

Naturalism—as Religion, within Religions, without Religion

with Willem B. Drees, “Naturalism and Religion: Hunting Two Snarks?”; Ursula W. Goodenough and Jeremy E. Sherman, “The Emergence of Selves and Purpose”; Matthew D. MacKenzie, “Spiritual Animals: Sense-Making, Self-Transcendence, and Liberal Naturalism”; Curtis M. Craig, “The Potential Contribution of Awe and Nature Appreciation to Positive Moral Values”; Mark E. Hoelter, “Mysterium Tremendum in a New Key”; Charles W. Fowler, “The Convergence of Science and Religion”; Todd Macalister, “Naturalistic Religious Practices: What Naturalists Have Been Discussing and Doing”; Paul H. Carr, “Theologies Completing Naturalism’s Limitations”; James Sharp, “Theistic Evolution in Three Traditions”; Alessandro Mantini, “Religious Naturalism and Creation: A Cosmological and Theological Reading on the Origin/Beginning of the Universe”; and Willem B. Drees, “When to Be What? Why Science-Inspired Naturalism Need Not Imply Religious Naturalism.”

THEISTIC EVOLUTION IN THREE TRADITIONS

by James Sharp

Abstract. This article examines the role of theistic evolution in the work of three scholars: Christian theologian Keith Ward, rabbi and philosopher Jonathan Sacks, and Muslim physicist Nidhal Guessoum. Ward presents theistic evolution in a theological context, while Sacks and Guessoum present theistic evolution in broader contexts: Sacks as part of a reassessment of science and religion in western cultures, and Guessoum in arguing for a more sophisticated approach to science and religion within Islam. Their presentations of theistic evolution show the potential for theological and philosophical work concerning science and religion aimed at a popular audience which moves beyond the stubborn categories of conflict and independence or isolation.

Keywords: Christianity; Darwinism; evolution; Nidhal Guessoum; Islam; Judaism; naturalism; Jonathan Sacks; theism; Keith Ward

This article will look at the role of theistic evolution within the work of three scholars: Keith Ward, Jonathan Sacks, and Nidhal Guessoum, representing viewpoints from Christianity, Judaism, and Islam, respectively. For the purposes of this article, theistic evolution is regarded as any

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description of evolution that finds theism to be fully compatible with the current scientific understanding of biological evolution. It therefore fits within the conference and journal theme under the category of naturalism within religion.

KEITH WARD

Keith Ward's presentation of theistic evolution in his 1996 book *God, Chance and Necessity* is used as the representative example of theistic evolution primarily for two reasons. First, it is one of the more robust presentations of theistic evolution to date, and it is presented in the larger context of a theistic exposition of the natural sciences in general. Second, Ward's work serves as a source for both Sacks and Guessoum in their own discussions of the religious significance of evolutionary theory. As will be seen, while Ward writes from a Christian standpoint, there is nothing in his presentation of theistic evolution which either Sacks or Guessoum finds objectionable in a Jewish or Muslim context.

Ward makes the assumption that while a naturalistic explanation of the physical processes of evolution may be sufficient to explain the outcome of evolution on a material level—that is, the various physical attributes of organisms such as limbs, eyesight, and metabolism—it is insufficient to explain the complexity of organisms as a whole, particularly conscious, self-aware organisms such as human beings. Contra Jacques Monod, who assumed that human consciousness is ultimately a by-product of the need for genetic reproduction (Monod 1971), Ward sees many human traits, such as the ability to produce and enjoy music, as unlikely to have been passed on solely due to natural selection, which suggests that some greater, more all-encompassing explanation is needed for their persistence (Ward 1996a, 70–72).

Such an explanation is not intended to replace the naturalistic explanation supplied by evolution, however, but rather to extend that explanation in a fashion that allows it to more fully account for the complexity of life, including human attributes that cannot be easily understood as traits that were favorably chosen by natural selection. This fuller theory of evolution is what Ward means by "theistic evolution," and in large measure is what makes "theistic evolution" an idea that is readily transferable to the contexts addressed by Sacks and Guessoum. Ward's claim is that an exclusively natural theory of evolution gives us no reason to believe that consciousness should ever evolve. If all that natural selection can select for is the capacity to survive, any number of simpler organisms, such as viruses and poisonous weeds, could be expected to survive and thrive, giving us no reason to believe that more complex, self-aware life forms should be expected to evolve. The fact that such life forms have evolved is evidence that the evolution of intelligent, conscious life forms is the purpose of evolution itself.

Monod, who sees no such purpose in evolution, finds the evolution of such life forms to be accidental, a lucky outcome of the universal drive to reproduce. Ward, having identified a purpose within evolution, asserts that such a purpose implies an intelligence behind it (Monod 1971, 176–80; Ward 1996a, 73–80). Such a claim is based in metaphysics, not science, and thus is a philosophical or religious claim, but the counterclaim that no purpose can be discerned in evolution since it is a purely physical process is likewise a metaphysical claim rather than a scientific one (Ward 1996a, 99–101).

Having staked out his territory, Ward goes on to outline seven crucial stages required by evolutionary theory, each of which is better explained by a theistic theory of evolution than a strictly naturalistic theory:

- (1) The origin of the universe itself, with a set of physical laws which permits the evolution of complex life

Ward argues for a strong version of the anthropic principle, suggesting that without direction or intentionality the physical laws of the universe would likely be such that complex organic molecules could never form (Ward 1996a, 105–16).

- (2) Once such laws are established, molecules with the capacity for self-replication must form

Ward concedes that, given enough time, such molecules could form through chance occurrences, but the sheer unlikeliness of this is so great that the purposeful hypothesis of theistic evolution is a better explanation (Ward 1996a, 116–18). Notably, the means by which such self-replicating molecules were first formed remains one of the major unanswered questions of evolutionary theory (Dawkins 1996, 209–25; Prothero 2007; Van Kranendonk, Deamer and Djokic 2017, 147–57).

- (3) Genetic mutation must occur in order to introduce changes to the molecular self-replication process

Again, Ward argues that the improbability of these changes improving an organism's chance of survival, let alone producing ever more complex organisms, is so great that a purposeful theory of evolution is preferable to a strictly naturalistic one. He also notes that simulations of natural selection require a (human) mind to engineer the selection process, which may hold true of natural selection itself (Ward 1996a, 118–26).

- (4) The information found in replicated RNA and DNA must express itself in the phenotypes of complex organisms

Without this expression, life as we know it would not exist. Here, Ward argues that genetic mutation and natural selection should be seen as parts of a complex system whose purpose is to produce complicated organisms that are adapted to their environments. Such purpose is better explained in the context of a theistic theory of evolution than an exclusively naturalistic one (Ward 1996a, 127–29).

- (5) This expression takes the form of highly complex organisms with multiple parts which are subject to natural selection

Ward argues that if the driving force behind evolution is the replication of DNA, as materialists such as Monod and Dawkins have asserted, the process itself is startlingly inefficient, given the number of “errors” that appear in the genetic code. Once again, a theistic version of evolution seems superior to a naturalistic one (Ward 1996a, 135–39). (Ward’s description of the relationship between genotype and phenotype is somewhat oversimplified, since it implies a one-to-one correspondence in which each genetic mutation leads to one relatively limited change in phenotype. Prothero and Kirschner and Gerhart provide descriptions of the complicated relationship of inactive DNA, regulatory genes, genetic switches, and phenotypic expression (Kirschner and Gerhart 2005; Prothero 2007, 95–103). Such complexity does more to support Ward’s interpretation than detract from it, however.)

- (6) The development of consciousness

Ward sees consciousness as a nonphysical aspect of the mind not readily explainable by the states of physical attributes of the brain. Such explanations are no more or less likely than the description of the mind as something nonphysical (Ward 1996a, 152–60).

- (7) The emergence of culture which includes characteristics and behaviors that persist and are passed on even though they are not part of the genetic code and may not be beneficial to individual organisms

Ward argues that human traits such as altruism and ideas such as beauty, truth, and goodness cannot be adequately explained as the by-product of natural selection. Once again, a theistic explanation is a more comprehensive explanation than a naturalistic one (Ward 1996a, 173–84).

Each of the first five stages is accepted by virtually all naturalists; the sixth and seventh stages are somewhat debatable, but almost all biologists and other evolutionary scientists would see human consciousness and culture as products of evolution in some measure, even if they are not

directly subject to natural selection. To these stages Ward would add an eighth stage, which clearly separates him from naturalistic understandings of evolution:

- (8) The primary goal of evolution is to bring self-aware conscious beings into relationship with God, the divine source of all reality (Ward 1996a, 185–88)

With this stage, Ward has clearly moved beyond a naturalistic understanding of evolutionary theory into a philosophical and theological interpretation of the implications of that theory. Although his understanding of evolution is based on a naturalistic approach, his development of that naturalistic description leads smoothly into his theological convictions.

God, Chance and Necessity places the naturalistic descriptions of the cosmological origins of the universe and the biological evolution of life together in a theological understanding of science. Throughout this work, and his discussions of evolution and science in other works, Ward consistently argues that a theistic explanation of evolution and scientific knowledge is superior to strictly naturalistic explanations. However, he is no biblical literalist or dogmatic theologian, either. Ward sees the universe as infused with a purpose from a transcendent God who is also present in creation, an idea that is influenced by both the process thought of Alfred North Whitehead and the evolutionary theology of Pierre Teilhard de Chardin (Ward 1996a, 78–80; Ward 1998, 119, 286–90; Ward 2004). The fact that Ward's understanding of theistic evolution is grounded more closely in scientific thought than in specifically Christian theology or biblical interpretation is one of the reasons scholars from other traditions can so readily adapt his ideas into their own projects.

Although science plays a role in much of Ward's theological thought, it is most influential in his four-volume comparative theology—*Religion and Revelation*, *Religion and Creation*, *Religion and Human Nature*, and *Religion and Community*. Here science, along with various other major religious traditions, is a dialogue partner with Christian theology, allowing Ward to present a comparative theology which takes both pluralism and scientific knowledge seriously. In *Religion and Human Nature*, Ward further develops his view of human consciousness, suggesting that it emerges as more complex animals evolve. This emergence is further evidence of the purposive nature of evolutionary history. Then, in one of the more evocative passages of Ward's comparative theology, he suggests that at some point an early human (or human ancestor) became aware of the tension between one's obligation to act in a certain way in fulfilling one's natural obligation toward other individuals or one's community and one's freedom to act in a contrary manner that may be personally rewarding but harmful toward others. Ward characterizes this development as the origin

of the human awareness of the conflict between self-interest and desire for personal power and the expression of divine love which is also part of our nature. This awareness is a natural development in a creature which is the result of God's love and care for creation, but nonetheless was intended to have the freedom to make its own choices. Rather than cling to old theological notions of humankind's fall into sin, Ward constructs a new vision of the emergence of choice and self-awareness that is compatible with scientific knowledge but also captures the alienation of human beings from God assumed by traditional theology (Ward 1998, 128–29, 159–62).

JONATHAN SACKS

While Ward's treatments of theistic evolution are presented in a clearly theological context, rabbi and philosopher Jonathan Sacks discusses theistic evolution in a more wide-ranging philosophical context. His 2011 work *The Great Partnership: Science, Religion, and the Search for Meaning* argues that both religion and science have a role to play in locating or re-locating meaning in western cultures and societies. In Sacks' view, religion and science represent two perspectives on the nature of the world, which are compatible, not contradictory. Science is the perspective that seeks to understand the way things work in the world and is associated most closely with activity in the left hemisphere of the brain, while religion is the perspective that seeks to understand the meaning found in our experience of the world and is associated with right-brain activity. While the integration of these two forms of knowledge is indeed difficult, Sacks sees historical reasons for the extent of the difficulty which it presents to western societies (Sacks 2011, 2–4). Although Sacks' personal perspective is informed by Judaism, he presents the religious view in a fashion that reflects the understandings and beliefs shared by all three of the major monotheistic traditions (Sacks 2011, 7).

He presents two accounts of the origins of the universe and life within it—one which includes solely naturalistic descriptions of the universe and one which includes religious narratives as well. Sacks asserts that only the second account can be seen as presenting an inherent meaning to life. Furthermore, the lack of meaning inherent in the strictly physical or naturalistic description of the universe demonstrates that the source of such meaning must come from something outside of or transcendent to the universe, which Sacks labels God (Sacks 2011, 19–30). Sacks traces the roots of the apparent conflict between religion and science in western civilizations back to the composition of Christian texts in the first century C.E. when the teachings of Jesus, rooted in Hebrew thought and expressed in Aramaic, were put down in Greek, the language of another people and culture entirely. In Sacks' view, the authors of the first Christian writings assumed that Greek philosophy and science, two left-brain ways of

thinking, were fully compatible with Hebrew prophetic religion, a right-brain understanding of the world (Sacks 2011, 57–62). The idea that teleology is inherent in the natural world—the same understanding that Ward uses to argue that theistic evolution is superior to strictly naturalistic evolution—comes from Greek philosophy rather than Hebrew theology (Sacks 2011, 66). Since the original prophetic religion never assumed that philosophical rationalism and scientific thought shared that same understanding of the nature of the world, the original texts are not in conflict with scientific thinking. Such conflict is rather the product of attempts to use rational and scientific arguments to demonstrate the existence of God, something that ancient Judaism never expected. The harmony between rationalism and faith assumed by early Christian philosophers and theologians was undermined by the failure of naturalistic explanations of the world to verify God's existence. For Sacks, this failure is not an issue since the basis of faith is a relationship between the human and the divine, not a propositional claim to be confirmed or dismissed (Sacks 2011, 71–74).

The expectation that meaning can be found through rationalism and a naturalistic understanding of the world is destined to fail, Sacks claims. Citing the philosophy of Friedrich Nietzsche and the horrors of the Holocaust, he argues that secularism leads to division and oppression arising from views that see life as meaningless apart from individual needs and desires (Sacks 2011, chapters 5 and 6). Theistic faith is what leads human beings to see beyond individual circumstances to create democracies that support universal human freedom and rights and societies that expect and reward moral conduct (Sacks 2011, chapters 7 and 8). It is our love for God that leads us to love other human beings, both individually and corporately (Sacks 2011, chapter 9). Ultimately the meaning that we find in life comes from faith in God, which may extend to religious faith beyond the Jewish, Christian, and Muslim monotheistic traditions (Sacks 2011, 204).

Having made his case for theism and against secularism, Sacks uses the third part of his book to address the three most serious challenges to theistic belief: Darwinian evolutionary theory and the implications associated with it, the existence of evil, and the related problem of evil committed by religious people or in the name of religious faith. He begins with a reminder that science and religion are not incompatible and adds that it is God's desire that human beings should seek out knowledge. Science and religion provide different perspectives on the knowledge of evolution, and it is the perspective of religion that can bring meaning to that knowledge. Evolutionary theory has five important implications for religion. First, it demonstrates God's delight in diversity. Second, it shows that God intended the universe itself to be creative. Third, all life has a single source—the genetic code. Fourth, the letters of the genetic code demonstrate a convergence between evolutionary theory and religions based on

scripture—each is based on linguistic understanding. Fifth, the interconnectedness of life demonstrated by the genetic code lends a deeper understanding to the biblical accounts of creation (Sacks 2011, 209–19).

None of these implications, however, demonstrate that Darwinian evolution has a purpose—the creation of self-aware beings capable of a relationship with God. It is here that Sacks believes science must turn to religion for meaning. Sacks cites the biblical story of Joseph and his brothers as exemplifying the principle that seemingly random events can be part of God's intention. Darwinian evolution, with its reliance on random mutations and slow development over millennia, challenges the kind of design described by William Paley, but that is not the only way to understand purpose. It is only as complex life emerges that the intentions of God toward creation become apparent. Like Ward, Sacks sees the point at which life-forms reach self-awareness to be the beginning of human beings' ability to relate to God and understand our own finitude (Sacks 2011, 221–31).

In the next two chapters of the book, Sacks discusses issues related to evil. He begins by challenging the traditional dilemma presented by evil (which he sees as a product of Greek rationalism rather than Hebrew religion): If God exists and is good, evil cannot exist, but if evil exists, than a good God cannot exist. The Hebrew Bible accepts the contradictory existence of both a good God and evil. The scriptures do not seek to answer a philosophical or theological problem, rather they cry out against injustice and suffering in the world and turn toward God for justice and comfort. The proper response to injustice and suffering in the world is not acceptance but action to bring about justice and change (Sacks 2011, 234–44, 246). In response to the charge that religion can inspire or call people to commit evil acts, Sacks first points out that secular ideas and movements are equally likely to do so (Sacks 2011, 250–51). He acknowledges, however, that specific aspects of Judaism and Christianity have led to specific expressions of evil. These aspects need to be countered with careful interpretation of texts, an understanding of the ambiguity of human nature and motivations, the rejection of messianic politics, both secular and religious, the separation of religion from political power, and respect for those who hold truths that challenge or contradict our religious truths. Sacks includes the dialogue between religion and science as a part of this last action (Sacks 2011, 251–65).

While Ward uses theistic evolution to help develop a theological understanding of science, which is then used to inform his approach to comparative theology, Sacks sees evolutionary theory as one of three major challenges to a religious world view, but one which can be answered with a theistic interpretation. In his concluding chapter, he utilizes some of the same observations and arguments given by Ward to argue that the scientific understandings of cosmology and evolution are better interpretations of reality when those understandings are coupled with the

teleology supplied by religious traditions (Sacks 2011, 268–73). In his final pages, Sacks reiterates his claim that the inherently meaningless natural system described by science can only be made meaningful through the religious standpoint located “outside” the natural world (Sacks 2011, 289). Although his book uses “science” and “religion” in the subtitle, he really is engaged in a larger dialogue between secular and religious understandings of the world. Sacks makes plain his belief that unchecked secularism can lead to horrifying immorality but acknowledges that religious excesses have produced the same horrors. In a pluralistic world, it is dialogue and mutual understanding that will lead us forward. Both Ward and Sacks see religion as bringing purpose to the evolutionary process described by Darwinian theory. Naturalism alone cannot produce meaning; only naturalism partnered with religious interpretation can bring purpose to the purposeless process described by scientific knowledge. Both scholars believe religion offers a better option than Monod’s claim that the only meaning to be found in evolutionary history is the meaning which we create in it for ourselves (Monod 1971, 176–80).

NIDHAL GUESSOUM

Like Sacks, Muslim astrophysicist Nidhal Guessoum situates his discussion of theistic evolution within a broader context. In Guessoum’s case, this context is a book-length discussion of the relationship between science and Islam—*Islam’s Quantum Question: Reconciling Muslim Tradition and Modern Science*. *Islam’s Quantum Question* argues that modern science and Islamic faith are compatible, although many contemporary Muslims, including well-educated Muslims, are ignorant of or hostile to scientific knowledge and understanding. Guessoum’s work aims to demonstrate that Muslims need not reject scientific knowledge in order to remain faithful to Islam and, to a lesser extent, to familiarize non-Muslims who have knowledge of the religion and science conversation with its expression in an Islamic context.

Guessoum’s treatment of theistic evolution is relatively brief—just five pages in his chapter on evolution, one of 10 chapters in the book. While Guessoum does not provide a definition of theistic evolution, the broad range of examples he gives are consistent with my definition of theistic evolution as any position which does not find religious belief to conflict with current evolutionary theory. His first example is Asa Gray, Darwin’s Presbyterian correspondent who saw no conflict between evolutionary theory and his own Christian belief. Guessoum also includes Pierre Teilhard de Chardin, whose ideas about evolution go well beyond what most contemporary proponents of theistic evolution are willing to claim. In discussing contemporary expressions of theistic evolution, Guessoum relates ideas from Holmes Rolston, John Haught, John Polkinghorne, and Keith

Ward. He closes his chapter on evolution by noting that theistic evolution provides a nonmaterialist interpretation of the scientific theory, demonstrating that evolution does not imply atheism or even confinement to strict naturalism (Guessoum 2011, 295–99, 323).

In his discussion of Muslim views of evolution, Guessoum begins by noting the predominantly negative view of evolutionary theory among Muslims today, despite the acceptance of evolutionary ideas by many Muslim scholars of the past. He also provides a number of verses from the Qur'an which demonstrate that even a fairly literal reading of the Qur'an can still accommodate evolutionary theory. He points out that the idea of evolution and transformation in human development was discussed by classical-era Muslim philosophers and scholars, although their conception of such changes was fairly remote from modern evolutionary theory. The key question is the extent to which medieval Muslim understanding of the ancient idea of the "great chain of being" allowed for specific organisms to change in such a way that they could move up the chain in a manner analogous to Darwinian evolution. Guessoum cites writings from Abu Nasr al-Farabi (d. 951), the Ikhwan al-Safa, 'Abd al-Rahman ibn Khaldun (d. 1406), and even a poem from Jalal ad-Din Rumi (d. 1273), as evidence that some classical Muslim scholars believed organisms could undergo changes or transformations that moved them up the chain of being (Guessoum 2011, 306–8).

Turning to the modern period, Guessoum first discusses the early Muslim reception of Darwinism, noting a range of acceptance and objection from Muslim scholars. He describes al-Afghani's and al-Isfahani's objections to Darwinism but notes that al-Afghani appears to have later moderated his views and that al-Isfahani's principal criticism of evolutionary theory was specifically related to human evolution, which Guessoum has identified as a sticking point for many Muslims. He points to Hussein al-Jisr (d. 1909) and Mustafa Husayn al-Mansuri as Muslim scholars who saw Darwinian theory as fully compatible with Muslim beliefs, and notes that Ismail Mazhar (d. 1962), who first translated *The Origin of Species* into Arabic, rejected the materialist interpretation of evolution and saw religion as having an important role in human societies. Guessoum then asserts that "al-Mansuri and other Muslim intellectuals of [his] time can be described as theistic evolutionists" (Guessoum 2011, 303, 309–11). Quoting Adel Ziadat, he argues "that [Arab] Muslims were more ready to accept Darwin's evolution than were the Christian Arabs" (Ziadat 1986, 128; Guessoum 2011, 312). Such acceptance by today's Muslim intellectuals is far less common, however, although Guessoum cites the controversial Syrian scholar Mohamad Shahrour as one who has sought to interpret the Qur'an in a fashion which is consistent with Darwinian theory (Guessoum 2011, 313–14).

Guessoum rejects Muslim expressions of creationism and Intelligent Design theory as unscientific, for largely the same reasons given by non-Muslim scientists and theologians (Guessoum 2011, 315–23, 238–40). Early in *Islam's Quantum Question*, he discusses a popular idea among contemporary Muslims of the “miraculous scientific content” of certain verses of the Qur’an, which, when properly interpreted, express modern scientific knowledge despite having been written centuries before the advent of modern science (Guessoum 2011, 4–15). Guessoum believes that the general recasting of scientific knowledge as Qur’anic revelation among Muslims and the widespread rejection of Darwinian theory by Muslim theologians and scholars has prevented Muslims from exploring the design argument (meaning design in general, not Intelligent Design theory) and other ideas that might provide bridges between Muslim doctrines and scientific knowledge and understanding. He argues that overcoming this rejection is crucial, since Darwinian evolution is now a well-established fact, the rejection of which prevents Muslims from arguing that Islam is compatible with contemporary science. However, neo-Darwinian theory may well be flawed in some respects, which could lead to a new or revised version of evolutionary theory. Regardless of such potential revisions, the materialism demanded by scientific thought does not preclude the development of metaphysical ideas, such as theistic evolution, which are compatible with scientific knowledge. On this point, Guessoum is in clear agreement with Ward, Sacks and other proponents of theistic evolution. Guessoum believes that the rejection of evolutionary theory is not congruent with historical Muslim views, which have largely been receptive to the idea that organisms, including human beings, change over time. This receptivity extended even into the period immediately following the publication of Darwin’s theory. Evolution in particular has the potential to advance the religion and science conversation in Muslim contexts, since it brings the issues at stake into such clear focus (Guessoum 2011, 241–42, 323–24).

Throughout the work, Guessoum makes the case for what he calls “theistic science.” Theistic science is simply an approach that regards scientific knowledge as naturalistic knowledge which should not be in conflict with the religious concerns of the Qur’an. Like Ward and Sacks, Guessoum sees science as helping religious people understand the natural world we inhabit, in the same way that science helps secular people develop the same understanding. As such, scientific knowledge is neutral when it comes to religious truth. However, religious claims and scriptures may need to be interpreted in a way that acknowledges and allows for knowledge gained through science. The model he proposes is one developed by the medieval Muslim philosopher Abul Walid ibn Rushd in explicating the relationship between reason and revelation. Guessoum summarizes Ibn Rushd’s claim as “No true statement of religion can contradict any true statement of

philosophy, if one makes sure to reach truth from each side” (Guessoum 2011, xix). By religion, Guessoum understands Ibn Rushd to have meant the revelation found in the Qur’an, and by philosophy to have meant the methodical application of reason. Ibn Rushd assumes that where revelation and reason appear to contradict one another, revelation, because its very nature requires that it be interpreted, must be understood metaphorically. This is not meant to suggest that revelation is somehow subordinate to reason, but rather that reason must always be presented in a straightforward, direct fashion, while revelation can be understood as symbolic or allegorical. For Guessoum, the importance of Ibn Rushd as a model is the “coherence and harmony he has achieved between his religious principles and his intellectual training” (Guessoum 2011, xxiii). Guessoum seeks to bring this same coherence and harmony to his own work through the following suppositions: that science is relevant to Islam; that science can contribute to intellectual, cultural, and religious progress, as well as material progress; that, just as science evolves, theology also should change and progress; and that, other than pure materialism, there is nothing that can oppose the synthesis of Islam and science. Ibn Rushd represents a time when Muslim philosophers, scientists, and physicians fully integrated their intellectual knowledge with their Islamic faith; Guessoum believes that such an integration of scientific knowledge and a Muslim worldview is still possible today (Guessoum 2011, xix–xxvi).

CONCLUDING REMARKS

The work of Ward, Sacks, and Guessoum represents three different ways that a theistic view of evolution can be utilized in philosophical and religious thought. Ward’s work stays closest to the science of evolutionary theory, using that science, along with cosmology, to develop a theological understanding of scientific knowledge which can challenge the atheistic interpretations of evolutionary theory and related scientific understanding made by authors such as Monod and Dawkins. Ward also uses theistic evolution in his comparative theology, suggesting that science along with insights from other religious traditions can lead to fruitful new interpretations of Christian scriptures and traditions. Sacks’ work focuses as much on rationalism in general as it does on science in particular and argues that rationalism and scientific naturalism alone are not enough to build a civilized society. Religion, with its positive view of humanity, is needed to create a society that reflects the divine value to be found in all of the natural world and especially in human beings as the embodiment of the image of God. Finally, Guessoum’s work shows how modern science can be understood in the context of a religion which has its own distinct history and civilization but nonetheless needs to engage with the contemporary world and its strong focus on science and technology.

Evolutionary theory, along with other scientific fields such as geology, cosmology, and genetics, presents a powerful narrative of the origins of life, our planet, and the universe. A theistic understanding of evolution offers a similarly powerful counternarrative to the idea, found in both secular and religious thought that human beings are somehow separate and set apart from the natural world around us. Theistic evolution demonstrates that we may be unique creatures, possessing a connection to the divine, but we are also products of and connected to the natural processes that surround us. At a time when human beings present a stark threat to all life on our planet, this is an important understanding that should be embraced by scholars, clergy, and laypersons across all traditions.

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