

Emergentism and the Rejection of Spirit Entities: A Response to Christian Physicalists

Callie Joubert, Truth Exposed, P.O. Box 300, Paulshof, Johannesburg, South Africa 2056

Abstract

Emergentism comprises two theses: (1) there is no such thing as a pure spiritual mental being because there is nothing that can have a mental property without having a physical property, and (2) whatever mental properties an entity may have, they emerged from, depend on and are determined by matter. For Christian physicalists, the view of the human person in Scripture is accordingly monistic. Underlying this view is an appeal to neuroscience and the evolutionary history of human beings. The aim in this paper is to respond to their claims by taking Genesis 1:2 as the point of departure. The argument is that the Spirit's presence and creative activities at the beginning of creation serve as a paradigm for how we are to understand the relationship of the soul/spirit to the body and of the mind to the brain. Logical, epistemological, and ontological objections will show that radical emergentism as an explanatory theory of consciousness, mental states and personal agency is so implausible that it cannot be true.

Keywords: agency, body, consciousness, creation, emergence, evolution, free will, mental states, mind, naturalism, person, physicalism, scientism, spirit, soul.

Introduction

According to Peter Corning, "There are very few terms in evolutionary theory these days-not even 'natural selection'-that can command such an ecumenical following" (Corning 2003, p.1) as "emergence." In this he is quite correct. Professor of religion and philosophy Philip Clayton spoke for many emergentists when he said, "Emergence is, in my view, a necessary condition for a theological interpretation of the human person," although "not a sufficient condition" (Clayton 1999, p.22). I believe that Professor Clayton was spot on when he said that the "debate about the human person expresses the crux of the battle between physicalist naturalism and its opponents today" (Clayton 1999, p.24). But what is emergentism? Emergentism is a worldview which comprises the following three key elements:

- 1. Epistemology (theory of knowledge). What can be tested scientifically can be known. If there are other sources of knowledge, scientific knowledge must be considered as superior to it in kind. In other words, what and how we can know about the world is best determined by scientific methods. The term to express this attitude is scientism.
- 2. Creation account and the origin of life. What exist are the products of evolution—laws and processes of nature and chance—therefore objects of nature. The term to express this mental posture is naturalism. According to the evolutionary story of creation, over millions and billions of years there emerged genuinely new and novel "qualities" from matter, and "We can now trace human origins to an extinct common ancestor of both humans and

apes, a creature that lived 5–7 million years ago. Between then and now there have been a variety of hominid species" (Murphy 2006a, p. 87).

3. Ontology (view of the nature of reality and the kinds of things that exist). Physical monists hold that all existent entities and those coming to be consist solely of matter. The term that captures this mental posture is known as physicalism.

From this worldview follows two claims: (a) there is no such thing as a pure spiritual mental being because there is nothing that can have a mental property without having a physical property, and (b) whatever mental properties an entity may have, they emerged from, depend on, and are determined by matter. The aim in what follows is to refute these claims, by defending the following thesis: If Genesis 1 records the fundamentals of God's intention for how things of Creation are to function, then Genesis 1:2 presents the paradigm case (most clear example) for how the relationship between spiritual and material realities is to be understood.

In Section I, I will briefly focus on the Spirit's presence in Genesis 1:2. This serves as background against which three important parallel phenomena to that of the Spirit's relation to the earth in Genesis 1:2 will be discussed and make sense. In Section II, I will raise a number of logical, epistemological, and ontological objections to emergentism in the context of an analysis of an important analogy between God and God's Spirit, and that of human beings and their spirits. Attention will particularly focus on consciousness, mental states, and an agent view of persons. In Section III, I will provide further evidence

ISSN: 1937-9056 Copyright © 2011 Answers in Genesis. All rights reserved. Consent is given to unlimited copying, downloading, quoting from, and distribution of this article for non-commercial, non-sale purposes only, provided the following conditions are met: the author of the article is clearly identified; Answers in Genesis is acknowledged as the copyright owner; Answers Research Journal and its website, www.answersresearchjournal.org, are acknowledged as the publication source; and the integrity of the work is not compromised in any way. For more information write to: Answers in Genesis, PO Box 510, Hebron, KY 41048, Attn: Editor, Answers Research Journal. *The views expressed are those of the writer(s) and not necessarily those of the* Answers Research Journal *Editor or of Answers in Genesis.*

114

that the soul is not only different from its body but is also capable of existing without a body. Of importance will be Matthew 10:28 and Paul's argument from creation in 1 Corinthians 15.

I will begin by clarifying the position of Christian physicalism first.

Christian Physicalism

That the concept of emergence gained popularity among "Christian physicalists" is beyond dispute (cf. Brown and Jeeves 1998; Clayton 1999; Green 2008; Jeeves 2005; Murphy 2006b). They are Christians who wish to harmonize their faith with science, rather than the other way around. For them the concept of emergence is well suited to create a sort of middle view between strong physicalists (ostensibly a position that science demands) and dualists (people who believe that there are also immaterial, spiritual entities in the world, and that matter is not the only reality). The view of Christian physicalists can be stated as follows: The mind, consciousness and mental states are not completely identical to the brain (matter), although it emerges from, is caused by and dependent on the physical processes of the brain which are, in turn, capable of being influenced by the emergent mental phenomena.

For Christian philosophers and theologians like professors Ian Barbour, Philip Clayton, and Nancey Murphy, emergentism is completely compatible with their panentheism—a view of God's relation to the world that is also known as "naturalistic theism." Professor Clayton is representative in this regard:

[T]he last few decades have brought an important new opening for science-based reflection on the nature of God. This opening lies in the ascendance of the concept of emergence, and more recently in the development of the new field of Emergence Studies... (Clayton 2004, p. 5)

As a theological model, panentheism is responsive to the emergent turn... (Clayton 2004, p.9).

In contrast to pantheists who believe that God is all and all is God, and theists who believe that Creation is a product of a personal God and therefore dependent on Him for its continued existence (not vice versa), panentheists believe that God is in the world and the world is in God. Although God is distinct from the world, He is not separate from the world. God has also not created the world out of nothing (cf. Romans 4:17; Colossians 1:15–18; Hebrews 11:3); matter co-existed with God.

If that is true, then that amounts to a form of idolatry, for at least two reasons: (a) it is compromising the ontological distinction between God and created things and the nature of His sovereignty (Copan and Craig 2004, p. 15), and (b) it is ascribing to finite and contingent Creation the divine quality of eternality, a

quality that belongs to the Creator alone (1 Timothy 1:17). In other words, on the panentheistic view of God and emergentism, God is not before creation but with and dependent on creation for His continued existence and work in the world. The least we can say is that, if the world of matter coexisted with God (contrary to Genesis 1:1), then it would deserve the same veneration as the Creator. It is the impression we get from the following words expressed by Christian psychiatrist and naturalist Dr. Bert Thompson:

Ignoring [our] brain[s] is the equivalent of ignoring God. The more we are paying attention to these things [for example, feelings, memories], what our bodies—what our brains are telling us—the more we pay attention to God. The more [we pay] attention to the functions of [our] brain[s], the more [we] began to hear God in ways [we] had never heard him before (emphasis added) (Thompson 2010, p. 57).

We thus have reasons to be concerned when Christian physicalists suggest that the concept of emergence will render their "biblical" view of the human person scientifically acceptable. In this respect they are not hesitant to reinterpret Scripture to make it so. However, it raises a question: Is it the scientific discoveries themselves that lead to emergentist views of the human person or is it because emergent views underlie the interpretation of scientific discoveries?

Statements by Professor Nancey Murphy indicate that it is indeed scientism, naturalism, and physicalism that drives the hermeneutic enterprise. Here is how she expressed her physicalist thesis:

My central thesis is this...we are our bodies—there is no additional metaphysical element such as a mind or soul or spirit (Murphy 2006b, p.ix).

Elsewhere she expressed her naturalism as follows,

[N]euroscience is now completing the Darwinian revolution, bringing the mind into the purview of biology. My claim, in short, is this: all of the human capacities once attributed to the immaterial mind or soul are now yielding to the insights of neurobiology....[W]e have to accept the fact that God has to do with brains—crude as this may sound (Murphy 2006a pp.88, 96 cf. Brown and Jeeves 1998).

About science she said,

[F]or better or for worse, we have inherited a view of science as methodologically atheistic, meaning that science...seeks naturalistic explanations for all natural processes. Christians and atheists alike must pursue scientific questions in our era without invoking a creator...anyone who attributes the characteristics of living things to creative intelligence has by definition stepped into the arena of either metaphysics or theology (Murphy 2007, pp. 194–195).

Professor Murphy admitted that she could have called her position "nonreductive materialism," (Murphy 2006b, p.116) but prefer "nonreductive physicalism," (Murphy 2005, p.116) because the word "physicalism" indicates her agreement with the scientists and philosophers who hold that it is not necessary to postulate a metaphysical (immaterial) soul or mind in addition to the material body/brain. So whatever spiritual entities that emerge from the brain is considered as just a further stage in the evolutionary history of human beings (cf. Clayton 1999, p.4. Professor Clayton prefers to call his own version of naturalistic physicalism "emergent monism").

Christian physicalists suggested accordingly a physicalist theology.

By this [they] mean a Biblical and theological anthropology which can sustain a physicalist view of humans without loss or degradation of Biblical teachings, theological substance or critical doctrines (Brown and Jeeves 1998, p. 6).

A review of criticisms advanced against Christian physicalists show precisely the opposite of what they set out to accomplish (Delfino 2005; Garcia 2000, p.239; Larmer 2000; Siemans 2005). It will suffice to say that these criticisms revealed the exact opposite of what theologian Charles Hodge concluded a number of years ago:

The Church has been forced more than once to alter her interpretation of the Bible to accommodate the discoveries of science. But this has been done without doing violence to the Scriptures or in any degree impairing their authority (Hodge 1997, p. 573, cited in Ham 2001, p. 4).

In other words, the debate between Christians who adopt Darwinian evolution and emergentism and their critics must not be construed as a mere difference in hermeneutics (interpretation) of Scripture. It cuts far deeper.

The facts are threefold: (i) the common claim that no conflict exists between biblical Christians and evolutionists (Christians or secular) is contradicted by the evidence; (ii) just as it is impossible to believe that a single statement of fact (a proposition) can be both true and false at the same time, likewise one cannot logically and simultaneously believe in two contradictory explanations of creation and the origin of life. Either God created the spirit/soul and mind, and Scripture is true, or mindless natural processes did, and evolutionary emergentism is true. But not both!; (iii) the conflict is in essence a conflict of authority that involves the nature and character of God.

Section I:

Genesis

Few Christians will doubt that the New Testament makes it unequivocally clear that the texts of Genesis 1 are the basis of a number of foundational doctrines of the Christian faith. Four examples from Genesis 1 will suffice to substantiate the point. 1. Genesis 1:3

"Then God said, 'Let there be light'...." The text speaks of a condition of darkness, blindness, and lifelessness. It is said of Jesus that "In Him was life, and the life was the light of men. And the light shines in the darkness, and the darkness did not comprehend [or overpower] it....[He] was the true light which, coming into the world, enlightens every man" (John 1:4, 5, 9). Genesis 1:3 must be understood in a literal way, for the apostle Paul quoted the text when he said, "For God, who said, 'Light shall shine out of darkness' is the One who has shone into our hearts to give the light ... " (2 Corinthians 4:6; cf. Ephesians 1:18). We call this the doctrine of salvation which begins with liberation from darkness, spiritual life and illumination by the Spirit of God (cf. John 3:1-16, 6:63).

2. Genesis 1:4

"... and God separated the light from the darkness." Again, Paul had this text in mind when he revealed the following literal truth: "Do not be bound together with unbelievers; for what partnership..., or what fellowship has light with darkness? Or what harmony has Christ with Belial...Or what agreement has the temple of God with idols...Therefore, come out from their midst and be separate, says the Lord" (2 Corinthians 6:14-18 cf. James 4:4). Elsewhere the apostle used the text to remind the Ephesian Christians that "they were formerly darkness, but you are now light in the Lord; walk as children of the light....And do not participate in the unfruitful deeds of darkness, but instead even expose them" (Ephesians 5:8, 11). We call this the doctrine of sanctification (of holy and moral living).

3. Genesis 1:11

"Then God said, 'let the earth sprout vegetation, plants yielding seed, and fruit trees bearing fruit after their kind..." (cf. also verses 12, 20–22). The Creator did precisely that in Genesis 1:26–27; He created the first human person in His image and likeness (cf. Psalm 94:9; Ephesians 2:10). In Genesis 5:3 we are told that Adam "became the father of a son in his own likeness, according to his image." We call this the doctrine of created kinds.

4. Genesis 1:27

"And God created man in His own image, in the image of God He created him; male and female...." (cf. 2:24). Jesus used this text to show that marriage and its sanctity are not human inventions: "Have you not read that He who created them from the beginning made them male and female, and said, 'For this cause a man shall leave his father and mother, and shall cleave to his wife; and the two shall become one flesh?' Consequently they are no longer two, but one flesh. What therefore God has joined together, let no man separate" (Matthew 19:3–8).

It is interesting that Jesus did three things in Matthew 19. First, He showed Himself to confirm the literal creation of Adam and Eve on the sixth day of creation. Second, He showed the unity of Scripture by quoting from both Genesis 1 (verse 27) and Genesis 2 (verse 24). And third, He showed that He regarded the record of Genesis 1 and 2 as literal history. It follows that if Christians concede that people should not take Genesis 1 and 2 as written, then it would be inconsistent to expect the world to accept any part of Scripture as written. One last point, Paul used the same texts to reveal God's will concerning authority and leadership in the church (1 Corinthians 11; 1 Timothy 2:9–15).

Genesis 1:2

Scripture states that, "In the beginning God created the heavens and the earth" (Genesis 1:1). Verse 2 begins by removing all doubt as to how that could happen: "And the Spirit of God was moving [hovering] over the surface of the waters." The text indicates that the earth was there—in a certain condition ("waste" and "emptiness")—which required divine action. But God's action presuppose God's presence, otherwise God could not have acted on the earth. And for God to have been present through the Spirit's hovering, the Spirit had to be of the order of unembodied spiritual mind. This is how Scripture reflects the attributes of the Spirit:

Who has measured the waters in the hollow of His hand, and marked off the heavens by the span, and calculated the dust of the earth by the measure, and weighed the mountains in a balance, and the hills in a pair of scales? Who has directed the Spirit of the Lord, or as His counselor has informed Him? With whom did He consult and who gave Him understanding? And who taught Him in the path of justice and taught Him knowledge, and informed Him of the way of understanding? (Isaiah 40:12–14).

Genesis 1:2 makes one thing very clear. It would be a mistake to think, just because the Spirit cannot be seen (cf. John 4:24; 1 Timothy 1:17), that He is not present or active in the world. Now for the Spirit to have been present and active at the beginning of God's creation of the world imply that He made certain things possible. Put in the reverse, things were dependent on the Spirit's presence and activities for them to exist and to be in a certain condition. So whatever appeared or came into being during the six days of creation is to be explained by the Spirit of God—who existed prior to creation. The Spirit of God is therefore not an entity of nature, such as a natural physical process, but a supernatural agent.

What this means for emergentists is that they are under huge pressure to explain how spiritual mental entities can "emerge" from mindless matter if they are radically different in kind from the matter from which they supposedly emerged. In contrast, biblical Christians are under no such pressure, for God created kinds of things to reproduce their own kinds. And since God did exactly that Himself in Genesis 1:26–27, 5:1, they already have an instance of what an unembodied spiritual mind, consciousness and mental properties are like-in God. In different words, they have a paradigm case of what a conscious personal agent is, and they accept God as ontologically and epistemologically analogous with themselves. The same point can also be stated this way: If God is a perfect being (cf. Matthew 5:48), then it follows that our God is the most supreme example of a person, which means that it is consistent that something be both a person and an immaterial spirit. Since this is so, it follows that something is a person if and only if it bears a relevant similarity to the supreme example. Let us focus next on three important parallel instances of Genesis 1:2 in order to further demonstrate, and thus to confirm our initial intuition, that the Spirit exists prior to matter, that the Spirit as the Giver of life, and that the Spirit is the source of power in humans—both individually and corporately.

Genesis 2:7: The creation of man

Then the Lord God formed man of dust from the ground, and breathed into his nostrils the breath of life, and man became a living being [lit. soul] (Genesis 2:7).

The text (in context) allows for several immediate inferences. Firstly, the first human being was neither a self-caused being nor the product of physical processes of nature. Secondly, prior to breathing, the body and its organs (including the brain) were inoperative. Thirdly, with the inbreathing of the breath (Hebrew: ruach-spirit, wind) of life into the body, the creature became a living being, a unified centre of conscious thought, capable of experiencing emotions, having beliefs, desires, and the power to will things. Fourthly, it is reasonable to believe that the spirit, because of its capacities, will use the body and its organs as instruments to accomplish certain purposes and through which it can express itself (cf. Romans 6:13–19, 12:1). In other words, the spirit needs the body to do things in the world and the body needs the spirit to come alive. Since it is spirit that gave life to the body (cf. Isaiah 42:5, 57:16), and the spirit existed prior to it, the immaterial spirit did not "emerge" from an inactive material body.

It is thus reasonable to conclude that a living human being is a composite of two radically different ontological parts: immaterial spirit and material body. We could say, a unified whole of inner invisible and outer visible parts. But the emergent monist could object and say that the breath imparted to the body was no more than biological life; alternatively, that inner and outer are merely two aspects of the same being. But if that is so, then they need identity to make their case: if whatever we can say of the inner person can also be said of the outer person, then they are the same. If, however, we can say just one thing true of the inner person that is not true of the outer person, or vice verse, then they are not just two aspects but two different ontological realities and physicalist monism is false.

In Luke 11:40 it is recorded that Jesus said to the Pharisees, "You foolish ones, did not He who made the outside make the inside also?" If the "outside" and the "inside" were just two aspects of the same being, then Jesus' clear distinction would have made no sense to them: "For the Sadducees say there is no resurrection, nor an angel, nor a spirit; but the Pharisees acknowledge them all" (Acts 23:8). In the gospel of John Jesus said something to Nathanael about himself (his inner person) that was not true of his body: "Behold an Israelite indeed, in whom is no guile!" (John 1:47). The apostle Peter held exactly the same convictions as his Master. He contrasted the inner person and his imperishable qualities with the external body this way:

And let not your adornment be merely external braiding hair, wearing gold jewelry, or putting on dress; but let it be the hidden person of the heart, with the imperishable quality of a gentle and quiet spirit, which is precious in the sight of God (1 Peter 3:3–4).

We find confirmation for the radical distinction between inner and outer person in the apostle Paul's letters. He said that followers of Jesus ought not to "lose heart," for although their "outer man is decaying, yet [their] inner man is being renewed day by day" (2 Corinthians 4:16). Had the "inner man" and "outer body" been the same, then either they would decay together or be renewed together, but that is not what the apostle said. They are therefore neither the same things nor just two aspects of the same thing, but different ontological kinds of entities—despite their deep unity.

Ezekiel 37:1–14: The restoration of Israel

The immediate context indicates that it is a prophetic vision of a restored Israel in their land after many years of captivity in Babylon. Striking is the imagery that God used to depict their dire condition: dry and lifeless bones in a valley full of graves. In verses 4 to 6 the prophet is told to prophecy (proclaim the word of the Lord) to the dead (verse 8 informs the reader that "there were no breath [spirit; wind] in them"). A miracle occurred when the prophet did exactly that. The dry bones came together bone to bone, flesh appeared and skin covered the flesh. However, although the proclamation of the word of the Lord was absolutely essential, there had been no life apart from the Spirit of God. It was only when "the breath came into them" that they came to life. In fact, verse 10 shows that the proclamation of the word and the life-giving activities of the divine Spirit are inseparable, a truth Jesus emphasized in the following words: "It is the Spirit who gives life; the flesh profits nothing; the words that I have spoken to you are spirit and life" (John 6:63).

In sum, it is not difficult to see that God's restoration of Israel as a body of people parallels God's creative activity in Genesis 1:2 and the creation of Adam in Genesis 2:7. Without the Spirit/spirit there can be no life and power, a truth that brings us to Acts 2.

Acts 2:1–4: The body of Christ

In Matthew 16:18 Jesus said, "I will build My church," which began with His own infilling with the Spirit of God—in the visible form of an entity with wings (Matthew 3:16), the initial calling of twelve "bodily parts" (disciples), and their receiving of life and power in Acts 2. Verse 1 (of Acts 2) tells us that the disciples (now about 120 of them) "were all together in one place" when "suddenly there came from heaven a noise like a violent, rushing wind, and it filled the house where they were sitting" as well as each of them individually (verses 2 and 4).

Significant about the event is that it brought an immediate depth to their understanding of Scripture—"This is what was spoken of through the prophet Joel" (verse 16), said Peter-and there was a new understanding of the "flesh" and "soul" of Jesus in the context of His death and resurrection (verses 22-28), and the "ways of life" (verse 28; cf. also verse 38). The fact of the matter is that none of this would have been a reality without the Spirit-a clear parallel to the creation of Adam and the restoration of Israel. It is thus reasonable to conclude that Christian physicalists serve as serious distractions from the plain truth of Scripture. Our parallel instances of the Spirit's relation to creation in Genesis 1:2 make it hard to doubt that the Spirit/spirit is the ground of life, power and action in the world. This insight deepens when we consider an important analogy between our Creator and human beings created in His image and likeness.

Section II: Objections to Emergentism 1 Corinthians 2:11

In 1 Corinthians 2:11 the apostle Paul stated: For who among men knows the thoughts of a man except the spirit of man, which is in him. Even so the thoughts of God no one knows except the Spirit of God.

The analogy is clear enough: human beings stand to their spirits as God stand to the Spirit of God. But to come to a proper understanding of what this means, what it involves and entails require that we see a few things first.

Firstly, what is referred to as a thought in this text is known as a mental state or entity (as also a belief, sensation, feeling and desire); when a person is thinking or knowing something, his spirit is in a state of thinking and knowing something. Secondly, a mental state has intentionality, since it is of or about something, and therefore has content and meaning. Put another way, the spirit's mental states allows it to interact with itself and other objects in the world. Thirdly, mental states (for example, a thought about a spider one is now seeing) is characterized by certain attitudes-perhaps fear in the case of the spider. Fourthly, mental states such as a thought is characterized by self-presenting properties-things a person has direct awareness of. Fifthly, and most remarkably, mental states are conscious states of the spirit; if a person lacks consciousness, then he or she will not know what he or she believes, thinks about, desires, feels, or wills.

We can now state the relationship between the spirit and the knowing of its own thoughts as follows:

- 1. If the human spirit (or God's) includes thoughts, then the spirit is necessarily such that whenever a thought is exemplified, it exemplifies the spirit.
- 2. If the human spirit (or God's) entails thoughts, then the spirit is necessarily such that when a thought is attributed to it, then a capacity (to think) is attributed to it. Another way of saying the same thing is, when a thought is attributed to the spirit, then it is reasonable to believe that a thought belongs to it.

This characterization makes it reasonable to say this: If conscious thinking, self-awareness, and intentionality (knowing what one's thinking is of or about) are essential properties of the immaterial Spirit of God and the spirit of man, then they are selfpresenting properties. That is, they are distinctive properties of a conscious first-person, knowing and intentional entity (a subject). It means that I can adopt certain attitudes toward objects, for example, to believe they exist, hope they love me, fear or hate them. Our quoted text refers to the existence of the spirit of God and God's thoughts.

Now, if the function of a self-presenting property is to present the objects of mental states to a thinking subject, then one can know directly and immediately what one is thinking, desiring, or feeling right now. And that is precisely what the apostle told us in verse 10—he knew the thoughts of God as He revealed them to him as a spiritual mental person. This means that God has no need to communicate first to someone's brain before He communicates with him or her. In short, 1 Corinthians 2:11 underlines three truths: (1) private awareness of one's own mental life; (2) direct and immediate awareness of one's mental life; (3) the existence of an immaterial spirit and mental capacities.

Now if a person, say Joe, is nothing other than a material brain, then none of this would be true. To begin with. Joe has no access to his brain whatsoever, but Joe knows what he is feeling right now when, for example, you prick him with a pin. A neuroscientist may know all there is to know about brains, but he cannot tell what Joe is thinking now if he watches the activity of Joe's brain on a brain scanning machine. If Joe is now thinking about a red rose he saw yesterday, neither will the rose be in his head nor the red color. And yet, there will be something red, his sensation of red. All these examples indicate that Joe and his mental states are not the same as his body or brain matter. Put differently, none of the examples have any material properties, such as weight, width, length, density, elasticity, and so on. Not a single one of Joe's thoughts, desires, beliefs, or feelings could be placed on a scale (to determine their weight), measured with a measuring tape (to see how long or wide they are) or kicked around (like a soccer ball). So let us take a closer look at consciousness and what the emergentists have to say about it.

Consciousness, mental states and emergence

According to naturalist Evan Fales,

Darwinian evolution implies that human beings emerged through the blind operation of natural forces. It is mysterious how such forces could generate something nonphysical; all known causal laws that govern the physical relate physical states of affairs to other physical states of affairs. Since such processes evidently have produced consciousness, however construed, consciousness is evidently a natural phenomenon, and dependent on natural phenomena (Fales 2007, p. 120).

The question of how consciousness could emerge from matter is for the naturalist simply a question about how the brain works to produce mental states even though neurons (brain cells) are not conscious. In other words, they lack the ability to feel, as open-skull brain surgery amply demonstrates. We can therefore not afford to miss Fales' difficulty: consciousness cannot be natural when consciousness emerges from unconscious mindless matter—given Darwinian evolution. And in this he is not alone. Naturalist philosopher Jerry Fodor was direct and forthright when he confessed: Nobody has the slightest idea how anything material could be conscious. Nobody even knows what it would be like to have the slightest idea how anything material could be conscious. So much for the philosophy of consciousness (Boden 1998, p. 1).

Naturalist and professor of philosophy and psychology Margaret Boden agreed (Boden 1998, p. 10).

There is a second obstacle in the way of naturalists who try to explain the emergence of consciousness and mental states from matter, and it is found in their models through which they image its emergence. Why is it an obstacle? Invisible, immaterial entities are not imageable. Any use of a visual metaphor to illustrate or imagine how consciousness and mental states could emerge from matter is therefore void of any meaning whatsoever. A favorite example of naturalists to illustrate emergence is liquidity. The scientific explanation is that, given the collection of a number of water molecules, liquidity emerges. But that is not the whole story; a scientific explanation tells us what must happen when a number of water molecules gather together. In other words, it explains why it must be necessarily so and not otherwise.

Now, to apply the emergence of liquidity to the mind's interaction with the brain is a bad analogy. Firstly, liquidity is not caused by the water molecules; it just is a necessary feature of water molecules coming together. And neither does liquidity exercise any causal influence on the molecules as its constituent parts. Secondly, if a neuroscientist can find regular correlations between a person's mental life and brain activity, then that bears a relevant similarity to the spirit of God and creation in Genesis 1:2, and that means that those correlations must be unnatural for the naturalist, not natural. But since we cannot image or picture consciousness, we are not able to imagine the causal interaction between the mind and brain.

The real problem for emergentists is to explain how mindless matter can produce entities that are radically different from it in kind. Naturalist professor of philosophy D. M. Armstrong hit the nail on the head when he stated that

It is not a particularly difficult notion that, when the nervous system reaches a certain level of complexity, it should develop new properties. Nor would there anything particularly difficult in the notion that when the nervous system reaches a certain level of complexity it should affect something that was already in existence in a new way. But it is a quite different matter to hold that the nervous system should have the power to create something else, of a quite different nature from itself, and create it out of no materials (Armstrong 1968, p. 30).

What Professor Armstrong told his fellow naturalists is clear enough: two radically different entities (mind and matter) cannot emerge from purely physical parts. We can put it in another way. Any first member in a given series of subsequent members can only pass on what it itself possesses.

The short of what has been said so far is simply this: when Christian physicalists postulate the emergence of mental properties from brain matter, then they are falsifying naturalistic physicalism. Spirit is simply not a natural entity and at home in a naturalist/ physicalist/monist ontological view of the world. This is why Christian physicalists like Professor Murphy must reject the existence of the spirit, soul, and mind. From this follows another problem: once a person rejects the existence of spiritual entities, then that person cannot appeal to them to explain anything. Therefore, her view that the mental can emerge from the brain, and then exercise causal influence on brain processes and functions, amounts to either (a) an acceptance of the ontological difference between matter and mental spiritual entities (substance dualism), or (b) accepting the refutation of her own non-reductive physicalism. If one is willing to admit that consciousness and mental states are unique compared to all other entities in the world, then that radical uniqueness makes consciousness and mental states unnatural for an emergentist. It therefore follows, just because we cannot see consciousness on a brain scanning machine does not imply or entail that it does not exist.

One final remark will be in order. If a human being emerged from an ape, as emergentists hold, then there is absolutely no reason why an angel (an immaterial spirit) could not as well. To think that life just spontaneously began from lifeless, mindless chemical processes is analogous to think that a square circle can come into being spontaneously. The point is simple: what we are confronted with here is a something so implausible that it cannot be true. This is why naturalist and philosopher Paul Churchland reasoned that

The important point about the standard evolutionary story is that the human species and all of its features are the wholly physical outcome of a purely physical process...if this is the correct account of our origins, then there seems neither need, nor room, to fit any nonphysical substances or properties into our theoretical account of ourselves. We are creatures of matter. And we should learn to live with that fact (Churchland 1984, p.21).

It stands to reason, what comes from the physical by means of the physical can only be physical.

Agent causation and emergence

Neuroscientist Professor Michael Gazzaniga recently estimated that between "98 to 99 percent" of "cognitive neuroscientists share a common commitment to reductive materialism in seeking to explain mental phenomena" (cited in Snead 2007, p. 15). One of the one to two percent of non-physicalist neuroscientists who does not share this view, based on his interpretation of scientific data, is Mario Beauregard. However, he agreed that the "discipline of neuroscience is materialist" (Beauregard and O'Leary 2008, p.x). George Botterill and Peter Carruthers stated that "physicalism of one sort of another is now the default approach in the philosophy of mind" (Botterill and Carruthers 1999, p. 4).

It may therefore be a scary thought, but neuropsychiatrist and professor of neuroscience Richard Restak predicted that, "There is something wrong with his brain that made him do it" will replace the traditional "There is something wrong with him" (Restak 2006, p.2). Now if this is true, then 2 Corinthians 5:10 will be false, that we all must one day appear before God to give an account of what we have done "in the body." It is important not to miss what the apostle Paul said in this text. You, I, we-immaterial persons-will be judged for what we have done in and through the material body, and not the body itself. If the immaterial person is the same thing as the material body, then the body would have been included in the judgment. But that is not what Paul said. The simple reason is because the body can do nothing without a person causing it to do things in the world.

If we need to know what is at the bottom of all this, we need not look too far and for too long. This is how naturalist John Bishop explained it:

[T]he problem of natural agency is an ontological problem—a problem about whether the existence of actions can be admitted within a natural scientific ontology....[A]gent causal relations do not belong to the ontology of the natural perspective. Naturalism does not essentially employ the concept of a causal relation whose first member is in the category of person or agent (or even, for that matter, in the broader category of continuant or 'substance'). All natural causal relations have first members in the category of event or state of affairs (Bishop 1989, p. 40).

For Professor Timothy O'Connor—who is a theist, but not a naturalist—an agent view of freedom of the will, will be pointless since it out-rightly contradicts "the scientific facts" (O'Connor 2000, p.108). He therefore adopted a view of agent causal power as an emergent phenomenon. It becomes accordingly important to get clear about what is meant with agent and free will.

Firstly, an agent is a person with special capacities as part of his constitution—thoughts, beliefs, desires, sensations (feelings), the ability to know and understand things, practical judgment, and so on. Secondly, an agent must possess consciousness, otherwise he or she would be unable to present to him or herself possible courses of action and evaluate whether a given action is appropriate or not, including evaluating whether his or her beliefs, desires, feelings, or thoughts—associated with the action—is relevant or not. Thirdly, an agent must remain the same through change, otherwise the person who committed a crime a week ago and is now standing in front of the judge cannot be punished for his crimes (if he is found guilty).

Recall that thought implies a thinker (1 Corinthians 2:11). To refer to a thinker is to refer to a particular that has the thought; Jane is the owner/possessor of her consciousness and mental states. It further means the thinker is the bearer of her own properties, that the thinker exists prior to her properties and the mental states she exemplifies, thus that the thinker is a substance. The simple fact is that a substance remains the same through change; a leaf, for example, can go from green to red and still remain the same leaf. Now if a self/thinker emerges or emerged from thinking matter (a brain) then thinking causes a thinker—something that is logically incoherent. The converse is rather true; thoughts and other mental states depend on a self/thinker to become real. If no thinker, then no thought—simple!

Fourthly, an agent must be able to design an action plan. Consider the difference between basic actions and non-basic actions. Suppose you wish to buy bread from a bakery you recently heard about. Suppose further that you decided to drive to the bakery instead of riding your bicycle. Picking up your car keys is a basic action in a series of acts until you fulfilled your non-basic intention—the buying of bread. The point is, basic actions produce direct and immediate effects by the action. We can therefore say that agents have causal powers to produce direct and immediate results in the world.

Fifthly, and closely related to the previous point, given choice A (to raise one's hand to vote) or B (to leave the room), nothing else than the person determines that choice. The agent determines her own choice by exercising her causal powers and will to do one of two alternatives, or refrain from doing anything at all. That also says, if the agent willed to do A, she could also have willed B. She is thus a first or unmoved mover. It is granted, however, that her feelings, desires, beliefs, and thoughts may influence her choices, but free acts are in no way caused by prior events or states in her as an agent. Let me characterize what I have said so far in the following way:

- a. A person is a substance that has the power (ability) to cause a broom to move.
- b. A person exerts his or her power as a first mover (an uncaused cause of action) to cause the broom to move.

- c. A person has the ability to refrain from exerting his or her power to cause the broom to move.
- d. A person caused the broom to move for the sake of some final cause (for example, to clean the floor), which is the reason the person caused the moving of the broom.

We can also put it this way: a broom moves the leaves but is itself moved by my hand that is moved by me. In other words, I am the direct, primary, first unmoved caused of the leaves. We can see that both the broom and hand moving are events caused by me. However, a physicalist neuroscientist may object to this. We know from physiology that there are still other events between me and my hand moving, for example, the muscles in my arm and the events taking place in my brain. Even if that is so, the principle still holds: I am also the cause of my brain events. The objection is this: If the brain moves muscles and caused the hand to move, then there is no point to appeal to an agent as distinguished from an event—for the whole thing is a matter of causal relations among events or states of affairs.

There is a sense in which this objection is valid, for a person does not do anything with or to his brain, in the sense that he does with his hand and broom. But this does not imply that a person is not the first cause of whatever happened in his brain. The late Rodney Chisholm helped us to see this with a distinction he drew between "making something A happen" and "doing A" (Chisholm 1964, p. 394). If I, he said, reach for the broom to pick it up, then one of the things I do is just that—reach for the broom and pick it up. But if that is something I do, then it follows that it is something I know that I do. If you ask me whether I am doing something or trying to do something, I will immediately be able to tell you. However, during this whole process of me doing something, I made a whole lot of things to happen which are not in any sense things that I do: I would have made air-particles to move; I may have freed an ant heap from the pressure that had been upon it by the broom; I may also have caused a shadow to move from one place to another. What is the point? If these are merely things that I made to happen, as distinguished from what I do, then I may know nothing about them. And this is exactly how it works with so-called unconscious events in the brain. It is not to say that if I am not aware of making things to happen in my brain when I do something with the broom, that I am not the cause of events happening within my brain. The same point can be put slightly different. Whenever a person does a certain thing, then he makes a whole series of events to happen, only some of which are identified by him and by him as his doing that.

Whether this is something emergent physicalists will contemplate remains doubtful, for as naturalist John Bishop has indicated, natural agency is a problem for a naturalist scientific worldview. The question that arises now is: Are we responsible for our thoughts, beliefs, desires, emotions, and choices? Why is this an important question? If we are not responsible for these things, then an agent cannot be held responsible for her actions. However, if there was a time when Joe acquired them, then he could also not have acquired them, and is therefore responsible for them. And if he is responsible for his desires and beliefs, then so also the choices and actions they lead to.

Section III:

Matthew 10:28 and 1 Corinthians 15

In 2008 theologian Professor Gordon Zerbe wrote an article in which he made this statement:

...nowhere does Paul attach to this word [psychē] the idea of an 'immortal soul' temporarily resident in a body as its essential core (Zerbe 2008, pp. 1–2).

Professor Zerbe's statement might lead Christians to conclude that Paul did not believe in the existence of the soul or that the soul cannot survive the death of its body, and that would be a mistake. While we can concede that Paul did not refer to the "soul and the body," it is important not to ignore what Paul presupposed. In order to show that I will first present a brief analysis of Jesus' teaching in Matthew 10:28.

Matthew 10:28

It is important to look at the context in which Jesus uttered the following words:

And do not fear those who kill the body, but are unable to kill the soul; but fear Him who is able to destroy both soul and body in hell.

Verse 1 informs us that Jesus "summoned His twelve disciples" and "gave them authority over unclean spirits, to cast them out." Among his lessons was alerting them to the fact that they should not think that their mission would be without persecution or suffering (verses 17–18). In verse 26, Jesus told the disciples who not to fear, in contradistinction to Whom they ought to fear (verse 28). A few remarks will accordingly be in order.

Firstly, the context indicates that there are three types of persons capable of interacting with human persons: two immaterial, and one with matter as part of its constitution (the human person). The one kind of immaterial entity is a tormented disembodied unclean spirit (demon) which, to all appearances, desires a body to inhabit—human or animal; it needs a body simply because it is the vehicle through which it manifests itself (cf. Mark 5:1–15). The other kind of immaterial entity is the unembodied Holy Spirit, who does not need a body but is nevertheless capable of entering one (cf. Acts 2:1–4, 38). How that is so is of lesser importance than the fact that it is so. The important point to see is this: the metaphysical identity of immaterial spiritual entities neither depends on nor is determined by the material bodies they enter or exit. Now if this is true, then it is also true of human persons.

The naturalist therefore faces at least three difficulties. One, these phenomena cannot be adequately explained naturalistically. Two, these phenomena cannot be explained scientifically. And three, none of these phenomena are emergent phenomena. In other words, these phenomena favor a substantial self different from the body they inhabit.

Secondly, Jesus did not express something entirely new to His disciples. The Hebrew people believed that death did not completely remove the deceased from God's hand. Deuteronomy, 1 Samuel and other passages in Scripture (cf. Job 10:21–22; Ezekiel 26:20) and especially works written during the last two centuries preceding Jesus' birth (for example, the Apocrypha) testify to ancient Jewish beliefs. Must we think that the Jews' understanding of the soul (and the afterlife) was defective? Perhaps their understanding deepened over time. If their ideas had been completely erroneous, would not our Lord have corrected them? Whereas He scolded the Jews on many points, He never contradicted nor corrected their beliefs concerning the soul and hell.

This leads to a third and related point, and that is that Jesus' words in Matthew 10:28 gives us the reason for His choice of words: salvation and the reality of the afterlife. The facts of Scripture compel its readers to conclude that Jesus offered humankind the opportunity to have their souls saved—before death (John 3:1–16; James 5:20), and the hope of a new body—after death (Mark 9:42–48; Luke 16: 19–31; 1 Corinthians 15). In other words, the saving of the soul is the first in a process of total redemption. If we now refocus attention on Jesus' words, then we can summarize His logic as follows:

- 1. There are things God can do to the soul that is beyond the reach of men. Had the soul and body been identical, then men who killed the body would be able to kill the soul too, but that is contradicted by Jesus.
- 2. The soul and body is contrasted to express the truth of point (1).
- 3. Jesus had a reason for making the distinction between soul and body: it is a matter of life and death.
- 4. The soul survives the death of the body—there is a destiny awaiting every person after death.
- 5. There is Someone to fear, a fear that ought to exceed any fear of what men can do to the body.

Let us now focus attention on Professor Zerbe and the apostle Paul.

Professor Zerbe and the apostle Paul

There are at least five reasons to think that Professor Zerbe's statement represents a misconstrual of Paul's understanding of the ontological constitution of the human person and life between death and the resurrection. Firstly, while it has already been conceded that Paul nowhere attached "soul" to body, it is important not to ignore what Paul presupposed. I will therefore show next that Paul neither contradicted Jesus' choice of terms nor presented Christian teaching in a more exact way than Jesus, since these ideas could be unintended consequences of Professor Zerbe's statement.

Secondly, while Paul did not attach "soul" to body, he did attach "spirit" to body (cf. 1 Corinthians 7:34; 2 Corinthians 7:1). The fact of the matter is that soul and spirit are used interchangeably in Scripture (although there are exceptions). Here follows just a few examples:

- 1. Just as the soul stands in need of purification from sin (1 Peter 1:22), so does the spirit (2 Corinthians 7:1).
- 2. At death, either the "soul" or the "spirit" departs. Rachel's soul departed (Genesis 35:18) and the rich fool's soul was required (Luke 12:20); Elijah prayed that the dead child's life (breath/spirit) returns to his body (1 Kings 17:17, 21), and David committed his spirit to the Lord (Psalm 31:5).
- 3. A person can be troubled either in "soul" or in "spirit." Jesus was troubled in His soul (John 12:27 cf. Isaiah 53:11) as well as troubled in His spirit (John 13:21).
- 4. A person worships God either with the "soul" or the "spirit." David's soul rejoiced in the Lord (Psalm 25:1, 62:1, 103:1) and Mary's soul made the Lord great (Luke 1:46); Paul prayed with his spirit (1 Corinthians 14:14–15) and Mary's spirit worshipped the Lord (Luke 1:47)—note that this is an example of Hebrew parallelism, a poetic device in which the same idea is repeated using different but synonymous words.

Thirdly, just because Paul did not use "soul" in conjunction with body does not mean such a conjunction is not real. Jesus used "soul" and "body" in the same context as His reference to hell. As a fact, Paul never used the term hell. Are we now at liberty to conclude that there is no such reality, that Jesus was wrong and Paul more truthful to reality? Far from it. Paul used the word "destruction" instead of hell, and used "spirit" and "body" in the context of holy living and purification of sins—the things that would keep us from inheriting the kingdom of God (cf. 1 Corinthians 6:9–20 with 1 Corinthians 7:33–35, and 2 Corinthians 6:14–18 with 2 Corinthians 7:1ff.). The only Scriptural alternative to the kingdom of God is hell/destruction. There are therefore no grounds to think that Paul did not presuppose the teaching of his Lord and Savior.

There is, however, more evidence that indicates that Paul believed that we are not our bodies, including his belief in an immediate life with Jesus upon death of the body. To see this requires that we briefly follow Paul's argument in 1 Corinthians 15, which I will refer to as his "argument from creation."

1 Corinthians 15

Paul's argument from creation begins in verse 20; Jesus, the Christ, was the first member of a new Creation ("the first fruits") in a series of subsequent members of the same created kind. Death, Paul said, came by a man, so also the resurrection from the dead (verse 21). Through Adam, the first human, physical death came into the world; through the "last Adam" (verse 45) freedom from death through life (verse 22; cf. Romans 5:12–18). That all this must have been denied by the Corinthians is evident in verses 34 and 35. Significant in this regard is that Paul pointed out three sources of their ignorance (their "no knowledge of God"): (1) "bad company" (that is, physicalists who taught that the only things that exist are material in nature—cf. Acts 17:16–34, 18:1ff.), (2) an improper understanding of the Creator (cf. Matthew 22:29), and (3) an inadequate understanding of the Creation record in Genesis 1 and 2. Because of this, they could not fathom "how" the dead will be resurrected and "in what kind of body" (verse 35).

Deniers of the resurrection, Paul said, are "fools" (verse 36), which must have cut deeply into their hearts, for Greeks were lovers of wisdom—how to rightly discern the true nature of things that exist (1 Corinthians 1:22). The logic of Paul's turning to Genesis (the Beginning) to understand salvation and the end—the "how" and "in what body" of the new life—can therefore be put as follows (adapted from Worthington 2010, p. 139):

- (a) *Question*: "How are the dead raised? With what kind of body do they come?" (verse 35)
- (b) *Preamble*: Consider God's creation in Genesis 1 and 2 (verses 36–43).
- (c) *Answer*: A natural (*psychikon*) body is sown, it is raised a spiritual (*pneumatikon*) body.
- (d) Explanation: Compare Genesis 2:7—"the first man Adam" who was able to produce his own kind (Genesis 5:3)—with Jesus' resurrection (verses 44–49). Not only is He the first of His kind, but He is also able to produce after His kind, since He is now a "life-giving spirit" (verse 45).

In verses 38 and 39 Paul made reference to two realities: the ontological difference between the various bodies—men, beasts, birds, and fish—and the will and action of God in creation. That God "gives" each its body is certainly a creative act (it involves life, growth and change), therefore, of the same character as "formed," "created," and "made" in Genesis 2:7 and 5: 1 respectively. The important point is that human beings are separated from the rest of Creation (cf. Genesis 1:20–25 with the image of God in Genesis 1:26–27).

The challenge now is to determine whether Paul believed in an intermediate state and whether Genesis 2:7 depicts a human being as a composite of two different ontological realities (that is, an immaterial spirit/soul and material body). First there is the apostle Peter, whom Paul referred to in verse 5 of 1 Corinthians 15. It must have been during the period between Jesus' resurrection and departure from the Earth that Peter had discovered that Jesus was alive between His death on the cross and His resurrection from the dead. He informed us that Jesus went to proclaim the gospel of the new life in Him to those whose bodies perished during Noah's Flood because of disobedience and disbelief (1 Peter 3:18–21, 4:6). Not only were they—Jesus and those that perished-alive, but they had been alive without material bodies. It is therefore consistent for Paul to have said that, "He who descended [to the lower parts of the earth] is Himself also He who ascended far above all the heavens" (Ephesians 4:9-10). The point is simply this, had Jesus been identical with His body, then His identity would have been dependent on His body as well, and that is not so; His body underwent radical change. Put differently, had Jesus been subject to change in Himself (his inner immaterial spiritual person) due to the change that took place in His material body, then the writer of the letter to the Hebrews could not have stated that "Jesus Christ is the same, yesterday and today, yes and forever" (Hebrews 13:8). If it is true of Jesus, then it must be true of us, for He was fully human.

But what about the "soul," that it is not even mentioned by Paul in 1 Corinthians 15? Again, we should be careful not to ignore what Paul presupposed. The Greeks were familiar with the reality of the soul and the idea of immortality; what they could not grasp was the "how" and "in what body" the resurrection would happen. Moreover, in 2 Corinthians 5 Paul used the metaphor of "earthly tent which is our house" [not prison!] (verse 1); in verse 4 he clearly intimated the he (and we) are indeed residents "in this house," and in verse 10 he stated clearly that we would one day appear before the Lord to give an account of how we lived in the body. If the resident and the house were the same things, and the resident not its essential dweller, then God would have to judge the "house" as well, and that is not what Paul said. Why is the "house" excluded? By now we know the answer: It does not make sense to presuppose consciousness and self-awareness of matter for it to exist or to be so characterized. Further, consciousness and mental states has intentionality—they are of or about other things. In contrast, physical objects stand in various relations to other physical objects, but one physical object is not of or about another one. Why? Physical objects lack consciousness and intentionality.

That human persons are only "temporary resident[s]" in their bodies as long as bodily death is a reality of earthly life, is a truth expressed also by the apostle Peter: "And I consider it right, as long as I am in this earthly dwelling, to stir up by way of reminder, knowing that the laying aside of my earthly dwelling is imminent..." (2 Peter 1:13–14). For Paul, "to be absent from the body" (2 Corinthians 5:8) meant to "depart" from his earthly dwelling and "to be with Christ" (Philippians 1:23). Now if the dweller in the house is not the essential resident, then "laying aside," "to be absent from" and to "depart to" would make no sense.

One final point will suffice. While it is granted that God is immortal (1 Timothy 6:14–16), it is interesting that Scripture only speaks of the death and perishing of the human body, nowhere in the same sense of the soul/spirit. Solomon informed us that the dead body "will return to the earth as it was, and the spirit will return to God who gave it" (Ecclesiastes 12:7), and the apostle James told us that the "body without the spirit is dead" (James 2:26). Nowhere in Scripture does that order appear in reversed form. Further, and most importantly, God is a God of the living, not of the dead (Matthew 22:32). It would therefore be simply wrong to think that the soul/spirit do not continue to live between death and the resurrection.

Concluding Remarks

This entire paper was an attempt to refute the claims of Christian physicalists by showing that there is an analogy between the Spirit's relation to creation and the spirit/soul and its body/brain. In Genesis 1:2 we have a paradigm case of what a conscious personal agent is, and we accept an ontological and not merely an epistemological analogy with us. Three troubling areas for physicalists were discussed: consciousness, mental states, and agency. Emergentism not only defies commonsense; there is also no scientific evidence whatsoever for us to believe that something material could produce an entity of a kind radically different from itself. It follows that emergentism is so implausible that it cannot be true. This implies that Christian physicalists lack an adequate understanding of a mental substance and/or evolutionary theory.

If agency is a feature of both human and divine action, then three things follow. Firstly, it has implications for how a person interacts with the world. Secondly, substance dualism is as an obstacle to monism and naturalistic explanations of human persons. And thirdly, the truth of Genesis 1 and 2 is a powerful and a legitimate source of knowledge about the world, as is the rest of Scripture (2 Timothy 3:16–17).

Acknowledgments

I wish to thank the reviewers of this paper for their helpful and appreciated suggestions.

References

- Armstrong, D.M. 1968. A materialist theory of mind. London: Routledge & Kegan Paul.
- Beauregard, M., and D. O'Leary. 2008. The spiritual brain. A neuroscientist's case for the existence of the soul. New York: HarperOne.
- Bishop, J. 1989. Natural agency. Cambridge: Cambridge University Press.
- Botterill, G., and P. Carruthers. 1999. *The philosophy of psychology*. Cambridge: Cambridge University Press.
- Boden, M. 1998. Consciousness and human identity: An interdisciplinary perspective. In *Consciousness and human identity*, ed. J. Cornwell. Oxford: Oxford University Press.
- Brown, W. S., and M. A. Jeeves. 1998. Portraits of human nature: Reconciling neuroscience and Christian anthropology. *Science and Christian Belief* 11, no.2:139–150.
- Chisholm, R.M. 1964. Human freedom and the self. Retrieved on November 1, 2010, from http://www.oswego.edu/~echel/ Chisholm_Freedom.pdf.
- Churchland, P.M. 1984. *Matter and consciousness*. Cambridge: MIT Press.
- Clayton, P. 1999. Neuroscience, the person and God: An emergentist account. Retrieved on March 16, 2011, from http:// www.akademieforum.de/grenzfragen/open/Grundlagen/ Clay_Neuro/NeuroscienceThePersonAndGod.pdf.
- Clayton, P. 2004. The emergence of spirit. Retrieved on March 16, 2011, from http://philipclayton.net/files/papers/ EmergenceOfSpirit.pdf.
- Copan, P., and L.G. Craig. 2004. Creation out of nothing: A biblical, philosophical, and scientific exploration. Grand Rapids, Michigan: Baker Academic.
- Corning, P.A. 2002. The re-emergence of "emergence." A venerable concept in search of a theory. *Complexity* 7, no.6: 18–30. Retrieved on March 23, 2011, from http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.114.1724.
- Delfino, R.A. 2005. Christian physicalism and personal identity. Retrieved on February 2, 2011, from http://www. metanexus.net/magazine/tabid/68/id/10449/Default.aspx.
- Fales, E. 2007. Naturalism and physicalism. In *The Cambridge companion to atheism*, ed. M. Martin. Cambridge: Cambridge University Press.
- Garcia, R.K. 2000. Minds sans miracles: Colin McGinn's naturalized mysticism. *Philosophia Christi* 2, no.2:227–242.
- Green, J.B. 2008. Body, soul, and human life. The nature of humanity in the Bible. Grand Rapids, Michigan: Baker Academic.
- Ham, K. 2001. The big picture. Being wrong about the six days of creation does not automatically mean someone is not a Christian. But if you think that makes it unimportant, stand back and look at the big picture.... Creation Ex Nihilo 23, no.2:16–18. Retrieved on February 9, 2011, from http:// www.answersingenesis.org/creation/v23/i2/bigpicture.asp.

- Hodge, C. 1873. Systematic theology. Reprint Michigan: Wm. B. Eerdmans Publishing Co., 1997.
- Jeeves, M. 2005. Neuroscience, evolutionary psychology, and the image of God. *Perspectives on Science and Christian Faith* 57, no.3:170–186.
- Larmer, R.A. 2000. Christian anthropology: Saving the soul? *Philosophia Christi* 2, no.2:211–226.
- Murphy, N. 2005. Nonreductive physicalism. In Search of the soul: Four views of the mind-body problem, eds. J.B. Green and S.L. Palmer, pp. 115–152. Illinois: InterVarsity Press.
- Murphy, N. 2006a. Scientific perspectives on Christian anthropology. CTI Reflections 8:82–100. Retrieved on June 20, 2010, from www.lastseminary.com.
- Murphy, N. 2006b. *Bodies and souls, or spirited bodies?* Cambridge: Cambridge University Press.
- Murphy, N. 2007. In Intelligent design. science or religion? Critical perspectives, eds. R. B. Baird and S. E. Rosenbaum. New York; Prometheus Books.
- O'Connor, T. 2000. *Persons & causes*. New York: Oxford University Press.
- Restak, R. 2006. The naked brain: How the emerging neurosociety is changing how we live, work, and love. New York: Three Rivers Press.

- Siemans, D.F. 2005. Neuroscience, theology, and unintended consequences. *Perspectives on Science and Christian Faith* 57, no.3:187–190.
- Snead, O.C. 2007. Neuroimaging and the 'complexity' of capital punishment. Retrieved on November 9, 2010, from http:// www.works.bepress.com/orlando_snead/3/cgi/viewcontent. cgi?article=1002&context=orlando_snead.
- Thompson, C. 2010. Anatomy of the soul: Surprising connections between neuroscience and spiritual practices that can transform your life and relationships. Texas: Saltriver/Tyndale House.
- Worthington, J. D. 2010. The beginning and before: Interpreting creation in Paul and Philo. Ph.D. thesis, Durham University. Retrieved on April 8, 2011, from http://etheses. dur.ac.ak/397/.
- Zerbe, G. 2008. Paul on the human being as a "psychic body": Neither dualist nor monist. *Direction Journal*, 37, no.2:168–184. Retrieved on March 17, 2011, from http:// www.directionjournal.org/article/?1527.