter sees so much common ground between Gnosticism and some Victorian thinkers, that he cannot resist continually making the parallel.³⁴ But no classicists or credible philosopher has ever aligned them as such in an in-depth manner, and for Hunter to do so conveys an improper nuance.

Some will be further surprised to see that Hunter finds common ground between John Milton and Darwin! He suggests that the prime theodical move of both was to distance God from His creation. But it seems to me this is a superficial comparison, since Milton took the creation narrative at face value, while Darwin certainly did not. Milton’s stated purpose for his classic, *Paradise Lost*—to ‘justify the wayes of God to men’—hardly finds legitimate parallel in Darwin.³⁵ Hunter compounds matters by suggesting that Milton’s theodicy functioned for moral evil alone; for why else would Hunter then ask—but ‘What about natural evils such as disease, pestilence, and earthquakes?’ (p. 122). Yet Milton does refer to a ‘Intestine stone and ulcer, cholic pangs, Demoniack phrenzy, moping melancholy, and moon-struck madness, pining atrophy, Marasmus and wide-wasting pestilence’, etc.³⁶ This ‘monstrous crew’ of evils, according to Milton, was brought on by the ‘inabstinence of Eve’, indicating clearly that he saw a causal nexus between the misuse of free will and the onslaught of natural evil.

The evolution theodicy

Another matter of concern may be found in Hunter’s suggestion that Dar-

win consciously employed his theory to get God off the hook for such natural evils. According to Hunter, Darwin repeatedly denied that the God of traditionalism would ever have created the world that the nineteenth-century naturalists were uncovering. Darwin apparently adopted his Grandfather’s perception of the organic kingdom as ‘one great Slaughter-house’.³⁷ As such, he saw apparent dysteleological entities such as peculiarities of biogeography, superfecundity, pollen and egg profligacy, seemingly inefficient contrivances for ensuring genetic health in plants, the cuckoo’s instinct to oust foster siblings, the bee’s sting causing its own death, excess drone production for a single act followed quickly by the slaughter of their sterile siblings, the instinctive hatred of the queen bee for her own fertile daughters, the slave-making instinct of certain ants, numberless creeping parasites (e.g. Spehegidæ), the tucutuco (an underground, often blind mole-like rodent), animals misled by false instincts or which possess organs constantly prone to injury or which delight in inflicting cruelty, and rudimentary organs like bastard wings, male nipples, fetal baleen whale teeth, and of course the infamous Ichneumonidae—all unbecoming of a good creator. An economy of nature so lacking in precision, one pregnant with seeming inefficiencies and anomalies, and which is also intensely brutal, cannot be the creation of a loving being.

Hunter’s contention that Darwin’s law of natural selection was an intentional theodicy for natural evil (which Hunter labels ‘the evolution theodicy’) is sure to garner reproof from the right, and heckling from specialists in theodicy as well as historians of science.³⁸ Hunter’s thesis appears to be that in the same manner that free will exonerates God from the genesis of moral evil, Darwin provides a solution for the natural by distancing the creator from his handiwork. One need merely affirm an absentee demiurge who never directly tinkers with creation, who instead employs only secondary causes. This *Deus Abscondus* set up the initial laws of uniformity and natural selec-

tion to govern nature's economy, and thus the creator's hands are purged of any dysteleological stains, and the scars of nature are explained.

How IDM's designer differs from the god of deism

Regarding this distinct deistic slant, Hunter seems to acknowledge that though one may still believe in a creator, it would not likely be one with power or any meaningful providence (p. 16).³⁹ What astute evangelicals will specifically want to hear from Hunter and IDM'ers is how their Designer differs from the god of deism. As with the leaders in the IDM, Hunter does not grant the Fall or Flood any meaningful impact,⁴⁰ although they both carry tremendous theodical and penal import. But young-earth creationists, despite being ostracized from the public square, at least have system coherence. They know the fall provides sufficient warrant for the origin of natural evil, and that a diluvial interpretation of the fossil record denies that natural evil is ancient—instead suggesting that the countless dead things in the geologic column are evidence of God's judgment. Hunter's school of thought does not make meaningful reference to either event, though biblically they were the most devastating events in history. The difference between the IDM and AIG perspectives can be summed up in how each generally frames the theodicy question. The first group, aims to offer an answer to the question: 'How could an all-good God *originally design* such a gritty reality?' and they may define evil as a departure from what ought to be. The latter group addresses the issue: 'How could an all-good God *allow* such a gritty reality to supplant an originally perfect, death-free creation?', and define evil as a departure from what actually once was.

Hunter's thesis that scientists are theory-laden with meta-empirical assumptions could also be met with a yawn, since he has not made the case that any scientist *denies* this. They will even press him to offer some defensible alternative. And here is perhaps one

of the IDM's weakest points, though it is never fleshed out in Hunter—with the affirmation of the grisly law of the jungle which so repulses negative theologians, and their acceptance of the evolutionary time frame,⁴¹ as evangelicals, Hunter and all IDM'ers are going to have to make a meaningful case for why God is not the author of evil, or if He is the author of paleonatural evil, why did He call it 'very good'? If mass-extinctions are 'very good', then why get worked up into a lather about species lost in the present?

Conclusion

My intention is to use this book as a required text in a future philosophy class. I find far more to agree with than disagree with Hunter. Those far to the left of him will disagree that evolutionism is dominated by theological concerns, but I suspect those who genuinely wrestled with his proposition will look at evolutionary writings (perhaps their own) and recognize the latent metaphysics they had missed before. Thus, even though Hunter's constructive suggestion falls far outside the boundaries of traditional historical and biblical theodicies, his overall position that the debate of origins is mostly about metaphysical issues, and far less about the assured results of dispassionate science, is a healthy and necessary reminder for the church.

References

1. Gould, S.J., 'The panda's thumb'; in: *The Panda's Thumb*, W.W. Norton, New York, p. 20, 1980. Hunter later reminds us that orchids, like most irises, tulips and dahlias, have been *artificially* developed (Hunter, p. 53). It remains up to the reader to surmise to what degree this effects Gould's claim.
2. Hunter concedes that natural history has seen some large-scale creaturely changes, but sees it a leap of faith to then claim any level of true goo-to-you evolution is possible. It would be comparable to visiting Kansas, observing the dominant lay of the land, and then concluding that the Earth is flat.
3. Actually, penguins are excellently adapted to 'fly' underwater! See Feduccia, A., *The Origin and Evolution of Birds*, 2nd Edition, Yale University Press, New Haven and London, p. 179, 1999.

4. Haeckel coined the word *dysteleology* (i.e. the doctrine of purposelessness in nature) in a sarcastic vein to counter teleology (i.e. the study of design and purpose). The term now refers to any alleged aberrant design or absence of purpose in nature, typically evidenced in things like vestigial organs, or whatever else appears to be uselessness to the life of the organism.
5. Sarfati, J., DNA: marvellous messages or mostly mess? *Creation* 25(2):26–31, 2003. See also articles by Woodmorappe in this issue of *TJ*.
6. Gurney, P., Is our 'inverted' retina really 'bad design'? *TJ* 13(1):37–44, 1999.
7. *NB*—As with the precarious art of measuring fitness, much less defining it, few evolutionists seem aware that even defining vestigiality is hugely problematic. How in principle could one prove that an organ lacks any function, without omniscience? Evolutionists seem to want to smuggle in the assumption of evolution to validate vestigiality, rather than using the latter to justify the former, unaware of the question-begging nature of this proposition.
8. Some philosophers of science, noting Hunter's use of Popperian falsifiability, will likely accuse him of being out of touch with the paradigm shift in that field in the last twenty years.
9. The 2001 PBS series, *Evolution*, referred to this as nearly indisputable proof of evolution. For a refutation, see Sarfati, J., *Refuting Evolution* 2, Master Books, Green Forest, Ch. 6, 2002.
10. Hunter detects a delicious irony here in that convergent evolution itself is believed to have produced 'remarkably similar species', thus leaving us ponder how an unguided process 'could ever hit upon the same design twice' (p. 29).
11. Hunter should have emphasized that modern creationists understand 'kind' more in the sense of 'family' than species.
12. But the world-class spine expert Dr Richard Porter strongly disagrees—see his interview, Sarfati, J., Standing upright for Creation, *Creation* 25(1):25–27, 2002.
13. Richardson, M.K. *et al.*, There is no highly conserved embryonic stage in the vertebrates: implications for current theories of evolution and development, *Anatomy and Embryology* 196(2):91–106, 1997.
14. Grigg, R., Fraud rediscovered, *Creation* 20(2):49–51, 1998; Ernst Haeckel: evangelist for evolution and apostle of deceit, *Creation* 18(2):33–36, 1996.
15. The best short treatment of the scriptural geologists is found in Milton Millhauser, *The Scriptural Geologists*. The most exhaustive scholarly treatment is Mortenson, T., British Scriptural geologists in the first half of the nineteenth century, serialized in past issues of *TJ*. See also Ury, T., The evolving face of God as creator: early nineteenth-century traditionalist and accommodationist theodical responses in British religious thought to paleonatural evil in the fossil record, (forthcoming).

16. See Brock, W.H., Selection of the authors of the *Bridgewater Treatises, Notes and Records of the Royal Society of London* 21(2):162–179, 1966; and Enys, J.D., Correspondence regarding the appointment of the writers of the *Bridgewater Treatises* between Davies Gilbert and Others, Penryn, 1877; prepared for private circulation.
17. Hunter, pp. 133 and 186, notes 18–20. Though Buckland continues to be referred to as a key player, with Kirby receiving much shorter-lived accolades, neither figure is crucial to Hunter's case. As such my point here could be seen as picky. However, when Hunter employs someone like Kirby, he should let his readers know that Kirby's fully-matured theodicy points in a direction substantially different than that portrayed in *Darwin's God*. This is always the prime danger when relying on secondary sources, Hunter apparently here relying on Gould.
18. See Buckland, W., *An Inquiry Whether the Sentence of Death Pronounced at the Fall of Man Included the Whole Animal Creation, or Was Restricted to the Human Race*, passim, John Murray, London, 1839.
19. Kirby, W., *On the Power, Wisdom, and Goodness of God, as Manifested in the Creation of Animals, and in their History, Habits, and Instincts*, 2 vols. William Pickering, London, 1835. Unless otherwise noted, all references are to Vol. I.
20. 'The whole globe was submerged', Kirby, Ref. 19, p. 38; 'the primeval globe ... perished [apoleto] at the deluge', Kirby, Ref. 19, pp. 41 and 376–390.
21. Kirby, Ref. 19, p. 9.
22. Kirby, Ref. 19, pp. 9–10, 42. Milton is quoted here, *Paradise Lost*, 227, bk. X, lines 707b–715.
23. Kirby, Ref. 19, p. 11.
24. Kirby, Ref. 19, p. 17.
25. Kirby, Ref. 19, pp. 42–43.
26. Kirby, Ref. 19, pp. 10–11 (italics in Kirby). Despite Kirby not giving his source, the context clearly infers that this expresses his sentiment as well.
27. Kirby, Ref. 19, p. 17. Cf. also pp. 372–374.
28. I.e. Genesis 1:30.
29. Kirby, 10. Permit me to inject a personal challenge. Readers of this journal know that primary source documentation is demanded of the best research in higher academia, with frequent use of secondary sources generally considered anathema. When relying on secondhand documentation, the researcher is at the mercy of the accuracy, and perhaps even biases and competence, of the source being used. While not devastating in principle, the *continued* reliance on secondary sources carries potential weaknesses, and credibility can suffer. In this regard, some errors Hunter commits are very minor and inconsequential. For example, when highlighting an important letter from Darwin to Joseph Hooker (13 July 1856), Hunter references Desmond and Morris, but it appears that instead Hunter relies on the text of Stephen Jay Gould ('Nonmoral Nature'; in: *Hen's Teeth and Horse's Toes*, W.W. Norton, New York, p. 42, 1983). This is clear in that Hunter makes much use of *Hen's Teeth*, plus the fact that the four transcriptional errors which Gould and/or his editors made have all made found their way into Hunter's text; none of which are found in Desmond and Morris. Note that the word in this passage is actually 'horridly,' not 'horribly'. The fact that they both convey virtually the same thing is beside the point. Since most antagonists of creationism think the opposition incompetent to begin with, it behooves us to get our facts straight in the little things. I have seen the above misquote in many creationist works, sending the subtle message that we rely on the research of others. Few get the details correct, like Adrian Desmond and James Moore, *Darwin: Life of a Tormented Evolutionist*, W.W. Norton, New York, p. 448, 1994, although they also commit one transcriptional error. Cf. Burkhardt, F. and Smith, S. (Eds), *The Correspondence of Charles Darwin*, vol. 6, 1856–1857, Cambridge University Press, Cambridge, p. 178, 1990.
30. Buckland, Ref, 18, p. 15.
31. Buckland, Ref, 18, p. 17.
32. The Cambridge Platonists, who had acumen in scientific and theological studies, were synthesizers who placed a high premium on subjective experience. One of the more well known representatives of this group, Ralph Cudworth, acknowledged that the present order did not seem to be the best of all possible worlds, thus raising the theodicy issue, but he never found his way through the thicket, much less constructed any type of formal theodicy. Yet, perhaps Birch's comment has merit when writing that Cudworth's work was 'an *exposé* of evil in a world that was supposed to be created once and for all perfect by an all-powerful Being' (Birch, L.C., *Nature and God*, Westminster Press, Philadelphia, p. 22, 1965). Cudworth's most famous work is *The Intellectual System of the Universe*, 2 vols., Printed for Richard Royston, London, 1678; facsimile reprint, Garland Publishing, New York, 1978).
33. Aside from radically separating the material sphere from the spiritual, and seeing the material realm as evil, auxiliary dogmas of mature Gnosticism include: 1) belief that a host of 'emanations' are involved in creation and redemption, 2) a general rejection of the Old Testament, 3) the world was created by a junior deity (Jehovah), 4) emphasis on allegorical hermeneutics, and 5) Christ's body was an illusion (docetism). The Gnostic heresy led some to antinomianism, and others to asceticism. They considered themselves the guardians of mystical, hidden 'knowledge' (*gnosis*), and saw this heightened illumination as necessary for salvation.
34. Hunter, pp. 122–123, 129–131, 147–150, 153, 169–170 and 173.
35. Milton, J., *Paradise Lost* [1667], Clark, Austin & Co., New York, 1851; p. 17 (book I, line 26).
36. See Milton, Ref. 35, pp. 248–249 (book X, lines 476 ff).
37. Darwin, E., *The Temple of Nature*, St. Paul's Churchyard, London, canto IV, line 66, 1803.
38. Theodicies, unfortunately, are often attributed to men (or in this case systems) who merely refer to the problem of evil, but who offer no substantive theological reflection or rigorously fine-tuned answers. James Moore has apparently lowered the bar in this fashion, finding theodicies in Malthus, Chambers, Asa Gray, Iverach, McCosh, Moore, Van Dyke, and Wright (*The Post-Darwinian Controversies*, Cambridge University Press, Cambridge, pp. 330–332, 344, 1979). But this can be very misleading. Residual theological 'musings' are found in their writings, but none approaches the more substantive reflection or sensitive treatment of, say, Darwin's contemporary G.J. Romanes. Ironically, accommodationists who are lauded for their openness to Darwinism (Van Till *et al.*) are not as sophisticated in their comments as it so often seems. Consider the irony in Aubrey Moore's promotion of God's immanence to the point of an 'all-or-nothing affair.' Though intended to mollify the problem of evil, when fully applied it actually compounds the theodicy issue.
39. Cf. Hull's quote, Hunter, p. 156.
40. The Fall or sin is mentioned in a few areas (pp. 47, 84, 93, 116, 118, 121, 140, and 172), but not with any in-depth investigation, or indication of how crucial a lapsarian component has been in the theodicies of past and present thinkers. See Ury, The evolving face of God as creator: early nineteenth-century traditionalist and accommodationist theological responses in British religious thought to paleontological evil in the fossil record, (forthcoming).
41. While never stating his belief in deep time explicitly, this is the common-sense inference from comments on pp. 69, 71 and 80. Hunter does not call the evolutionary time frame into question, perhaps unaware that the same level of metaphysical assumptions which characterizes biology, also permeates the disciplines of cosmology, geology and paleontology.