

## Neuroscience, Materialism, and the Soul: Limit Questions

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**In light of recent discoveries in neuroscience linking the mind to physical processes, Christian philosophers have resorted to a more materialistic view of the human person, using neuroscience as support for their view that an immaterial soul does not exist. In this essay, I will point out a major flaw in the logic for defending a materialistic view, argue that either a bipartite or tripartite view of the human person is more aligned with Scripture, and hopefully point towards a more reliable means for attaining truth regarding human nature and the soul.**

Joel B. Green, a professor at Fuller Theological Seminary, makes the claim that “in the case of identifying what it means to be human, the biblical scholar is likely to side more with the neurobiologist than with the major, well-known voices of the Christian tradition.”<sup>1</sup> According to Green and other Christian materialists, as neuroscience has advanced in the past few decades, the idea that a separate, immaterial entity (such as a spirit or soul) being necessary to account for human capacities – a bipartite or tripartite view – is becoming less and less probable from a scientific perspective. Biological processes are beginning to give adequate explanations for human thoughts and behaviors, and as neuroscience advances it may be the case that someday every mental process will be traced to a biological one.<sup>2</sup> Reaction to this trend has varied among lay Christians. For the most part, Christians still hold onto a bipartite (body and soul) and or a tripartite (mind, body and soul) view, not resorting to materialism. Christian philosophers on this subject (mainly concentrated at Fuller Theological Seminary) have attempted to tackle this issue by rejecting bipartite/tripartite thinking and leaning much

more toward a materialistic view of the human person; these Christian thinkers have attempted to reshape and amend their interpretation of Scripture in light of modern findings in neuroscience.

### Bipartite/Tripartite Views and Dualism

Most lay Christians hold a bipartite or a tripartite view of the human person, believing that each of us contains some sort of immaterial, usually eternal, entity. From a secular lens, bipartite and tripartite views are very similar to dualism, which is a position that holds that the mind and body are not identical and that mental phenomena are non-physical.<sup>3</sup> Although dualism is generally considered “out of fashion” in psychology and philosophy,<sup>4</sup> the idea is not seen as completely unfeasible today in the scientific world. Some well-known neurologists, including Nobel laureates such as the late Sir John Eccles, have continued to defend dualism.<sup>5</sup> Even a minority of secular philosophers believes that resorting to materialism, although an easier approach, fails to give the complete picture.

There are a variety of ways to divide dualism (i.e. predicate dualism, property dualism, and substance or Cartesian

<sup>1</sup> Jeeves, 2004, p. 182

<sup>2</sup> Satel and Lilienfeld, 2013

<sup>3</sup> Guttenplan, 1994

<sup>4</sup> Robinson, 2016

<sup>5</sup> Jeeves, 2013, p. 72

dualism) and also a variety of perspectives as to how the immaterial and material interact (i.e. interactionism, epiphenomenalism, and parallelism). The strain of dualism and the variety of interaction most synonymous with bipartite and tripartite views are substance (Cartesian) dualism and interactionism. A substance dualist is defined as one who “holds that a normal human being involves two substances, one a body and the other a person.”<sup>6</sup> Translated to bipartite/tripartite views, this ‘person’ refers to an immortal and immaterial soul to Christians. Interactionism is the view that the immaterial and material causally influence each other; so for the Christian, the soul has influence over the body and vice versa.

### **The Lay Christian View – Shaped by Scripture**

Why do most lay Christians hold a bipartite/tripartite view similar to Cartesian thinking? These are a few common biblical passages that point to a dualistic view of the human persons,

we are of good courage, and we would rather be away from the body and at home with the Lord. (2 Corinthians 5:6 ESV)  
Do not fear those who kill the body but cannot kill the soul; rather fear him who can destroy both soul and body in hell. (Matthew 10:28 ESV)  
And the dust returns to the earth as it was, and the spirit returns to God who gave it. (Ecclesiastes 12:7 ESV)

If one accepts them, these positions make it difficult to refute a bipartite/tripartite view of the human person. In the first passage, Paul is explicitly referring to two separate entities – the person (‘we’) and the body. This passage is in stark opposition to any form of materialism. The second passage also seems to suggest an entity untouchable

by other people – the soul – while demonstrating the physical entity (‘the body’) that is capable of being destroyed by other people. The last passage uses the term ‘dust’ to refer to the body; this is what returns to the earth in burial, while the ‘spirit’ (a separate entity) returns to God. Reading passages like these in plain sense strongly suggests an immaterial entity contained in each individual. It is also suggested in passages like these that this immaterial entity can be in a separate location than the body.

### **Dualism in Philosophy**

Philosophical arguments for dualism can also be translated into arguments for bipartite/tripartite views. One argument is called the modal argument. The argument can be traced back to Descartes, who claims that since it is conceivable for the mind to exist apart from the body, one’s mind (or soul, in the case of the Christian) is a different entity than one’s body.<sup>7</sup>

Admittedly, the modal argument is not a particularly robust one; neither are the other philosophical arguments for dualism. Complete reducibility of the mind to the brain and the rest of the central nervous system has been a recent trend,<sup>8</sup> and neuroscience will most likely proceed in this direction, yielding dualism completely obsolete from a scientific standpoint. But most lay Christians do not use philosophical arguments to guide their faith; Scripture is used as the ultimate source of authority on this issue. The Christian philosopher, on the other hand, feels compelled to incorporate logic and modern scientific/philosophical findings into their biblical criticism, so a disparity has formed between Christians in the pew and Christian scholars.

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<sup>6</sup> Op. cit. ref. 2 n.p.

<sup>7</sup> Op. cit. ref. 4

<sup>8</sup> Op. cit. ref. 2

### **The Christian Scholar's View – Shaped by Neuroscience**

According to some of today's most prominent Christian thinkers on this subject, a serious issue arises for the bipartite/tripartite thinker – the rise of modern neuroscience linking the mind to the brain, making obsolete the need for an immaterial entity to allow for consciousness and thoughts. In light of this, these philosophers have resorted to a materialistic (monistic) view of the human body.

Nancy Murphy, developed the philosophy of 'nonreductive physicalism,' which maintains a materialistic view of the human body, but claims that humans are not completely reducible to their brains. She ties the idea of downward causation, a philosophical concept that mental states have causal power over biological aspects of the body, into her view to avoid the assertion that all human thoughts and behaviors are based solely on neurobiological processes.<sup>9</sup> Her argument can be summed up in one sentence: "All of the human capacities once attributed to the mind or soul are now being fruitfully studied as brain processes – or, more accurately, I should say, processes involving the brain, the rest of the nervous system and other bodily systems, all interacting with the socio-cultural world."<sup>10</sup> Another Christian thinker, Timothy O'Conner, holds a view called "emergent materialism," believing that consciousness is an emerging property of physical aspects of the human body.<sup>11</sup>

Neither Murphy nor O'Conner believe in an immaterial soul, but rather hold that one's conscience is dependent on physical processes occurring in his or her body. They believe that consciousness does not continue after death because of this reason. Christian philosophers like Murphy and O'Conner use neuroscientific research

as evidence to support materialistic ideas since the mind has recently been shown to be dependent on the brain.

N.T. Wright, in praise of the ideas held by these philosophers, writes in a foreword of a collection of Christian materialists' essays, "The media regularly report neuroscientific and genetic research indicating the interdependence of mind, brain, and body. This outstanding book brings that work into dialogue with profound philosophical analysis and careful attention to relevant biblical texts."<sup>12</sup>

### **Limit Questions – Recognizing Boundaries**

But is the use of neuroscience really an appropriate means for defending a materialist view of the human person? For someone open to the possibility of a divine being (such as a Christian), an appropriate approach to the philosophy and practice of science must be taken. One of the best-known approaches is called methodological naturalism, which is the practice of science that limits research to the study of the natural world, leaving supernatural phenomena open to possibility but outside the scope of science. Several Christian scientists and Christian scholars adopt this view. This is opposed to philosophical naturalism, which states that the natural world is all that exists since any possible supernatural forces have not survived tests using the scientific method. Only atheists or agnostics hold this view since there is no possibility of a deity with this worldview.

If methodological naturalism is practiced, neuroscience has no say in whether an immaterial soul exists or does not exist. Whether or not a human being has an immaterial aspect cannot be tested or observed using the methods of science, which are limited to natural phenomena.

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<sup>9</sup> Murphy, 2006

<sup>10</sup> *Ibid.*, p. 56

<sup>11</sup> Scott and Phinney, Jr., 2012

<sup>12</sup> Jeeves, 2004, preface

Christian materialists have inappropriately incorporated modern neuroscientific findings to defend a materialistic view when all along the possibility of an immaterial soul has been outside the realm of science.

This is not to say that biology cannot provide answers to questions that are seen as shared territory between faith and science. It certainly can, as long as it operates within the limitations of methodological naturalism. One such example is evolution. Biology can give us answers about how organisms have evolved and, through phylogenetic analyses, can create statistically significant trees of life within which every discovered species can be incorporated. But if science limits itself to the study of the natural world, it cannot shed any light on whether or not evolution happened by pure chance or happened as a result of guidance by a divine power (or a mix of both). Chance is assumed in methodological naturalism; however, supernatural intervention cannot be disproven because it is not testable. The same limitation applies to neuroscience. Simply because connections are being discovered between the mind and the brain does not give neuroscience a say in whether an immaterial soul exists or not. Not recognizing this critical boundary limit as to what science can and cannot address has been a flaw in Murphy and her colleagues' logic. This resorting to a materialistic view is an unnecessary compromise between science and faith. Even if one day all human thoughts and behaviors are linked to some biological process, the existence of an immaterial aspect cannot be ruled out by science since it cannot be observed or tested by the very methods of science.

### **Bodily Resurrection**

Another problem exists for Christian materialists. Regarding issues of

eschatology, Christian materialists place a large emphasis on the bodily resurrection. No intermediate state (a period of consciousness between death and Judgment Day) is possible with materialists because consciousness is dependent upon one's physical body. What do most lay Christians believe? For the most part, both Catholics and Protestants hold a bipartite/tripartite view in believing that consciousness remains after death, and the disembodied spirit is relocated to another place. For most Protestants, this intermediate state is something like a temporary heaven or hell, depending on the person's final destination. A general underworld, *hades*, is believed to be the intermediate state in Eastern Orthodox, Methodist, and Anglican circles. Purgatory is one possible intermediate state believed by most Catholics. Catholics also believe in the Communion of Saints, which holds that those who have died and have lived a life of faith are now in heaven and can even intercede on the earthly believer's behalf.<sup>13</sup> All these views hold that each person who dies maintains a disembodied consciousness immediately after death. Two biblical passages used to support this belief are Luke 23:43 where the thief is promised paradise with Jesus 'today' and Luke 16:22-24 regarding the story of Lazarus at Abraham's side and the rich man in Hades.

It is hard to refute the word 'today' in the first passage. On the very day the thief on the cross was going to die, Jesus told him he would be in paradise, which could only be possible if he maintained consciousness after death (outside of his physical body). In the second passage, the relocation of the rich man and Lazarus is evident immediately after death. The rich man goes to Hades, while Lazarus is living where Abraham is (supposedly, heaven). Relocation immediately after death is also believed to have happened to Jesus. In the Apostle's

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<sup>13</sup> Madrid, 1992

Creed, the believer states, “I believe that Jesus ... descended to the dead.”<sup>14</sup> One passage that most likely gave way to this statement of belief is 1 Peter 3:18-20 where Christ is said to proclaim to the ‘imprisoned spirits’ disobedient in Noah’s time. Here we see Jesus, conscious, despite his body being in the tomb, communicating with other conscious people who are separated from their bodies.

In contrast to these passages, some lay Christians, such as Seventh-day Adventists, hold to the idea that the soul inhabits some sort of sleeping state between death and Judgment Day; they use John 5:28-29 and 1 Thessalonians 4:13-14 to support their views:

Do not marvel at this, for an hour is coming when all who are in the tombs will hear His voice and come out, those who have done good to the resurrection of life, and those who have done evil to the resurrection of judgment.

But we do not want you to be uninformed, brothers, about those who are asleep, that you may not grieve as others do who have no hope. For since we believe that Jesus died and rose again, even so, through Jesus, God will bring with him those who have fallen asleep.

Maintaining a dualistic perspective does not contradict either of these views. However, for the materialist, the requirement of a bodily resurrection for consciousness to take place in the Eschaton requires a radical *ad hoc* twisting of passages such as Luke 23:43, Luke 16:22-24, and 1 Peter 3:18-20 before a materialistic view can be supported by Scripture. Even Kevin Corcoran, a Christian materialist, admits that these passages are difficult to ameliorate with a materialistic view of the human person.<sup>15</sup>

### An Alternative

Methodological naturalism was brought about in the practice of science to avoid “God-of-the-gaps” arguments, or arguments pointing toward a divine being when science was unable to provide an answer to a particular question. This is simply a method for placing a limitation on science as a field of study, as all fields of study should have limitations. The same holds true for religion; the Bible should not be used a scientific document, even though fundamentalist Christians have used and abused it as one.

Simply because neurobiology is providing adequate explanations for the human mind does not mean that the Bible is under attack in its claim that humans have souls. Even Nancey Murphy admits that “no such accumulation of data can ever amount to a proof that there is no immaterial mind or soul in addition to the body.”<sup>16</sup> Despite central nervous system organs being linked to certain thoughts, emotions, and behaviors, none of it can amount as evidence against an immaterial soul. If an immaterial soul exists, it cannot be detected by CT scans or fMRIs. Belief in an immaterial soul should stem from Scripture, which in faith is believed to be divine revelation, and whether neuroscience links the human mind to physical processes should have no effect on this, one way or the other. Christians, especially those who have a high regard for traditional understandings of Scripture, will acknowledge these limitations and base their views of the human person thereon.

### Conclusion

Biblical criticism is important, and obtaining a clearer view of Scripture in light of scientific findings is beneficial for the Christian seeking to find answers from both nature and divine revelation. For this

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<sup>14</sup> ELCA, 2006

<sup>15</sup> Corcoran, 2006

<sup>16</sup> Op. cit. ref. 9, p. 69

particular topic, however, science is limited in its scope in providing answers about an immaterial soul, and should not necessarily be used as evidence against it. As a result, Scripture may be the primary means for seeking the truth to these kinds of questions. Resorting to materialism is an unnecessary and inappropriate compromise if methodological naturalism is practiced as metaphysical naturalism. Consequently, there is a chance that lay Christians have this right; maybe their lack of knowledge of philosophical and scientific explanations regarding this topic have kept them closer to the truth. The Gospel, after all, was

successfully spread to the world by “uneducated and untrained” men who simply had faith (Acts 4:13). Philosophical thinking may be pushing us in the wrong direction on this issue, as it sometimes does according to Paul in 1 Corinthians 1:20-25. On the other hand, as N.T. Wright points out, “the Bible does not envisage human beings as split-level creatures (with, say, a distinct body and soul) but as complex, integrated wholes. The ultimate Christian hope is not for disembodied immortality but for bodily resurrection.”<sup>17</sup> Adjudication between these two positions is far from settled.

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<sup>17</sup> Op. cit. ref. 12