Have We Lost Our Minds? Neuroscience, Neurotheology, the Soul, and Human Flourishing. By Stan W. Wallace. Eugene: Wipf & Stock, 2024. 209 pages. $31.00.

With the many advances in neuroscience, some Christians, such as the psychiatrist Curt Thompson, and the clinical psychologist, Jim Wilder, are advocating "neurotheology." They advocate a physicalist view of humans to integrate neuroscience with spiritual formation. For Wilder, brain science is changing "the understanding of human nature that has dominated Christian theology since the Middle Ages" (8). Due to these changes, they have shifted away from the traditional Christian view that humans are a unity of body and soul. Thus, they stress brain formation, rather than soulish formation with its focus on beliefs and choices, as the key to spiritual maturity.

Wallace acknowledges the advances discovered in neuroscience, as well as the admirable goals of Thompson and Wilder, such as the desire to help us realize how neuroscientific knowledge can help us become more Christ-like. Yet Wallace also realizes the importance of ontology as prescriptive for how we can flourish and grow. While the topics of neuroscience, human ontology, and spiritual formation have considerable depth to them, Wallace writes in a way that is accessible for anyone willing to think carefully about them. It is a skillful application of important biblical and philosophical principles to a particularly important, contemporary topic for Christians.

In chapter 1, he surveys key neuroscientific discoveries that Thompson and Wilder use to support their neurotheology. One is the correlation between brain regions and our mental life, and the other is the neuroplasticity of the brain, that is, its ability to be reshaped for better functionality (15–16). Thompson and Wilder use these good findings to conclude that we are essentially our brains (16–19). Moreover, in chapter 2, he surveys how Wilder and Thompson draw upon scripture to support their neurotheology. For Wilder, our need to experience loving relationships with others is "attachment love," which is a property of the brain (29). For Thompson, mental events are brain events (30).

In chapter 2, Wallace also defends the image of God in us as being fundamentally immaterial (33), and that our body and soul are deeply united. In contrast, he rightly sees how views, such as Gnosticism, deny that unity, and they have created much trouble in church history, including a rejection of the importance of the body in our spiritual formation. Ultimately, he argues that we are essentially a soul that has a body (35) that are in a deep, functional unity.

In chapter 3, Wallace contends that the neurotheological view of humans is predicated on their mistaken identification of mental events with neural events. They confuse constant correlation with identity (43–7). There are three fundamental reasons why mental events cannot be reduced to brain events (47–55). First is the primacy of the first-person perspective, which is not reducible to a third-person perspective. For

instance, a patient has a privileged access to the feeling caused by a brain surgeon's stimulus of the brain.

Second is free will. Although Wilder and Thompson rightly presuppose human free will, Wallace counters that brains cannot make choices. Like all other physical things, they are subject to the laws of chemistry and physics. Third, our abilities to reason undercut the reduction of mental events to brain events, and of the mind to the brain (54–5). As physical things, brains lack free will to compare data, see logical relations, and reach rational decisions.

Then, in chapter 4, Wallace rebuts Wilder and Thompson's contention that we are physical beings, even a brain. Wallace uses two familiar arguments. For one, we are a unity at a time, in that our experiences of the world and ourselves are "bound together into a unified whole" (64). But brains do not have unified experiences (66–7). Instead, only the soul, since it is not composed of separable parts, can unify the aspects of our mental life (68–9).

For another, we are a unity through time. We can think through a train of thought over time and reason to a conclusion. In contrast, since the brain always is changing, there is no basis for our unity and sameness of person through time on the neurotheological view (74).

Here we also see how Wilder misinterprets Dallas Willard about the soul and spiritual formation. Wilder claims that Willard "describes the soul as 'that part of the person that integrates all the other dimensions to make one life.'" But Wilder goes on to claim that "when Dallas describes our experiences of the soul . . . he could hardly have described the cingulate [cortex] in clearer terms" (64). However, Wallace clearly shows that Willard embraced substance dualism (120).

Wallace shifts in chapter 5 to explore what we can learn about the soul from philosophy that also fits with the biblical portrait. He introduces essential natures; for humans, it is the "specific set of highest-order capacities shared by all and only human persons" (85). Capacities are the "ability to manifest a property," such as rationality. All humans have this capacity as part of their nature, but not all may exemplify it. Also, he gives a particularly useful discussion of a hierarchy of capacities which he will use insightfully later when discussing spiritual formation. A first-order capacity is one we can exemplify now, such as my ability to pay attention to my feelings. A second order capacity would be the ability to think about that feeling. In turn, that can involve a still higher-order capacity, to assess whether I should act on it, which in turn requires still higher-order capacities. According to Wallace, our highest-order capacities define our essential nature, that is, what kind of thing a human being is (83).

Wallace continues to discuss six faculties of humans. These include the mental, emotional, volitional, social, spiritual, and sensory faculties. The chapter concludes with a treatment of four features of individual, or particular, human natures as a substance.

Chapter 6 focuses on the unity of the soul and the body. He explores ways in which the soul and the body interact with each other as a helpful corrective to Cartesian dualism (96–103). He argues for a "holistic dualism," in which the soul develops a body appropriate for it due to its nature. Thus, there is a deep, functional unity between the body and soul (107–11).

Chapter 7, however, examines counterarguments from neurotheology, including science should guide us, and neurotheology helps many people. Against the first, Wallace argues against scientism, drawing on arguments used in the philosophy of neuroscience. Second, though their claims have helped some people, such as to pay attention to their feelings and other awarenesses, this still occurs despite their neurotheology.

Chapter 8 treats neurotheologians' arguments against holistic dualism, of which I will address two. First, neurotheologians claim their view is simpler ontologically than dualism and therefore should be preferred. However, while Ockham's razor is helpful when other considerations are roughly in epistemic parity, we have seen that they are not in this case.

The second objection is common: since souls and bodies would be radically different ontologically, how could they interact? Yet Wallace counters with five helpful rebuttals. Then he provides us with an especially useful explanation of how both Cartesian and Platonic substance dualism have led to this interaction objection. For Plato, the material and immaterial realms are radically separated. But, as Wallace perceptively points out, those who reject holistic dualism seem to have misunderstood Aristotle's relationship of form and matter (141), and therefore they wrongly "identify all Greek thought with Plato's idea that matter and spirit are very separate, which they reject" (141).

Chapter 9 focuses on praxis: how we can best love God considering Wallace's findings? He posits holistic dualism as a middle way for spiritual formation between two extremes, Platonic/Cartesian dualism and physicalism. The former has led to errors of just focusing on "spiritual" activities while ignoring the importance of the body in our formation. Yet, physicalism utterly denies the soul and makes it impossible to be conformed into Christ's image.

Then Wallace makes application to how our formation and flourishing involve our exhibiting all our "highest-order capacities at the first-order level" (152). Here, he addresses various forms of blockages that impede our development of these capacities,

and he offers suggestions to help address them (152–9). These observations should be very fruitful for use in spiritual formation.

Chapter 10 applies his conclusions to how we can best love others in two ways: (a) as Christ's ambassadors in sharing the gospel and promoting the common good; and (b) in our professions. In terms of the gospel, physicalism undermines sin's reality by reducing it to just brain states. But sin involves wrong thoughts, attitudes, and choices, which are mental states. However, if sin is not real, we are not separated from God and do not need Christ's atoning work.

Wallace also applies holistic dualism to bioethical issues, such as abortion, and to the basis for social justice. Crucially, the latter is undermined by physicalism, for on it, we differ in functional abilities and have no basis for intrinsic, essential value. He also offers excellent suggestions for further investigation for our formation in the context of education, medicine, business, architecture, law and politics, science, computer science, and vocational ministry.

In light of Wilder's and Thompson's assumption to provide us knowledge of how to become more Christlike, there is a suggestion that I would make. Repeatedly, I see Christian physicalists make claims that presuppose we can have knowledge. But I think this is false because without irreducible intentionality (the ofness or aboutness of our thoughts, beliefs, experiences used to make observations, and almost all other mental states), there will not be knowledge of the facts of reality. Why? Such knowledge is a justified true belief. So, consider a belief: it seems impossible to have a belief and not be about anything, even if that thing does not obtain, such as Pegasus. Thus, intentionality is essential beliefs, and so without intentionality, there will not be knowledge.

So, crucially, can intentionality be preserved on a physicalist ontology? I have argued elsewhere that it cannot (Naturalism and Our Knowledge of Reality (London: Routledge, 2014)). Here I will highlight one main reason. As a naturalist, Daniel Dennett denies that there is real intentionality. Instead, there are only interpretations we make of behaviors to predict what someone (or something) will do. For example, while we may talk as though two chess players have beliefs about how to checkmate each other's king, there are only behaviors that the onlookers interpret and ascribe to the players as their intentions.

Dennett also denies there are any essential natures, which is consistent

with the physicalism of the neurotheologians. If there were essences, Dennett admits there could be a real fact of the matter of what the players had "in mind" when they made their moves. They really could have beliefs that are about how to checkmate their

opponent's king. But since there are no essences, everything becomes just a matter of interpretation.

However, if so, then we are faced with an infinite regress of interpretations, without a way to get started to form an initial interpretation. Without real intentionality, there are no real beliefs, and without them, knowledge becomes impossible. But this result seems utterly mistaken; we have awarenesses of various things and we form beliefs about them, and we can know that they are about their objects.

Now, if there is no knowledge available on a physicalist ontology, including that of the neurotheologians, then their claims cannot give us knowledge, especially of spiritual formation. Further, without intentionality, we could not enter into, much less be formed by, personal relationships, with other humans or God, for those presuppose that we can have beliefs, thoughts, experiences, feelings, and more about others.

That suggestion notwithstanding, Wallace's book is accessible, richly documented, and provides for further investigation, including by scholars. It would be a good text in applied undergraduate philosophy courses and graduate ones in spiritual formation and soul care. It also would be excellent for discussions among professionals and interested people in churches and beyond. I highly recommend it.

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