

MY REPLY TO ALAN PADGETT

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Alan Padgett is a premier analytical philosopher of religion whose writings have been widely received and appreciated across the scholarly community. So it is not without some reservations that I express disagreement with his views on eternity, time, and omniscience. As he noted, we agree on basic doctrinal beliefs, but on the issue of divine omniscience, I have more reservations about the awkwardness of his concept of “relative timelessness” than about the substance of what he means. At any rate, I welcome his critique and this opportunity to further clarify my own views.

I will respond to each of his major criticisms in the order in which they appear in his reply to my article, “Does God Know the Future? Can God Be Mistaken? A Reply to Richard Swinburne” (*The Asbury Theological Journal* 56.2–57.1 (Fall 2001, Spring 2002): 5–47).

First, Padgett thinks “Wood switches easily—rather too easily—between divine eternity and divine omniscience,” but I believe he minimizes the connection between these concepts. Boethius was concerned to show how God is omniscient and yet humans have freedom. He was awaiting execution due to false accusations of being a traitor to the emperor, and he spent his final days in prison reflecting on the meaning of human freedom and divine omniscience. He found spiritual consolation in the faith that an all-knowing God who is the instant moment of all times allows humans to exercise freedom, and hence bad things happen to good people without God foreordaining them. The problem with Molinism (which Padgett thinks is a valid argument defended by William Lane Craig) is the concept of literal foreknowledge. If God literally foreknows the future, Boethius properly noted that this entails determinism. That in part is why Boethius rejected the literal notion of divine foreknowledge and espoused the view God knows all things in our future because our real future is already present to God. To speak in literal terms,

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God knows (not foreknows) our future, but not before it has happened. This view of eternity is a coherent statement because all temporal things exist instantly in God. So eternity does not exclude time, but includes it.

Second, Padgett thinks I fail to recognize the full range of different concepts on eternity. My essay was a response to the two views of eternity presented by Swinburne (who was Padgett's Ph.D. supervisor at Oxford) who maintained that eternity means one of two things: "That he [God] is everlasting life (i.e., exists at each period of time past and time future) or that he is timeless (he exists outside time)." I reminded my readers that there is a third option that Swinburne (and Padgett) omit, namely, the view of Boethius. I did not deal with Padgett's concept of eternity as "relative timelessness" in part because I was considering primarily the views of Swinburne.

Third, Padgett thinks that I overlook the "powerful philosophical reasons" why the traditional view of timeless eternity is wrong. Actually, I agreed in my essay with Swinburne's argument that Augustine's traditional view of eternity as timelessness is mistaken. In particular, I agreed with Barth and Pannenberg that it is not possible to deal biblically with the concept of the incarnation if God is merely timeless. I also agreed that it is impossible to affirm human freedom and sheer divine timelessness. But there is more than one version of the traditional view of eternity, which Padgett overlooks. I discussed the view of the Early Greek Fathers (Irenaeus, Clement of Alexandria, Origen, the Cappodician Fathers) and Boethius (6th century)—all of them taught that God is the instant of all times (past, present, and future) and that humans have freedom, unlike Augustine who defined God in terms of sheer timelessness and who introduced the concept of absolute predestination into Christian theology. Highlighting the distinction between Boethius and Augustine is one of the key contributions of Barth. Unfortunately, Swinburne and Padgett confuse the Early Greek Church Fathers and Boethius with the view of Augustine.

Fourth, Padgett thinks that I did not give adequate attention to "a diversity of viewpoints" regarding the nature of time. Beginning with John McTaggart at the beginning of the 20th century, it has been common to make a distinction between A-theory and B-theory of time, and Padgett is right to point out that I assumed the A-theory of time. My reason for this assumption is more theological than philosophical. I view spacetime (=creation) as the framework of salvation history, and it is important to recognize the progressive development of revelation in history if the history of salvation is to be the centerpiece of theological method. Unless the temporal process is objective and not just a subjective state of mind, the realism of salvation history would be called into question. I also believe that Swinburne embraces the A-theory of time, and since this was not a matter of dispute, I did not discuss it.

After my essay was published, I received a letter from Wolfhart Pannenberg commending me for my views and interpretation, but he also thought I should have noted that Einstein held to a B-theory of time, which essentially means that the succession of time is like a trick of the imagination. In my subsequent writings, I have discussed Einstein's philosophy of time. I might add, somewhat humorously, that I think God holds to the A-theory of time!

Fifth, Padgett thinks that Boethius' view of eternity—that God transcends and

embraces time simultaneously—is incoherent. This is a serious accusation to make especially in the light of the fact that it represents the views of the Early Greek Fathers (who gave us the Trinitarian orthodox faith of the Church), Boethius, and most of the *thinkers* in the history of Christian theology. If I might repeat it here, John Wesley's explanation of Boethius' view is clear, consistent, and coherent. In simple pastoral language, Wesley wrote:

He [God] does not know one thing before another, or one thing after another, but sees all things in one point of view, from everlasting to everlasting. As all time, with everything that exists therein, is present with him at once, so he sees at once whatever was, is, or will be to the end of time. But observe: we must not think they are because he knows them. No; he knows them because they are. Just as I (if one may be allowed to compare the things of men with the deep things of God) now know the sun shines. Yet the sun does not shine because I know it: but I know it because it shines. My knowledge supposes the sun to shine, but does not in any wise cause it. In like manner God knows that man sins; for he knows all things. Yet we do not sin because he knows it; but he knows it because we sin. And his knowledge supposes our sin, but does not in any wise cause it. In a word, God looking on all ages from the creation to the consummation as a moment, and seeing at once whatever is in the hearts of all the children of men, knows everyone that does or does not believe in every age or nation. Yet what he knows, whether faith or unbelief, is in no wise caused by his knowledge. Men are as free in believing, or not believing, as if he did not know it at all.¹

Wesley's point is that all time is present to God as a single whole, but this does not erase the reality of temporal developments. It is as if temporal events pass with infinite velocity before God. He sees everything all at once, although we see them in fragments of time.

I see nothing logically inconsistent with this view, given the reality of Who God Is and whom God has been revealed in the history of salvation. To define a human being in these terms would be preposterous, but God is the Lord of creation (spacetime) and hence God includes creation as well as transcends it.

I believe Eleonore Stump, Norman Kretzman, and Brian Leftow (who is Richard Swinburne's successor at Oxford) have shown the consistency and coherence of the Boethian view, as I noted in my essay. Also the writings of Barth and Pannenberg have demonstrated (to my satisfaction) that this view is required in order to have a proper understanding of the biblical revelation of the Triune God. Padgett does not agree with this logic, but I believe his either/or thinking does not allow him to appreciate the nature of dialectical thinking. To insist that theological language must correspond to the intuitive logic of ordinary human experience seems too anthropomorphic to me.

There are of course many analytical philosophers, such as A. N. Findlay and J. L. Mackie, who insist the very idea of God is incoherent because it is an anthropomorphic projection of human characteristics on to the idea of God, but Padgett is certainly not in agreement with their judgment on this issue. Nor am I. However, I believe the rejection of the Boethian concept of eternity may be due to an anthropomorphic tendency to

prejudge the nature of God on the basis of human limitations.

I also believe that our understanding of this issue is confused if we are locked within a modernist notion of truth—as if the intent of language and propositions is to mirror reality literally based on the intuitive logic of ordinary human experience. One of the decisive contributions of Michael Polanyi was his insight that even in the realm of science the idea of literal and purely objectivist language is impossible. All knowing is more tacit than explicit. Hence one knows more than one can literally tell and comprehensively explain.² If this is true of scientific knowledge, it is especially true regarding what humans know about God who transcends the world.

Richard Rorty (who was trained in analytical philosophy) is right to point out the limitation of logical analysis in his book, *Philosophy and the Mirror of Nature*. He proposed that modern philosophy should be abandoned and he considered analytic philosophy in particular as “one more variant of Kantian philosophy.”³ He argued the modernist self-understanding was based on the false assumption of a body-mind dualism and on the alleged task of the mind to mirror the outside world of things; thus the task of modernist philosophy was to polish and inspect this mirror to insure that its pictures were literally reflecting reality.⁴ He argued that a more productive method for discussing the nature of things is to focus on hermeneutic theory, which shows that words do more than just report a literal picture of things. The idea that words must mirror reality in a literalist sense truncates the larger meaning of truth.

Likewise one of the most productive and creative philosophers in the contemporary period has been Paul Ricoeur who has criticized the pretensions of the modernist notion of critical rationality. He has shown that we should appreciate the nature of figurative and poetic language as a valid means of understanding the nature of things and God.⁵ Undoubtedly part of the reason for a shift away from the modernist epistemology of literalism has been the influence of postmodern science with its counterintuitive discoveries about the nature of the world.⁶

As I pointed out in my article, one should be careful about disregarding commonsense, but relativity physics illustrates that the intuitive logic of commonsense is not always right. This is why Kip S. Thorne speaks of the “weird behavior of space and time” which is not observed in our everyday life because of our “slowness” as compared to the speed of light.⁷

Admittedly, the paradoxical ideas of eternity—that God transcends time and yet time is real to the essence of God—seem to be incoherent from the standpoint of the intuitive logic of our ordinary experience. Yet if that is the way God is revealed in the history of salvation, then deductive logic based on commonsense has to enlarge its understanding of the way things really are.

Postmodern science has come to recognize the limits of deductive logic. Experimental evidence in science has changed our understanding of the way the world is, and it often contradicts the intuitive logic of commonsense. This is especially true in quantum theory where experimental results contradict classical physics and have forced a new way of understanding the world.⁸ Quantum physics deals with microscopic particles as packets of energy at the atomic and subatomic levels as distinct from relativity theory, which deals with larger things in the space-time continuum. The quantum world entails “very tiny

differences in energy" among particles, although the smallness of the quantum world does not mean that its effects do not cover large distances in space.⁹ It is called "quantum" because it was discovered that energy (particles) can change at this microscopic level of reality only in discrete units (or quanta) rather than in a continuous manner.¹⁰ It is as if particles jump from one unit, or quanta, to the next rather than flowing continuously as things do in space-time.

Although quantum theory is concerned with probabilities and uncertainty, it is the most exact theory in dealing with physical reality,¹¹ and yet there is so much about it that puzzles scientists and contradicts commonsense logic, although it does not really contradict itself as such. As David Lindley put it, "there is nothing strictly paradoxical" about the behavior of the quantum world. Rather, the paradox lies with "our prior expectation of the way we think things ought to be."¹² For example, it has been discovered that light exhibits both electromagnetic waves and streams of particles. What is further remarkable about this phenomenon is that "*each individual particle* behaves in a wavelike way entirely on its own."¹³ This weird behavior of light and particles at first shocked physicists.¹⁴ It can be mathematically explained clearly, but not very clearly in words¹⁵ and hence it sounds paradoxical because our ordinary, commonsense experience of the space-time world has difficulty understanding the quantum world.

Related to this surprising behavior of wave/particle duality is the behavior of electrons orbiting the nucleus of an atom. It is impossible for the physicist to determine both the position and the speed of an electron at the same time. It is as though the non-disruptive and non-invasive observation of the physicist introduces uncertainty into its behavior, according to Neils Bohr who was a pioneer of modern quantum theory. Bohr thus insisted on a hidden relationship between the scientist and the behavior of electrons.¹⁶ His protégé, Werner Heisenberg, argued that scientists should not introduce philosophical assumptions into what constitutes the nature of reality, as if something exists objectively only because it is subjectively measured. Instead of saying that there exists a hidden relationship between the knower and the behavior of electrons, Heisenberg developed the principle of uncertainty, saying that experimental evidence demonstrated that there is an element of uncertainty and chance at the quantum level of reality.¹⁷ In other words, there is no way to account for this unpredictability other than it is empirically observed.

This shocked Einstein whose pantheistic need for the perfect harmony of the universe would not permit him to believe that God would engage in "dice-playing."¹⁸ In their friendly discussions together, Bohr humorously told Einstein that he should be "cautious" about ascribing to God human ways of thinking and telling God how to do things.¹⁹ Einstein believed the uncertainty was simply epistemological, reflecting the physicist's inability to understand the law of nature underlying its cause.²⁰ However, as Stephen Hawking has noted, quantum theory has proved to be an "an outstandingly successful theory and underlies nearly all of modern science and technology."²¹ Hawking shows that the consensus among physicists is that the building blocks of the universe are composed of unpredictable quanta (or packets) of energy called particles. Without denying the principal of causality, it appears that chance is built right into the very structure of reality at its most elemental level.²² A shocking fact about these particles is that one particle can occupy two places at the same time as it has been demonstrated in a two-slit experiment

in which a beam of electrons was fired through a pair of narrow slits to a screen behind.²³

Intuitive logical thinking based on commonsense is thus not very reliable in dealing with the quantum level. Werner Heisenberg said if one insists on "complete logical clarity," then that "would make science impossible."²⁴ Roger Penrose, who along with Stephen Hawking is recognized as the most highly respected scientist in contemporary physics, has argued the human mind exceeds the computational method of mathematics and logic and that science is unable to explain the conscious activity of the brain. He argues that the mind is capable of engaging in non-computational understanding that transcends mathematics and logic.²⁵ This human trait, he believes, is something that computers or artificial intelligence cannot do, and it underscores the uniqueness of conscious thinking. Mathematics and the principles of logic are indispensable tools for explaining things and cannot be dismissed as irrelevant, but they have their limitations because there is a dimension of truth that can be derived only from the non-mathematical activity of conscious thinking in general.²⁶

This non-mathematical and intuitive grasp of things corresponds to some of the inexplicable aspects of reality itself. For example, a logical conundrum in Einsteinian relativity physics is the behavior of the speed of light. The one absolute in relativity physics is the speed of light. Everything else is measured relative to it. No matter how fast different things travel, their comparable speeds have no bearing on their relation to the speed of light. For example, if one vehicle is going 1000 miles an hour and another vehicle is only going 1 mile an hour and if they both are trying to catch up to a beam of light, they would in fact find themselves the same distance from it, and the faster vehicle would show no signs of gaining on the slower moving vehicle relative to the speed of light because both would be 186,000 miles per second behind the light beam.

This was a shocking discovery to Einstein,²⁷ but it has revolutionized our understanding the way the world really is. Time is thus relative to the speed of light as the one physical absolute. One way to put this is to say that the speed of light has no future time; it is the future. The past, present, and future are instantly the same moment with light. If one wanted to move into the future, one could do this if one could technologically develop a space machine that would allow us to travel at or near the speed of light. The faster one moves the lesser the time difference among the past, present, and future, until there is no temporal distinctions at all when one reaches the speed of light. Time only emerges as the result of slowing down to speeds less than the speed of light.

Like the definition of eternity, one can refer to physical light as the instantaneous whole of all time. The whole is the speed of light; time emerges as a result of objects going slower than the speed of light. This may explain in part why Einstein himself held to the idea that actual time was only measurement. The speed of light could serve as Einstein's model of reality where there is only the pantheistic Whole without any real past, present, and future. In this sense, pantheism is really acosmic.

However, the difference between the speed of light as an absolute and the relative speeds of time could also serve as a Boethian model of eternity. Light could represent a single whole, which surrounds the relative speeds of spacetime as past, present, and future. The difference between Einstein and Boethius is that for Einstein time was only measurement and was not an essential aspect of reality, whereas for Boethius time was an

essential part of reality itself and was included within the Triune life of God.

Now regarding the coherence of the Boethian view, my essay did not intend to suggest that science had proven the Christian doctrine of eternity or divine omniscience, but rather it was intended to show that the breakdown of simultaneity according to Einsteinian relativity illustrates how Boethius' view is a coherent idea. That is why I adapted Einstein's parable of the paradox of the twins to explain a Boethian concept of eternity.²⁸ Let me repeat it here. If a twin named Paul takes a trip in space traveling at near the speed of light and is gone for a period of 30 years according to earth time, when he returns his earth-bound twin Peter will look thirty years older. However, the space-traveler Paul will only be a few minutes older than when he first took his space trip. All the events of thirty years in the life of his twin brother Peter would have occurred instantly for him because his speed and the turn-around back to earth put him in a different inertial frame of reference.²⁹ [An "inertial frame of reference" means moving in a straight line at a constant speed]. I believe the breakdown of simultaneity between two inertial frames of reference illustrates the coherence of the Boethian concept. Padgett does not accept this illustration because he does not accept the real breakdown of simultaneity according to Einsteinian relativity theory.

Just as postmodern science must use dialectical ways of speaking, so the Early Greek Church Fathers and Boethius were forced to speak in dialectical ways as well: God transcends time and yet includes it; God knows everything and yet humans are genuinely free; the future is yet to be decided within our temporal frame of reference, but the future is already present in eternity. These polarities are counterintuitive to our earth-bound and commonsense literalism, but we are able to grasp their meaning through dialectical thinking.

This leads me to the really substantive difference between Padgett's view and my own. We have a different understanding of contemporary physics. Some analytical philosophers of religion have been unable to accept the counterintuitiveness of postmodern science, particularly Einsteinian spacetime relativity. Padgett defends Swinburne's non-Einsteinian views of relativity, along with the Newtonian views of Peter Hodgson, and he argues that I presented a very limited interpretation of relativity theory because I ignored their interpretation.

However, I am unwilling to grant Padgett's contention that I should have allowed for a non-Einsteinian theory of relativity. Peter Hodgson and William Lane Craig make it clear that they espouse a Newtonian view of space and time as modified by Lorentz, but I see no reason to grant the validity of their views in the light of the overwhelming consensus in contemporary physics that Lorentz's view was incomplete and that his Newtonian idea of space and time was wrong. To be sure, Lorentz was a significant scientist in the development of relativity theory, but he was a transitional figure. Even if publishers such as Oxford University Press published the writings of these minority views, the scientific literature acknowledges that only a very small group of physicists and philosophers continue to hold on to a non-Einsteinian view of relativity, and their view has been discredited as reactionary and obscurantist.³⁰

It might be helpful to clarify a few things about Lorentz and his relationship to Einstein. Hendrik Lorentz was professor of mathematical physics at the University of

Leiden from 1878-1912. He became famous for his part in the development of the Fitzgerald-Lorentz contraction theory. This theory proposed that mass is increased, the length of objects is shortened, and time is dilated as the speed of light is approached. This contraction hypothesis was offered as a way of explaining the negative result of the Michelson-Morley experiment of 1887, which had been designed to demonstrate the earth's absolute motion through space. What this experiment actually demonstrated, however, was that light travels at the same speed relative to any object regardless of its own motion. This was a surprising result because it was believed that light would show different speeds as it moved in perpendicular directions. In order to account for this surprising result, Lorentz continued to explain it in Newtonian terms by introducing an ad hoc mathematical factor into his equation, which he called "an aid to calculation." He tried to explain length contraction and time dilation as the effects of motion on the interactions between electrons and the ether, but Einstein later showed that contraction was a property of space-time. Lorentz's makeshift mathematical equation failed to measure up to the elegance and simplicity of Einstein's equations, and his assumption of ether was rejected as mythical and unnecessary. Although Lorentz was not successful in reconciling his contraction theory with Newtonian physics, it became the basis of the mathematics of Einstein's Theories of General and Special Relativity. Lorentz's contributions to relativity theory are thus very significant.

Is the concept of ether a valid concept today among theoretical physicists? If one reviews the body of scientific literature, the answer is clearly no. Let me explain. Ether was thought to be an invisible, transparent jelly-like substance that was evenly spread throughout the universe. It was a notion used in the 19th century in order to explain how electromagnetic waves travel through space because it was believed these waves could not travel through "empty space." Attempts were made to verify the existence of this hypothetical substance, most notably the Michelson-Morley experiment as we noted above. Although Einstein agreed with the Lorentzian view of contraction of space and time at relativistic speeds, he argued that the Michelson-Morley experiment disproved the existence of ether and that the concept of ether was an unnecessary presupposition. Einsteinian relativity quickly won out over Lorentzian relativity because of the latter's ad hoc mathematical addition to his equation and because Lorentzian relativity relies upon the discredited notion of the ether. Heisenberg noted "in a conclusive way that the concept of the ether had to be abandoned"³¹ because the Michelson-Morley experiment offered "definite proof" that it did not exist.³² As Milic Capek put it, "By the discovery of the constant velocity of light the classical mechanistic-visual model of aether was wrecked beyond repair."³³ Consequently, the notion of ether was discarded and Einstein's view that contraction is a property of space-time has been accepted universally and is the only valid view offered in standard textbooks on physics.³⁴

William Lane Craig and Peter Hodgson have nevertheless argued for the existence of ether, which they believe Bell's Theorem implies. Bell's Theorem entails what Einstein referred to as "spooky action at a distance," which is the idea that separated particles of energy at the quantum level can influence each other at extreme distances apart.³⁵ When an electron is split in half and both halves spin off in entirely different directions, they remain entangled with each other and are in immediate contact even though they may

be miles apart. Physicists have proved this to be the case by altering the spin of one part of the electron and have observed that the other half immediately responds in the same way. This seems to be in conflict with Einsteinian relativity theory that says that nothing travels faster than the speed of light. How does this happen? William Lane Craig says the concept of the ether is needed to account for this.³⁶

However, Roger Penrose has shown that the embedded electrons are not communicating information. This is known because it is not possible for technology to use the separated parts of the particle for sending information. Hence the strange behavior of the separated parts of an embedded particle do not violate special relativity theory that the speed of light is absolute. By being embedded, the two halves still function as one particle.³⁷ Penrose shows that although quantum physics deals with things with a very small size like molecules, atoms, and subatomic particles, "quantum-level effects can occur across vast separations." The behavior of these very small things cannot be understood on the basis of space-time relativity, but this does not mean that space-time relativity has been violated.³⁸ Nor is the notion of ether relevant.

Hodgson recognizes that his Newtonian view of space and time relies upon the unverifiable assumption of ether. It is apparent, however, that part of Hodgson's reasons for holding on to the idea of absolute space and absolute time is more philosophical than scientific—because he fears that Einsteinian relativity can be interpreted as undermining the idea of absolute truth.³⁹ This worry results from a confusion of philosophical relativism with scientific relativity. Relativity allows that the laws of nature are universal and operate the same in all inertial frames of reference. Relativity is a term that is used primarily to suggest spacetime is relative. Further, why should one be concerned to retain the concept of absolute truth. This is a concept itself which has become problematic, and as a theologian I believe the idea of absolute truth is a redherring. Theology is based primarily on the interrelated events of salvation history, not on the discoveries of reason, and it assumes that God is related to all things and all things are included within the divine being. This idea of divine relativity and a relational view of truth can be defended without yielding to the Hartshornian pantheistic identification of God with the world. If truth is not absolute, but relational, as revealed in the doctrine of the Trinitarian Persons, then Hodgson's philosophical concerns about Einsteinian relativity is muted. The idea of absolute truth is more pantheistic than Trinitarian, and Einstein himself assumed a pantheistic notion of the absolute. Ironically, Einsteinian relativity affirms at least one absolute truth; namely, the speed of light, which Craig and Hodgson reject, and presumably so does Padgett despite the compelling proof of the Michelson-Morely experiment, which has been repeated many times.

I do not believe Einsteinian relativity undermines Trinitarian orthodoxy, but it can be used to illustrate how everything is relational. I do not accept the conclusion that this theory about truth being relational is self-contradictory as though it is an absolute statement itself. Rather, this relational theory is not a theory about absolutism and relativism, but a recognition that what we know grows out of the connectedness and contingency of life. We do not live in a world of absolutes, but in a world of probabilities. That is why we as Christians live by faith. The modernist worldview was preoccupied with absolutes—absolute precision, absolute clarity, absolute literalness—and without these absolutes one

supposedly could not make genuine truth-claims. There is a growing recognition in contemporary thought that one can be more modest about what one claims to know without falling into skepticism. I believe the skepticism of the more extreme versions of post-modernism can be explained in part as a reaction to the narrowness and failure of the modernist concept of the absolutely irrefutable truths of reason. Einsteinian relativity should not be confused with philosophical relativism, as Hodgson implies that it does. Rather, Einsteinian relativity can help to explain diversity and differences in the world without falling into skepticism and nihilistic relativism.

Einsteinian relativity thus does not have to lead to philosophical relativism or pantheistic absolutism. Another possibility is that it can also lead us to see the consistency and coherence of the Boethian concept of eternity because it helps us to understand how the future can already exist—that the real future of our world is already present for God because the past, present, and future exist as an instant moment in eternity. Lorentzian relativity does not accept the relativity of simultaneity; rather, the differences among inertial frames of references are about measurement only. Hence in Lorentzian relativity, only the present exists and it is simultaneous for all inertial frames of reference, whereas in Einsteinian relativity, there is no absolute present throughout the physical universe. For example, it is theoretically possible to move into the future if we were able to travel at the rate of nearly the speed of light.

There is thus a fundamental difference between Lorentz' Newtonian view and Einsteinian relativity theory. This explains why Padgett is unrelenting in his judgment that a Boethian concept of eternity is impossible. My point is that given the Einsteinian relativity theory, a Boethian view is intelligible and Padgett's denial of the real breakdown of simultaneity among different inertial frames of reference reflects outdated science. In the final analysis, Padgett's real disagreement is not with Boethius, but with Einstein.

Finally, Padgett thinks I should have discussed his and William Craig's works, and he believes that I did not consult or even quote from Swinburne's major works on relativity. Although my discussion of Padgett and Craig was contained in the footnotes and not in the body of my essay, this was because my main purpose was to reply to Swinburne's views on divine omniscience. However, I do think that I accurately reflected their views.

Padgett is mistaken, on the other hand, to say that Swinburne's major works on time "are not discussed or even mentioned in a footnote." His views on time are well explained in his works on *The Coherence of Theism* and *The Christian God*, which are numerous discussed throughout my essay. Padgett was particularly concerned that I had not discussed his work, *Space and Time*, but Padgett apparently did not look carefully enough at my essay or otherwise he would have noticed that I discussed and footnoted this particular work. What Padgett also did not notice is that Swinburne espoused a traditional view of eternity at the time he wrote his major work, *Space and Time* (1968) and not until later—after Pike's work (*God and Timelessness*, 1970) appeared—did Swinburne shift his position against the traditional view of eternity.⁴⁰ So apparently, Swinburne's ideas of the philosophical and scientific notions of space and time did not affect his views at all. Now it is true that I did not engage in a discussion about the merits of Swinburne's espousal of a Newtonian view of space and time, but I did not intend to do so because the scientific consensus is clear enough on this issue and I saw no need to

discuss scientific views that are so far removed from the consensus of contemporary scientific thought.

In conclusion, while Lorentz was a great scientist whose experiments and theories were transitional and led to Einsteinian physics, I believe it is a serious mistake for Christian apologists to embrace Lorentz's version of Newtonian physics. It is reminiscent of the Scopes Monkey Trial, where well-meaning Christians were trying to overthrow modern science and replace it with ad hoc explanations supposedly based on the Bible. In the case of Einsteinian relativity, Hodgson thinks that absolute truth is at risk and Craig fears the danger of positivism and materialism (as I noted in my essay). A far more serious theological problem that Hodgson and Craig find themselves facing is reducing God to finiteness, if God has a future which subsequently moves into God's present, which then fades into God's past. On the other hand, assuming the validity of Einsteinian relativity that space-time is a single entity, God necessarily transcends time if God also transcends space, for time and space are indivisible.

To be sure, we must use temporal language in speaking of what existed "before" time and what will exist "after" time, but metaphor is one of the ways that language must function in speaking of transcendent realities. Theology has always spoken of God existing "before" time, and now contemporary science speaks of an infinitesimally small, dense soup of energy (one trillionth the size of a proton) existing "before time" when it tells us spacetime came into existence with the Big Bang. It is a staggering thought to realize that all the matter of the universe—the planets, the sun, the stars, the galaxies—emerged out of that tiny burst of energy. Thus, time and space had a beginning and are like a single fabric. Is this coherent? It is certainly counterintuitive, but it describes the way things really are as established by scientific evidence and mathematical equations.

Finally, I find it puzzling that clear thinkers like Padgett and Craig whose Christian orthodoxy is without question and who have been eloquent spokesman for Christian faith would embrace out-of-date views of contemporary science. They would still be able to maintain full divine omniscience if they were to embrace a Boethian version of the traditional doctrine of eternity, which is a coherent argument especially in reference to Einsteinian relativity theory. So why defy the scientific consensus? I also believe it is the best theory to explain the biblical data on time. As I noted in the original article, Gerhard von Rad demonstrated that the future events on earth appear in heaven as already having happened in the Book of Daniel. The basis for accepting Boethius' view of eternity is rooted in the theological exegesis of Scripture, but the philosophy of contemporary science illustrates that it is also a coherent view.

NOTES

1. John Wesley, *Sermons*, ed. Albert Outler (Nashville: Abingdon Press, 1991), 2:417, "On Predestination."
2. Michael Polanyi, *Personal Knowledge* (University of Chicago Press, 1958), 312.
3. Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979), 8, 257ff. Cf. Richard J. Bernstein, *Beyond Objectivism and Subjectivism: Science, Hermeneutics, and Praxis* (Oxford: Basic Blackwell, 1983), pp. 197-207.
4. Rorty, *Philosophy and the Mirror of Nature*, 12. See especially the chapter on "The Invention

of the Mind."

5. Paul Ricoeur, *Essays in Biblical Interpretation*, ed. Lewis S. Mudge (Philadelphia: Fortress Press, 1980).
6. Cf. Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1974).
7. Kip S. Thorne, *Black Holes and Time Warps, Einstein's Outrageous Legacy* (New York: W W Norton, 1994), 78.
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9. Roger Penrose, *Shadows of the Mind* (Oxford: Oxford University Press, 1994), 257, Penrose, *The Emperor's New Mind*, 237
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20. F. S. C. Northrop, "Introduction," to Werner Heisenberg, *Physics and Philosophy*, 4ff.
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29. Cf. Leo Sartori, *Understanding Relativity, A Simplified Approach to Einstein's Theories* (Berkeley: University of California Press, 1996). 195ff. For a larger discussion of special and general relativity in understanding the relativity of simultaneity, see Milic Capek, *The Philosophical Impact of Contemporary Physics* (New York: D. Van Nostrand Company, Inc., 1961), pp. 199-205.
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32. *Ibid.*, 112.
33. Capek, *The Philosophical Impact of Contemporary Physics*, 251.
34. Sartori, *Understanding Relativity*, 199n.
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36. Cf. Craig, *Time and Eternity* (Wheaton, Illinois: Crossway Books, 2001), 54-56.
37. Penrose, *Shadows of the Mind*, 246-249, 294.
38. Penrose, *Shadows of the Mind*, 256; Penrose, *The Emperor's New Mind*, 282ff, 286f.

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