

Review Article

GOD AND CONTEMPORARY SCIENCE: PHILIP CLAYTON'S DEFENSE OF PANENTHEISM

by Willem B. Drees

God and Contemporary Science. By PHILIP D. CLAYTON. Edinburgh Studies in Constructive Theology. Edinburgh: Edinburgh Univ. Press, 1997. xii + 274 pages. £14.95 (paper). Also Grand Rapids, Mich.: Eerdmans. \$25.00.

Abstract. Philip Clayton's *God and Contemporary Science* is summarized and discussed. Clayton presents a theological reading of biblical texts. In my opinion, science-and-religion studies should deal more substantially with insights of secular studies on the situated character of these texts. Clayton uses the relationship between mind and brain as analogy for the relationship between God and the world. This runs the risk of understanding God as analogous to the mind and hence secondary and emergent relative to the world. Besides, Clayton's arguments for "mental causation" are wanting. But then, why should a defender of panentheism decouple the mental and the material?

Keywords: Philip Clayton; divine action; exegesis; human agency; naturalism; philosophy of mind; philosophy of religion; postmodernism.

In *God and Contemporary Science* the philosopher Philip Clayton articulates and defends a panentheistic position: The world is in God, but God transcends the world. Clayton seeks to understand the God-world

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relationship as highly analogous to the mind-body relationship in humans. Though this book is apologetic in intention, Clayton has a keen eye for the difficulties involved: "one must not make the task sound easier than the data actually allow" (p. 9). True to this intention, Clayton is critical not only of those he considers to be too far off on the liberal or naturalistic side (including the current reviewer) but even more of major contemporary Anglo-American philosophers of religion such as Alvin Plantinga and William Alston, and of postliberal theologians such as Hans Frei and George Lindbeck. According to Clayton, they conclude too easily to symmetry between a naturalistic and a theological view of phenomena. Clayton holds that there are good reasons for "the presumption of naturalism," that is, for the habit of looking first for a naturalistic explanation of events and regularities. In his understanding of theology, Clayton concentrates on cognitive claims rather than on religions as complex practices. Thus, he is more in conversation with the science-and-theology literature on divine action (e.g., the Vatican Observatory-CTNS project) than with anthropological studies on the history and function of religions. Physics and neuroscience are in this context more his archetypal sciences than are sociobiology and evolutionary psychology.

In the first chapter, many of the general characteristics described so far appear. Clayton claims that "the scandal of particularity" is past; from postmodernism we can learn that any point of departure is particular. This is reflected in the structure of the book, which has three chapters on "biblical theology," say, the particularities of Christian faith. However, the more permissive cultural climate of postmodernism does not absolve us, in his view, from careful reflection on the interaction of our particular positions with science; Clayton does not use postmodernism as an easy way out. By the way, in using the argument for the legitimacy of a particular point of departure, postmodernism runs the risk of becoming itself a systematic position with universal aspirations regarding metacognitive issues. Clayton's style is not what I would call postmodern either; he clearly prefers argument over narrative, anecdote, or biography. Theology is treated as an understanding of the world, or even as an explanatory enterprise. This approach significantly influences his selection of which elements of the Bible to consider. Creation stories get serious attention, but there is no reflection on the Sermon on the Mount or the Ten Commandments, or even the particular role of the Sabbath in the first creation narrative. His passing over such elements of the actual life and practices of Israelites and others may lead one to wonder how postmodern his approach actually is. But then, what is in a name? Clayton more specifically, and quite adequately, refers to his position as "postfoundationalist": there are no indisputable and reasonable foundations on which all humans of good intellect should agree, independent of all cultural and personal biases.

Clayton points out, however, that the natural sciences have achieved a

universality unmatched by other human enterprises. This gives the debate with the natural sciences a particular urgency for those who make theological truth claims. I agree on this universality but wonder whether that should not give us reason to significantly qualify our postmodernism. Some intellectual practices are apparently more affected by postmodern pluralism than others.

In the first chapter Clayton introduces the main potential tension between theology and science, which he sees as characterized by methodological naturalism and explanatory reductionism. This reductionism or naturalism is at odds with “folk psychology,” which assumes something irreducible about human mental life. It is even more at odds with theology as traditionally understood. A particular view of *mind* becomes central to Clayton’s arguments, because irreducibility in the philosophy of mind reveals the limitations of a naturalistic program and thereby creates opportunities for an intellectually viable theology. I doubt that we should identify naturalism and reductionism with respect to mind as closely as he does. Besides, this gives a very particular twist to the conversation with the sciences. Despite all his respect for the sciences, Clayton argues against the competence of science when it comes to mental life rather than exploring possibilities for theology or religious life in a naturalistic framework.

One more important element of this rich introductory chapter of only twelve pages: When speaking of divine action, Clayton also considers divine inactivity, or, formulated otherwise, the problem of evil, which is too often neglected in studies of divine action. For Clayton, apparently undeserved suffering is a reason for great reticence with respect to claims about specific divine acts, because we risk making God responsible for cases of apparently random but genuine suffering. In this context, Clayton suggests that “psychological miracles” might be less problematic than “physical miracles”—a move that assumes the irreducibility of mental to physical phenomena central to his arguments.

A THEOLOGICAL BIBLE OR BIBLICAL STUDIES?

Three chapters form part 1, “The God Who Acts: Towards a Biblical Theology of God and the World.” They deal with the Hebrew Bible, Christology, and panentheism. In the creation narratives of the Hebrew Bible Clayton finds the message that Christians should neither identify God with creation nor separate God completely from it. This chapter on the biblical material is less postmodern than one might expect after the introductory chapter; it seems as if essential elements can be abstracted fairly easily from the particular situations in which the text arose. That the creation narrative of Genesis 1 ends with the Sabbath, setting this story squarely in the liturgical and social life of Israel, does not receive much attention. Furthermore, I wonder whether panentheism is not read too much into

the text by Clayton. Does the biblical material really support the claim that the eschatological vision “concerns a final state where the difference and the incompatibility of God and humanity will be overcome” (p. 45)? The incompatibility, perhaps, but the difference? If not counter to a careful exegesis of the texts, Clayton’s conclusions as to what “the biblical story is about” (p. 51) certainly reach far beyond the scope of the exegetical explorations presented.

Given his theological agenda, it is very well that Clayton moves beyond general considerations on creation to “Christology and Creation: Struggling with the Particularity of the Christian Story,” as the next chapter is aptly titled. Half of the chapter is on Christology. In these sections the New Testament is read through the eyes of systematic theology; he sketches “the core theological beliefs that the tradition has taken to be entailed by the Christian story” (p. 61). It is not made explicit by whom the tradition is considered to be represented best (as, for instance, liberationist and feminist theologians might do at such a moment). Notions such as the Trinity, as forged in the fourth and fifth centuries C.E., are applied without hesitation. There are various other ways of reading the biblical texts, including various more secular ways—concentrating on the Jewish setting of Jesus, offering a sociological analysis of the Jesus movement, analyzing the unity and variety in the text material, and so forth. As became clear to me as I read these exegetical chapters of Clayton’s book, in the study of science and theology we also face the decision of how we approach exegetical tasks. Clayton prefers a theological reading of the biblical texts—thus easing the transition to systematic reflections on God, the Trinity, Jesus Christ, and panentheism. I consider it more appropriate in science and theology to acknowledge the significance of secular biblical studies as they have developed over the last century and a half, with insights regarding the situated character of these texts. Whereas one might assume that postmodernism aligns with historical-critical scholarship, with its eye to the situated and particular, in this case the postmodern leaves that to moderns, while appropriating texts fairly straightforwardly for the purpose of contemporary beliefs.

In the second half of the chapter, Clayton writes about religious epistemology. He discusses arguments concerning the claim that Christians do not have to offer arguments for their beliefs, as brought forward in various forms by theologians Hans Frei and George Lindbeck and philosophers Alvin Plantinga, William Alston, and Nicholas Wolterstorff. Clayton sides with critics of these thinkers. According to Clayton, Christians have to engage in an intellectual conversation with secular knowledge. They cannot and should not withdraw to the basic beliefs of their particular communities.

The next chapter is “Panentheism and the Contribution of Philosophy.” Clayton begins with a discussion of the development of monotheism, presenting it as a development of ideas, as suits a philosopher. For a

quite different analysis in the context of science and religion, one might consider Gerd Theissen's *Biblical Faith: An Evolutionary Approach* (1985). Theissen sees the rise of monotheism primarily as fueled by social developments. Clayton argues that there is one alternative to strict monotheism that is neither polytheistic nor pantheistic, and that is panentheism, the idea that the world (the Greek word *pan* meaning "everything") is in God, while God is more than the world. In this context, Clayton offers some reflections on the nature of space; with space all finite things are within God. The difference between God and created beings is articulated not in terms of God being spaceless and created beings being spatial but as the difference between the absolutely infinite and finite entities. According to Clayton, atheism is inadequate as an account of the existence of the universe, but a dualistic theism also fails as a view of God as creator of the world. The biblical tradition is antidualistic in its conception of human nature, which Clayton sees as support for a nondualistic understanding of God-and-world. Matter is not evil, and hence it is no problem if God is seen as related closely to material reality. He concludes this chapter with a panentheistic retrieval of the main arguments for the existence of God, that is, the ontological, the cosmological, and the teleological arguments.

POSITIONS ON COSMOLOGY AND THEOLOGY

Part 2 consists of only one chapter, "What Theologians Can and Cannot Learn from Scientific Cosmology." In this chapter Clayton surveys various authors who in different ways relate scientific knowledge to religious beliefs, namely, Robert Wesson, Angela Tilby, Frank Tipler, Paul Davies, Ted Peters, Stanley Jaki, David Bohm, Edward Harrison, and Willem Drees, the latter representing a "sophisticated (religiously tinted) naturalism"—so the reader now knows the proper label for this reviewer. I abstain from summarizing the summaries given by Clayton; I found those on the thinkers familiar to me fair, sensitive, and insightful. The only weakness seems to me that here, as well as in some other sections of the book, the author assumes more familiarity with discussions in the philosophy of religion (e.g., when referring in passing to "Braithwaite's 'emotivist' theory of religious language," p. 130) than may be expected of the mixed audience that books on science and theology have. Clayton concludes with a summary of seven different positions that I found clear, even though I hope and believe that I did not oppose truth and construction in the way he attributes to me (p. 156 and n. 73). Clayton emphasizes that the more satisfactory approaches show that some form of metaphysical discourse is needed, both as the arena for discussions and as proposals about how it will all fit together in the end. Current science does not provide support for any one particular metaphysical or theological position; cosmology neither proves nor disproves a theistic explanation of reality.

THE PRESUMPTION OF NATURALISM

Part 3, "Towards a Theology of Divine Action," picks up the main line of the argument, in favor of panentheism and of the God-world relationship as analogous to the mind-brain relationship. However, before coming to consider proposals for views of divine action, Clayton first impresses upon the reader how hard it is to argue for particular divine activity in the world since "the presumption of naturalism" is very strong and deservedly so. We always assume in the first instance that the cause of an event in the world is natural rather than supernatural. This assumption is not merely behind scientific research but also part of our common sense. According to the Bible, even Samuel went first to Eli, the priest (not his father, a mistake in the book), when he heard a voice. As Clayton astutely observes, arguments about divine action need as much to overcome this presumption as they need a metaphysics that allows for the possibility of divine action—the topic of the next two chapters. By recognizing the presumption of naturalism, Clayton acknowledges an asymmetry between naturalistic and theistic explanations of events in the world. In this context, Clayton criticizes the views of philosophers such as Plantinga, Alston, and Wolterstorff, who have argued for more parity between theistic and naturalistic explanations of events in the physical world. There is more room for parity, according to Clayton, when we talk about the origin of the universe as a whole or about patterns in cosmic history as a whole. Furthermore, the case for psychological miracles is quite different from that for physical miracles. There is a theological presumption against physical miracles. However, psychological miracles are excluded only on a metaphysical naturalistic view of the mind-brain relation that would connect mental changes tightly to physical ones. But, according to Clayton, current science does not force on us such a metaphysics. Sometimes we may have reasons to believe that God has acted, but we cannot claim that to be knowledge in the same strong sense as when we claim perceptual knowledge of, say, trees.

DIVINE ACTION

The final two chapters come to the heart of the book, the argument for a panentheistic view of the God-world relationship. Chapter 7 surveys various options regarding the metaphysical possibility of divine action. Discussed are especially ideas from John Polkinghorne, Robert J. Russell, Thomas Tracy, Nancey Murphy, and Arthur Peacocke. The focus on particular authors seems to result occasionally in sidetracks; besides, the flow of the argument is at times hard to follow because the same theme returns in different places. Clayton considers quantum mechanics, which does seem to allow for an ontological openness in the physical world, and chaos theory, which on careful analysis does not—even though it may be helpful in amplifying the results of "choices" at the quantum level, if any, to

macroscopic differences. However, Clayton also refers to others who do abstain from locating “the causal joint” between God and the world or take it that God’s primary causality is in some way behind every action of created beings. At the end, he comes to a discussion of “a panentheistic theory of divine action,” with references mainly to the writings of Arthur Peacocke. God does not so much act in the natural world (as if God were an outsider); natural processes are modes of God’s activity. Clayton expresses his affinity with Peacocke’s position but considers it insufficient; there needs to be more room for particular divine activity. To argue for particular divine activity, he turns in the final chapter to the analogy between human and divine action.

THE ANALOGY BETWEEN DIVINE AND HUMAN ACTION

Clayton believes that “*if* one is able to conceive of human intentional action in a way that is compatible with natural scientific accounts of the world, then one will have done the bulk of the work necessary for a theory of divine causation” (p. 233). In the discussion of this last chapter, I concentrate on two aspects of his use of the analogy between a panentheistic view of the God-world relationship and the mind-brain relationship, namely, the theological side (what it says about God) and the human side, the view of the mind-brain relationship.

In my opinion, one very major theological problem with this way of using the analogy between a nondualist understanding of body-mind and a panentheist relationship between the world and God arises when one reflects on the question whether God is the analogon of the brain or of the mind. Clayton holds to the view, which seems a defining element of panentheism, that God has ontological priority over the world; God as the Creator is thought of as existing before the Big Bang (p. 158). This panentheist primacy of God over the world makes God more analogous to the brain than to the mind, because defenders of contemporary nondualistic views of human nature in general assume the primacy of the body; during the course of embryonic and later development, the human person acquires more and more mental capacities. Reading the analogy as one between God and the brain (and between the world and the mind) is obviously not the road Clayton wants to travel. The purpose of the analogy is to introduce personal agency, with intentions and the like, into our understanding of the relationship between God and the world—and hence to align God with mind. However, if God is the analogon of the mind, it seems that the analogy leads us to take God as ontologically secondary to the world. Clayton recognizes this problem; on such a reading of the analogy, “God becomes another word for the ‘spiritual’—or perhaps mental—phenomena that occur within the world” (p. 237), which is theologically not sufficient for him. God is ontologically prior, also for a panentheist. If

I read him correctly, in the end Clayton backs away from the problem this generates for the analogy so central to his arguments with the remark, “Beliefs about the nature of God prior to and apart from the universe can never be dictated by anything within the universe” (p. 259). Thus, the breakdown of the analogy is covered by an appeal to metaphysical immunity. He suggests that he merely offers a “theological supplementation of science” (p. 260), but it seems to me to be a loss of nerve—first to put so much emphasis on the analogy and then to let the *disanalogy* result in some supplementation rather than in a more fundamental qualification of the analogy.

Qualification (and not just supplementation) also seems needed in the light of my observation that contemporary explanations of human agency, whether reductionist or not, are all naturalist. Those who plead for some form of an ontology that has mental aspects as well as physical ones do not thereby introduce divine aspects—nor does such a dual-aspect ontology clarify how the divine, uncreated infinite source of being could act in the realm of physical and mental processes. The transition from the natural to the divine challenges the project of applying this analogy as an argument. More modest claims regarding what the use of the analogy achieves, say, by providing us with a model or metaphor, seem more defensible. Clayton’s expressed ambition is higher, more realistic; according to him, this route offers “the only position that would allow for the action of God upon human minds” (p. 256), thereby implicitly excluding action at the quantum level (which was allowed in the preceding chapter) and metaphysical alternatives that keep more distance from particular scientific knowledge.

How does Clayton discuss the relationship of mind and brain? In his view, “Christian theology can and must side with the irreducibilists” in contemporary debates in the philosophy of mind (p. 243). He gives two reasons for this preference, of which the first one seems nonsense to me: if minds were to be reduced to physical processes, then God would have to be reduced in a similar manner as well. Why would the source of being have to be reduced to created processes if one particular type of created processes turned out to be expressible in terms of another kind of created processes? Clayton prefers to read this first argument differently (as he indicated in a communication to me), namely, not as an argument about necessary consequences but rather as the view that a reductionist view weakens the grounds for being a theist rather than a naturalist. This does not convince me either. Whether the world of material and mental beings such as ourselves is at bottom all reducible to ninety-six or so types of elements, one type of basic stuff (matter) to two types of stuff (matter and the mental), or even to three or more, does not seem to make much of a difference when we face the question of whether there is a personal God or not (though I agree that strong views of reduction make religious language

superfluous, as they do with all languages aside from the one describing the basic stuff).

Clayton's second argument for irreducibility concerns the eschatological hope of subjective life after death in a nonphysical state, which may be impossible if minds are too tightly connected to physical states—that is, unless one assumes that resurrection or life after death pertains also to some form of material existence, that is, bodies and not merely minds. Clayton considers emergence as the attractive medium between dualism and physicalism. However, emergent properties are natural properties, even if they are a genuinely new type of phenomenon. Hence, that does not deliver the theological goods, for instance with respect to life after death.

Supervenience, a similar notion that is also considered, assumes too that the underlying physical body is a necessary substratum for the mental state. And again, if the analogy is pursued in terms of supervenience or emergence, God would be dependent on the world, or even be a property of the world. Clayton acknowledges that standard ideas about emergence and supervenience are not strong enough in this respect. He then goes on to speak about mental causation (one supervening state being the cause of another supervening state), as if that would get us away from underlying subvenient states. As an example of mental causation he considers the idea of “ $23 + 47$,” causing one to think “70.” In my view, we need a distinction here between the issue of causation (at the physical level) and justification or truth, which is at the level of the mathematics—and we need this distinction whether we consider persons or computers. The fact that a person or a computer writes down “70” (or some other symbols, depending on the particular way the person or machine is trained to write numbers) is an event in the world, causally explicable—even though the causal pathways that led to the proper movements of the hand or printer are hidden from our sight. The fact that this is the right answer is a matter of mathematics; the truth of “ $23 + 47 = 70$ ” is one of justification rather than of causation. We think at the semantic rather than the syntactic level. However, underlying this is an (assumed) adequacy of our thought (or of the computer program), or, to say it differently, an isomorphy is assumed between the right mathematical relationships and the causal, physical processes in the computer or in ourselves. The fact that our brain or computer is able to write down the right answer rather than, say, 69, is a matter of training or programming, where the brain or computer has learned to connect particular symbols in a particular way, which preserves the truth of the relevant mathematical relationships. If a computer or person were to offer wrong answers (as at one point a certain type of Pentium processor did), we would no longer concentrate on the mathematics (which we would if there were a process of unmediated mental causation) but would assume

that the causal processes at the lower level are not in line with the mathematical relationships and hence need correction. In the case of the imperfect computer chip, somewhere the isomorphy between the mathematical relationships and the causal, physical processes broke down and needed correction, a redesigning of the chip. (I owe the example and analysis to T. B. Jongeling.) The brain does not cause the truth of the outcome, but the brain does cause the pathway that leads to my pronouncement that this particular idea is the outcome. As I see it, and as exemplified by this analysis of mental causation, Clayton does not manage to get away from the connection between mental and physical states in the way he suggests he does. We may even wonder why a pantheist would want to get away from this connectedness within the natural world, because the world is in God, whether that concerns the mental or the physical aspects of that world.

In the end, Clayton faces a choice. "Given the evidence, one can say that a 'strange' type of property supervenes on physical systems and that these mental properties constrain (and in this sense act causally upon) the system in question. Anything beyond this point is, to our scientific discussion partners, metaphysics in the bad sense" (p. 257). With such a perspective, supervenience in the philosophy of mind "will be of no more help to the Christian theologian than reductionism itself" (p. 258). Clayton argues, however, that science underdetermines one's metaphysical view. Theology can "enter into the debate with the sciences as an equal partner at those points where the discussion concerns matters that are not (and could not be) empirically resolvable" (p. 259). In that sense, theology can go beyond an emergentist monism (which is defensible in the context of science) and the limited notion of supervenience articulated in the philosophy of mind. With the help of the theological resources available to him, Clayton in his final pages argues for a transcendental human subject, as an entity that is more than a set of mental properties (pp. 261f.). The penultimate section is thus entitled "The Break with Materialism."

At the end of this book, which is full of insightful remarks and guided by a particular vision, Clayton acknowledges that he has "moved beyond the realm of empirical knowledge and control" (p. 265). He openly gives theology a more independent role than it has in "natural theology." The theological assertions imported into the argument "never fully divest themselves of a component of faith and trust" (p. 265). If we do not share as trustfully in those convictions, there seems to be more tension left between the analysis of science and the philosophy of mind on the one hand and the theological nonreduction argued for on the other hand. Clayton seems to have brought such a reader to a position which is more naturalistic than Clayton would like. He has argued well for the presumption of naturalism, which should make us very reluctant regarding claims about particular divine actions. The analogy from the philosophy of mind to theology

did not deliver the theological goods hoped for, because in a secular philosophical discussion mind remains a natural, emergent phenomenon, whereas Clayton seeks to argue for God as a nonemergent and nonnatural being.

However, I wonder why such naturalist conclusions in the philosophy of mind should be a problem for a pantheist, which is what Clayton aspires to be. The pantheist does not believe that nature must be all there is, but what a pantheist or any other religious believer might call God's creation is nature as we have come to know it through the sciences as a multilayered reality; physics describes the lower level, whereas biology and psychology deal with irreducible but natural higher levels. Clayton opposes naturalism and pantheism, but it seems to me that this reflects more the dualistic heritage of theism (and the associated conception of immortality as disembodied existence) than the necessary consequences of pantheism. Clayton's approach is more ambitious than the modest approach of Peacocke, available to the pantheist, to take all natural processes, at all levels of nature, as modes of God's activity, but Clayton does not reach conclusions that convinced me. Even though Clayton opposes naturalism and pantheism, in the end he is a pantheist who is a naturalist in the understanding of physical processes in the world; to be consistent, it seems to me that he should also be a naturalist (though not a reductionist) in understanding mental processes.

One final disagreement. On page 200 Clayton calls this book "an introductory text." In this review, I have my agreements and disagreements with his text. This is one of the latter. What Clayton has written is definitely not an introductory text but rather a substantial book, exploring relevant literature and offering substantial arguments for a particular view.

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