

Naturalistic versus Eschatological Theologies of Evolution

Junghyung Kim



Junghyung Kim

In this article I pose two primary questions. (1) How is God's action in the evolutionary process to be understood with regard to seemingly self-explanatory evolutionary novelties, novelties with no telos inherent within them? (2) How can Christian affirmation of divine action in evolution be reconciled with the massive yet unavoidable evil and suffering involved in the evolutionary process? This article explores the answers to the questions by explicating two major figures in the contemporary science-theology dialogue: Arthur Peacocke and Wolfhart Pannenberg. They represent quite contrasting positions within the camp of theistic evolution. I term them respectively "naturalistic" and "eschatological." I will analyze their positions in terms of their fundamental metaphysical commitments and respective answers to the two questions mentioned above. This analysis aims first to make explicit the contrasting points between two different approaches and then to lay the foundation for a theology of evolution going beyond them.

Can we believe in God and evolution at the same time? Ted Peters and Martinez Hewlett answer: yes, we can. But we can do so only if we do not confuse evolutionary biology with a natural science and atheistic materialism.¹ In other words, given that the distinction between methodological and metaphysical reductionism is kept in mind, the scientific theory of evolution embracing only methodological reductionism is compatible with Christian faith. "Theistic evolution" is the name Peters and Hewlett give to the positions that they take when reconciling Christian faith and evolutionary biology.²

Yet, it is one thing to argue for the formal compatibility of God and evolution; it is quite another to address the substantial challenges that the details of evolutionary biology bring to Christian theology. For instance, Peters and Hewlett identify five issues theistic evolutionists need to deal with: deep time,

natural selection, common descent, divine action, and theodicy.³ This short article cannot address all these important subjects. Nevertheless, with a specific focus on God's relation to the history of biological evolution, I will pay special attention to the issues of divine action and theodicy. I will pose two primary questions. (1) How is God's action in the evolutionary process to be understood with regard to seemingly self-explanatory⁴ evolutionary novelties, novelties with no *telos* inherent within them? (2) How can Christian affirmation

Junghyung Kim finished his BA in philosophy at Seoul National University and his MDiv at the Presbyterian College and Theological Seminary, both in South Korea. In 2007 he began his doctoral studies at Graduate Theological Union, Berkeley, and now is a PhD candidate under the supervision of Professors Ted Peters and Robert John Russell. Junghyung Kim is a winner of the 2009 Center for Theology and the Natural Sciences Charles H. Townes Graduate Student Fellowship in Theology and Science and a first-prize winner in the 2010 International Society for Science and Religion Essay Competition in honor of John Polkinghorne. He is now working on his dissertation with the title of "Cosmic Hope in a Scientific Age: Christian Eschatology in Dialogue with Scientific Cosmology."

Article

Naturalistic versus Eschatological Theologies of Evolution

of divine action in evolution be reconciled with the massive yet unavoidable evil and suffering involved in the evolutionary process?

This article explores the answers to these questions by explicating two major figures in the contemporary science-theology dialogue: Arthur Peacocke and Wolfhart Pannenberg. The former was a British biochemist and theologian with an Anglican background; the latter, a German systematic theologian with a Lutheran background. They represent quite contrasting positions within the single camp of theistic evolution. I term them “naturalistic” and “eschatological,” respectively. I will analyze their positions in terms of their fundamental metaphysical commitments and respective answers to the above-mentioned questions. This analysis aims first to make explicit the contrasting points between two different approaches and then to lay the foundation for a theology of evolution going beyond them.

Arthur Peacocke: A Naturalistic Theology of Evolution

As a hybrid scientist-theologian, Peacocke shows “a deep concern with the *naturalistic assumptions* of the empirical sciences and with the need to find an adequate theological response to them.”⁵ The naturalistic approach in his theology of evolution represents one of the most influential strands among theistic evolutionists.

Naturalistic Theism

Peacocke summarizes his basic theological position with three letters: ENP. ENP refers to Emergent monism, Naturalistic theism, and Panentheism, all of which are closely related to one another.⁶ Among them, this discussion focuses on naturalistic theism.

The first fact to be noted is that Peacocke’s discussion begins with scientific insights and derives from them the implications for our understanding of God’s relation to the world. In other words, he wants to bring to his theological thinking the assumptions underlying today’s understanding of the natural world as it is afforded by the sciences. Of the many significant assumptions, he refers specifically to the ubiquity of regularity in the world, its closure to nonnatural forces, its skepticism about the supernatural, and the self-creative and emergent character of natural processes.⁷ It is important to note that the

assumptions Peacocke derives from the sciences are not merely methodological; but they are also metaphysical in nature, although definitely not atheistic.

In other words, Peacocke embraces not only “methodological naturalism,” but also a sort of “metaphysical naturalism.” In this regard, he follows David Griffin’s proposal of “scientific naturalism.” Like Griffin, Peacocke defines scientific naturalism as naturalism_{ns} (ns: nonsupernaturalist), putting it in antithesis with supernaturalism. At the same time, he distinguishes scientific naturalism from any full-blown metaphysical position, such as materialistic naturalism.⁸ Scientific naturalism is the only type of naturalism assumed by the scientific enterprise. Hence, it is open to Christian theism as well as materialistic atheism.⁹

In this way, Peacocke rejects both supernaturalism, a doctrine that a supernatural being exists outside the otherwise universal web of cause-effect relations and can violate it, and materialistic naturalism, a metaphysical claim that nature is all there is. Since scientific naturalism provides the true account of our world, he believes that there are neither supernatural entities nor miracles that break the regularities of nature discovered by science.¹⁰ Nonetheless, he believes that scientific naturalism is reconcilable with Christian theism, if God is not conceived as a supernatural person who can violate the natural regularities.

When Peacocke defines his theological position as naturalistic theism, scientific naturalism is already presupposed in it. Yet, naturalistic theism, in its genuine sense, means more than scientific naturalism; in fact, it contains a theological claim about a specific mode of divine action in the natural world:

[T]he processes revealed by the sciences are in themselves the action of God as Creator, such that God is not to be found as some kind of additional influence or factor added on to the processes of the world God is creating.¹¹

This position he designates as *theological naturalism*. Once scientific naturalism has excluded all the supernatural forces from the natural processes, the processes of ongoing creation in the natural world are identified with divine action. God is depicted as immanent in the natural processes. Only if it is accepted that God is “more than” the natural processes does this theological naturalism lead to a

panentheistic vision.¹² Hence, Peacocke's naturalistic theism refers to this naturalistic-immanentist-panentheistic approach to divine action in the natural world.

Peacocke's naturalistic understanding of God's relation to the natural world needs a few more comments. First of all, Peacocke affirms that the natural, including the human, world owes its existence to another "entity," a Creator God who is real and personal and has purposes for this world. Yet, he confines the scope of continuous divine activity within the regularities of natural processes, which is, in itself, God's creation. He is explicitly against the idea of miracle:

God does not implement these purposes through "miracles" that intervene in or abrogate the world's natural regularities, which continue to be explicated and investigated by the natural sciences.¹³

Be that as it may, Peacocke does not succumb to the model of a deistic God whose creative activity is found only in the beginning. His explicitly panentheistic idea of God as the circumambient reality emphasizes divine immanence in the world.¹⁴ And he is insistent that God is working "in, with, and under" the natural processes. In addition, he argues that God could, if God so intended, influence particular events in the world without contravening the regularities established by science through the downward causality on the world as a whole.¹⁵ I now turn to how Peacocke develops his theology of evolution within the framework of naturalistic theism.

Interplay of Chance and Law as Creative Origin of Evolution

Peacocke's recent discussion of evolution begins with a remarkable identification of two characteristic features in the evolutionary history: continuity and emergence. First, he notes the *seamless* character of the history of nature as it is described by science.¹⁶ This seamless, continuous feature is especially true of the processes of biological evolution. According to Peacocke, this feature was at first a conjecture of Charles Darwin, yet is now thoroughly validated. As the second feature, Peacocke refers to emergence; namely, new forms of matter appear in the natural processes and constitute a hierarchy of emergent levels. These emergent levels involve not only epistemologically irreducible concepts, but also at least a "putative ontology."¹⁷

These two features of evolutionary history are not separated from each other. Rather, the history of emergent evolution is marked by continuous processes. In other words, even the ontologically strong emergence is to be explained without recourse to any supernatural influences. Peacocke thinks that the emergence of life is no exception in this regard.¹⁸

If both the origin and history of life are to be scientifically explained away as a seamless process of emergent evolution, how can one conceive of divine action within the evolutionary history? Does this scientific explanation obviate any idea of divine action? By no means. On the contrary, evolution has made possible a more dynamic understanding of divine action in the world. In this vein, Peacocke proposes

the model of God *sustaining and giving continuous existence* to a process which has a *creativity built into it* by God. God is creating at every moment of the world's existence *in and through* the *perpetually-endowed creativity* of the very stuff of the world.¹⁹

To use a sacramental language, God "is 'in, with, and under' all-that-is and all-that-goes-on." Thus, Peacocke does not feel any need to look for additional divine action to explain biological evolution. It should be noted that Peacocke deliberately avoids an intimation of any sort of special divine action in the evolutionary processes.

This naturalistic understanding of divine action within evolutionary processes is further confirmed by Peacocke's more specific discussion of the creativity and propensities in evolution. In this regard, he attempts to respond to Jacques Monod, who argued that everything in evolution went on in an entirely uncontrolled and fortuitous matter. Contra Monod, Peacocke argues that there is no reason to attribute a metaphysical status to chance, for the *chances* at the DNA level of mutation do not preclude *trends* and *inbuilt propensities* at the higher levels of organisms, populations, and ecosystems. Instead, he argues that

it is the interplay of chance and law that is in fact creative within time, for it is the combination of the two which allows new forms to emerge and evolve—so that natural selection appears to be opportunistic.²⁰

And this creative interplay of chance and law presupposes the "potentialities" that the physical world possessed *ab initio*. It is a short step to move from this

Article

Naturalistic versus Eschatological Theologies of Evolution

idea of *ab initio* potentialities to that of a sort of divine creation. Peacocke argues that a theist must think of such potentialities as *written into* creation by the Creator's intention and, at the same time, as gradually being actualized by the operation of chance stimulating their emergence. In this sense, God is regarded as the ultimate ground and source of both law and chance and therefore of the creativity in evolution.

In addition, Peacocke argues that there are natural "propensities" in evolution toward the possession of certain characteristics and that these propensities are *inherently built into* an evolutionary process based on natural selection.²¹ Consistent with his scientific naturalism, Peacocke thinks that these propensities do not need any mysterious explanation. They simply reflect the advantages conferred in natural selection by these features. Thus, he says that there seems to be "*overall direction and implementation of divine purpose* through the interplay of chance and law without a deterministic plan fixing all the details of the structure(s) of what emerges possessing personal qualities."²² Probably, he would agree with Niels Henrik Gregersen's idea of God as the designer of the self-organizing universe.²³ No wonder that Peacocke does not see any need to postulate any *special* divine action to explain the overall direction of evolution. In particular, he does not accept the idea of divine manipulation of mutations at the quantum level to ensure the emergence of persons as a result of evolutionary processes.

As I said earlier, one needs to remember that Peacocke does not simply deny special divine action in the natural world. His proposal of God's downward causality on the world as a whole is widely known. Given that our topic focuses upon biological evolution, however, Peacocke seems reluctant, if not opposed, to apply even such a type of special divine action to the evolutionary process, when he says,

If there are any such influences by God shaping the direction of evolutionary processes at specific points—for which I see no evidence (how could we know?) and no theological need—I myself could only envisage them as being through God's whole-part constraint on all-that-is affecting the confluence of what, to us, would be independent causal chains.²⁴

In short, this quotation confirms once again the strongly naturalistic tendency of Peacocke's theology of evolution.

God's Cosuffering Immanence in the Self-Creative Process of Evolution

This naturalistic understanding of the evolutionary history as a seamless process of emergence (scientific naturalism) and of God as acting in and through the natural processes (theological naturalism) underlies Peacocke's natural theodicy.

As regards the ubiquity of pain, suffering, and death in the history of evolution, Peacocke's theological response begins with stressing its biological inevitability in two ways. First, he says, the ubiquity of pain and suffering in the living world appears to be an inevitable consequence of creatures acquiring advantageous properties in natural selection. Next, in a finite universe, the law of new life through death of the old is inevitable. This is "the prerequisite of the creativity of the biological order."²⁵

Then, Peacocke offers his own twofold answer to the problem of evil in evolution. On the one hand, he emphasizes the positive aspect of evolution, such as the diversity and richness of life, insisting that God has joy and delight in creation itself:

The existence of the whole tapestry of the created order, in its warp and woof, and in the very heterogeneity and multiplicity of its forms must be taken to be the Creator's intention.²⁶

As for the negative side of evolution, Peacocke appeals to the recent renewal of the theology of the cross: if God is immanently present in and to natural processes, he says, "God suffers *in, with, and under* the creative processes of the world with their costly unfolding in time."²⁷ To the motif of the cosuffering God, Peacocke adds another motif of teleology found in John Hick's "Irenaean" theodicy.²⁸ Thus, Peacocke argues that when God suffers the natural evils along with the world, God has a specific intention to bring about a greater good thereby—that is, a kingdom of loving people of free-will, in communion with God and with each other.

Peacocke's theodicy, grounded upon naturalistic theism, may be summarized as a combination of the theology of the cross and the defense of a free process for the sake of a greater good. One may note here that Peacocke emphasizes the cross of Jesus and its implication for our understanding of God as the suffering (or cosuffering) God, without any mention of the resurrection of Jesus and its implication for his theodicy.²⁹

Naturalistic Theology of Evolution

Peacocke's naturalistic approach in the theological response to evolution, as thus explored, is widely shared among many contemporary theologians. Among them, several process thinkers, including David Griffin and Philip Clayton, stand out in developing an explicitly naturalistic theology of evolution. Some panentheistic thinkers such as Niels Henrik Gregersen may also be included in this group.³⁰

In my judgment, one may identify several basic ideas shared by these naturalistic theologians of evolution. They prefer a naturalistic approach to evolution and tend to identify the creative process of emergent evolution itself with divine creative activity. In this process, God is depicted as creating in and through the evolutionary processes. This naturalistic-immanentist-panentheistic understanding of divine action in evolution presupposes that the evolutionary world is a seamless or closed web of complex cause-effect relations, even if ontologically strong emergence is maintained. Also, they assume that creative potentiality and trends toward complexity are originally built into natural processes, although not in a mechanistic or deterministic way. In addition, their naturalistic panentheism forces them to reserve their commitment to special divine action in the evolutionary processes, even though they generally do not deny the idea of special divine action altogether. Finally, with regard to the theodicy problem, they tend to prefer the free-process defense as well as the theology of the cross, while ignoring the significance of eschatological redemption for theodicy.

Wolfhart Pannenberg: An Eschatological Theology of Evolution

Wolfhart Pannenberg's theology of evolution is of special significance thanks to his well-refined eschatological perspective. Among theistic evolutionists, his eschatological theology of evolution represents another influential theological option which stands in remarkable contrast with the naturalistic theology of evolution at several important points.

Eschatological Ontology

In "Contingency and Natural Law,"³¹ Pannenberg proposes his original idea of eschatological ontology,

which provides the fundamental framework for his theological interpretation of the evolutionary process.³² He begins with the observation that the Israelites experienced contingent events as the historical acts of God. This fact has two significant implications for Pannenberg's understanding of reality. First, the structure of this biblical experience of reality as history reveals that occurrences are fundamentally contingent, for they are irreversible acts of God. As the following argument will show, this element of contingency is of extreme importance for Pannenberg's view of reality, in which contingency rather than regularity is regarded as the fundamental nature of reality.

Next, the biblical experience of reality as history also shows that the continuity or unity of the historical acts of God is constituted backward from ever new present, for every present event throws new light on earlier occurrences and makes them appear in new connections. This insight into backward continuity lays the foundation for Pannenberg's eschatological ontology.³³ The idea of backward historical continuity implies that every historical occurrence—whether past, present, or future—is open to the ultimate or eschatological future, for its true essence will be determined only within the completed connections of all the occurrences; this is not made possible until the eschatological future. Moreover, the openness of every occurrence to the eschatological future means that the eschatological future is constitutive of every occurrence.

Pannenberg argues that these biblical insights into the fundamental contingency and openness to the future of every occurrence can be applied to natural occurrences. First, in regard to the contingency of occurrences, Pannenberg finds its philosophical support in Carl Friedrich von Weizsäcker's concept of the history of nature. Weizsäcker derives this concept of the history of nature from his philosophical reflection upon cosmological physics. What excites Pannenberg is that this concept involves the idea of the irreversibility, unrepeatability, and thus uniqueness of all natural occurrences.³⁴

The idea of the contingent uniqueness of all natural occurrences enables Pannenberg to relativize the laws of nature in two ways. First, he argues, no scientific model of the history of nature can be immediately identified with the history of divine creative

Article

Naturalistic versus Eschatological Theologies of Evolution

action, for by its methodological self-limitation such a scientific model deals only with regularities abstracted from fundamentally contingent occurrences. In this sense, natural laws are no more than abstract approximations to the actual course of nature.³⁵ In addition, the contingent uniqueness of each natural occurrence implies that “natural laws do not exist unchangeably but are related to regularities in occurrences that originate themselves and change in the process of material reality.”³⁶ In other words, natural laws are not eternally abiding laws. In that they originate and may also end in a certain temporal point, natural laws are time dependent, thus contingent.³⁷

Pannenberg’s attempt to relativize the natural laws by appealing to the fundamental contingency of natural occurrences needs a qualification. That is, it is to be noted that Pannenberg still insists on the inviolability of natural laws and rejects the idea of an exception to the normal regulation of events in nature or gaps in the scientific description of nature. Furthermore, he emphasizes that the uniformity of natural processes, as a reflection of divine faithfulness, has an enormous significance for the history of nature as a condition for the emergence of anything new.³⁸

The real point Pannenberg wants to make is that there is “more” to natural occurrences than their uniformity. And in this “more,” he finds a way to apply to natural processes his second biblical insight into the openness to the future of every occurrence. In this regard, he pays special attention to the temporal structure of the natural systems: “the systems observed in nature are always open, for as real systems they are basically temporal, i.e., systems in which temporal processes of change take place.”³⁹ As temporal systems, the natural systems are always open to the future. This idea of the openness to the future of natural systems relates to Pannenberg’s definition of the future as “the field of the possible.” As the field of the possible, the future is the basis of the openness of creation to a higher consummation as well as to the source of what is new or contingent in each event.

Having opened extra “room” for the power of the future in the temporal structure of the natural world, Pannenberg then relates it to the divine Spirit: “in the creaturely power of the future as the field of

the possible, the dynamic of the divine Spirit in creation expresses itself.”⁴⁰ While noting the biblical idea that the Spirit is the creative origin of the new life of resurrection, he further argues that one has to regard the dynamic of the Spirit in creation from the very outset in terms of the coming consummation, that is, as an expression of the power of his eschatological future. In this way, Pannenberg seems to find a convergence between the philosophical idea of the power of the future as the field of the possible and the theological idea of the dynamic of the divine Spirit as the power of the eschatological future. Finally, it is noteworthy that it is primarily the contingent or novel aspects, rather than the regular aspects, of the natural processes that the dynamic of the divine Spirit or the power of the future concerns.

Omega, Spirit, Field of Energy as Creative Origin of Evolution

As we have seen, Pannenberg derives from the biblical experience of reality as history a metaphysical conclusion about the nature of reality: that is, every natural occurrence is fundamentally contingent as well as open to the future. Now I will examine how Pannenberg develops his theology of evolution within this framework of eschatological ontology.

Pannenberg thinks that the theory of evolution has given theology an opportunity to see God’s ongoing creative activity in the constant bringing forth of things that are new. Also, he argues that the Darwinian theory of evolution legitimately replaced a teleological view of nature (as it is found in William Paley’s *Natural Theology*) by its emphasis on the contingency of events in the interplay of inheritance and natural selection.

Here one needs to be careful. What of Darwinism, in particular, does Pannenberg speak highly of? In fact, it is not Darwin’s discovery of the mechanism of natural selection, but his opening of a historical view of nature that Pannenberg acclaims. He does not think that it is possible to give a purely mechanistic explanation of evolution through the theory of natural selection. Yet the new evolutionary worldview provides him with “the possibility of thinking of the dynamic process of creation as a process that is open in time.”⁴¹ In short, Pannenberg’s eschatological understanding of reality as contingent and open to the future finds consonance with the historical view of nature implied in Darwin’s theory of evolution.

When one enters the details of Pannenberg's theology of evolution, it would be helpful to know that behind his theology of evolution there are two significant dialogue partners: the tradition of emergent evolution and Teilhard de Chardin.

First, Pannenberg traces the tradition of emergent evolution back to *Lux Mundi* (1889), a collection of twelve essays from liberal Anglo-Catholic theologians who hailed the theory of evolution as liberation from a mechanistic view of nature and took it to describe a historical, rather than mechanical, process. In his judgment, this work anticipated a later concept of emergent evolution, which was explicitly proposed in 1923 by Lloyd Morgan.⁴²

For Pannenberg, emergence refers to the appearance of something new at each stage of the evolutionary process. And, he says, that emergent novelty does not merely "result" by mechanical necessity from past conditions. In other words, the concept of emergence cannot conform to the mechanistic, reductionist way of describing Darwin's theory; rather, the former overcomes the latter. Pannenberg calls this idea of the arrival of something totally new at each stage of evolution the *epigenetic*⁴³ character of evolution. He argues that this idea has been further confirmed by the recent discovery that major steps in evolution cannot be explained by a sequence of small steps of cumulative variations, yet need "fulgurations" (or sudden brightening) of new schemes of organization.

In this regard, Pannenberg finds great interest in Michael Polanyi's interpretation of the emergence of more or less durative forms of finite reality in terms of phases of equilibrium within the context of a field. In his view, the description of the evolution of life in terms of a *generalized field theory* must be extremely suggestive to theologians, because it seems to offer a modern language that possibly can express the biblical idea of the divine spirit as the power of life that transcends the living organism and at the same time is intimately present in the individual.⁴⁴

Next, the second primary source of Pannenberg's theology of evolution is Teilhard de Chardin's idea of the Point Omega. It is worthwhile to note that Pannenberg engaged himself with Teilhard's works at an early stage when he began to develop his own theology of nature. In 1971, he wrote an article on Teilhard's phenomenology entitled "Spirit and

Energy." Briefly speaking, this short article aims to reveal the decisive weakness of Teilhard's hypothesis of the inner "Within" of a thing (or radial energy) in that it has no idea of the "field" nature of energy and still adheres to the "classical" bodily oriented concept of energy. For Teilhard, as a result, radial energy as the inner Within of a thing represents itself only as something inherent to the body itself, not as "a self-transcending power" standing independently over against it.

This criticism leads Pannenberg to a revision of Teilhard's concept of energy in terms of the concept of field. Pannenberg suggests that Teilhard's other hypothesis of the Point Omega might be of great help to supplement his weakness:

[I]f Omega as the power of the future shapes the creative origin of evolution, then the energy that moves this process is not to be understood already by itself as the energy dwelling in the phenomena.⁴⁵

That is, like the energy as a field, Omega is, at the same time, immanent and transcendent to the process of evolution.

One year later (1972) Pannenberg developed his earlier discussion of Teilhard and made more explicit his own pneumatological interpretation of evolution. This time, he emphasized the divine Spirit as a transcending principle, which transcends every given reality but activates it in the direction of a creative unification. No wonder that he identifies the divine Spirit with the Point Omega. In a similar vein, in *Systematic Theology*, he also says that the divine Spirit as the origin of creaturely life works through all *fields* of force and that in the working of the Spirit, the *future* of the consummation in the kingdom of God predominates.⁴⁶ In sum, it seems evident that Pannenberg locates the creative origin of evolution in the energy as a field, understood futuristically as the attractive power of the Point Omega, on the one hand, and understood pneumatically as the dynamic power of the divine Spirit, on the other.

Based upon this preunderstanding of two primary sources of Pannenberg's theology of evolution, I will explore his own reformulation of the crucial theological problem related to the scientific theory of evolution and his answer to it.

As far as the modern scientific theory of evolution is concerned, Pannenberg sees the problem in the

Article

Naturalistic versus Eschatological Theologies of Evolution

apparent conflict between the modern “immanentist” view of evolution as self-organizing process and the biblical “transcendentalist” view of the origin of life in the divine Spirit.⁴⁷ Pannenberg fully accepts the modern immanentist view of evolutionary processes and argues for its compatibility with the biblical witness to the transcendental origin of life. His argument consists of two lines of thought: one appealing to the biblical tradition and the other to the scientific theory.

On the one hand, since God’s creative activity does not exclude the employment of secondary causes in bringing about creatures, creationists should not have any objection to the emergence of organisms from inorganic matter, nor to the descent of the higher animals from those initial stages of life. Thus, only if it is noted that the activity of creatures is not on the same level with that of the creator, there is no need to reject the immanentist explanation of evolution in modern sciences. On the other hand, as regards the scientific theory of evolution, Pannenberg argues for the compatibility between the epigenetic theory of evolution and the biblical idea of divine creative action. Unlike a mechanistic interpretation of Darwinism, the epigenetic theory speaks of the process of evolution within which something new occurs in virtually every single event. And the element of contingent novelty in the concept of epigenetic emergence, as already suggested in the eschatological ontology, secures its openness to the creative activity of God in this process. Moreover, the modern scientific view of the field of energy as the origin of the creative self-transcendence of life resonates with the biblical view of the Spirit as the transcendental origin of all life.

Finally, if one were to ask specifically how the immanent creativity of creatures relates to the transcendent creativity of the divine Spirit, Pannenberg would say that the spontaneous creativity of life is the *form* of God’s creative activity.⁴⁸ The creative self-organization of life in the process of evolution *corresponds to* the Spirit of God who breathes life into ever new creatures and thus blows through the evolution of life. For Pannenberg, however, the “breath” of the divine Spirit is not just a metaphorical expression, but as a field of energy also a “constitutive” part of the creative existence of living creatures, corresponding to the “ecstatic” character of their transcendent tendency. Moreover, in that the Spirit is not

only the source of life as seen in the Old Testament, but also the power of the resurrection of the dead as witnessed in the New Testament, he suggests that the divine Spirit works in the creative process of emergent evolution as the power of the eschatological future.⁴⁹

Eschatological Consummation as an Answer to the Question of Theodicy

In *Systematic Theology*, Pannenberg identifies two theological challenges introduced by the biological theory of evolution: (1) “the independence of creaturely forms and processes which leave the impression that they need no divine Creator to explain them” and (2) “the apparently senseless suffering of creatures and the entrance and at least temporary success of evil in creation.”⁵⁰ Pannenberg argues that these two issues are closely related to each other and are, in fact, two aspects of one and the same fact of creaturely independence. Creaturely independence is nothing other than the very goal of God’s creative activity:

For the autonomous creature self-independence conceals dependence on God, just as for the scientific observer the autonomy of natural processes hides their origin in God. At the same time, the results of creaturely autonomy in the form of suffering and iniquity seem to refute belief in a good Creator of this world.⁵¹

Pannenberg is convinced that the problem of theodicy can find its final answer only in the real overcoming of evil through the eschatological consummation of creation. Hence, only the union of creation and redemption against the background of eschatology makes possible a tenable answer to the question of theodicy. In this sense, he agrees with Wolfgang Trillhaas that “there is no theodicy without eschatology.”⁵² Meanwhile, he criticizes the traditional treatment of the problem of theodicy, in particular that of Leibniz. Traditional theodicy attempts to give a proof of the righteousness of God in his works “exclusively from the standpoint of the origin of the world and its order in God’s creative work,” while not taking into consideration “the history of God’s saving action and the eschatological fulfillment.”⁵³

Pannenberg concedes, however, that the promised eschatological redemption cannot answer the

question of why the Creator did not create a world in which there could be no pain or guilt. With the precaution that concern to absolve the Creator has been a mistake in Christian theodicy, he appeals to the so-called “free will defense” within the broader context of the doctrine of divine providence oriented to the reconciliation and redemption of the world. In short, he argues, if the Creator wanted free and independent creatures, then the decision to create carried with it the risk of a misuse of this creaturely freedom. In other words, the Creator accepts the “risk,” not necessity, of sin and evil as a “condition,” not means, of realizing a free fellowship of the creature with himself.⁵⁴ In this way, Pannenberg defends the traditional thesis of divine “permission” of evil for the purpose of salvation, sharply distinguishing it from the erroneous thesis of evil as an indispensable part of the perfect and beautiful creation.

But why did God permit evil in the first place? In his answer to this question, Pannenberg speaks first of the theological necessity of the finitude of creaturely existence: “it would involve contradiction to demand that God should have created creatures without creaturely limits.” Yet, he qualifies this statement by saying that the true basis of the possibility of evil is not limitation but “the independence for which creatures were made,” for the finitude is not yet itself evil.⁵⁵

Pannenberg’s theodicy may be summarized as a combination of free will defense and eschatological hope. He takes eschatological redemption and the resurrection of Jesus Christ much more seriously than Peacocke, while paying little attention to such themes as the cross of Jesus Christ and the suffering God, which is prominent in Peacocke’s theodicy.

Eschatological Theology of Evolution

In addition to Teilhard de Chardin, one can see the eschatological perspective playing a decisive role in the theistic evolutionary schemes of Philip Hefner, Jürgen Moltmann, John Haught, Ted Peters, Martinez Hewlett, Robert John Russell, Thomas Tracy, and John Polkinghorne. Pannenberg has company.⁵⁶

Eschatological theologians of evolution share several insights in common. Of them, the most fundamental is the eschatological understanding of God as the attractive power of the eschatological future. The God of the future is the ultimate source of all the

contingency, temporality, creative novelty, and even emergent orders in creaturely existence, and thus the true origin of emergent evolution. As a result, the whole creation is revealed as the fundamentally historical reality which is influenced not just from the past, but also from the future new creation. Moreover, the current “laws” or regularities of natural processes are regarded not just as abstractions from the concrete reality of radical contingency, but also as open to the eschatological transformation. Finally, eschatological theists take seriously the biblical report of the bodily resurrection of Jesus Christ and interpret it as divine promise and anticipation of the eschatological consummation of creation. In this vein, they argue that without eschatology there is no definite answer to the theodicy problem.

A Theology of Evolution beyond Peacocke and Pannenberg

The scientific theory of evolution provides us with a picture of the biological world replete with apparently self-explanatory emergent novelties and their accompanying evils. Theistic evolutionists argue that this evolutionary theory is reconcilable with belief in God the Creator. Thus far I examined two representative theologians within the camp of theistic evolution, asking specifically how they conceive divine action in relation to both the evolutionary novelties and the accompanying evils. And I analyzed their divergences basically grounded upon their different metaphysical understandings of God’s relation to the natural world, which I term “naturalistic” and “eschatological,” respectively.

Let me briefly summarize the divergences between these two different approaches. Arthur Peacocke, representative of naturalistic theology of evolution, puts great emphasis upon the *regularity* and *closed causal web* of natural processes as they are discovered by sciences. Therefore he assumes that scientific naturalism in its materialist or physicalist version offers us the true account of the natural world. In this vein, Peacocke suggests a naturalistic-immanentist-panentheistic idea that God acts in and through the natural processes, or that the latter are themselves divine action. On the contrary, Wolfhart Pannenberg, an eschatological theologian of evolution, emphasizes the *contingency* and *openness to the future* of natural processes as they are implied in the

Article

Naturalistic versus Eschatological Theologies of Evolution

biblical view of reality, and supposes that the laws of nature explored by scientists are limited approximations to the fundamentally contingent natural world. In this regard, Pannenberg proposes an eschatological understanding of divine action as the attractive or retroactive power of the eschatological future.

This divergence in approach between Peacocke and Pannenberg underlies their different explanations of the evolutionary novelties. The former believes that the interplay of chance and necessity is sufficient enough to explain the creative process of evolution. Hence, God is depicted only as the sustainer of, and continuous giver of the existence to, the evolutionary process in time.⁵⁷ For Pannenberg, meanwhile, the process of emergent evolution always presupposes the creative field of the divine Spirit. In other words, the divine Spirit as the attractive power of the Point Omega explains the general contingency as well as the evolutionary novelties of evolutionary process.

Likewise, with regard to the problem of evil in evolution, Peacocke's commitment to naturalistic panentheism not only enables him to embrace the theology of the cross in which God suffers with creatures, but also makes it difficult for him to conceive the eschatological redemption as a viable answer to the problem. On the other hand, Pannenberg appeals to the idea of the transformative power of the transcendent Omega and suggests the eschatological consummation as the ultimate answer to the problem of evil, while not explicitly affirming the thesis of the suffering God—at least, in his theodicy.

I suspect that all these divergences may be traced back, although by no means reducibly, to the difference of the starting points in their participation in the theology-science dialogue. One starts from the *scientific* insights into the natural world, derives from them a metaphysical assumption of reality as a closed web of causal relations (namely, *scientific naturalism*), and then construes the mode of divine action according to that view of reality; the other starts from the *biblical* insights into the God of history, derives from them a metaphysical assumption of reality as history open to the future (namely, *eschatological ontology*), and then applies that view of reality as an overarching framework to interpret the natural world.


To begin with, I want to state that these two different starting points themselves are not mutually exclusive. As Robert John Russell suggests, they may be brought to a creative mutual interaction in one form or another. However, the real problem arises at the metaphysical level; Peacocke and Pannenberg come from different starting points to mutually incompatible understandings of the nature of reality. If so, how can I resolve the conflict?

In my opinion, two points need to be made clear. First, Peacocke's scientific naturalism is not a scientific claim, but a metaphysical claim based on a philosophical reflection of scientific insights. In this vein, as Ronald Numbers and others argue, I think that the distinction between methodological naturalism and scientific naturalism ought to be retained.⁵⁸ Second, the gospel of Jesus Christ, the material norm of Christian theology, presupposes a particular view of reality. And, in my view, the gospel must be interpreted primarily as God's promise for the eschatological consummation of the whole creation. According to this explication of the gospel, reality is revealed as fundamentally contingent and open to the radical transformation in the future. While the distinction between methodological and scientific naturalism may confirm the distinction between the scientific theory of biological evolution and the philosophical position of evolutionism, a widespread assumption among many theistic evolutionists,⁵⁹ the eschatological explication of the gospel of Jesus Christ will challenge them to take seriously the eschatological perspective that is central to Christian faith, a thus far relatively neglected aspect.

These two points, in the final analysis, encourage me to prefer Pannenberg's approach to Peacocke's. If not only the naturalistic view of reality (scientific naturalism), but also the historical view of reality (eschatological ontology) is reconcilable with scientific insights, then it would be wiser to embrace the latter, for it is more faithful than the former to the norm of Christian theology, namely, the gospel of Jesus Christ.

Furthermore, addressing the question of God's relation to the evolutionary novelties and the accompanying evils, I think that eschatological theology gives more comprehensive theological answers than does naturalistic theology. In this aspect, I disagree with both Peters' and Hewlett's critical comments

concerning theistic evolutionists. They point to two weaknesses in most versions of theistic evolution: first, the neglect of the doctrine of redemption; and second, the collapse of the theodicy problem into natural processes. These criticisms are especially true of Peacocke's naturalistic theology of evolution. In agreement with Peters and Hewlett, I believe that it is important to emphasize the openness of the evolutionary process to the redemptive future, and that without the eschatological redemption of the whole creation there is no final answer to the theodicy problem.

Still, Pannenberg's eschatological theology of evolution is not complete in itself. In particular, as Peters rightly indicates, Pannenberg's *literal* identification of the force field with the divine Spirit is highly problematic.⁶⁰ Also, unlike the motif of the resurrection, the motif of the cross plays too small a role in his theology of evolution. In my opinion, the theology of the cross could bring more depth to his evolutionary theodicy by supplementing the eschatological vision of redemption with the idea of God's solidarity and compassion with the victims of the evolutionary process. Hence, I expect that further research will be needed in the direction of incorporating the theology of the cross into the eschatological theology of evolution. 

Notes

- ¹Ted Peters and Martinez J. Hewlett, *Can You Believe in God and Evolution? A Guide for the Perplexed* (Nashville, TN: Abingdon, 2006), 21.
- ²Ted Peters and Martinez Hewlett, *Evolution from Creation to New Creation: Conflict, Conversation, and Convergence* (Nashville, TN: Abingdon, 2003), 115.
- ³*Ibid.*, 118.
- ⁴Cf. also Francisco J. Ayala, "Darwin's Devolution: Design without Designer," in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. Robert John Russell, William R. Stoeger, and Francisco J. Ayala (Vatican City State: Vatican Observatory/Center for Theology and the Natural Sciences, 1998), 101–6.
- ⁵Philip Clayton, introduction to *All That Is*, ed. Philip Clayton (Minneapolis, MN: Fortress, 2007), xi.
- ⁶Arthur Peacocke, "A Naturalistic Faith for the Twenty-First Century," in *All That Is*, 5–56.
- ⁷*Ibid.*, 6.
- ⁸*Ibid.*, 8.
- ⁹Cf. David Ray Griffin, "Comments on the Responses by Van Till and Shults," *Science and Theology* 2, no. 2 (2004): 182–3.
- ¹⁰Peacocke, "Naturalistic Faith," 9.
- ¹¹*Ibid.*, 20.

- ¹²For Peacocke's defense against the charge of pantheism, see Arthur Peacocke, "Biological Evolution: A Positive Theological Appraisal," in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, 359, n.5.
- ¹³Peacocke, "Naturalistic Faith," 9.
- ¹⁴Arthur Peacocke, "Articulating God's Presence in and to the World Unveiled by the Sciences," in *In Whom We Live and Move and Have Our Being*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: Eerdmans, 2004), 146.
- ¹⁵Peacocke, "Naturalistic Faith," 9, 45–7. See also Arthur Peacocke, *Theology for a Scientific Age* (Minneapolis, MN: Fortress, 1993), 135–83.
- ¹⁶Peacocke, "Biological Evolution," 358. Emphasis is mine.
- ¹⁷*Ibid.* In this regard, the ontology of Peacocke's emergent monism comes close to Philip Clayton's concept of ontologically strong emergence: cf. Philip Clayton, *Mind and Emergence: From Quantum to Consciousness* (Oxford: Oxford University, 2004), 9. Also see Clayton's later qualification of the categorization of the concept of emergence: "Emergence from Physics to Theology: Toward a Panoramic View," *Zygon: Journal of Religion and Science* 41, no. 3 (2004).
- ¹⁸Peacocke, "Biological Evolution," 358, n.4.
- ¹⁹*Ibid.*, 359. My italics. We may compare this position with Robert John Russell's argument for the ontological gaps at quantum level. Cf. Russell's critical proposal of "top-down-through-bottom-up" divine action and Peacocke's appreciative response to it: *All That Is*, 146–51 and 186–8.
- ²⁰Peacocke, "Biological Evolution," 363.
- ²¹Peacocke appropriates Karl Popper's notion of "weighted possibilities," which are more than mere possibilities because of the notion's dependence on the total situation. He draws this notion from Karl Popper, *A World of Propensities* (Bristol: Thoemmes, 1990). See Peacocke, "Biological Evolution," 364–5.
- ²²Peacocke, "Biological Evolution," 368.
- ²³Niels Henrik Gregersen, "From Anthropocentric Design to Self-Organized Complexity," in *From Complexity to Life*, ed. Niels Henrik Gregersen (Oxford: Oxford, 2003), 206–34.
- ²⁴Peacocke, "Biological Evolution," 368–9. In this regard, Philip Clayton is more explicit than Peacocke, for Clayton argues in *Mind and Emergence* for the fundamental difference between physics-level and thought-level divine action (p. 191). In the same book, Clayton says,

If theism implies that God influences the physical evolution of the cosmos or guides evolution at the biochemical level in order (say) to produce human beings, then it is committed to the strong notion of physical miracles that I have otherwise eschewed (p. 201).

Instead, he suggests that "God does not begin influencing the world until organisms complex enough to manifest mental causality appear on the scene" (p. 201).
- ²⁵Peacocke, "Biological Evolution," 369.
- ²⁶*Ibid.*, 371.
- ²⁷*Ibid.*, 374. My italics. Note that the same sacramental prepositions are used to describe God's creative acts in evolution as well. See Peacocke, "Articulating God's Presence," 146.
- ²⁸Peacocke finds especially acceptable John Hick's earlier position in *Evil and the God of Love* (London: MacMillan, 1966). See Peacocke, "Biological Evolution," 372, n.43.

Article

Naturalistic versus Eschatological Theologies of Evolution

²⁹Peacocke accepts the basic insight of Moltmann's *The Crucified God* (London: SCM, 1974), yet seems to have no or little interest in his earlier work, *Theology of Hope* (London: SCM, 1967). Also, it is noteworthy that Peacocke does not mention Hick's emphasis on the eschatological motif in his later theodicy.

³⁰For Clayton's presumption in favor of "metaphysical naturalism," see Clayton, *Mind and Emergence*, 164. Also, cf. David Ray Griffin, *Reenchantment without Supernaturalism* (Ithaca, NY: Cornell, 2000); Niels Henrik Gregersen, "The Emergence of Novelty: Exploring Five Theological Models," in *Christian Thought and Culture 2*, ed. Choi YunBae (Seoul: PCTS, 2007).

³¹Wolfhart Pannenberg, *Toward a Theology of Nature: Essays on Science and Faith*, ed. Ted Peters (Louisville, KY: Westminster/John Knox, 1993), 72–122.

³²We may trace the origin of this thesis back to his earlier work, "Revelation as History," in *Revelation as History*, ed. Wolfhart Pannenberg (New York: Macmillan, 1968), 123–81. As for the development of Pannenberg's eschatological understanding of God as the power of the future up to his *Systematic Theology II* (Grand Rapids, MI: Eerdmans, 1991), see "The God of Hope," in *Basic Questions in Theology 2* (New York: Augsburg Fortress Publishers, 1971), 234–49; *Theology and the Kingdom of God* (Philadelphia: Westminster Press, 1969); *Metaphysics and the Idea of God* (Grand Rapids, MI: Eerdmans, 1990). Also, cf. Christiaan Mostert, *God and the Future: Wolfhart Pannenberg's Eschatological Doctrine of God* (London: T&T Clark, 2002).

³³Pannenberg, *Theology of Nature*, 83. For a criticism of Pannenberg's ontology of the whole, see Miroslav Volf, "Enter into Joy! Sin, Death, and the Life of the World to Come," in *The End of the World and the Ends of God*, ed. John Polkinghorne and Michael Welker (Harrisburg, PA: Trinity Press International, 2000), 267. On the contrary, for a defense of the ontology of the totality, see Benjamin Myers, "The Difference Totality Makes: Reconsidering Pannenberg's Eschatological Ontology," *Neue Zeitschrift für Systematische Theologie und Religionsphilosophie* 49, no. 2 (2007): 141–55. Meanwhile, what Pannenberg means is not only epistemological (semantic), but also ontological determination by the future (or anticipation of the future). Cf. Clayton's distinction of two senses of anticipation and preference of the epistemological sense and also Pannenberg's response to Clayton in support of the ontological sense of anticipation in Carl E. Braaten and Philip Clayton, eds., *The Theology of Wolfhart Pannenberg: Twelve American Critiques, with an Autobiographical Essay and Response* (Minneapolis, MN: Augsburg, 1988), 131–41, 319–21.

³⁴Pannenberg, *Theology of Nature*, 86–7.

³⁵*Ibid.*, 96–7. Cf. Wolfhart Pannenberg, *Systematic Theology II*, 59.

³⁶Pannenberg, *Theology of Nature*, 108.

³⁷For more sophisticated analysis and critique of Pannenberg's concept of contingency, see Robert John Russell, "Contingency in Physics and Cosmology: A Critique of the Theology of Wolfhart Pannenberg," *Zygon: Journal of Religion and Science* 23, no. 1 (March 1988): 23–43. In his response to Russell, Pannenberg defines the contingency of event as "that which is not necessary in terms of the past and presup-

poses openness to the future." See Pannenberg, *Systematic Theology II*, 66–7.

³⁸Pannenberg, *Systematic Theology II*, 65 and 71–2.

³⁹*Ibid.*, 65. Particular reference is given to Hans-Peter Dürr, "Über die Notwendigkeit in Offenen Systemen zu Denken," in *Die Welt als Offenes System: Eine Kontroverse um das Werk von Ilya Prigogine*, ed. G. Altner (1986), 9–31.

⁴⁰Pannenberg, *Systematic Theology II*, 98.

⁴¹*Ibid.*, 120.

⁴²Wolfhart Pannenberg, "Human Life: Creation versus Evolution," in *Science and Theology: The New Consonance*, ed. Ted Peters (Oxford: Westview, 1998), 139. Peacocke is introduced as the most recent representative of this tradition of emergent evolution in Pannenberg, *Systematic Theology II*, 121. Also, note that Pannenberg's celebration of *Lux Mundi* in terms of its overcoming of mechanism is comparable, even if in a slight difference in nuance, with Peacocke's appreciation of it in terms of its overcoming of deism. Cf. Peacocke, "Naturalistic Faith," 18.

⁴³In today's biology, "epigenesis" describes the morphogenetical process of the development of an organism, and "epigenetics" refers to changes in phenotype or gene expression caused by nongenetic factors. In this discussion, however, I assume Pannenberg's definition of epigenesis as the appearance of something new which does not result simply mechanically from the past conditions.

⁴⁴Pannenberg, *Theology of Nature*, 47, 23–4. Referring to Michael Polanyi's "acknowledgment of a field as the agent of biotic performances," Pannenberg points out the convergence between Polanyi's thought and Teilhard's "vision of point Omega at work in the process of evolution as the power of the divine spirit" (p. 24). Cf. Polanyi, *Personal Knowledge*, 2d ed. (New York: Harper and Row, 1962).

⁴⁵Pannenberg, *Theology of Nature*, 143–4. My italics. Pannenberg perceptibly notes that, in his early years, Teilhard contrasted Bergson's idea of the *vis a tergo* (a force acting behind) of the *élan vital*, a thrust of life without finality, to the idea of a *vis ab ante*, a power of the future, quoting from him that "the power that creates the world can only be a *vis ab ante*, a uniting power" (p. 143). Cf. Teilhard de Chardin, "Die Schöpferische Einigung" (1917), in *Frühe Schriften* (Freiburg/Munich, 1968), 181–92.

⁴⁶Pannenberg, *Systematic Theology II*, 109.

⁴⁷Pannenberg, "Human Life," 139.

⁴⁸*Ibid.*, 144.

⁴⁹Pannenberg, *Systematic Theology II*, 98, 145.

⁵⁰*Ibid.*, 162.

⁵¹*Ibid.*, 173. Though he applies the idea of kenosis only to Christology, this observation here seems close to a sort of free process defense found in the current kenotic view of God's creation: cf. John Polkinghorne, ed., *The Work of Love: Creation as Kenosis* (Grand Rapids, MI: Eerdmans, 2001).

⁵²Pannenberg refers to Wolfgang Trillhaas, *Dogmatik*, 3rd ed. (1972), 172ff. See Pannenberg, *Systematic Theology II*, 173.

⁵³Pannenberg, *Systematic Theology*, 164–5.

⁵⁴*Ibid.*, 166–7.

⁵⁵*Ibid.*, 171.

⁵⁶Teilhard de Chardin, *The Phenomenon of Man* (New York: Harper & Row, 1975); Philip Hefner, *The Promise of Teilhard* (Philadelphia: Lippincott, 1970); Jürgen Moltmann, *God in Creation* (Minneapolis, MN: Fortress, 1993) and *The Way*

of *Jesus Christ* (Minneapolis, MN: Fortress, 1993); Peters, *Anticipating Omega* (Göttingen, Germany: Vandenhoeck and Ruprecht, 2006); Peters and Hewlett, *Evolution from Creation to New Creation* (Nashville, TN: Abington Press, 2003); John F. Haught, *God after Darwin: A Theology of Evolution* (Boulder, CO: Westview, 2000); Thomas Tracy, "Evolutionary Theologies and Divine Action," *Theology and Science* 6 (2009): 107–16; John Polkinghorne, "Evolution and Providence: A Response to Thomas Tracy," *Theology and Science* 7 (2009): 317–22.

⁵⁷Peacocke, "Naturalistic Faith," 20.

⁵⁸Ronald L. Numbers, "Science without God: Natural Laws and Christian Beliefs," in *When Science and Christianity Meet*, ed. David C. Lindberg and Ronald L. Numbers (Chicago: University of Chicago, 2003), 266. According to Numbers,

the phrase "methodological naturalism" was first coined by Paul de Vries, who introduced it in 1983 in a conference paper that was later published as "Naturalism in the Natural Sciences," *Christian Scholar's Review* 15 (1986): 388–96. See "Science without God," 320, n.2.

⁵⁹Cf. Jacob Klapwijk, *Purpose in the Living World? Creation and Emergent Evolution*, trans. and ed. Harry Cook (Cambridge: Cambridge University, 2008), esp. chapter 4. Meanwhile, I cannot but see that eschatology does not play as significant a role in his philosophical reflection on evolution as the gospel of the kingdom of God and the resurrection of Jesus suggest.

⁶⁰Ted Peters, "Introduction" in Wolfhart Pannenberg, *Toward a Theology of Nature: Essays on Science and Faith*, ed. Ted Peters (Louisville, KY: Westminster/John Knox, 1993), 14.

66th ASA Annual Meeting

Science-Faith Synergy: Glorifying God and Serving Humanity

North Central College

Naperville, IL

Pre-Meeting Workshops

FRIDAY, July 29, 2011, 9:00 AM–4:00 PM

WORKSHOP 1: Science and Scripture: Interpreting the Information —Terry Morrison, Leader

Scientists, as well as scholars studying Scripture, Church History, etc., have a common task: dealing with "information," that is, the experimental data and the interpretations of the scientists and the biblical data and interpretations of the theologians. This also involves questions of critiquing the sources of the data, etc. And, of course, there is the question of "The Question," i.e., what is it you want to know/understand?

For the Christian in science, e.g., ASA members, these constitute an overlap of the foci of our lives. Can we learn from appropriate approaches in either Scripture/theology studies or philosophy of science and from theologians and science practitioners, things that will advance our work, our understanding, and our living as effective Christians?



John
Walton



Kevin
Vanhoozer



Del
Ratzsch



Denis
Lamoureux

Four scholars will address these issues. They are

- John Walton, www.wheaton.edu/Theology/faculty/walton
- Kevin Vanhoozer, www.wheaton.edu/Theology/faculty/vanhoozer
- Del Ratzsch, www.calvin.edu/academic/philosophy/faculty/ratzsch
- Denis Lamoureux, www.ualberta.ca/~dlamoure

To register, go to
www.asa3.org/ASA/meeting/ASA.php

FRIDAY, July 29, 2011, 1:00 PM–4:30 PM

WORKSHOP 2: Helping Your Congregation Deal with Religion-Science Issues —George Murphy, Leader



George
Murphy

Christians with expertise in science-related fields are called to serve God in their daily work. We'll reflect a bit on this aspect of vocation but our goal here is to help scientists use their knowledge and experience in local congregations. God can use us in several areas of a church's work to further his mission in an increasingly scientific world.

Many Christians don't see the need to deal with issues raised by scientific and technological developments, while others see them as threats. Neither attitude is healthy. We'll discuss the following ways to nurture better understanding.

Scientists can contribute to the church's work in education. Leading a class on faith and science or some specialized topic could be done alone or together with other leaders. We'll discuss how to develop such classes, think about possible areas of controversy, and look at some resources.

Preachers can be uneasy about addressing scientific questions, but they need to proclaim the gospel to people in a scientific world. Pastoral counselors may need awareness of medical technologies to understand decisions people are faced with. Scientists can provide encouragement, support and resources for these ministries.

Medical personnel have long been involved in church-related activities—e.g., as medical missionaries or parish nurses. Ecologists and engineers can contribute to environmental stewardship (e.g., in improving a church's energy efficiency) and thus help people to see a practical dimension of the doctrine of creation.

George Murphy, <http://home.roadrunner.com/~scitheologyglm>, will share his knowledge of these issues, drawing upon his experience as a scientist and as a parish pastor, including extensive work in adult education in congregations, and will suggest print and online resources.

READING GENESIS 1-2:

An Evangelical Conversation

September 30 – October 1, 2011
Chattanooga Convention Center

www.bryan.edu/genesis



Dr. John H. Walton
Professor of Old Testament at Wheaton College and the Wheaton Graduate School



Dr. Todd Beall
Professor of Old Testament and Chair of the Department of Old Testament Literature and Exegesis at Capital Bible Seminary



Dr. Tremper Longman III
The Robert H. Gundry Professor of Biblical Studies at Westmont College

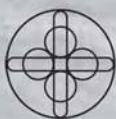


Dr. Richard E. Averbeck
Professor of Old Testament and Semitic Languages and Director of the Ph.D. program in Theological Studies at Trinity Evangelical Divinity School



Dr. C. John Collins
Professor of Old Testament in the Department of Scripture and Interpretation at Covenant Theological Seminary

For more information contact Dr. J. Daryl Charles, Director, The Bryan Institute
(423)775-7265 • daryl.charles@bryan.edu



The Bryan Institute
for Critical Thought and Practice

CHRIST ABOVE ALL
BRYAN
COLLEGE