Is there purpose in evolution?

Is There Purpose in Biology: The cost of existence and the God of love
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Denis Alexander’s main argument is that “[evolutionary] biology is not necessarily purposeless as is often assumed” (p. 248). Indeed he says such a belief is irrational (p. 178), but he covers much ground before reaching this conclusion. Most pertinently, the “God of love” of the subtitle, is not touched on until the last fifth of the book (p. 198).

From the outset, the author distinguishes purpose (small ‘p’) from Purpose (big ‘P’), the latter being teleological (and this review keeps to his convention). Atheists such as Daniel Dennett, Peter Atkins, and Richard Dawkins obviously express their “denial of any ultimate reason for the existence of a biological process such as evolution” (p. 14). As a theistic evolutionist, Alexander challenges this. He first overviews the history of “the roots of purpose in biology” (chapter 1), chapters 2–4 explore the ‘nuts and bolts’ of genetics, then he tries in the final two chapters to interweave his evolutionary narrative with Christianity.

Ideas of purpose rooted in history

Alexander first gives an interesting overview of the history of teleology. He reminds us of Aristotle’s ‘Unmoved Mover’ and the polytheist Cicero’s (106–43 BC) Stoic philosophy. The Greek Galen (born AD 129) was quite taken with Plato’s “craftsman demiurge”. He rejected the biblical Creator God, but he did recognize functionality in biology—albeit not an ultimate telos. Various Muslim natural philosophers also employed design arguments (p. 28).

During the Middle Ages in Europe, people’s idea of ‘purpose’ in biology was intertwined with allegorical and spiritual meaning. The Protestant Reformation emphasized the literal reading of the Bible. Thus, allegory and the ancient Greek philosophers were disparaged, and a more ‘mechanical’ view of the cosmos dominated (p. 42). Thus, the narrative of design became prominent, and God’s existence and attributes could rightly be inferred from a consideration of His ordered creation.

Scottish philosopher David Hume (1711–1776) challenged this head-on. Voltaire (1694–1778) on the other hand, although a deist, argued for God’s existence from the tradition of natural theology. Alexander does inevitably discuss William Paley’s famous Natural Theology, about which Darwin admitted, “I was charmed and convinced by the long line of argumentation”.1 Still, evolution undermined Purpose from Darwin’s point of view:

“But to a large degree it was his theory that killed off any idea of a Broader Purpose for evolution, mainly because of the role that ‘chance variation’ was perceived to play in his theory and, perhaps even more so, because adaptations engineered by natural selection subverted … the understanding that complex organs like the eye, the human brain, and so forth were due to God’s direct creative action” (p. 52).

Alexander is less objective in his discussion of the post-Darwin era. Thinking that evolution’s reputation suffers from people mistakenly thinking of it as a ‘chance process’, he strenuously argues that this is wrong. He insinuates that, if enthusiasts for biological design were better Bible students, they wouldn’t dangerously engage in ‘designer-of-the-gaps’ reasoning! With sufficient ‘enlightenment’ on these topics, so he claims, it is “easy for the Christian community to baptize evolution into the traditional understanding of God as creator” (p. 55).

The big story

The remainder of the book is spoilt by the obligatory assumption of evolution. For instance, “For the first 2.5 billion years of life on Earth, things only rarely got bigger than 1 millimetre across, about the size of a pinhead” (p. 58). Also, “When the need to see more clearly becomes acute during evolutionary history, there is strong pressure to evolve eyes using whatever genomic resources are around to help in the process—it just keeps on happening” (p. 77).

Alexander parades time-worn themes before the reader: the transition
from unicellular to multicellular life, biodiversity from the ‘Cambrian Explosion’ onwards, Richard Lenski’s ‘bacterial evolution’ experiment with *E. coli*, convergent evolution (pp. 73–90 and much of chapter 3), homology, co-operative behaviour and intelligence in animals. He opines:

“Evolutionary history gives every appearance of being a drama with the late entry of intelligent minds upon the stage, able to investigate and to some extent understand their own history, providing a striking denouement” (p. 68).

This, however, conflicts with Romans 1:20, since there is no need for (thus no reference to) a Creator God in this drama.2 Alexander tries to paint an evolutionary picture of increasing biological diversity and complexity over deep time, points to the apparent ‘progress’, and infers that some sort of purpose is at least compatible with evolution.

In fact, he often employs evolution in a general sense (and Neo-Darwinism in particular) as a synonym (substitute?) for the Creator:

“… as animals and plants face the challenges of adapting to different environments, so at independent times and in independent circumstances the evolutionary process has converged on the same adaptive solution …” (p. 73).

“Natural selection is like the potter moulding the clay—over a long period of time the consequences of genetic variation are moulded by the potter of natural selection to shape an interbreeding population into a slightly different collection of phenotypes” (p. 172).

This sounds like atheistic evolutionspeak. Indeed, why would Alexander use the potter (an intelligent agent) to describe natural selection, especially since Scripture likens God to the potter (e.g. Isaiah 29:16; Jeremiah 18:5–6; Romans 9:21)? The Creator moulded Adam from ‘clay’ (Genesis 2:7). If natural processes suffice to explain all biological complexity, why is God needed at all? He becomes an unnecessary hypothesis. Instead, he gives the creature the credit (instead of the Creator; see figure 1):

“To build their eyes, the clever little creatures [dinoflagellates] have stacked lots of mitochondria together to form a cornea-like surface across a lens structure with a membrane network derived from multiple plastids packed together to make up the retina” (p. 78).

Purportedly, opportunity or need (or both) somehow produce evolutionary change:

“But in most cases, there is no intrinsic reason why a particular molecular solution to life’s challenges emerges apart from the fact that it’s so useful to the organism that, once generated, it’s much the best strategy to hang on to it” (p. 138).

“If an adipose fin is the need of the hour, then an adipose fin is what you are likely to get (in evolutionary terms at least)” (p. 90).

This reifies evolution, as if it could weigh up an organism’s needs and strategize. Regarding the adipose fin, one is reminded of Vij Sodera’s aphorism: “What you want you won’t get.” Undeterred, Alexander’s faith in evolutionary convergence to work veritable miracles conquers all. “Deep homology” has become trendy, i.e. superficially similar growth patterns and developmental processes (e.g. the pentadactyl limb and hox genes) reflect ancient (deeply rooted) genetic regulatory systems. All are “the fruit of millions of years of selective advantage” (p. 98) rather than design. But convergence is just an ad hoc attempt to explain away biological similarities that don’t fit with evolution.

Concerning rapid biological changes observable today (e.g. spines on sticklebacks), Alexander believes these demonstrate that fitness can be increased or decreased at will: “Without such clever ‘evolvability’ living things wouldn’t exist—including us” (p. 124). But if evolution really is that powerful, why bother invoking Purpose at all?

**Purpose overarching chance?**

In chapter 4, Alexander celebrates Richard Dawkins’ desire to “destroy th[e] eagerly believed myth that Darwinism is a theory of ‘chance’” (p. 141) and explains why, in his view,
the ‘random’ nature of mutations is often misunderstood. He distinguishes “epistemological chance” (that which, though exceedingly complex is law-like, e.g. coin tossing) from “ontological (pure) chance” (where prediction is impossible, e.g. radioactive decay) and “metaphysical chance” (that which is entirely outside the remit of science). He says epistemological and ontological chance introduce variation into genomes. Nevertheless, he emphasizes that, “in both cases the winnowing effects of natural selection are what have the upper hand in bringing about certain constrained outcomes” (p. 172). Furthermore, “the winnowing necessity of natural selection generally plays the trump card in the end” (p. 173; emphasis added). Thus, for Alexander, Darwinian evolution is not really about chance at all.

Of course, the myriad sources of genomic variation are not truly random—point mutations (SNPs), transposons, gene duplication, structural mutations (those involving larger chromosomal segments than indels), and gene flow (e.g. horizontal gene transfer, retroviral insertions). Mutational hotspots further support this, and many epigenetic alterations are increasingly being implicated in the whole affair. The author rightly acknowledges this but ignores the obvious solution, anathema to any evolutionist, that genomes were designed to vary. It is easy to claim that “mutations are caused by molecular mechanisms” (p. 166) but mechanism requires design. Similarly, if “Mutation rates have to be ‘set’ just right in different parts of genome to facilitate evolvability” (p. 167), what/who does the setting? Design again, surely? Well no, Alexander says, it’s natural selection.

So where is Purpose in all this? The two sorts of chance he discusses only rise to the level of purpose with a small ‘p’. One simply cannot derive Purpose from biology, he insists (p. 177); all one can say is that evolution is compatible with some sort of overall Purpose. This hardly justifies the conclusion that the atheist claim of the Purposelessness of evolution is ultimately unreasonable, as Alexander contends. As J.P. Moreland rightly states, “God is allowed somehow or other to be involved in the process as long as there is no way to detect his involvement. Design in biology must be unknowable and undetectable!” But, if so, “What, exactly, did God do, and how could we know the answer to this question? If he was ‘involved,’ no one could know it, so God begins to take on some of the characteristics of the tooth fairy.”

**Christianizing evolutionary biology?**

In his fifth chapter, Alexander presents his vision of “the Christian matrix within which biology flourishes”. It is, however, a case of eisegesis on steroids. As in his previous works, Alexander fondly uses his ‘baptism’ metaphor for shamelessly force-fitting evolution into the Bible. Though he thinks creation doesn’t reveal Purpose (big ‘P’), he is keen on “baptizing evolution … into a much broader overall Purpose, that provided by Christian faith” (p. 181). He tries to justify himself by claiming that “baptizing evolution into Christian theology is nothing new” (p. 183), later referencing the willingness of Darwin’s churchmen contemporaries, “to baptize the theory of natural selection into the Christian doctrine of creation” (p. 205). However, ‘survival of the fittest’ (a synonym of natural selection) is antithetical to the Gospel—Jesus, the most fit of all (the sinless One), died for the unfit (sinners; Romans 3:23) in order that they would survive eternally.

True theology (rooted in Holy Scripture), whether creation or redemption theology, is the casualty of Alexander’s eisegesis. But Alexander mainly wants to show that biological evolution fits with his “theological matrix” (p. 206)—what I call his ‘evo-theo matrix’. Having decided that it is consistent with his conception of a purposeful God, he describes three overarching Purposes: 1) biological diversity’s great value; 2) the emergence of volitional beings (ourselves); and 3) that this planet is not the ultimate end in view, rather the “new heavens and new earth” (Isaiah 65:7).

One major problem in Alexander’s ‘evo-theo matrix’ is his failure to accept that God’s creative work was “finished” (Genesis 2:1–3)—it is not ongoing. Instead, he conflates God’s providential, sustaining work (see e.g. Nehemiah 9:6, Hebrews 1:3) with the idea of ‘continual creation’ by evolution. This makes Alexander relegate the clear statements of divine fiat (“Let there be …” or equivalent; e.g. Genesis 1:11, 20, 24) to “the language of gracious allowance” (p. 188)! Elsewhere, he acknowledges that the language employed is that of God speaking to create, and that it occurs throughout the Bible (e.g. Psalm 33:6–9; Luke 8:25; Hebrews 11:3) but argues that these accommodate gradual evolution and do not point to “the heavenly engineer” or “designer” (p. 201). He is even happy to try and marry Trinitarian terminology to evolution: “God the Father, God the Son, and God the Holy Spirit are all intimately involved in creation continua, the ongoing work of creation” (p. 197).

Never mind how this conflicts with Genesis 2:1–3! Theistic evolution rules and the Bible must conform to it. Astonishingly, Alexander even invokes Jesus’ words about His and His Father’s ongoing “working” (John 5:17) as alleged support for his ‘evo-theo matrix’.

Of course, this sort of thing is sadly typical of prominent theistic evolutionists in general. N.T. Wright,
speaking at the 2017 BioLogos Conference on Christ and Creation, said:

“… if the creation comes through the kingdom bringing Jesus, we ought to expect that … it would involve seed being sown in a prodigal fashion in which a lot went to waste. … We ought to expect that it would be a strange, slow process which might suddenly reach some kind of harvest. We ought to expect that it would involve some kind of overcoming of chaos. Above all, we ought to expect that it would be a work of utter, self-giving love. That the power that made the world … would be the power not of brute force, but of radical outpoured generosity.

But the wasteful “strange, slow process” of evolution envisaged here is read into Scripture. And how do theistic evolutionists reconcile God’s “self-giving love” with the blind, wasteful, utterly brutal process of evolution?

That, of course, is the million-dollar question, and the one which the author attempts to answer in his final chapter.

**Death, pain, suffering, and the God of love**

Denis Alexander rejects original sin, denying that a historical Fall caused humanity thereafter to be subject to sin and physical (not just spiritual) death. Evolution created beings “with the capacity for free will, and so moral choice”. Inevitably, the ‘gospel’ according to Denis Alexander is a confused version of that taught in the Bible:

“But the good news is that Christ through his death and resurrection has opened up a new way to experience Purpose in biology in which we become once again the good carers for creation that God originally intended us to be” (p. 211).

John 3:16 also receives a radical makeover. Noting that ‘world’ in the Greek is kosmos, he claims: “Christ came to die for the whole cosmos … Yes, individuals enter the kingdom as they trust in Christ, but his redemption extends to the whole created order …” (p. 215).

While it is true that the Bible teaches the redemption of the whole creation itself (Romans 8:21–22; 2 Peter 3:13), this verse does not provide support for that doctrine. The semantic range of kosmos is considerable but the context clearly restricts its use to human beings rather than the planet (as some environmentalists favour), let alone the whole cosmos. Alexander’s ‘novel’ interpretation of Scripture at this point seriously detracts from the sacrificial love of God for perishing sinners recorded by the Apostle John.

Thinking God used biological evolution to create, how does Alexander resolve the problem of suffering, pain, and death inherent within it? First, he warns his readers not to expect answers that help those struggling with suffering. He says that attempted theodicies are useless in practical terms (certainly true of all those advanced by theistic evolutionists). With this disclaimer, he overviews the various approaches to theodicy that his fellow theistic evolutionists have advanced. Space allows only cursory comment on these theistic evolutionary attempts, but all are futile. Having made God the ‘divine evolver’, no theodicy can succeed in ‘getting him off the hook’.

Interestingly, Alexander is uncomfortable with the ‘hands-off’ God who allows the ‘free process’ of his creation to have an ‘unscripted adventure’ in which the outcomes are uncertain (p. 225). He correctly observes that such a being would be just as responsible for death and suffering as “the ‘total control’ God” (p. 221). He thinks a robust Trinitarian theism, with evolution baptized into it, can take it on the chin: “God really is ultimately responsible for all the ‘biological evils’ of the world (but not the moral evils arising from human free will)…” (p. 228).

On the surface of it, the biblical creationist would agree with this, the crucial difference being that, man having defied God at the Fall, it was God’s prerogative to bring the Curse. However, evolution entails that human wickedness is just as contingent upon deep-time Darwinian processes as are animal predation, parasitism, disease, or painful death. Alexander ignores that, but how does he defend God against the charge of employing...
‘biological evils’—what Darwin called the “horribly cruel works of nature”?12 Alexander denies that the creation tells us anything about God’s character. He claims that Romans 1:20 limits the divine attributes that are clearly perceived to God’s power and glory (pp. 228–229). Furthermore:

“The created order is not there to teach us about the character of the creator—we learn that through revelation—but many of its properties are perfectly consistent with the God who has Purposes for the world” (p. 231).

He protests too much. First, the final clause of Romans 1:20 says “they are without excuse”. How can the pagans be morally culpable for refusing God His due if creation reveals nothing of God’s character? Paul is surely saying that atheism is simply inexcusable because the created order is telling us something of what the Creator is like, such things as His “eternal power” and “divine nature/Godhead”.13

Making evolution God’s responsibility is repugnant. The ‘evolver god’ is a ghastly being, horribly and vastly inferior to the God of Scripture (figure 2). But Alexander’s embracing of evolution and his concomitant rejection of the Fall bite again and again. So, “the mutations that are essential for our very existence because evolution depends on them [his article of faith] can also cause genetic diseases that can kill us” (p. 232). And God, remember, “really is ultimately responsible” for this! The present realities of pain and death are essential components of the “carbon-based life package deal” (pp. 234–238).

What, then, of Jesus healing people during His earthly ministry? If cancer and the host of other human illnesses are not ultimately the result of the Fall, why did the Son of God confront sickness and alleviate human suffering? Alexander answers that it is because these things have no part in the new heaven and earth. Rejecting that these evils have anything to do with the literal curse of the present creation (Genesis 3), he nevertheless believes in a future new creation without animal predation, pain, suffering, disease, or death, a wholly inconsistent position.

Evolution = no purpose of any kind

The book’s title asks: Is there purpose in biology? Moreland, critiquing theistic evolution in general, sums things up well:

“Whether theistic or atheistic, when properly understood, evolutionary theory entails the denial of a scientifically detectable God, and as a result, places the detection of divine design outside of science.”14

Alexander would agree, but tries to ‘baptize evolution’ into Christianity in such a way that Purpose makes sense anyway. Yet, his vision is deeply disturbing and dissatisfying. William Provine was right:

“Let me summarize my views on what modern evolutionary biology tells us loud and clear, and I must say that these are basically Darwin’s views. There are no gods, no purposeful forces of any kind, no life after death. When I die, I am absolutely certain that I am going to be completely dead. That’s just all—that’s gonna be the end of me. There is no ultimate foundation for ethics, no ultimate meaning in life, and no free will for humans, either.”15

Alexander, on the other hand, expects his readers to gulp down contorted logic and theological distortion in equal measure:

“Without the physical properties of the world we in fact observe, there would be no life, no evolution, so no free will, no moral responsibility, therefore no sin, no incarnation, no redemptive work of Christ upon the cross for sin, no resurrection and no possibility of entering into Phase Two, the fulfilled kingdom of God” (p. 243).

Abiogenesis followed by evolution: in Alexander’s vision, these are the foundation upon which everything stands. The cost of theistic evolution is high indeed.

References

8. Alexander’s views are thoroughly critiqued in chapter 7 (Original goodness?) of Bell, ref. 2.
10. For a more thorough treatment of the subject, see pp. 42–43 (re: open theism) and chapter 5 (Suffering explained?) of Bell, ref. 2.
11. When God subjected creation to futility (Romans 8:20) as a judgment on Adam’s sin, it was thereafter subject to the bondage to decay. Thus, the biblical creationist has legitimate grounds to distinguish between God being causally responsible for the fallen world and being morally blameworthy for natural evil. However, the theistic evolutionist who rejects the Fall can make no such distinction.
12. Darwin, C., Letter to Joseph D. Hooker, 13 July 1856, darwinproject.ac.uk
13. Chapter 2 (Clearly seen) in Bell, ref. 2, is devoted to this crucial discussion of the attributes of God as revealed in creation.
14. Moreland, ref. 6, p. 649.