



*Journal of
Religion & Society*
Supplement Series

The Kripke Center

Supplement 11 (2015)

Religion and the Sciences

Opportunities and Challenges

Edited by Ronald A. Simkins and Thomas M. Kelly

9. Life, Design, and Drama

A Theological Response to Evolutionary Naturalism

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Introduction

Darwin's influence on disciplines beyond science extends all the way to theology. This claim may seem curious to most evolutionists, but Darwin's impact on religious thought is by no means theologically erosive. In my opinion, what the philosopher Daniel Dennett calls Darwin's "dangerous" idea is a wholesome stimulus to theology. Darwin's apparent disposing of the notion of a designing deity, for example, is entirely salutary, at least for Christian theology (Haught 2000). I acknowledge that prior to Darwin, intricate forms of living complexity seemed to provide evidence of a creative intelligence at work in nature (Ruse: 33-50). Indeed, the most remarkable instances of living design have traditionally pointed sensitive religious minds toward a superhuman intelligence. God has been

understood as an “intelligent designer” whose handiwork is evident in the marvels of nature such as an insect’s wing, the human eye, or, more recently, subcellular chemical complexity.

However, many evolutionists now claim that it is not divine action, but *instead* natural selection that accounts ultimately for patterns in life that religious believers formerly took to be clear evidence of divine creativity (Cziko; deBeer). Viewed in evolutionary terms, moreover, the design in living organisms now seems not so intelligent after all, even if some outcomes of evolution – namely humans – have turned out to be intelligent themselves. Countless aimless accidents, plus the grinding on of blind natural selection, plus the mindless passage of time are three purely natural ingredients needed to cook up living design.

Evolutionary naturalists, those who believe that Darwinian biology is enough to account for all the characteristics of living organisms, claim that biology now excludes any place for theological understanding. They insist that descent, diversity, adaptive design, death, suffering, sexuality, intelligence, moral aspiration, and even religious longing can be rendered fully intelligible in terms of biology. Chance + selection + time – what an amazingly simple, indeed unintelligent, formula nature has chanced upon to transform the first spark of life, which itself arose by accident, into metabolizing, feeling, seeing, inquiring, moral, worshipping, and knowing forms of being! According to most Darwinians, the process that produced living design carries not a trace of mind or intentionality, even though it has lately produced intention-driven human subjects. As philosopher Owen Flanagan puts it, intelligence is not necessary to produce intelligence. “Evolution demonstrates how intelligence arose from totally insensate origins” (11).

Lacking any purposeful direction, evolution has apparently wandered blindly down countless pathways, most of them leading nowhere. Occasionally, evolution stumbles accidentally upon a survivable line of descent, although in doing so it is required to experiment “wastefully” with innumerable unworkable itineraries over an unimaginably long period of time. The process seems so inefficient that even the clumsiest human engineering seems mechanically superior. For example, the human digestive tract, as science writer Chet Raymo observes, is so circuitous that an engineer cannot help wondering how food can move from one end to the other. “An engineer might sort it out. Roll that small intestine up into a nice neat coil. Straighten out those kinks in the large intestine. Can you imagine the exhaust system of your car in such a tangle?” Likewise the human ear is frustratingly labyrinthine from an engineer’s point of view. “Hammer, anvil and stirrup: Where did those crazy little mechanisms come from? Five separate membranes. And three fleshy loops that seem, on the face of it, superfluous.” Indeed, says Raymo,

. . . much of the human body is an engineer’s nightmare, showing little in the way of intelligent design: which is just what you’d expect if our bodies evolved by a process of incremental changes acted upon by natural selection. The thing about evolution is this: Inevitably it moves toward ever more finely adapted organisms, but the end is not foreordained and the journey is something of a drunken stagger.

Nevertheless, after observing evolution’s mechanical ineptness, Raymo, a former Catholic educated at Notre Dame and now a devotee of evolutionary naturalism, adds the following:

Now, before you accuse me of tossing an Intelligent Designer out of the picture, consider this: For all of the improvements an engineer might suggest for the human body, the body is still a thing that no engineer could hope to equal. Fabulously resilient. Capable of stunning feats of endurance. Exquisitely attuned to the environment. Agile, disease-repelling, self-repairing, purposeful, cunning.

Evolution by natural selection, for all of its jerry-rigged solutions, for all its failed experiments and blind alleys, is a wonderfully efficient way to populate a universe with diverse and interesting creatures. If I were an Intelligent Designer, and I had a hundred billion galaxies (at least) to fill with wonders, I can think of no way more efficient to do it than by genetic variations and natural selection of self-reproducing organisms.

You want intelligent design? Try evolution.

To be sure, Raymo, a religious skeptic, wants nothing to do with the intelligent design theism (ID) of Michael Behe or William Dembski, but his lyrical commendation of evolution's blind meandering and experimenting is theologically suggestive, in spite of his intentions. His portrait of life provides a hint, I believe, that after Darwin the place to look for theological meaning in evolution is not in life's complex and often unsuccessful attempts at design, but in the *dramatic* flow of life.

Instead of looking for mechanical elegance in cells and organisms, theology may now search for a *narrative* coherence that lies much deeper than design. A scientifically informed theology of evolution will focus not so much on specific instances of living design as on the question of why the fabric of the universe is woven out of a fascinating three-part narrative blend of accidents, reliable habits (usually called "laws" of nature), and deep time. In any case, focusing on the idea of "design" is a dead end for theology as well as science. Scientists and philosophers who contend that Darwinian biology has disposed of theology altogether have usually done so by taking as their standard of theological meaning the same historically limited analogy of architectural and mechanical engineering that creationists and ID opponents employ (see Kitcher). If God exists, both ID proponents and evolutionary naturalists agree that nature should provide immediately unambiguous evidence of having been manufactured by a divine maker who has to be at least as intelligent and skillful a designer as a human architect or engineer. Dembski, Behe, and other ID proponents base their implicitly theological search for an ultimate explanation of life on their expectation of impeccable engineering in cells and organisms. Evolutionary naturalists such as Richard Dawkins, on the other hand, discard the idea of an intelligent designer because the adaptive imperfections or "design flaws" in evolution demonstrate that life was not intelligently designed after all. If a divine intelligent designer really exists, then our digestive system or hearing apparatus would not be the physiological mess it is. Evolutionary science, Dawkins proclaims, clearly refutes the God-as-engineer "hypothesis" (2006: 31-73).

ID proponents, in their urgent quest to find instances of divine perfection in nature, tend to ignore the three-part Darwinian recipe (contingency, natural selection, and deep time) and all the messiness that a narrative approach to life expects to find in evolution. Their focus is on design rather than drama. They remark, for example, on the staggering

complexity of sub-cellular mechanisms that seem to surpass in complexity anything that earthly engineers have yet devised. Then they argue that such marvels of nature must have been designed by a “master intelligence.” Evolutionary naturalists, on the other hand, comment on the failures of organisms to measure up to the standards of good human engineering and architecture. The contingency, impersonality, struggle, waste, and inefficiency in evolution point only to the incompetence of any supposed divine designer. Therefore, God, the allegedly infinite, intelligent, perfect designer, cannot possibly exist (Dawkins 1986, 2006).

The evolutionist and science writer David Barash, to cite one of many other possible devotees of evolutionary naturalism, asserts that religious believers attribute the intricate design in life directly to an intelligent designer, since in their view “only a designer could generate such complex, perfect wonders.” But then Barash goes on to point out that “in fact, the living world is shot through with imperfection.” “Unless one wants to attribute either incompetence or sheer malevolence to such a designer,” he asserts, “this imperfection – the manifold design flaws of life – points incontrovertibly to a natural, *rather than* [emphasis added] a divine, process, one in which living things were not created *de novo*, but evolve.” According to Barash, evolution, by ruling out divine intelligence as a direct cause of design, has decisively destroyed any basis for theology.

A Deeper Coherence?

However, Raymo’s remarks, as cited earlier, suggest that a theologian may look beyond both Dawkins and ID toward an interpretation of life distinct from current debates about design. In effect he is directing our attention away from design and toward the *drama* of life. Unlike Barash, Dawkins, and ID advocates, Raymo is not fixated on “design” in the sense of engineering elegance, industrial efficiency, or even informational complexity. Nor does he regard the wildly meandering trajectory of evolution, the inevitable imperfection of adaptations or the unreasonable convolutions of a digestive tract to be incompatible with a deeper kind of wisdom at work in nature.

Raymo, who claims to have lost his earlier belief in a providential God, has given up on theology. My point, however, is that theology need not underestimate the fact that, precisely because of its untamed wildness, evolution has in fact brought about a far more interesting, self-creative, inventive, diverse, beautiful – and of course dangerous – world than ever could have occurred if nature had been put together from the beginning with no “design flaws,” as Barash prefers. Instead of a universe instantaneously ordered to fit Barash’s, Dawkins’s, and ID’s culturally constricted architectural standards, Darwin has laid open before our eyes a world in which engineering defects occasionally provide openings to creative and self-creative consequences that perfectionistic implementations of design could never have permitted. Evolutionary science, in other words, presents the life-story as a true adventure. Evolution is a risk-taking and extravagantly inventive drama wherein, alongside lush creativity, there always lies the possibility of tragic outcomes, including unimaginable suffering and abundant death. We humans do not like this, but what is the alternative? A perfectly designed world, if that is what you want, would be dead on delivery. Since it would already be perfect, it would also be finished; and if finished, it would have no future, no room for freedom and no possibility of life. Set in stone by a hypothetical intelligent

designer, it would correspond flawlessly and passively to an eternal master plan. Such a world, of course, would be devoid of the contingency, indeterminacy, freedom, vitality, and futurity apart from which there could be no truly dramatic creative process. A perfectly designed world, the one idealized by both evolutionary naturalists and ID partisans, would be intolerably dull to those who love stories.

If a fixed and frozen – hence moribund – universe is still your preference, then you will insist on design in the manner of Dawkins and ID proponent Dembski. But if you want a truly interesting world, then perhaps you will be open to Darwin's recipe for evolution. As Raymo vaguely hints, a life story composed of Darwin's three-part formula may in principle carry a narrative meaning that evolutionary naturalists, creationists, ID proponents, and others obsessed with perfect design simply cannot imagine.

What this meaning might be is something for which we must wait. It is a mark of impatience, presumption, and perfectionism to insist here and now on a world completely cleansed of design flaws. It is not the business of a biblically based theology of life and evolution to look for a divine designer lurking immediately beneath or behind the data of scientific inquiry. Christian theology, I suggest, is incompatible with the idea that God directly engineers or tinkers mechanically with the natural world. Theologians in the biblical tradition, after all, normatively understand divine creativity, providence, compassion, and wisdom in a more dramatic way, as inseparable from the more fundamental motifs of *liberation* and *promise*. Drama does not correspond tightly with the notion of design. Israel's idea of God is shaped by her experience of Exodus, just as Christianity's God is inconceivable except in terms of the experience of being delivered from the most profound forms of enslavement. Further, the liberating God of the Abrahamic traditions is a promising God, that is, a God who opens up the future even where it seems to mortals that there are dead ends everywhere. One might even say that the Abrahamic God *is* the world's future (Peters; Pannenberg 1977, 1993).

It follows, therefore, that whenever the idea of God is separated from the basic biblical themes of freedom and futurity, it is an idolatrous distortion. This is why the idea of God as strictly an engineer or designer seems so remote from a specifically biblical theology. At times, of course, biblical metaphors, adapting to the popular imagination, portray the Creator as a craftsman, potter, builder or planner. Such images serve to fortify the trust that our lives are not pointless, and that goodness will prevail in the end. But only an extreme literalism can banish from these images the religiously powerful motifs of liberation and promise that underlie a biblically inspired quest to understand the meaning of life.

From a biblical point of view the central themes that come to mind when we utter the word "God" are those of *freedom* and *future*. The universe is not fixed, determined, and closed as the idea of scientific *laws* suggests all too often. Rather, the created world is a story still open to an indeterminate but redemptive future (Moltmann 1975, 1992, 1996). It is this futurist understanding of God, not the abstract idea of an "intelligent designer," that a dramatic or narrative theology of nature will try to bring into deep coherence with Darwin's three-part recipe.

Ever since Darwin, I should add, thoughtful Christians have expressed excitement about the dramatic nature of evolution. In the 20th century, for example, the quest for a

narrative coherence in the cosmos has been central especially in theological conversations stimulated by the writings of geologist Teilhard de Chardin and the philosopher and mathematician Alfred North Whitehead (Haught 2000, 2007).

In the spirit of these two thinkers I am proposing that a properly biblical theology of nature will view divine wisdom, providence, and compassion less as a guarantee of the world's safety – as the idea of design suggests – than as a bounteous self-giving that grants the world an open space and generous amount of time to become *more*, and in doing so to participate in its own creation. The God of evolution is concerned that the world grow in freedom and beauty, and so God invites the creation to experiment with many possible ways of being, allowing it to make “mistakes” in the process. The God of evolution is one who honors and respects the indeterminacy and openness of creation and in this way ennobles it. The God of evolution is a selfless, humble, self-giving liberality interested in the world's growth toward independence, not in a direct manipulation of things. Consequently, contrary to Barash's foolishly simplistic understanding of divine creativity, we may understand the emergence of life's patterns not as a matter of natural processes *rather than* God doing all the work, but of God creating *through* a natural world that is not designed but instead seeded with *promise* and potential for more being and increasing freedom.

Evolution as Story

Theology after Darwin, then, is much more interested in narrative depth than mechanical design (Haught 2003). A theology of evolution begins by acknowledging that chance, predictability and deep time are indeed fundamental facets of nature underlying evolutionary process. All three ingredients are tacitly presupposed, in one distribution or another, in nearly all contemporary scientific accounts of how evolution works (Gould and Lewontin: 581-98; Dawkins 1986, 1995, 1996). Christian theology tuned into Darwinian biology, therefore, will wonder less about the religious meaning of design than about the three-sided evolutionary loom on which life's designs are being narratively woven. Such a softer, but deeper, focus will not overlook the post-Darwinian interpretations of evolution that have recently begun to emerge. Such accounts point to cooperative, self-organizing biophysical, genetic, and ecological factors in the shaping of life. These are influences that classical Darwinism may not have noticed or highlighted (Depew and Weber), but they in no way obscure or diminish the fundamentally narrative quality of the Darwinian portrait of life. Contingency, selection, and deep cosmic time still remain.

For almost two centuries fixation on the idea of design has turned theological attention away from pondering the deeply dramatic disposition of nature. What I am suggesting is that theology after Darwin must focus more deliberately than ever before on the remarkably narrative mix of physical features underlying evolution. We can now see that the physical universe itself is a gracefully balanced blend of unpredictability, predictability, and temporality that allows the natural world to unfold as a *story*. This is my main point. Already waiting on the cosmic table long before life makes its debut is a narrative matrix that permits life to present itself not as a state but as a story. The tripartite Darwinian recipe turns out to be the stuff of narrative or drama, and this is theologically interesting for the simple reason that a story may be the carrier of deep meaning – a meaning to which science, strictly speaking, has no access.

Again, a story or drama requires that we *wait* for it to unfold, and the universe that sponsors evolution is still coming into being. A story, if we only wait patiently, may put things together in a coherence that we cannot possibly imagine at present. So the cosmic story too may integrate not just spatially distinct elements, as does design, but also temporally accumulating moments in time. In the quest for temporal rather than merely spatial coherence a story requires, in the first place, a certain degree of contingency or unpredictability to keep it from rigidifying into mechanistic immobility. Contingency is also needed for the uncertainty about outcomes that every true story must have in order to be worth telling. Second, there must be some degree of limitation or constraint imposed on sheer uncertainty in order to give the story enough continuity to keep it from collapsing into a jumble of disconnected moments and episodes. I prefer to think of these constraints as more analogous to grammatical rules than to iron rail “laws.” Third, to have a story there must be a span of time in which it can unfold, and for a truly momentous story the amount of time may have to be enormous. The deeper, narrative coherence for which a biblically informed theology looks in God’s creation after Darwin, therefore, is one in which contingency or accident opens the world to an unpredictable future. Meanwhile the regularity of the drama’s inviolable grammatical rules, i.e. the unbending “laws” of physics and natural selection, are like inviolable grammatical rules that keep the story on track as the world journeys through time. It is into this wondrously deep narrative soil, not the shallows of mechanical design, that a theology of evolution will sink its roots.

Chance, predictability, and time are essential to a narrative cosmic coherence that takes shape only gradually and uncertainly beneath life’s more ephemeral patterns. Apart from these three components of natural process no story of any kind could ever have been told about anything – including the cosmos and life. We may surmise, then, in light of geology, biology, and recent cosmology, that the universe is shaped pervasively by what might be called a “narrative cosmological principle.” It is this narrative setting that, in my opinion, most appropriately evokes our theological wonder. Why, we may ask, is the world made for stories? The narrative setting composed of contingency, necessity, and time is much more to be wondered at than all the imperfect designs that may have emerged during the world’s unfolding. Theologically, therefore, we cannot hope to get to the bottom of life’s evolutionary adventures without first asking why the universe would have the kind of deep narrative structure that allows it to be dramatic in the first place.

Chance, grammatical regularity, and irreversible temporality had already bestowed on nature a narrative orientation long before life made its first precarious entry on earth nearly four billion years ago. The cosmic pantry was already stashed with the ingredients for an evolutionary drama long before life began to stew. Few theologians, and even fewer scientists, however, have reflected in a sustained way on just how remarkable it is that nature would be endowed with a narrative makeup at all. Asking why it possesses a dramatic way of being, I suggest, is not simply a scientific puzzle, but a metaphysical or theological mystery second only to that of why anything exists at all.

Apart from a delicately balanced amalgam of contingency, predictability, and duration, life’s evolution could never have been launched or sustained. We have every reason to wonder at this great and possibly impenetrable mystery of cosmic narrativity. While science limits its inquiry to physical causes at work in nature, theology may now appropriately

wonder why, beneath the surface of all evolutionary occurrence, there lies a dramatic substructure that combines openness to the future (made possible by contingency) with a dependable grammar (the so-called laws of nature), and an irreversible sequence of time – and that it does so in the exquisitely interesting way that scientists have recently discovered.

From a narrative perspective, the accidents in nature such as genetic mutations and asteroid impacts, events that frustrate a theology fixated on design, are intelligible to a theology that connects evolution to the biblical themes of freedom and promise (Pannenberg 1993: 72-122). The randomness of events does not fit a conceptual scheme in which creation is required to be a set of direct designs, but the contingency in nature does cohere intelligibly with an understanding of nature as narrative. Likewise, the grammatical inviolability of natural selection, in company with all other habits and constants of nature, makes good sense to a narrative theology, since at least some degree of predictability is essential to the continuous unfolding of any story. Finally, a story requires time to unfold, and the fact that evolution takes so much time need in no way diminish its overall narrative coherence.

Precisely where the story may be going remains a question upon which both science and theology can speculate, each in its own way. Narrative coherence, unlike design, however, is something we can gain access to only by first putting on the virtue of hope. Hoping requires a forbearance and humility that an impatient fixation on design is unwilling to give up. Theologically speaking, in fact, the obsession with design, whether by ID advocates or evolutionary materialists, expresses an impatience that seeks to escape from time and refuses to wait in hope for a future narrative coherence that may be taking shape up ahead. Spurning the posture of hopeful waiting, both ID and evolutionary materialism take premature flight, seeking metaphysical refuge in storyless conceptions of nature, whether that of Platonic eternity or that of blank materiality.

A seasoned theology, for its part, has learned from its encounter with modern science to postpone the metaphysical finality sought by impatient religiosity as well as atheistic materialism. A theology of evolution encourages natural science to carry its own methods and explanations as far as they can possibly go, without ever interrupting. This caution, however, does not signify that theology is irrelevant at an explanatory level distinct from that of scientific method. Theology, after all, assumes that there can be more than one level of explanation for everything. It endorses the idea of *layered explanation*. It assumes that no discipline can give an exhaustive account of anything whatsoever. Any particular kind of explanation, including the Darwinian, has a limited horizon of inquiry and needs to be complemented by others, including that of theology.

Human inquiry into the phenomenon of life, for example, allows for more than one explanatory slot. It is entirely appropriate to push scientific explanations (physical, chemical, biological) as far as they can possibly go at their own proper levels within a hierarchy of explanatory levels. The problem with both ID and evolutionary materialism, however, is that they share the unfounded belief that only one authoritative kind of explanation is available to human inquiry today, namely, that of scientific inquiry. Darwin's science is theologically important then precisely because it compels theologians to look at the *story* of life in search of deeper levels of explanation, addressing questions such as why there is any order at all

rather than just chaos, or why there is anything at all rather than nothing, or why the universe is intelligible – or why the universe is made for stories.

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