

ALISTER MCGRATH'S ANTI-MIND-BODY DUALISM:
NEUROSCIENTIFIC AND PHILOSOPHICAL
QUANDARIES FOR CHRISTIAN PHYSICALISM

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I. INTRODUCTION

Here is a staggering truth: the ontology of the human person currently embraced by the most vocal Christian scholars working on this issue is a view that almost no Christians thought plausible only 100 years ago. Until recently, the dominant view among Christian thinkers has been various forms of mind-body dualism (hereafter, dualism), according to which the human person comprises body and soul.¹ In stark disagreement, many contemporary Christian scholars vigorously advance antidualism and defend physicalism (reductive or nonreductive), understanding the human person as fundamentally physical.² These Christian physicalists proffer the strong impression of a uniform rejection of dualism across the neuroscientific, theological, and philosophical communities, as if dualism has been defeated, just as phlogiston was in the 1770s.

Here is another staggering truth: this *certain-defeat-of-dualism* narrative is demonstrably false. There is, in fact, a growing resurgence of dualism in philosophy. The recent *Blackwell Companion*

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¹See Paul Gavarilyuk, "The Incorporeality of the Soul in Patristic Thought," in *Christian Physicalism? Philosophical Theological Criticisms*, ed. Keith Loftin and Joshua Farris (Lanham, MD: Lexington Books, 2017), 1–26; and Thomas Atkinson, "Christian Physicalism: Against the Medieval Divines," in Loftin and Farris, *Christian Physicalism?*, 27–42. This isn't to say that dualism was the only view, as there is a tiny minority of Christian physicalists in the history of the church. See, for example, Hud Hudson, *A Materialist Metaphysics of the Human Person* (Ithaca, NY: Cornell University Press, 2001), 167–80.

²See, e.g., Joel Green, *Body, Soul, and Human Life: The Nature of Humanity in the Bible* (Grand Rapids: Baker Academic, 2008); Nancey Murphy, *Bodies and Souls, or Spirited Bodies?* (Cambridge: Cambridge University Press, 2006); Malcolm Jeeves and Warren S. Brown, *Neuroscience, Psychology, and Religion: Illusions, Delusions, and Realities about Human Nature* (West Conshohocken, PA: Templeton Foundation Press, 2009); Trenton Merricks, *Objects and Persons* (Oxford: Oxford University Press, 2001); Peter van Inwagen, *Material Beings* (Ithaca, NY: Cornell University Press, 1990); and Kevin Corcoran, *Rethinking Human Nature* (Grand Rapids: Baker Academic, 2006).

to *Substance Dualism* evidences this resurgence,³ as do a number of recent books⁴ and articles.⁵ There is also a growing acknowledgment that the most cited objections to dualism are not as strong as once thought. For example, José Gusmão Rodrigues, although not a dualist, nonetheless acknowledges that, “at the current stage of inquiry, we have no decisive reasons to rule out all forms of substance dualism and that in turn gives us reasons to explore these neglected theoretical options.”⁶ Such a fair-minded and informed assessment is largely absent in contemporary Christian objections to dualism.

This essay attempts to move this conversation forward by carefully considering Alister McGrath’s objections to dualism. McGrath’s work deserves attention for two reasons. First, McGrath is a prominent theologian whose work has had, and rightly so, a substantial impact on academics and the church at large. Second, McGrath has unique qualifications as both a theologian and a scientist, which give us reason to expect a well-reasoned and well-researched treatment of dualism.

In the first section of my paper, I argue that McGrath’s objections to dualism fail for a variety of reasons. I give special attention to his argument that neuroscience is incompatible with dualism. In the second section, I develop two arguments against McGrath’s antidualism, each of which could pose problems for Christian physicalism in general. The first problem arises from advances in the neuroscience of consciousness. The second problem reveals a deep tension between McGrath’s defense of theistic belief from studies in cognitive science that I argue provide equal if not greater *pro tanto*

³Johnathan Loose, Angus Menuge, and J. P. Moreland, eds., *The Blackwell Companion to Substance Dualism* (Oxford: Wiley Blackwell, 2018).

⁴See Howard Robinson, *From the Knowledge Argument to Mental Substance: Resurrecting the Mind* (Cambridge: Cambridge University Press, 2016); Geoffrey Madell, *The Essence of the Self* (New York: Routledge, 2015); Howard Robinson and Andrea Lavazza, eds., *Contemporary Dualism: A Defense* (London: Routledge, 2013); Richard Swinburne, *Mind, Brain and Free Will* (Oxford: Oxford University Press, 2013); Benedikt Paul Göcke, ed., *After Physicalism* (Notre Dame: University of Notre Dame Press, 2012); Mark C. Baker and Stewart Goetz, eds., *The Soul Hypothesis: Investigation into the Existence of the Soul* (New York: Continuum, 2011); Stewart Goetz, and Charles Taliaferro, *A Brief History of the Soul* (Oxford: Wiley-Blackwell, 2011); and Alessandro Antonietti, Antonella Corradini, and Jonathan Lowe, *Psycho-Physical Dualism Today: An Interdisciplinary Approach* (Lanham, MD: Lexington Books, 2008).

⁵See, e.g., C. Stephen Evans and Brandon Rickabaugh, “What Does It Mean to Be a Bodily Soul?,” *Philosophia Christi* 17.2 (2015): 315–30; Martine Nida-Rümelin, “The Argument for Subject Body Dualism from Transtemporal Identity Defended,” *Philosophy and Phenomenological Research* 86.3 (2013): 702–14; J. P. Moreland, “A Conceptual Argument for Spiritual Substantial Soul,” *RelS* 49.1 (2013): 35–43; N. M. L. Nathan, “Substance Dualism Fortified,” *Philosophy* 86.2 (2011): 201–11; and Dean Zimmerman, “From Property Dualism to Substance Dualism,” *Aristotelian Society Supplementary Volume* 84.1 (2010): 119–50.

⁶José Gusmão Rodrigues, “There Are No Good Objections to Substance Dualism,” *Philosophy* 89.2 (2014): 221. See also, William Lycan, “Giving Dualism Its Due,” *Australasian Journal of Philosophy* 87.4 (2009): 551–63.

justification for dualism. Along the way I make mention of how both arguments apply to the works of other antidualists.

II. ANALYZING MCGRATH'S ANTIDUALISM ARGUMENTS

I will focus on four of McGrath's objections to dualism, which can be summarized as follows.

- Dualism embraces platonic views that are incompatible with Christianity;
- Dualism is based on a mere Greek idea, not on a biblically faithful anthropology;
- Biblical arguments for dualism are based on false interpretations of "soul" and "spirit";
- Dualism is at odds with science, especially neuroscience.

In this section, I state and clarify McGrath's objections to dualism in various publications, especially his chapter, "Souls: On Being Human," in a recent book on faith and science.⁷ Often McGrath's objects are underdeveloped and merely asserted. In these cases, I do my best to offer plausible ways of strengthening these arguments. Following each of McGrath's objections, I will offer various lines of criticism.

A. *Confusing the Thesis of Mind-Body Dualism*

The thesis of mind-body dualism is often misunderstood. McGrath is not immune and has inherited these confusions. Clarifying the dualist thesis will help move the conversation forward. The core thesis is as follows. In *mind-body dualism*, the human person is not identical to a physical body but consists of a physical body and a nonphysical substantial soul. While dualists will often make additional claims about the nature of the soul and body, this is the common thread running through all forms of mind-body dualism.

To begin with, McGrath confuses the basic thesis of dualism with specific views about the ontology of the soul and body. For example, McGrath ties dualism to "the idea of an immortal soul, trapped within the human body and only able to escape at death."⁸ After briefly stating Plato's views, McGrath claims that "Descartes developed a similar position."⁹ McGrath concludes that we ought to reject dualism. These claims and McGrath's overall thesis that dualists embrace Plato's view are misleading and demonstrably

⁷Alister McGrath, *The Big Question: Why We Can't Stop Talking about Science, Faith and God* (New York: St. Martin's, 2015).

⁸Ibid., 131.

⁹Ibid., 137.

false.¹⁰ In what follows I compare the similarities and dissimilarities between the views of Plato, Augustine, and Descartes in reply to McGrath's thesis that dualism is Platonic dualism.

Consider first their views on the relationship between the soul and body. In agreement with Plato,¹¹ Augustine holds that the soul imparts life to the body (all living things, including plants, animals, and human bodies).¹² Descartes famously rejected this, opting instead for a mechanistic view of the body.¹³ Descartes, however, rejects the anti-embodiment view that McGrath attributed to him, that the soul resides in the body "as a pilot resides in a ship," but rather that they form a kind of natural unity "most closely joined" and "as if intermixed."¹⁴ Although Descartes rejects the life-giving power of the soul, he refers to the soul as a "substantial form,"¹⁵ and as "substantially united"¹⁶ with the body. Descartes's view is closer to scholastic-Aristotelian theories of soul-body union than to Plato's view.¹⁷

Both Augustine and Descartes explicitly reject Plato's view that the body is an evil prison for the soul.¹⁸ Augustine argues that embodiment is a great good, such that a disembodied soul is impoverished and not fully human.¹⁹ For Augustine, the union of soul and body is "an order of things so great and so divine" that nothing better could be linked together.²⁰ Similarly, Descartes argues that our embodiment is teleologically orientated to preserve and

¹⁰For a helpful treatment of various types of mind-body dualism, see Stewart Goetz and Charles Taliaferro, *A Brief History of the Soul* (Oxford: Wiley-Blackwell, 2011).

¹¹Plato, *Phaed.*, 105c-d.

¹²See St. Augustine, *Immortality of the Soul*, trans. Ludwig Schopp (Washington, DC: Catholic University of America Press, 1947), 3:3; Augustine, *The Magnitude of the Soul*, 33:70; Augustine, *The City of God*, trans. M. Dods (New York: The Modern Library, 1993), VII:29; Augustine, *The Trinity*, X.2.6; Augustine, *The Magnitude of the Soul*, 13:22, cf. 33:72.

¹³René Descartes, *Treatise on Man*, 108. See also, Sarah Broadie, "Soul and Body in Plato and Descartes," *Proceedings of the Aristotelian Society* 101.3 (2001): 295-308.

¹⁴René Descartes, *Meditations on First Philosophy, Sixth Meditation*, 81 (1641), in *Descartes: Selected Philosophical Writings*, vol. 2, trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (New York: Cambridge University Press, 1988), 56. Hereafter CSM refers to this edition of Descartes's work. See also *Discourse on Method* 1637, part 5:59 (CSM I 141), and *Meditations on First Philosophy, Objections and Replies* 228 (CSM II 160).

¹⁵René Descartes, *Letter to Regius*, CSM III, 207-8.

¹⁶René Descartes, *Letter to Mesland*, CSM III, 243.

¹⁷See Paul Hoffman, "The Unity of Descartes' Man," *The Philosophical Review* 95 (1986): 339-69. For a critical treatment of Hoffman, see Marleen Rozemond, *Descartes's Dualism* (Cambridge: Harvard University Press, 1998). For a response to Rozemond, see Justin Skirry, *Descartes and the Metaphysics of Human Nature* (London: Thoemmes-Continuum Press, 2005).

¹⁸Plato, *Phaedr.*, 250c.

¹⁹St. Augustine, *The Catholic and Manichaean Ways of Life*, trans. Donald Gallagher and Idella Gallagher, in *The Fathers of the Church*, Vol. 56 (Washington, DC: Catholic University of America Press, 1966), I.IV.6.

²⁰Augustine, *The Magnitude of the Soul*, 36:81.

promote human flourishing.²¹ This contradicts the claims of McGrath mentioned above.

What about the soul's dependence on the body? Here we must be careful in what we are asking. It is clear that, like Plato,²² Augustine and Descartes believed that the soul in no way depends upon the brain or body for its continued existence or ability to think.²³ Things are more difficult to answer when talking about the cognitive dependence of the soul on the body. None of these philosophers hold that cognition is a fully bodily process. However, Augustine and Descartes think that some kinds of cognition cannot occur without a body. Descartes held that memory, imagining, and perceiving by the senses were dependent on the brain.²⁴

Consider now their views on the nature of the soul. According to Plato, souls existed before embodiment²⁵ and are indestructible.²⁶ Augustine and Descartes, however, talk of the soul, not as indestructible, but as immortal, as surviving the death of the body only in virtue of God's activity.²⁷ Famously, Plato talks of souls as having three parts (appetitive, spirited, and rational),²⁸ although, a charitable interpretation is that Plato is talking about aspects of the soul and not literal parts.²⁹ Ultimately, Plato held that souls have no parts but are simple substances.³⁰ Here Augustine agrees that the soul, unlike the body, has no parts, but is a simple substance.³¹ While Descartes reserves talk of simplicity for natures and not the soul, he does talk of the soul as indivisible.³² Both Plato and Descartes hold that the soul is not spatially located.³³ In addition to not being spatially located, Augustine thinks that the soul is wholly present in each space that its body is present.³⁴ The soul, says Augustine, "has no mass spread out in space, but in any body it is whole in the whole

²¹See Descartes, *Meditations on First Philosophy*, 81–82, CSM II, 56. For an excellent treatment of this underexplored aspect of Descartes's thought, see Lisa Shapiro, "Descartes' Passions of the Soul and the Union of Mind and Body," *Archiv für Geschichte der Philosophie* 85 (3):211–48.

²²Plato, *Phaedr.*, 247d; idem, *Theaet.*, 184c–d.

²³René Descartes, *Discourse on the Method*, 59 CSM I, 141.

²⁴Descartes, *Meditations on First Philosophy*, 358, CSM II, 248. See also *Treatise on Man*, 178 CSM I, 107, and, *The Passions of the Soul*, 359, CSM I, 343.

²⁵Plato, *Phaed.*, in *Plato: Complete Works*, ed. John M. Cooper (Indianapolis, IN: Hackett, 1977), 70c–72e. All references to Plato are from this volume.

²⁶Plato, *Phaed.*, 105d–e.

²⁷Descartes, *Discourse on the Method*, 141.

²⁸Plato, *Tim.*, 71a, 77b; idem, *Republic*, 440e–441a.

²⁹See Christopher Shields, "Plato's Divided Soul," in *Partitioning the Soul: Debates from Plato to Leibniz*, ed. Klaus Corcilius and Dominik Perler (Berlin: de Gruyter, 2014), 15–38.

³⁰Plato, *Phaed.*, 78c.

³¹Augustine, *Greatness of the Soul*, 1.2; 13.22, and 14.23.

³²René Descartes, *Meditations* VI, 196. See Marleen Rozemond, "The Faces of Simplicity in Descartes's Soul," in Perler and Corcilius, *Partitioning the Soul*, 219–44.

³³Descartes, *Meditations* VI, 190.

³⁴Augustine, *The Immortality of the Soul*, 16.25; and idem, *Letters* 156–210, in *The Works of Saint Augustine: A Translation for the 21st Century*, Vol. 3., trans. R. Teske, (New York: New City Press, 2004), 166.2.4.

and whole also in any part of the body."³⁵ The soul is located in space although not extended in space. It seems that Descartes adopted this scholastic view as well, which is out of step with Plato's dualism.³⁶

McGrath's characterization of dualism is inaccurate. His rightful repudiation of Plato's view applies neither to Descartes's view nor to contemporary dualism. To embrace dualism does not require one to embrace Cartesian or Platonic dualism. The minimal dualist thesis, as stated above, permits an expansive logical space for various forms of dualism, some of which are not only distinct from but even incompatible with Platonic and Cartesian dualism.

On *Neo-Cartesian dualism*, the soul is reduced to the mind, where the body alone has physical properties, while the soul alone has pure mental properties.³⁷ Cartesian dualists hold various views of embodiment. Richard Swinburne rejects the view that the soul is the person and that the body, although temporarily linked to the soul, is not a part of the person. According to Swinburne, all the parts of one's body are parts of that person. "The person," says Swinburne, "is the soul together with whatever, if any, body is linked temporarily to it."³⁸ Charles Taliaferro, however, defends what he calls *integrative dualism*. Being an embodied person, on Taliaferro's view, consists in the exercise of six types of nonmoral virtues: sensory, agential, constitutional, epistemic, structural, and affective.³⁹ Cartesians, such as, Swinburne hold that the functioning of the soul, especially consciousness, is nomologically dependent on neurological facts.⁴⁰

Emergent dualism, defended principally by William Hasker, holds that the soul is spatially located,⁴¹ yet cannot be divided into parts.⁴² The soul naturally emerges from a living human brain and nervous system.⁴³ Consequently, the activities of the soul are dependent on a functioning of brain and brain stem for its existence and the gradual development of its capacities.⁴⁴

³⁵Augustine, *The Trinity*, VI.2.8.

³⁶See, Marleen Rozemond, "Descartes, Mind-Body Union, and Holenmerism," *Philosophical Topics* 31 (2003): 343-67.

³⁷Swinburne, *Evolution of the Soul*, 145.

³⁸*Ibid.*, 146.

³⁹Charles Taliaferro, *Consciousness and the Mind of God* (Oxford: Oxford University Press, 1994), 114-22; and idem, "The Virtues of Embodiment," *Philosophy* 76 (2001): 111-25.

⁴⁰Swinburne, *Evolution of the Soul*, 175-76.

⁴¹William Hasker, "Is Materialism Equivalent to Dualism?" in Göcke, *After Physicalism*, 196.

⁴²William Hasker, "Do My Quarks Enjoy Beethoven?," in *Neuroscience and the Soul: The Human Person in Philosophy, Science, and Theology*, ed. Thomas Crisp, Steven Porter, Gregg Ten Elshof (Grand Rapids: Eerdmans, 2016).

⁴³William Hasker, *The Emergent Self* (Ithaca, NY: Cornell University Press, 1999), 189-90.

⁴⁴William Hasker, "On Behalf of Emergent Dualism," in *In Search of the Soul: Four Views on the Mind-Body Problem*, ed. Joel B. Green and Stuart L. Palmer (Downers

Neo-Thomistic dualism, as defended by J. P. Moreland⁴⁵ develops a sophisticated theory of embodiment, adopting Aristotle's thesis that the soul is "the cause and source of the living body."⁴⁶ The essence of the soul (an immaterial substance) contains, as a fundamental unity, powers for developing the body, and is both the internal efficient cause of and teleological guide for the internal structure of the body.⁴⁷ Accordingly, the body is not merely a physical thing, but a complex psycho-physical structure, a mode of the soul.

There are, of course, other contemporary versions of dualism such as Non-Cartesian dualism,⁴⁸ and Bodily Soul dualism.⁴⁹ Unexpectedly, McGrath mentions none of the contemporary dualist views nor does he interact with their arguments. Although I have merely sketched some differences among contemporary dualist views, it is clear that McGrath is mistaken about the thesis of dualism. His Platonic objection fails.

B. Confusing Dualism as Merely a Secular Greek Idea

McGrath argues, "The notion of an immaterial soul was a secular Greek concept, not a biblical notion."⁵⁰ Consequently, dualism should be rejected. This line of criticism is popular among Christian physicalists. It is, however, easily answered. First, it is simply false that dualism is merely a secular Greek idea. Conceptions of dualism pre-date the Greeks as far back as ancient Egypt. The Greek historian, Herodotus, (ca. 484 BC – ca. 425 BCE) understood this:

Moreover, the Egyptians were the first to teach that the human soul is immortal, and at the death of the body enters into some other living thing then coming to birth; and after passing through all creatures of land, sea, and air (which cycle it completes in three thousand years) it enters once more into a human body at birth. Some of the Greeks, early and late, have used this doctrine as if it were their own; I know their names, but do not here record them.⁵¹

Likewise, Eastern religions, as such Hinduism and some forms of Buddhism, hold to dualism.⁵² A recent large-scale, quantitative

Grove, IL: InterVarsity Press, 2005), 79; and idem, "The Dialect of Soul and Body," *American Catholic Philosophical Quarterly* 87.3: 216.

⁴⁵J. P. Moreland, "In Defense of a Thomistic-Like Dualism," in Loose, Menuge, and Moreland, *The Blackwell Companion*, 102–22.

⁴⁶Aristotle, *De an.* 415b.9. See also, *De an.* 412a22, 412a27–28.

⁴⁷For more on this as it relates to contemporary biology, see Thomas J. Kaiser "Is DNA the Soul?," *The Aquinas Review* 20 (2015): 90–92.

⁴⁸E. J. Lowe, *Subjects of Experience* (Cambridge: Cambridge University Press, 1996).

⁴⁹C. Stephen Evans and Brandon Rickabaugh, "What Does it Mean to Be a Bodily Soul?," *Philosophia Christi* 17.2 (2015): 315–30.

⁵⁰McGrath, *The Big Questions*, 137.

⁵¹Herodotus, *Hist.* 2.123.2.

⁵²Stuart Goetz, "Substance Dualism," in Green and Palmer, *In Search of the Soul*, 35n6.

examination of mind and body concepts in pre-Qin Chinese literature (pre-221 BCE) revealed both the universality of pretheoretical belief in dualism as well as an intellectual development of dualism in early China.⁵³

Moreover, several extrabiblical texts evidence a Jewish adherence to dualism. Robert Gundry offers the following passages in support of this claim:

- The dead are those “in hades whose spirit has been taken from their bodies” (Bar 2:17).
- Tobit prays for the release of his “spirit” in death for the enjoyment of “the everlasting place” (Tob 3:6).
- The souls and bodies of the righteous will be united at the resurrection, but the souls of the wicked will continue in a grief-laden disembodied existence (2 Bar. 30:25).
- At death the mortals “who were made of earth” return “to the earth” while their souls return to God who lent them (Wis 15:18).⁵⁴

Furthermore, as Jean-Baptiste Guillon has recently argued, the church fathers embraced dualism even though (a) they founded their dualism on arguments taken from Scripture and (b) explicitly rejected Plato’s conception of the soul. It is, therefore, implausible to think that they were unawares influenced by Greek philosophy and turned away from a biblically informed anthropology.⁵⁵

Second, the thesis that dualism is the product of secular Greek thinking has been challenged by recent empirical studies which show that young children, yet to be indoctrinated by culture, naturally embrace dualism.⁵⁶ After exploring a wide range of work in modern social psychology of religion, Ilkka Pyysiäinen concludes:

All peoples have beliefs about various types of souls that are responsible for the liveliness of the body as well as for various cognitive-emotional functions; these are folk psychological conceptualizations of human agentive properties, not mere “mythology.”⁵⁷

⁵³Edward Slingerland and Maciej Chudek, “The Prevalence of Mind-Body Dualism in Early China,” *Cognitive Science* 35.5 (2011): 997-1007.

⁵⁴Robert Gundry, “Addendum: A Biblical and Philosophical-Scientific Conversation with Christian Nonreductive Physicalists,” in *The Old is Better: New Testament Essays in Support of Traditional Interpretations* (Tübingen: Mohr Siebeck, 2005), 191.

⁵⁵Jean-Baptiste Guillon, “Heaven before Resurrection: Soul, Body and the Intermediate State,” in *Heaven and Philosophy*, ed. Simon Cushing (Lanham, MD: Lexington Books, 2017), 45-76.

⁵⁶See Paul Bloom, *Descartes’ Baby: How the Science of Child Development Explains What Makes Us Human* (Cambridge, MA: Basic Books, 2004).

⁵⁷Ilkka Pyysiäinen, *Supernatural Agents: Why We Believe in Souls, Gods, and Buddhas* (Oxford University Press, 2009), 93.

These results are the exact opposite of what we should discover if dualism is the product of secular Greek thought. Contrary to the Greek influence thesis, the prevailing view among cognitive scientists is that dualism is a universal pretheoretical belief shared across cultures and naturally developed in infancy.⁵⁸

Third, the secular Greek influence thesis faces philosophical problems. Stewart Goetz has argued that belief in dualism is properly basic in similar ways to theistic belief.⁵⁹ J. P. Moreland has argued that average individuals do not infer dualism from premises but intuitively form the belief that dualism is true in virtue of a direct awareness of themselves as mereologically simple and distinct from the body.⁶⁰ If Goetz and Moreland are correct, then belief in dualism is not merely the influence of Greek culture. One could argue that most cultures (Greek, Jewish, Hindu, and Buddhist) naturally embrace dualism because it is the pretheoretical commonsense view based on the experience of one's self.

Furthermore, that there is a single notion of the soul passed down from Greek philosophers fails to recognize both the historical lineage and the conceptual variance of the term "soul."⁶¹ Lewis Ayers argues that we must move beyond the Greek origin theses:

Recent scholarship on early Christianity has seen a number of attempts to move beyond simple oppositions between the "Hellenistic" and the "biblical" or "Jewish." Once the complexity of cultural interchange here is recognized, intellectual strategies which depend on isolating a core Hebraic conception of the person—or on ignoring the complexities of the literature and period which form the context for the New Testament writings—should appear to the theologian to be unsustainable.⁶²

In virtue of these arguments, it is clear that dualism is not merely a secular Greek idea, as McGrath argues. Rather, belief in dualism is deeply ingrained into the natural commonsense beliefs of individuals across a wide range of cultures that likely date as far back as human civilization.⁶³

⁵⁸Ibid., xii.

⁵⁹Stewart Goetz, "Modal Dualism: A Critique," in *Soul, Body, and Survival*, ed. Kevin Corcoran (Ithaca, NY: Cornell University Press, 2001), 89–104.

⁶⁰J. P. Moreland, "Substance Dualism and the Argument from Self-Awareness," *Philosophia Christi* 13.1 (2011): 21–34.

⁶¹See e.g., John Haldane, "Is the Soul the Form of the Body?" *American Catholic Philosophical Quarterly* 87.3 (2013): 489.

⁶²Lewis Ayers, "The Soul and the Reading of Scripture: A Note on Henri De Lubac," *SJT* 61.2 (2008): 177.

⁶³Raymond Martin and John Barresi, *The Rise and Fall of Soul and Self: An Intellectual History of Personal Identity* (New York: Columbia University Press, 2006), 290.

C. Confusions about Biblical Arguments for Dualism

According to McGrath, dualism is often defended on biblical grounds by appealing to the NT language of “body and soul” or “body, soul, and spirit.” McGrath claims,

References to the “body” were understood by some older Christian writers to refer to the physical and material parts of humanity, whereas the “soul” was understood as an immaterial and eternal spiritual entity which merely resided within the human body.⁶⁴

According to McGrath, dualism is based on arguments that fail to understand the biblical notions of “soul” and “spirit” that are wholly independent of the body as stated in Scripture.

First, I know of no Christian defenders of dualism who maintain that the soul merely resides within the human body. For example, biblical scholar, Craig Blomberg, after defending dualism and the survival of the soul in the intermediate state, argues,

But during life, and after being reunited with one’s resurrected body, one’s spirit is integrally related to the material aspect of human existence. Put simply, there is an ultimate dichotomy between body and spirit/soul in every human but a fundamental interrelatedness of both elements.⁶⁵

Second, McGrath’s objection neglects the actual biblical defenses of dualism. Recently, Richard Steiner has made a fascinating dualist argument by analyzing Ezek 13:17-21 in light of rabbinic sources (concerning Jewish funerary practice and the beliefs associated with it), ANE literary sources, and recent archeological evidence.⁶⁶ Steiner summarizes his conclusion as follows:

One piece of evidence is worth singling out: the expression *וַיִּאָסֶף אֶל עַמּוּיָו* and its antonym *וּנְכַרְתָּהּ הַנֶּפֶשׁ הַהוּא מֵעַמּוּיָהּ*. The latter expression speaks of a spirit/soul joining its kinsmen in heaven (not in Sheol), while the former expression speaks of a spirit/soul being *prevented* from doing so. These two expressions account for the bulk of the biblical occurrences of *עַמּוּיָו* used in the sense of “kinsmen” (rather than “peoples”). This is a very archaic usage—a fossil preserved only in a few fixed expressions in the Pentateuch. These expressions—and the ideas that they reject—must therefore be extremely old. In short, this evidence suggests that ideas about disembodied souls and their punishment in the

⁶⁴McGrath, *The Big Questions*, 137.

⁶⁵Craig Blomberg, *1 Corinthians*, NIV Application Commentary (Grand Rapids: Zondervan, 2009), 66.

⁶⁶Richard C. Steiner, *Disembodied Souls: The Nefesh in Israel and Kindred Spirits in the Ancient Near East, with an Appendix on the Katumuwa Inscription* (Atlanta: Society of Biblical Literature, 2015).

afterlife were current among the Israelites far earlier than generally assumed.⁶⁷

Steiner concludes:

In the light of all this evidence, it is no longer possible to insist that the Hebrew was unable to conceive of a disembodied נֶפֶשׁ. If anything, the opposite now appears to be true. The evidence suggests that a belief in the existence of disembodied souls was part of the common religious heritage of the peoples of the ancient Near East.⁶⁸

Steiner's careful and detailed study, informed by recent archeological discoveries, contradicts McGrath's thesis that "the Hebrew word *nephesh*, translated as 'soul' in some older English Bibles, really means a 'living being.'"⁶⁹ This line of argument, popular among Christian physicalists, faces a new evidential problem.

Those who make a biblical case for dualism do so from the teachings of Scripture, especially the intermediate state, where we exist after death but before bodily resurrection.⁷⁰ Other arguments are made that the NT authors assumed a commonsense dualist anthropology.⁷¹ On two occasions, the disciples thought Jesus was an immaterial soul, a ghost, or spirit (Matt 14:26; Luke 24:37). Some thought that Peter's angel visited them (Acts 12:15). Likewise, although John the Baptist's body could easily be located, some thought Jesus was John the Baptist, Elijah, Jeremiah, or one of the prophets (Matt 16:13-14). In fact, Herod, who ordered John the Baptist's execution, wondered if Jesus was John (Matt 14:2). Last, consider that Jesus cast out unclean spirits from people, and that no one thought this idea perplexing or unintelligible (e.g., Mark 1:27). The presumption of a commonsense dualism is evidenced in Scripture.

Like many Christian physicalists, McGrath fails to interact with the leading biblical arguments for dualism, which are not made from the words for "soul," "spirit," and "body." If one is to reject dualism on biblical grounds, they must interact with the most sophisticated biblical arguments for dualism, especially that of John Cooper.⁷² The

⁶⁷Ibid., 126.

⁶⁸Ibid., 127.

⁶⁹McGrath, *The Big Questions*, 137-38.

⁷⁰The most thorough treatment of this argument to date is, John Cooper, *Body, Soul, and Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate* (Grand Rapids: Eerdmans, 1989).

⁷¹The following is found in, Stewart Goetz, "Is N. T. Wright Right about Substance Dualism?," *Philosophia Christi* 14.1 (2012): 187-88.

⁷²See Cooper, *Body, Soul, and Life Everlasting*; idem, "Biblical Anthropology and the Body-Soul Problem," in Corcoran, *Soul, Body, and Survival*, 218-28; idem, "The Current Body-Soul Debate: A Case for Holistic Dualism," *Southern Baptist Journal of Theology* 13 (2009): 32-50; idem, "Scripture and Philosophy on the Unity of Body and

core arguments of Cooper and other dualists, however, are repeatedly ignored. Until McGrath responds to this literature his rejection of dualism is premature.⁷³

D. Is Dualism at Odds with Science, Especially Neuroscience?

Ubiquitous in antidualist arguments is the claim that science, in general, and neuroscience, in particular, is somehow at odds with dualism. Pitting science against dualism, McGrath writes, "Neither science, nor our own experience provides any support for the existence of disembodied human minds in this world."⁷⁴ This is a bold claim, the kind for which one would rightly expect a supporting argument. Unfortunately, McGrath offers none. Regardless, McGrath's claim is demonstrably false. There are numerous arguments, including arguments from science and personal experience that support dualism.⁷⁵ Perhaps McGrath means to say that he does not consider any of these to be good arguments. That might be so. McGrath, however, offers no supporting argument, nor does he reference any such arguments.

A chief complaint among antidualists is that dualism is somehow at odds with neuroscience. McGrath observes,

Modern neuroscience has no place for the idea of a "soul," understood as some immaterial part of the body. Neither does the Christian Bible. The "soul-body" dualism lives on in popular culture, both secular and Christian. Yet the best view—found in both contemporary neuroscience and Christian theology—is to think of humanity as a physical unity—a single body, not a "body and soul."⁷⁶

I know of no dualist who holds that the soul is "some immaterial part of the body." The soul is either identical to the person or a part of the person as is the body.

It isn't clear what to make of McGrath's claim regarding neuroscience. If taken as a statement about beliefs among neuroscientists, then his claim is empirically weak. A 2006 study concluded that mental health professionals continue to employ a

Soul: An Integrative Method for Theological Anthropology," in *The Ashgate Research Companion to Theological Anthropology*, ed. Joshua Ryan Ferris and Charles Taliaferro, (Burlington, VT: Ashgate, 2015), 27–42; and idem, "Absent from the Body ... Present with the Lord": Is the Intermediate State Fatal to Physicalism?," in Loftin and Farris, *Christian Physicalism?*, 319–39.

⁷³See John Cooper, "The Bible and Dualism Once Again: A Reply to Joel B. Green and Nancy Murphy," *Philosophia Christi* 9 (2007): 459–69; and idem, "Exaggerated Rumors of Dualism's Demise: A Review Essay on Body, Soul and Human Life," *Philosophia Christi* 11 (2009): 453–64.

⁷⁴McGrath, *The Big Questions*, 81.

⁷⁵See those mentioned in the introduction.

⁷⁶McGrath, *The Big Questions*, 138.

mind-brain dichotomy when reasoning about clinical cases.⁷⁷ A 2009 study concluded that “more than one-third of medical and paramedical professionals regarded mind and brain as separate entities,” and that “the widespread dualism revealed by our survey continues to exert an influence on scientific thought.”⁷⁸ There are several dualists working in psychology and neuroscience. Nobel Prize-winning neuroscientist, John C. Eccles, defended dualism, as did Nobel Prize-winning physicist, Eugene Wigner,⁷⁹ as do neuroscientists Wilder Penfield, Matthew Stanford, and research psychiatrist Jeffery Schwartz.⁸⁰ Likewise, psychologists Nancy Duvall, Todd Hall, Jeffrey Boyd, Eric Johnson, Sherwood Cole, and Stephen Greggo are all dualists, early informed by the relevant sciences.⁸¹

Perhaps McGrath is claiming that contemporary neuroscience is empirically at odds with dualism. But, then other problems arise. First, many dualists defend their view in light of neuroscientific

⁷⁷Marc Miresco and Laurence Kirmayer, “The Persistence of Mind-Brain Dualism in Psychiatric Reasoning About Clinical Scenarios,” *American Journal of Psychiatry* 163.5 (2006): 913–18.

⁷⁸Athena Demertzi et al., “Dualism Persists in the Science of Mind,” *Disorders of Consciousness: Annals of the New York Academy of Sciences* 1157 (2009): 1–9.

⁷⁹See Karl Popper and John C. Eccles, *The Self and Its Brain*, 2nd corrected ed. (New York: Springer-Verlag, 1985); John C. Eccles, *The Human Psyche* (New York: Springer, 1980); idem, *Evolution of the Brain: Creation of the Self* (London: Routledge, 1989); and idem, *How the Self Controls Its Brain* (Berlin: Springer-Verlag, 1994). See Eugene Paul Wigner, “Remarks on Mind-Body Question,” originally published 1961, repr. in J. A. Wheeler, and W. H. Zurek, eds., *Quantum Theory and Measurement* (Princeton: Princeton University Press, 1983) 168–69.

⁸⁰Wilder Penfield, *The Mystery of Mind* (Princeton: Princeton University Press, 1975); Matthew Stanford, *The Biology of Sin: Grace, Hope, and Healing for Those Who Feel Trapped* (Downers Grove, IL: InterVarsity Press, 2010), 12; Jeffrey Schwartz, “A Role for Volition and Attention in the Generation of New Brain Circuitry: Toward a Neurobiology of Mental Force,” *Journal of Consciousness Studies* 6.8–9 (1999): 115–42; and Jeffrey Schwartz and Sharon Begley, *The Mind and the Brain: Neuroplasticity and the Power of Mental Force* (New York: HarperCollins, 2002), 54–95.

⁸¹See Nancy Duvall, “From Soul to Self and Back Again,” *Journal of Psychology and Theology* 26.1 (1998): 6–15; Todd Hall, “The Soul or Substantive Self as Experiencer, Actualizer, and Representative in Psychoanalytic Theory,” *Journal of Psychology and Theology* 26.1 (1990): 55–65; Jeffrey Boyd, “The Soul as Seen through Evangelical Eyes, Part I: Mental Health Professionals and ‘the Soul,’” *Journal of Psychology and Theology* 23.3 (1995): 151–60; idem, “The Soul as Seen through Evangelical Eyes, Part II: On Use of the Term ‘Soul,’” *Journal of Psychology and Theology* 23.3 (1995): 161–70; and idem, “A History of the Concept of the Soul during the 20th Century,” *Journal of Psychology and Theology* 26.1 (1998): 66–82; Eric Johnson, *Foundations of Soul Care: A Christian Psychology Proposal* (Downers Grove, IL: InterVarsity Press Academic, 2007), 16–17; idem, “Whatever Happened to the Human Soul? A Brief Christian Genealogy of a Psychological Term,” *Journal of Psychology and Theology* 26.1 (1998): 16–28; Sherwood O. Cole, “Don’t Disembody Me Just Yet! A Christian Perspective on our Biological Nature,” *Journal of Psychology and Christianity* 21.2 (2002): 15–60; and Stephen P. Greggo, “Soul Origin: Revisiting Creationist and Traducianist Theological Perspectives in Light of Current Trends in Developmental Psychology,” *Journal of Psychology and Theology* 33.4 (2005): 258–67.

data.⁸² Even nondualists recognize that neuroscientific methods are based on the conceptual framework of dualism, as they, for example, take first-person reports as epistemically privileged over third-person reports.⁸³ Others argue that neuroscience fails to support physicalism over dualism.⁸⁴ If McGrath is to defend the conflict between neuroscience and dualism, then he must offer plausible replies to these lines of argument. To date, McGrath hasn't offered any replies.

We shouldn't take this issue lightly. Recent experiments show that priming individuals with neuroscientific language dissuades belief in dualism, even though the neurological language itself provides no evidence against dualism.⁸⁵ The use of neuro-lingo, even when not truth-preserving, is persuasive and irrationally biases us toward physicalism. Consequently, we ought not be so cavalier with claims as to what neuroscience concludes. In fact, contrary to McGrath's claim, there is a growing skepticism, even among neuroscientists, regarding exaggerated claims about what neuroscience has shown or even could show.⁸⁶ Robert Shulman, a biophysicist who pioneered the use of nuclear magnetic resonance (NMR) and other brain imaging techniques, explains how

⁸²See Riccardo Manzotti and Paolo Moderato, "Neuroscience: Dualism in Disguise", in Robinson and Lavazza, *Contemporary Dualism*, 81-97; Alessandro Antonietti, "Must Psychologists Be Dualists?" in Antonietti, Corradini, and Lowe, *Psycho-Physical Dualism Today*, 37-67.

⁸³See M. R. Bennett and P. M. S. Hacker, *Philosophical Foundations of Neuroscience* (Malden, MA: Blackwell, 2003); W. Teed Rockwell, *Neither Ghost Nor Brain* (Cambridge, MA: MIT Press, 2005); William R. Uttal, *The New Phrenology: The Limits of Localizing Cognitive Processes in the Brain* (Cambridge, MA: MIT Press, 2001); and idem, *Dualism: The Original Sin of Cognitivism* (Mahwah, NJ: Lawrence Erlbaum Associates, 2004).

⁸⁴See Eric LaRock, "Neuroscience and the Hard Problem of Consciousness," in *Neuroscience and the Soul: The Human Person in Philosophy, Science, and Theology*, ed. Thomas Crisp, Steven Porter, and Gregg Ten Elshof (Grand Rapids: Eerdmans, 2016), 151-80; Eric LaRock and Robin Collins, "Saving Our Souls from Materialism," in *Neuroscience and the Soul*, 137-46; Eric LaRock, "Is Consciousness Really a Brain Process?," *International Philosophical Quarterly* 48.2 (2008): 201-22; and J. P. Moreland, "Christianity, Neuroscience, and Dualism," in *The Blackwell Companion to Science and Christianity*, ed. J. B. Stump and Alan Pagget (Oxford: Blackwell, 2012), 467-79; Jeffrey M. Schwartz and Sharon Begley, *The Mind and the Brain: Neuroplasticity and the Power of Mental Force* (New York: HarperCollins, 2002); Mihretu P. Guta, "Neuroscience or Neuroscientism?" *Perspectives on Science and Christian Faith* 63.1 (2011): 69-70; and Terence Horgan, "Nonreductive Materialism and the Explanatory Autonomy of Psychology," in *Naturalism: A Critical Appraisal*, ed. Steven Wagner and Richard Warner (Notre Dame: University of Notre Dame Press, 1993), 313-14.

⁸⁵See Jesse Lee Preston, Ryan Ritter, and Justin Hepler, "Neuroscience and the Soul: Competing Explanations for the Human Experience," *Cognition* 127 (2013): 31-37.

⁸⁶See Paolo Legrenzi and Carlo Umiltà, *Neuromania: On the Limits of Brain Science*, trans. Frances Anderson (Oxford: Oxford University Press, 2011); Sally Satel and Scott Lilienfel, *Brainwashed: The Seductive Appeal of Mindless Neuroscience* (New York: Basic Books, 2013); and Raymond Tallis, *Aping Mankind: Neuromania, Darwinitis and the Misrepresentation of Humanity* (New York: Routledge, 2011).

unsubstantiated expectations for what neuroscience can achieve have skewed how the data is interrelated. He explains that

While neuroimaging experiments indeed open new areas of brain studies, creating an empirical field with informative results and still-greater promise, it soon became apparent that they failed to find these causal explanations of everyday phenomena. Despite an ongoing absence of experimental support, the appeal of these theoretical expectations has been so great that imaging results continue to be interpreted in terms of its goals. Consequently, superb modern methods and valuable experiments findings are intermingled with unreliable interpretations and claims that form a muddle as to what can be expected from neuroimaging.⁸⁷

Neuroscience is far from being able to weigh in on the dualism debate as McGrath states.

Last, it is far from clear that neuroscience could, in principle, undermine dualism. The most cited neuroscientific antidualist argument is made from advances in mapping psychophysical correlations. The thought is that, if dualism is true, it is highly improbable that such neurological correlates would exist. But what is missing from this argument is an analysis of how the prior probabilities of the psychophysical correlations are improbable given dualism.

Let's consider how this might work by setting up physicalism and dualism as rival hypotheses for evaluation against a common body of evidence, the psychophysical correlates, by considering each of their likelihoods given that evidence. Consider the following standard principle of confirmation theory.

Likelihood Principle: e counts in favor of h_1 over h_2 if $P(e|h_1) > P(e|h_2)$, where $P(e|h_1)$ and $P(e|h_2)$ represent the conditional probability of e on h_1 and h_2 , respectively.

Accordingly, an observation e counts as evidence in favor of hypothesis h_1 over h_2 if the observation is more probable under h_1 than h_2 . Let the following values hold: e = the psychophysical correlates; h_1 = dualism; and h_2 = physicalism. On standard accounts, the degree to which e counts in favor of one hypothesis over another is proportional to the degree to which e is more probable under h_1 than h_2 . So, how do we determine the degree to which e is more probable given physicalism than it is given dualism?

An evaluation of e alone will do no good as it tells us nothing about physicalism or dualism. In order to determine which hypothesis is more probable than the other with respect to e , we must consider physicalism and dualism themselves. But notice that we've left the realm of neuroscience for philosophy. When it comes

⁸⁷Robert Shulman, *Brain Imaging: What it Can (and Cannot) Tell Us about Consciousness* (Oxford: Oxford University Press, 2013), 76.

to analyzing such probabilities, neuroscience itself offers us nothing. As Joshua Rasmussen has argued, it seems reasonable to think that the empirical data regarding psychophysical correlations actually fits better with dualism.⁸⁸ Both the location of psychophysical correlates and the neuroplasticity of the brain are exactly what we should expect if dualism is true. This point has been made by neuroscientists themselves, especially regarding neuroplasticity (the brain's ability to be reprogramed by the person whose brain it is).⁸⁹

This demonstrates that there isn't a purely neuroscientific argument against dualism. In fact, some Christian physicalists, understanding this, reject the conflict thesis McGrath endorses. For example, Kevin Corcoran and Kevin Sharpe write,

Are the deliverances of the neurosciences consistent with the view that human persons are or have an immaterial soul? Yes, they are. But they fit much more seamlessly with a physicalist understanding of human nature and the world.⁹⁰

The issue is one of fit (which is a complicated argument), not one of neuroscience conflicting with dualism. Likewise, Nancey Murphy admits that the relevant neurological evidence regarding consciousness does not rule out dualism.⁹¹ We should then conclude that McGrath's neuroscientific objection to dualism fails. There simply is no conflict. As I will argue next, however, there are serious problems for physicalism regarding the nature of consciousness and studies in cognitive science.

III. NEUROSCIENTIFIC AND COGNITIVE SCIENTIFIC QUANDARIES FOR MCGRATH'S ANTIDUALISM

In what follows I advance two lines of criticism against McGrath's antidualism. The first problem arises from the conjunction of physicalism and advances in the neuroscience of consciousness, namely, the hard problem of consciousness. The second problem reveals a deep tension between McGrath's defense of theistic belief from studies in cognitive science which equally justify belief in dualism.

⁸⁸Joshua Rasmussen, "Against Nonreductive Physicalism," in *The Blackwell Companion to Substance Dualism*, 336-37.

⁸⁹See, e.g., Mario Beauregard, "Mind Does Really Matter: Evidence from Neuroimaging Studies of Emotional Self-Regulation, Psychotherapy and Placebo Effect," *Progress in Neurobiology* 81.4 (2007): 218-36; and Jeffrey Schwartz and Sharon Begley, *The Mind and the Brain: Neuroplasticity and the Power of Mental Force* (San Francisco: HarperCollins, 2002).

⁹⁰Kevin Corcoran and Kevin Sharpe, "Neuroscience and the Human Person," in Crisp, Porter, and Ten Elshof, *Neuroscience and the Soul*, 134.

⁹¹Murphy, *Bodies and Souls, or Spirited Bodies?*, 112.

A. Christian Physicalism and the Hard Problem of Consciousness

Whereas McGrath sees a conflict between neuroscience and dualism, many see a conflict between the neuroscience of consciousness and physicalism. The strong confidence in rejecting dualism by Christian physicalists, like McGrath, is in stark contrast with the waning confidence many have in either reductive or nonreductive physicalism. The primary reason for this decreasing confidence in physicalism is the great difficulty in finding room for consciousness within the presumptions of physicalism. It's curious that Christian physicalists largely ignore this seemingly intractable problem. There is no hint of this widely acknowledged problem in McGrath's case for physicalism over dualism.

One needn't be a dualist in order to recognize this deep tension. Regarding how consciousness might arise from a physical system, such as the brain, Steven Pinker states,

Beats the heck out of me. I have some prejudices, but no idea of how to begin to look for a defensible answer. And neither does anyone else.... At least for now, we have no scientific purchase on the special extra ingredient that gives rise to sentience. As far as scientific explanation goes, it might as well not exist. It's not just that claims about sentience are perversely untestable; it's that testing them would make no difference to anything anyway.⁹²

Likewise, cognitive scientist, Donald Hoffman, observes, "The scientific study of consciousness is in the embarrassing position of having no scientific theory of consciousness."⁹³ Physicist, Freeman Dyson, agrees:

The origin of life is a total mystery, and so is the existence of human consciousness. We have no clear idea how the electrical discharges occurring in nerve cells in our brains are connected with our feelings and desires and actions.⁹⁴

Jerry Fodor observes, "Nobody has the slightest idea how anything material could be conscious. Nobody even knows what it would be like to have the slightest idea about how anything material could be conscious."⁹⁵ Consciousness has posed such a difficulty that, as Antti Rovonsuo explains, "The already existing fields that study the mind or the brain have ignored consciousness."⁹⁶

⁹²Steven Pinker, *How the Mind Works* (New York: W. W. Norton, 1997), 146–47.

⁹³Donald Hoffman, "Conscious Realism and the Mind-Body Problem," *Mind & Matter* 6.1 (2008): 90.

⁹⁴Freeman Dyson, "How We Know," *The New York Review of Books* (10 March 2011): 11.

⁹⁵Jerry Fodor, "The Big Idea: Can there Be a Science of Mind?" *Times Literary Supplement* (3 July 1992): 5–7.

⁹⁶Antti Rovonsuo, *Consciousness: The Science of Subjectivity* (New York: Routledge, 2010), xxi.

It wasn't until the last decade that the brain sciences have begun to approach the issues of consciousness, and progress is dismal. Neuroscientist (Cal-Tech) and Chief Scientific Officer of the Allen Institute for Brain Science, Kristof Koch, after discussing the history of neuroscientific attempts to explain phenomenal consciousness, makes the following observation:

But no matter what features prove critical, what is it about these particular ones that explains subjectivity? Francis [Crick] and I toyed with the idea that consciousness must engage feedback circuits within the cortex, but what is it about feedback that gives rise to phenomenology, to feelings? A room thermostat also has feedback: When the ambient air temperature reaches a predetermined value, cooling is switched off. Does it have a modicum of consciousness? How is this fundamentally different from believing that rubbing a brass lamp will make a djinn appear?⁹⁷

This problem in neuroscience fares no better in the philosophy of mind.

It seems at least as probable that consciousness is only a problem if one assumes physicalism. Even ardent physicalists acknowledge that, at least when considering consciousness, physicalism seems false.⁹⁸ When considering physical objects or processes, it seems to many that such things are not, and perhaps cannot be, conscious. The tension is brought out by considering the following.

P: The complete set of microphysical truths about the universe.

Q: Any arbitrary truth about phenomenal consciousness:
for example, that I am experiencing a headache.

Primarily due to Thomas Nagel's bat argument⁹⁹ and Frank Jackson's Mary argument,¹⁰⁰ most think that knowledge of *P*-type facts do not give us knowledge of *Q*-type facts. From this epistemological gap we get what Joseph Levine calls the *explanatory gap*: our inability to provide or even comprehend a plausible explanation of how consciousness could depend upon a physical nonconscious substrate.¹⁰¹

⁹⁷Christof Koch, *Consciousness: Confessions of a Romantic Reductionist* (Cambridge, MA: MIT Press, 2012), 114.

⁹⁸See David Papineau, "Explanatory Gap and Dualist Intuitions," in *Frontiers of Consciousness*, ed. Lawrence Weiskrantz and Martin Davies (Oxford: Oxford University Press, 2008), 57.

⁹⁹Thomas Nagel, "What Is It Like To Be a Bat?," *The Philosophical Review* 83.4 (1974): 435-50.

¹⁰⁰Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly* 32 (1982): 127-36; and idem, "What Mary Didn't Know," *Journal of Philosophy* 83 (1986): 291-95.

¹⁰¹Joseph Levine, "Materialism and Qualia: The Explanatory Gap," *Pacific Philosophical Quarterly* 64 (1983): 354-61.

Attempts to explain *Q* given *P* constitute what David Chalmers famously calls, *the hard problem of consciousness*.¹⁰² Chalmers explains:

What makes the hard problem hard and almost unique is that it goes beyond problems about the performance of functions. To see this, note that even when we have explained the performance of all the cognitive and behavioral functions in the vicinity of experience—perceptual discrimination, categorization, internal access, verbal report—there may still remain a further unanswered question: Why is the performance of these functions accompanied by experience?¹⁰³

The problem is much worse, as it extends beyond phenomenal consciousness to the *subjective character of consciousness*: the fact that something appears for the subject of consciousness as distinctively first-personal and private. Thomas Nagel argues that this subjective character of consciousness evades scientific analysis, which demands an objective characterization. We can learn everything there is to know about the neuroscience of bat consciousness, argues Nagel, yet fail to know what it is like to be a bat.¹⁰⁴ Both the phenomenal and subjective character of consciousness are seemingly intractable problems for reductive and nonreductive physicalism. As of late, most think the hard problem is unsolvable. Ned Block and Robert Stalnaker observe, “No one has ever given an account, even a highly speculative, hypothetical, and incomplete account of how a physical thing could have phenomenal states.”¹⁰⁵ In light of this, some nonreductive physicalists hold that although physicalism is highly probable, we will never understand how it could be true in light of the hard problem.¹⁰⁶ This widely acknowledged difficulty in harmonizing consciousness with physicalism is a strong reason to give up on physicalism as the recent move away from physicalism to Russelian monism and panpsychism reveals. This is not a problem for the dualist, however, as the dualist is not committed to the thesis that a purely physical system grounds consciousness. The dualist is free to hold that consciousness is the result of mind-brain interaction, or nomologically dependent on the brain for certain phenomenal states—the dualist avoids the hard problem of consciousness.

McGrath's claim that there is no room for dualism in neuroscience is exaggerated. But, even if McGrath's thesis is correct,

¹⁰²David Chalmers, “Facing up to the Problem of Consciousness,” *Journal of Consciousness Studies* 2 (1995): 200–219; and idem, *The Conscious Mind: In Search of a Fundamental Theory* (Oxford: Oxford University Press, 1996).

¹⁰³Chalmers, “Facing up to the Problem of Consciousness,” 202.

¹⁰⁴Nagel, “What Is It Like To Be a Bat?,” 435–56.

¹⁰⁵Ned Block and Robert Stalnaker, “Conceptual Analysis, Dualism, and the Explanatory Gap,” *The Philosophical Review* 108.1 (1999): 1.

¹⁰⁶See Colin McGinn, *The Mysterious Flame: Conscious Minds in a Material World* (New York: Basic Books, 1999); and Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* (Oxford: Oxford University Press, 2012).

the right conclusion to draw wouldn't be physicalism, as there is a deep conflict between the reality of consciousness and physicalism, nonreductive or otherwise. Said differently, McGrath's rejection of dualism and embrace of nonreductive physicalism is the cause of an obviously false prediction: that the universe should be devoid of conscious beings. That price far outweighs any cost the dualist is charged with.

B. A Cognitive Science Dilemma for McGrath's Antidualism

Although McGrath's chapter is titled "Souls: On Being Human," much of the chapter makes use of the cognitive science of religion. McGrath mentions various cognitive science studies, especially in the cognitive science of religion (CSR) that show the tendency to form religious belief is a natural cognitive process for humans. According to McGrath, "The cognitive science of religion tells us that humans are naturally religious."¹⁰⁷ "The origins of religious belief," says McGrath, "do not lie so much in cultural or social conditions as in the intuitions that arise from normally developing and functioning human cognitive systems."¹⁰⁸

A tension in McGrath's thesis is coming to the fore. McGrath has told us that belief in the soul is a religious belief, held throughout the history of the church, which he contends is the result of pagan Greek philosophy. Here, however, he claims that the etiology of religious belief is not sociocultural. Here is the dilemma: McGrath must offer a principled reason to reject that belief in the soul, like other religious beliefs, are not grounded in intuitions that arise from normally developing and functioning human cognitive systems. As I will argue, however, the empirical research is not on McGrath's side.

Returning to McGrath's treatment of the CSR data, we must get clear on his thesis. Although McGrath is careful not to make too much of these studies, he does think they are relevant to the rationality or warrant of religious belief as this data "works more in theism's favor" than in favor of atheism.¹⁰⁹ Elsewhere, McGrath writes,

¹⁰⁷McGrath, *The Big Question*, 145.

¹⁰⁸*Ibid.*, 142.

¹⁰⁹*Ibid.*, 140.

Yet it is important to point out that a recognition of the "naturalness" of religious concepts can easily be accommodated within a theistic perspective, and lead on to the development of a natural theology which is informed by the insights of the cognitive sciences.¹¹⁰

In this passage, McGrath references the work of Justin Barrett.¹¹¹ According to Barrett, the conjunction of CSR and commonsense epistemology raises the probability of theism. Barrett writes,

If our ordinary, natural cognitive systems provide us with nonreflective beliefs along the lines of natural religion, then, until reasons arise that we should regard these beliefs as suspect, they are justified beliefs.¹¹²

That is, if a belief is natural, in the sense used by cognitive science, then that belief has *pro tanto* justification: justified unless one encounters a strong enough reason to think that belief is unjustified.

McGrath's argument regarding CSR and the justification of religious belief has the following structure:

1. Cognitive science shows that religious belief is natural (empirical premise).
2. If a belief is natural, then it has *pro tanto* justification (epistemic premise).
3. Therefore, religious belief has *pro tanto* justification.

Notice, that if we plug in the data from cognitive science regarding dualism, the result is at odds with McGrath's antidualism. Consider the following:

4. Cognitive science shows that belief in dualism is natural (empirical premise).
5. If a belief is natural, then it has *pro tanto* justification (epistemic premise).
6. Therefore, belief in dualism has *pro tanto* justification.

A deeper tension in McGrath's antidualism arises. McGrath must accept (5), as it is identical to (2) in his argument. Therefore, premise

¹¹⁰Alister McGrath, *The Open Secret: A New Vision for Natural Theology* (Oxford: Wiley Blackwell, 2008), 106.

¹¹¹McGrath references Justin Barrett, "The Naturalness of Religious Concepts: An Emerging Cognitive Science of Religion," in *Textual, Comparative, Sociological, and Cognitive Approaches*, vol. 2 of *New Approaches to the Study of Religion*, ed. Peter Antes, Armin W. Geertz, and Randi R. Warne (Berlin: de Gruyter, 2004), 401–18; and Justin Barrett, *Why Would Anyone Believe in God?* (Lanham, MD: AltaMira, 2004).

¹¹²Justin Barrett, *Cognitive Science, Religion, and Theology: From Human Minds to Divine Minds* (West Conshohocken, PA: Templeton, 2011), 156.

(4) is the contentious premise.¹¹³ As I will argue, however, (4) enjoys the same empirical support as (1). Consequently, if McGrath accepts (1), then he should accept (4).

What are the main reasons from cognitive science for thinking that belief in dualism is natural in the same way as religious belief?¹¹⁴ Neuropsychologist Paul Broks calls belief in dualism a “primordial intuition” such that we are “natural born soul makers, adept at extracting unobservable minds from the behaviour of observable bodies, including their own.”¹¹⁵ Cognitive psychologist, Paul Bloom, argues that we are common-sense dualists regarding human persons.¹¹⁶ Bloom arrives at this conclusion utilizing research in early social cognition, especially in infants. Referencing multiple studies, Bloom argues that infants:

- a. instinctually imitate the facial expressions of adults;¹¹⁷
- b. have expectations about social interactions with people;¹¹⁸
- c. display different expectations for objects and people, in that they do not appear surprised when people violate object principles, but are surprised when objects violate those principles.¹¹⁹

This data is best explained, argues Bloom, by the thesis that infants attribute intention to persons, not objects, and can distinguish between bodies and persons. This natural and resilient belief in dualism, says Bloom, helps explain our inclinations toward religious concepts as well as emotions such as empathy and disgust.

¹¹³Alternatively, McGrath may accept that dualism has prima facie justification, but not ultima facie justification given counter-evidence from neuroscience/while theism has not only prima facie justification, but also ultima facie justification since (he may argue) there are no decisive defeaters. However, this line of argument only works if McGrath’s reasons for rejecting dualism hold. I have argued above that they do not.

¹¹⁴For a philosophical analysis of the naturalness of mind-body dualism, see Uwe Meixner, “The Naturalness of Dualism,” in Göcke, *After Physicalism*, 25–47.

¹¹⁵Paul Broks, “Out of Mind,” *Prospect* 109 (April 2005): 1; as quoted in Nicholas Humphrey, *Soul Dust: The Magic of Consciousness* (Princeton: Princeton University Press), 95.

¹¹⁶See, for example, Paul Bloom, *Descartes’ Baby: How the Science of Child Development Explains What Makes Us Human* (New York: Basic Books, 2004); idem, “Religion Is Natural,” *Developmental Science* 10 (2007): 147–51; and idem, “Religious Belief as an Evolutionary Accident,” in *The Believing Primate: Scientific, Philosophical, and Theological Reflections on the Origin of Religion*, ed. Michael Murray and Jeffrey Schloss (New York: Oxford University Press, 2009), 118–27.

¹¹⁷A. N. Meltzoff and M. K. Moore, “Imitation of Facial and Manual Gestures by Human Neonates,” *Science* 198 (1977): 83–99.

¹¹⁸P. Rochat, and T. Striano, “Social-Cognitive Development in the First Year,” in *Early Social Cognition: Understanding Others in the First Year of Life*, ed. P. Rochat (Mahwah, NJ: Lawrence Erlbaum, 1999), 3–34.

¹¹⁹See V. A. Kuhlmeier, P. Bloom, and K. Wynn, “Do 5-Month-Old Infants See Humans as Material Objects?,” *Cognition* 94.1 (2004): 95–103.

Henry Wellman has conducted several landmark studies in the cognitive science of belief formation among children. Two studies, in particular, are continually referenced as producing significant and well-established findings.¹²⁰ Both experiments studied children's understanding of mental images as distinguished from nonmental entities. The first experiment involved 72 preschoolers (between ages three and five), while the second experiment involved sixty preschoolers (between ages three and five). These children were asked, for example, if they could perform various tasks without a brain, and separately without a mind. These tasks included mental acts (thinking, remembering), perception (seeing, hearing), feelings (interests, happiness), voluntary action (walking, talking), and involuntary behavior (breathing, sneezing).

The following summarizes the results of these studies:

- a. Children appeal to the commonsense criteria of behavioral sensory evidence (visibility, tangibility) to distinguish mental entities—such as a thought about a dog—from prototypic physical objects—a dog.
- b. Children distinguish mental entities from physical entities that themselves are intangible or invisible (smoke, sounds).
- c. Young children understand that mental entities are peculiarly private.
- d. Children judged mental entities such as images (one sort of representational entity) as quite different from photographs (another sort of representational entity).
- e. Children responded correctly to questions about mental entities with unspecified real referents (a thought about a dog), as well as about mental entities with specified referents (a mental image of this cup).
- f. At the same time, these young children recognize that mental entities can be about nonexistent states of affairs.

According to Wellman, these studies show that young children exhibit “a solid and articulate understanding of the fundamental distinction between mental entities and physical objects.”¹²¹ Wellman concludes, “Our data argue clearly that the first understanding of mind is one of ontological dualism, perhaps combined with some

¹²⁰See Henry M. Wellman and D. Estes, “Early Understanding of Mental Entities: A Re-Examination of Childhood Realism,” *Child Development* 57 (1986): 910–23; Henry M. Wellman and A. K. Hickling, “The Minds ‘I’: Children’s Conception of the Mind as an Active Agent,” *Child Development* 65 (1994): 1564–80; David Estes, Henry M. Wellman, and Jaqueline Woolley, “Children’s Understanding of Mental Phenomena,” in *Advances in Child Development and Behavior* 22, ed. Hayne Reese (New York: Academic Press, 1989); and Henry M. Wellman, *The Child’s Theory of Mind* (Cambridge, MA: MIT Press, 1990).

¹²¹Wellman, *The Child’s Theory of Mind*, 60.

form of epistemological realism."¹²² And other studies show that young children initially conceive of agents as compounds of body and soul, both material and intentional.¹²³

More recently, developmental psychologists, Jesse Bering and David Bjorklund, conducted experiments where a puppet show depicts an alligator eating a mouse.¹²⁴ This was shown to three different age groups: kindergartners (ages 3–6), elementary-schoolers (ages 10–12), and adults (ages 18–20). After the puppet show, participants were asked a set of questions about the mouse who died. These questions examined six aspects of death: biological, psychobiological, perceptual, desire, emotional, and epistemic. The study revealed a discontinuity among the age groups regarding every question set except the epistemic question set. A similar study took place the following year comparing religiously and secularly schooled children.¹²⁵ The results were quite similar. This data suggests, according to Bering and Bjorklund, that beliefs in an afterlife are not acquired through social learning. Again, the data strongly suggests that dualism is a naturally formed belief.

McGrath might object by arguing that although belief in dualism has *pro tanto* justification, that justification is outweighed by his antidualism arguments. I have already shown, however, that McGrath's arguments fail. Perhaps McGrath might attempt to undermine the cognitive science evidence for dualist beliefs. But this is unlikely given the evidence. Perhaps he could argue that this evidence for dualism isn't as strong as the evidence for religious beliefs, like the belief that God exists. This would be to go against the conclusions of cognitive scientists of religion, such as Barret, whom McGrath depends on for his claim that religious belief is natural.

It seems then that the evidence of CSR for the naturalness of belief in dualism is quite strong. This is certainly the case when we compare it to the CSR evidence for religious belief. Justin Barret observes,

¹²²Ibid., 59.

¹²³See E. S. Spelke, A. T. Phillips, and A. L. Woodward, "Infants' Knowledge of Object Motion and Human Action," in *Causal Cognition: A Multidisciplinary Debate*, ed. D. Sperber, D. Premack, and A. J. Premack (Oxford: Clarendon Press, 1995), 44–78; and R. Saxe, R. Tzelnic, and S. Carey, "Five-Month-Old Infants Know Humans Are Solid, Like Inanimate Objects," *Cognition* 101.1 (2006): B1–B8.

¹²⁴Jesse Bering and David Bjorklund, "The Natural Emergence of Reasoning about the Afterlife as a Developmental Regularity," *Developmental Psychology* 40.2 (2004): 217–33.

¹²⁵Jesse Bering, Carlos Hernandez Blasi, and David Bjorklund, "The Development of 'Afterlife' Beliefs in Religiously and Secularly Schooled Children," *British Journal of Developmental Psychology* 23 (2005): 587–607.

Exactly why believing in souls or spirits that survive death is so natural for children (and adults) is an area of active research and debate. A consensus has emerged that children are born believers in some kind of afterlife, but not on why this is.¹²⁶

Barret explains that dualist beliefs “are among the most widespread supernatural belief. Even in places that claim to be atheistic.”¹²⁷

There is little doubt then that if you accept the CSR evidence for the naturalness of religious belief, as McGrath does, that you must also accept the cognitive science evidence for the naturalness of dualist beliefs. McGrath’s argument for the *pro tanto* justification of religious belief from the data of cognitive science provides *pro tanto* justification for dualism. Consequently, McGrath faces a dilemma: either hold fast to his antidualism and abandon his naturalness of theistic belief argument or keep that argument and embrace dualism. The cognitive science evidence for the naturalness of dualist belief is too strong to ignore.

IV. CONCLUSION

In summary, I have advanced two lines of argument. First, McGrath’s objections to dualism fail for a variety of reasons. These problems can be attributed to (i) McGrath’s failure to represent dualism accurately, and (ii) McGrath’s misuse of neuroscience in answering issues regarding the ontology of human persons. Second, I developed two arguments against McGrath’s antidualism. The first problem arises from advances in the neuroscience of consciousness that significantly lower the probability of physicalism over dualism. The second problem reveals a deep tension between McGrath’s defense of theistic belief from studies in cognitive science and the cognitive science of dualist belief formation.

That being said, I am often unsatisfied with merely arguing that a position is false, even though doing so is of great use. Additionally, I would like to suggest a positive way forward. If we are, as a community of Christian scholars, to make progress on this issue, I propose the following. First, Christian physicalists must apply their criticisms to actual dualist views and take into consideration the many dualist replies. I am sincerely interested in how McGrath, for example, might reply to my arguments. Second, Christian physicalists would do well to explain their commitment to a view that faces problems that cause physicalists serious worry, specifically, the hard problem of consciousness and the unity of consciousness problems. Third, dualists must seriously engage the physicalist challenge to work out metaphysically rich accounts of embodiment within the framework of dualism. Last, dualists would

¹²⁶Justin Barret, *Born Believers: The Science of Children’s Religious Belief* (New York: Free Press, 2012), 215.

¹²⁷*Ibid.*, 212.

do well to develop accounts of psychological development and mental illness within a dualist view, which display just how dualism can contribute to and be informed by neuroscience. All this to say, there is a need for new constructive dialogue between dualists and antidualists as well as fertile research projects for dualism. Rather than its demise, as predicted by theologians in the 20th century, the future of dualism in the 21st century is quite promising.