

**Science and Religion: The New Dialogue**

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**Lecture Six**

**The Soul and its Future: Neuroscience, Free Will and Resurrection  
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## **Knowledge in a Worldview**

Last week I said that knowledge is like a web, with our most stable and important beliefs at the center. I placed Christ at the center of the Christian worldview, because as Christians we believe the life of Jesus is God saying to the world, “From before the world, this is who I am.” That means that the ministry of Christ, including his Passion and Resurrection, tell us who God is, and how God works, and why.

We hold this to be the center of all knowledge. Other beliefs and knowledge radiate from that core, from the inside out. But knowledge also radiates from the outside in. That is where we have our actual experience of life—the raw data of existence. Scientific theories would tend to occupy the middle regions of a worldview. Ethical matters would be a little closer to the center.

Consider an analogy. Medical students begin their education with a course in anatomy and physiology. Anatomy concerns the structure of the body, the arrangement of its various parts. Physiology has to do with the dynamic processes through which all the organs perform their functions. Similarly, there is an anatomy of knowledge within a worldview, with the web showing the placement of different beliefs.

There is also a physiology, as information moves back and forth among its different sectors. Suppose someone comes up with a new idea, we are going to want to test that idea from two directions: the inside out, and the outside in.

You are talking ethics with Smith and Jones. Jones says, “I think we should go back to an eye for an eye and a tooth for a tooth: the punishment for murder should be death.” Smith disagrees: “I think the whole notion of punishment for crimes is wrong, because humans don’t really have a choice: our actions are determined by physics, genetics, and the environment.”

How are you going to evaluate these two proposals? From the inside out, you ask yourself, are these ideas consistent with theories of justice derived from the center of our tradition? From the outside in, you ask if they are consistent with what we know of physics, genetics, and the sociology of criminal behavior.

The way I remember to test ideas from two directions is to ask myself two questions: “Will it hunt?” and “Will it preach?”

Will it hunt? How reasonable is this when considered in relation to what we know through science, and through the wisdom of experience.

And will it preach? How reasonable is this when considered in relation to our faith in God and commitment to the gospel?

A few years ago, my friend Eloise Dewese was dying, and I went to see her. She was telling me about her days in Pine Bluff, and how she'd come to be an Episcopalian.

Eloise told me that, back in those days, the Episcopal Church wasn't all that easy to join. The feeling around town was, admission was by invitation only. She didn't tell me whether she'd been invited herself, or rather had just decided on her own to crash the party. I asked Eloise who had been the rector at Grace back when she came in. I've known and liked all of the Grace Church rectors going clear back to John Barton. She told me the fellow's name, but it didn't ring a bell.

"He had some interesting ideas," said Eloise. "Oh... like what?" I asked. "Like in Inquirer's Class he told us that he didn't really believe that anything else happens when you die. You're just dead."

That *is* an interesting idea, coming from a priest and promoted in Inquirer's Class. We could take this as an indication that, in the early sixties, our Episcopal Church wasn't entering one of its more vibrant eras.

The problem with this idea, of course, is that it just won't preach. It is inconsistent with the affirmations at the center of the Christian worldview.

This is made crystal clear on page 507 of the Book of Common Prayer, in a note following the Order for Burial. It says: "The liturgy for the dead is an Easter liturgy. It finds all its meaning in the resurrection. Because Jesus was raised from the dead, we, too, shall be raised."

That most definitely will preach. But will it hunt? Today we will be taking on that question.

## **The Soul and its Future**

The class is titled: “The Soul and its Future: Neuroscience, Free Will and Resurrection.”

That phrase, “the soul and its future” can be taken in either of two ways.

First, it can mean the future of a concept. Here the question is, is there still a place for the notion of a “soul” in our age of neuroscience. Maybe the notion of “soul” is one of those theological conceptions that lies strangled beside the crib of baby Hercules.

I will tell you in advance that the answer to that will be, yes, there most certainly is still a place for the notion of “soul” in our scientific era. But this is also an area where modern science does have some theological implications. What we learn from neuroscience can, and should, affect our understanding of the “soul” if we want a coherent, as well as comprehensive, worldview.

I will also tell you that here we have another case where the encounter with science tends to bear out the value of traditional theological conceptions. The future of “soul” is a return to biblical tradition where the word for soul, *psyche*, is simply the word for “life.”

And this leads to the second way to take our title, as having to do with the question: when we die, what does the future hold for you and me?

### **On the Web: The Anatomy of this Discussion**

This discussion will take us all over the web. We will be involved with two doctrines in theology, two bodies of science, and some very interesting raw data.

Theologically, our first question is: What makes up a human being? That belongs to an area of study called “theological anthropology.”

Our second theological question is the one about what happens when the world ends, or we die, whichever comes first. That’s the problem for the doctrine of the last things, called “eschatology.”

Scientifically, we will be concerned mainly with neuroscience, but also just briefly with evolutionary theory.

As to data, you will hear about John Cade’s discovery, the strange case of Phineas Gage, and some reported experiences near death.

## Theological Anthropology

Throughout this lecture I will be very closely following the work of Nancey Murphy in her book *Bodies and Souls, or Spirited Bodies?*<sup>1</sup>

In this book, she looks at contemporary neuroscience and explores its implications both for our theology of the human person, and for our theology of last things.

We will start with theological anthropology. The question is, what are human beings made of?

There are a lot of different theories. As Murphy says, “we have available to us a wealth of conflicting ideas about what a human being, most basically, is.”<sup>2</sup> She also says that having this wealth of available ideas is something we have in common with early Christians, who also lived in a time and place where there was a lot of religious and philosophical diversity.

I am going to slightly oversimplify from Murphy’s presentation and give you four basic theories to consider, and I’m going to say that two of these will preach and two will not. The theories are:

- (1) Reductive physicalism
- (2) Non-reductive physicalism
- (3) Body-soul dualism
- (4) Radical body-soul dualism

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<sup>1</sup> Nancey Murphy, *Bodies and Souls, or Spirited Bodies* (Cambridge: Cambridge University Press, 2006).

<sup>2</sup> *Ibid.*, 1.

(2) and (3) will preach: they are consistent with the beliefs about God and Christ at the center of our tradition. Murphy argues that, in an age of neuroscience, only (2) will hunt.

She may be right, but I'm still not convinced dualism's done for.

## Dualism

Dualism is probably the view most commonly associated with belief in God, although in Christianity the picture is more complicated than is generally assumed.

Dualism is the theory that humans are composed of two parts, a body plus a mind or soul.<sup>3</sup> We are “hybrid” creatures.

I have distinguished between dualism that is “radical” and dualism that is not, and have said that only the latter is consistent with the Christian faith.

Radical dualism is the theory souls exist before they were ever bodies. Souls put on bodies more or less like you and I would change our clothing. The soul is the person, the body is more or less a way to communicate and get around. You find this in Gnosticism and other non-Christian religions where there is belief in reincarnation.

I was flipping channels the other day and paused to watch a psychic giving a client a reading. We learned that the woman was an “old soul” who had been around since the sixth century, at which time she had lived in India.

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<sup>3</sup> Ibid., 2. Murphy explains: “The terms ‘mind’ and ‘soul’ were once (nearly interchangeable, but in recent years ‘soul’ has taken on religious connotations that mind has not.”

Christianity hasn't accepted reincarnation for theological reasons, namely that it doesn't seem to be consistent with our teaching about redemption. I think you would have to say that if people who believe in reincarnation are correct, then both the Christian doctrine of redemption and Christian eschatology are seriously mistaken.

A more reserved dualism, on the other hand, has been quite common in Christianity. This is the theory that each person has a soul and body as contributing parts to a single identity. The key point is that when the body dies, the soul endures.

This view has been especially important in modern liberal theology. According to Nancey Murphy, as liberal theology became more skeptical about Jesus' resurrection, it became heavily invested in the theory of the immortality of the soul, as the basis for Christian hope for life after death. This was especially strong in the eighteenth and nineteenth centuries. Another factor was the philosophy of Immanuel Kant, who developed an argument for the soul's immortality based on requirements for a morally purposeful existence.

Murphy writes that Kant's philosophical position "nicely reinforced the tendency among theologians to see body-soul dualism as the 'Enlightened' Christian position."<sup>4</sup>

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<sup>4</sup> Ibid., 8.

## **The Traditional Position**

The “pre-Enlightened” Christian position combined the dualist’s belief in the soul’s immortality with a more obviously biblical expectation of bodily resurrection from the dead. Paul doesn’t talk about immortal souls. He talks about the resurrection of the body.

So, given two distinctly different ways Christians might have for thinking about what happens at death, the tradition basically combined them.

As Murphy tells us: “Christians have two strikingly different conceptions of what happens after we die. One is based on dualism: the body dies and the soul departs to be with God. The other is the expectation of bodily resurrection. For centuries these two ideas have been combined. The body dies, the soul departs, and at the end of time the soul receives a resurrected or transformed body.”<sup>5</sup>

This Christian dualism was developed into what became known the doctrine of the “intermediate state.” The church certainly affirmed the expectation of bodily resurrection, but it also accepted body-soul dualism as a description of the human person. The question had to be asked: what happens to the soul of the faithful (or unfaithful) Christian in the time between death and the general resurrection? John Calvin developed the idea that, between the body’s death and resurrection, the soul exists in a sentient, watchful state. The same concept was affirmed by the Roman Catholic Church in the year 1513, at the Fifth Lateran Council. “Thus,” according to Murphy, “the doctrine of

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<sup>5</sup> Murphy, *Bodies and Souls*, 7.

the ‘intermediate state’ still serves as a motive for body-soul dualism among some conservative Christians, both Catholic and Reformed.”<sup>6</sup>

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<sup>6</sup> Ibid., 16.

## Near Death Experience

There is another possible motive, or basis, for belief in body-soul dualism, the evidence for which strikes me as compelling enough that I would feel remiss were I not to mention it. I am referring to the literature about reported experiences near death.

Many people, Christian and not, who have had heart attacks or been in traffic accidents, and whose hearts have stopped and brains apparently as well, have reported a rather strange and wonderful, although sometimes disturbing, mixture of experiences.

“Joy pulsed through me as I looked around, and at that moment I became aware of a large crowd of people. They stood in front of a brilliant, ornate gate. I have no idea how far away they were; such things as distance didn’t matter. As the crowd rushed toward me, I didn’t see Jesus, but I did see people I had known. As they surged toward me, I knew instantly that all of them had died during my lifetime. Their presence seem absolutely natural.

They rushed toward me, and every person was smiling, shouting, and praising God.”

That’s from a book titled *90 Minutes in Heaven*, by Don Piper, a Baptist pastor who was crushed in an automobile wreck at an old bridge on Highway 19 outside of Huntsville, Texas. The paramedics took his pulse and declared him dead, and it was ninety minutes later that he turned up living. During those ninety minutes, he saw old friends, he heard music, and he saw the light.<sup>7</sup>

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<sup>7</sup> Don Piper, *90 Minutes in Heaven* (Grand Rapids, Mich.: Revell, 2004). “With Cecil Murphey.”

There is now a scholarly literature on this, and as you would imagine there have been robust efforts to show that the brain remains active through these experiences, and to show that they can be stimulated by chemical and electrical activity and to drive home a conclusion that, whatever they may be, they are not experiences of heaven.

I'm only going to mention this, rather than emphasize it, because I am by no means sure that there isn't a purely physicalist explanation for these experiences, and because I don't want to give the impression that the Christian hope is bound to the kind of dualism they imply—because it is not.

But I will mention them because I think they are evidence of a sort, and as evidence they will either have to be explained, or explained away—and as best as I can tell they still haven't been explained away.

Consider a report by Ornella Corazza, an NDE researcher at the University of London.

One of her many cases concerns an infant, Mark Botts, who at the age of nine months had an experience very near to death.

“The little boy was suffering from severe bronchiolitis, which caused a full cardiopulmonary arrest. It apparently took more than 40 minutes for doctors to revive him, and afterwards he was in a coma for a further three months. A trachea tube, which prevented him speaking, remained in place until he was aged 3. And then another two years passed before, one day, totally out of the blue he surprised his parents by talking about ‘when he had died’. He described how, during his experience, he left

his body and crawled through a dark tunnel into a bright golden light where he was greeted warmly by some ‘white clouded figures’. He then glided down a golden road until suddenly a being, whom he understood to be God, appeared in front of him. They conversed telepathically until Mark was told he had to return to his body. He was told: ‘You have a purpose in life, and when you fulfill it, you can come back and visit me again someday.’ Interestingly, while out of body Mark saw things that could be subsequently verified. He observed the doctors and nurses working on him, and then he watched as his grandmother tried to find his mother who was ‘at least a hundred yards away through many corridors, rooms and doors’. As Mark’s mother said, in response to the cynicism she faced when talking about Mark’s experience, ‘How can you *not* believe when he can tell you where you stood, when it’s impossible to see you? How can you not believe him when the things he said, happened?’<sup>8</sup>

It is that last experience, which is not uncommon, that gives me pause. What theory, other than dualism, could account for a child’s seeing something in another room?

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<sup>8</sup> Ornella Corazza, *Near Death Experiences: Exploring the Mind-Body Connection* (New York: Routledge, 2008), 32.

## **Challenges to dualism**

This is a class on the new dialogue between religion and science, and the near death phenomena have not been on the agenda for that particular discussion. For the most part, the theologians in this group are not body-soul dualists, but are committed instead to a “non-reductive physicalist” understanding of the human being. The thinking is that this theological position is more deeply consistent both with Christian doctrine and with discoveries in science. The sciences considered most relevant to this discussion are neuroscience and evolutionary biology.

*Evolutionary Science.* Just to briefly touch on evolutionary biology, the question here is: Why would we think that humans have souls in a ways that animals do not? Now there are radical dualists (most notably, the Hindus) who believe that animal bodies and human bodies are inhabited by souls in the same way. But Christian dualists have not generally accepted the notion that animals have souls. This raises the problem of deciding at what point in the evolution of the human species the soul would have first appeared. If a soul is the kind of substance that some creatures absolutely have while other creatures absolutely don't, that becomes an issue.

On the whole, evolutionary science tends to show our continuity with other species. Even the qualities that are distinctively human, such as rationality and morality, seem to be incipient in certain other creatures. No one in my house doubts that dogs are smart, have feelings, and understand a difference between right and wrong.

Under the influence of this science, it makes more sense to recognize differences between humans and other creatures as differences of degree than as absolute, either-or distinctions. For body-soul dualism in the Christian tradition, that is a significant challenge.

## *Neuroscience*

A greater challenge comes from neuroscience.

Here is an item I picked up from an article by the writer Tom Wolfe, for a journal called *Orthodoxy Today*. The article is titled “Sorry, But Your Soul Just Died.” My mother sent it to me.

Wolfe tells this story: “In 1949 an Australian psychiatrist, John Cade, gave five days of lithium therapy—for entirely the wrong reasons—to a fifty-one-year-old mental patient who was so manic-depressive, so hyperactive, unintelligible, and uncontrollable, he had been kept locked up in asylums for twenty years. By the sixth day, thanks to the lithium buildup in his blood, he was a normal human being. Three months later he was released and lived happily ever after in his own home.”<sup>9</sup>

Now, another story: the famous case of Phineas Gage. Phineas Gage was a nineteenth century railroad worker, who one day suffered a terrible accident. A job site explosion blew a metal rod through his skull and into his brain. The good news for Gage was that he recovered physically, and

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<sup>9</sup> Tom Wolfe, “Sorry, But Your Soul Just Died,” *OrthodoxyToday.org*, March 17, 2005. This was actually the seed for the development of a new science that would largely displace an old one, Freudian psychotherapy. This patient had had twenty years of Freudian treatment, according to Wolfe, to no avail. “Over the next twenty years antidepressant and tranquilizing drugs completely replaced Freudian talk-talk as treatment for serious mental disturbances.” I think we could say that here is an instance where a new bit of data brought on the sudden collapse of a powerful worldview.

all his cognitive functions—including reasoning, memory and language—were basically restored. The bad news for Gage and those who knew him was that his character was completely changed. Before, he had been reliable, respectful, and considerate of others. After the accident he was profane, impulsive, inconsiderate and unreliable. The accident had turned Dr. Jekyll into Mr. Hyde.<sup>10</sup>

Now one could conjure any number of theories for why a man who had suffered such a trauma might experience a personality change. But the best-supported theory is that it all boils down to the damage the metal rod had done to a specific region of the brain. Two scientists, Antonio and Hannah Damasio, have studied the accident reports, the accounts of Gage's changes in personality and moral character, and they have also closely examined the actual physical damage to his skull.

According to Nancey Murphy:

“Hanna Damasio was able to determine from the damage to Gage's skull exactly which parts of the brain would have been destroyed in the accident—selected areas of his prefrontal cortices. The Damasios conclude from this and other similar cases that this area of the brain is ‘concerned specifically with unique human properties, among them the ability to anticipate the future and plan accordingly within a complex social environment; the sense of responsibility toward the self and

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<sup>10</sup> Murphy, *Bodies and Souls, or Spirited Bodies*, 67, quoting Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: G.P. Putnam's sons, 1994), 8.

others; and the ability to orchestrate one's survival deliberately, at the command of one's free will."<sup>11</sup>

For Nancey Murphy, this body of scientific work is theologically important—both for our theological anthropology (our understanding of the human person) and our eschatology (our understanding of what world awaits beyond the point of death.)

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<sup>11</sup> Murphy, 67, quoting Damasio, 10.

## **Murphy's case for physicalism**

Let's look first at Murphy's theological anthropology, and her case for a "non-reductive physicalist" account of the human person.

The key elements of Murphy's case for physicalism are:

1. Consistency with scripture
2. Aquinas's conception of the powers of the soul
3. Neuroscience's demonstration of these powers as functions of the brain

## Consistency with scripture

According to Murphy, “The New Testament authors are not intending to teach *anything* about humans’ metaphysical composition. If they were, surely they could have done so more clearly!”<sup>12</sup>

Murphy distinguishes between the Greek and Hebrew views of human beings. Greeks conceived of humans “partitively,” while Hebrews saw humans “aspectively.” “Partitive” means composed of separate parts, like a house is composed of separate rooms. “Aspectively” means that the same thing can be seen in several different ways, like Marie Milwee can be seen as a grandmother, a travel agent, and a steel magnolia. A partitive understanding of soul sees body and soul as two parts of a whole person. An aspective understanding of soul understands a soul as a human being as considered from a certain point of view.

Murphy is saying that this is often the view we find in scripture. She finds support for this in the work of the Scottish biblical scholar James D.G. Dunn. Dunn explains it as the difference between a school *having* a gym, and his *being* a Scot, because Scottishness is an aspect of his whole being.<sup>13</sup>

Murphy: “So the Greek philosophers . . . were interested in the question: what are the essential parts that make up a human being? In contrast, for the biblical authors each ‘part’ (‘part’ in scare quotes) stands for the whole person thought of from a certain angle. For example, ‘spirit’ stands for the

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<sup>12</sup> Murphy, *Bodies and Souls, or Spirited Bodies?*, 21.

<sup>13</sup> Ibid., 21, citing James D.G. Dunn, *The Theology of the Apostle Paul* (Grand Rapids, MI: Eerdmans, 1998), 54. Dunn in turn attributes the aspective/partitive account to D.E.H. Whitely, *The Theology of St. Paul* (Oxford: Blackwell, 1964.)

whole person in relation to God. What the New Testament authors are concerned with, then, is human beings in relationship to the nature world, the community, and God. Paul's distinction between spirit and flesh is not our later distinction between soul and body. Paul is concerned with two ways of living: one in conformity with the Spirit of God, and the other in conformity to the old aeon before Christ."<sup>14</sup>

So the first part of Murphy's case is that it is wrong to assume that biblical authors like Paul were thinking as dualists when they spoke of souls. They were thinking of humans in relation to God.

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<sup>14</sup> Murphy, *Bodies and Souls, or Spirited Bodies*, 22.

## **Aquinas on the soul**

The second part of her case is simply a review of Thomas Aquinas's teaching on the soul. This is, she says, the clearest exposition and "high water mark" for Christian thinking on the subject.

I suppose Aquinas should be considered a dualist, but his dualism is so low key and subdued that the word almost doesn't fit. The soul, for him, isn't a substance, it is rather the "form" of the body. That is to say, the soul is what makes us distinctively human, in the same way that the form of a chair is what makes a wooden chair distinctively a chair, rather than, let's say, a log, or a piece of lumber.

But Aquinas did speak of the soul as having "faculties" or "powers," and he examined them in detail. He distinguished between three levels in an ordered hierarchy.<sup>15</sup>

At its lowest level, the soul has *Vegetative Powers* that humans share with plants and animals. These are powers for nutrition, growth, and reproduction.

Then there are *Sensitive Powers*, including touch, taste, sight, smell, and sound, and also more subtle senses, such as the "estimative power" to "recognize something that is useful or useless, friendly or unfriendly." The sensitive powers also include "eleven kinds of emotion: love, desire, delight, hate, aversion, sorrow, fear, daring, hope, despair, and anger." According to Aquinas, other animals *do*

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<sup>15</sup> Murphy, *Bodies and Souls, or Spirited Bodies*, 15.

have these same sensitive faculties and powers. Aquinas agreed with Aristotle's classification of humans as "rational animals."

So the third level, and the one that sets us apart, consists of our *Rational Powers*. These include the "passive and active intellect and will." For Aquinas, morality is a combined function of intellect and will. Our will is always drawn to one good thing or another, and it is our intellect that allows us to distinguish what is good from what is not. A clear-sighted intellect will see that all good comes ultimately from God, and will guide the will to God as to goodness at its source.<sup>16</sup> So that is Aquinas on the soul.

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<sup>16</sup> Ibid., 15.

## Physicalism

Murphy's argument is this. If Aquinas is the high water mark in Christian thinking about the soul; and if, according to Aquinas, the soul has this long list of powers; and if neuroscience can locate every item on Aquinas's list, up to and including the intellect and will, to specific regions of the brain—then neuroscience has shown the soul is not a substance independent of the brain.

That leads Murphy to adopt a “physicalist” conception of the human person.

“Physicalism,” according to Murphy, “is the view that humans are composed of only one part,” a physical body.”<sup>17</sup> We “are not hybrids of matter and something else, [but rather] purely physical organisms.”<sup>18</sup>

Murphy is a “physicalist,” but she is not a “reductive physicalist.”

### *Reductionism.*

We have talked a lot about determinism in this class. Let me speak for a moment about “reductionism.”

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<sup>17</sup> Murphy, *Bodies and Souls, or Spirited Bodies.*, 1.

<sup>18</sup> *Ibid.*, 69.

Reductionism is the thesis that the way to understand something is to break it down into its parts, and that once we've understood the parts we've understood the whole. Taken to the limit, the reductionist thesis is that sociology breaks down to biology which breaks down to chemistry which breaks down to physics. In principle, once we had a complete physics, we would have a complete understanding of the world.<sup>19</sup>

That means that in nature causes work only from the bottom up. Physics causes chemistry, which causes biology, which causes our religious belief that we should love the Lord our God with all our heart and mind and soul, and our neighbor as ourselves.<sup>20</sup>

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<sup>19</sup> Elliott Sober says that reductionism is the thesis that, in principle, “an ideally complete physics would be able to account for all biological phenomena.” Sober, *Philosophy of Biology*, 25.

<sup>20</sup> Non-reductive physicalism is the thesis that in nature there are wholes that are greater than the sum of their parts. It goes hand in hand with a theological interpretation of evolution that I call the theory of “Emergent Value.” The theory of Emergent Value affirms that this is a good, divinely ordered world, whose values are its *raison d'être*. It claims these values are multilayered, supervenient and irreducible—in a word: emergent. Values are “multilayered” in that they are described by a hierarchy of sciences; “supervenient” in that each layer is comprised of the elements of the one below; and “irreducible” in that in some way the supervening layer adds value “over and above” the elements of which it is comprised. Nancey Murphy, presenting Robert Van Gulick's treatment of emergence, encapsulates it thus: “If the basic idea of emergence is more or less the converse of reduction, and the core idea of reduction is that X's are nothing more than Y's, then the core idea of emergence is that X's are something over and above Y's.” Nancey Murphy, Introduction to *Evolution and Emergence: Systems, Organisms, Persons*, ed. Nancey Murphy and William R. Stoeger (Oxford: Oxford University Press, 2007), 3. The theory of Emergent Values identifies emergent values in science, ethics and religion, meaning that in these disciplines we have to deal with values that to some degree transcend biological and sociological constraints. Finally, it claims the existence of emergent values as a fact about the world that invites a theistic explanation, supplying epistemic support for an hypothesis of God.

The basic idea of reductive physicalism is that the higher human capacities, including moral, intellectual and religious capacities, are “*nothing but* brain processes.”<sup>21</sup>

The basic idea of non-reductive physicalism is that with the evolution of the human brain, in human beings the whole is greater than the sum of its parts. After you understood everything there is to know about brains, you wouldn't necessarily understand *Macbeth*, the meaning of  $E=MC^2$ , or the difference between Jeremy Bentham and Immanuel Kant's principles for distinguishing between right and wrong. Nor could you know why it still hurts to think about the Arkansas-Texas game of 1969.

Drawing from the work of Owen Thomas, Murphy asks us to think of all the capacities that contribute to make us uniquely human. These include self-awareness, creativity, memory and anticipation, as well as “moral, intellectual, social, political, aesthetic, and religious capacities.” All of these capacities are physical, in that they are fully embodied in the brain. They are also spiritual, in that these are all the pieces of ourselves that are involved in our relationship with God. God is not a figment of our imagination. In humankind, creation has evolved the capacity to know and love the Lord our God, and our neighbors as ourselves. That is what makes us souls—beings in relationship with God.<sup>22</sup>

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<sup>21</sup> Murphy, *Bodies and Souls, or Spirited Bodies?*, 69.

<sup>22</sup> *Ibid.*, 33.

## Free Will

Murphy's case for *non-reductive* physicalism includes an argument for free will.

“Proofs” for free will are every bit as controversial as proofs for God.

Murphy arrives at a stance in favor of limited free will. She recognizes the “bottom up” constraints imposed on Phineas Gage, and the patient of John Cade, yet she also recognizes that human beings have a degree of freedom to select our future, and indeed influence our own physical constitution.<sup>23</sup>

One of the more interesting things about human nature is that what happens to our bodies affects us spiritually, and what we do spiritually has effects within the body. Causes work the top down as well as from the bottom up. We can see that in studies showing how spiritual practices like prayer have long-term effects within the brain.

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<sup>23</sup> According to Murphy, what free will requires is:

1. Neural complexity
2. Language

Regarding neuroscience and the problem of free will: “The worry is this: if human choices are essentially brain events, and if brain events are governed by the laws of neurobiology, then must it not be the case that all choices and all subsequent behavior are governed by the laws of neurobiology?” Ibid., 103. Murphy answers that worry with her thesis of top-down causation.

Murphy writes:

“Free will is usually treated as an all-or-nothing thing affair; an act is free or not free. It is more helpful, I believe, to see human actions as *more or less* free.”<sup>24</sup> Murphy then compares the levels of freedom we experience at different ages.

“The behavior of infants is almost entirely determined by biology. The task of raising a toddler is that of replacing some natural biological processes with social controls. The maturation task is a process of reshaping the person’s character so that she become increasingly the source of her own actions. This reshaping occurs, as [Alasdair] MacIntyre points out, by means of a process of self-evaluation or self-transcendence. My recommendation is to say that when a person acts on the basis of considered goals and principles, without undue biological or social interference, she has become the author of her own acts and ought to be described as acting freely.”<sup>25</sup>

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<sup>24</sup> Ibid. 107.

<sup>25</sup> Ibid. 108.

## **Implications for Life After Death**

Murphy says that the science that points to a “non-reductive physicalist” theory of the human person also has a bearing on our eschatology. With respect to our hope, it helps settle an old theological dispute between two theories:

1. “Immortality of the Soul”
2. “Resurrection of the Body”

Earlier, I mentioned that in the 18<sup>th</sup> and 19<sup>th</sup> centuries, skeptical liberals had looked to body-soul dualism as their basis for maintaining Christian hope for life beyond death. The body dies, but the soul endures.

But in the twentieth century, biblical scholars have reminded us that the biblical writers paint a rather different picture. First, they tend not to be committed to body-soul dualism as an account of the person; and second, what we hear from them is not about the “immortality of the soul,” but rather about the “resurrection of the body.”<sup>26</sup>

It is not that the soul survives, it is that bodies are raised, transformed.

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<sup>26</sup> Ibid., 10.

So if neuroscience challenges body-soul dualism, it adds weight to a theology of bodily resurrection. Moreover, compared with the traditional doctrine of the intermediate state:

“One . . . needs to understand resurrection differently: not re-clothing of a ‘naked’ soul with a (new) body, but rather restoring the whole person to life—a new transformed kind of life.”<sup>27</sup>

This is actually a much richer conception of afterlife, and it is one, Murphy suggests, that also has this-worldly implications.

“This is not, of course, to deny the after-life. It is rather to emphasize the importance of *bodily* resurrection. It is important to see how the contrasting accounts of life after death—resurrection versus immortality of the soul—lead to different accounts toward Kingdom work in this life. Luther theologian Ted Peters whimsically describes the dualist account of salvation as ‘soul-ectomy.’ If souls are saved *out* of this world, then nothing here matters ultimately. If it is our bodily selves that are saved and transformed, then bodies and all that go with them matter—families, history, and all of nature.”<sup>28</sup>

This also has implications for our conception of the next world.

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<sup>27</sup> Ibid., 23.

<sup>28</sup> Ibid., 29.

“Looking forward to the resurrection and transformation of our bodies leads naturally to the expectation that the entire cosmos will be similarly transformed. German theologian Wolfhart Pannenberg argues that in Jesus’ resurrection we see the first fruits of the transformation for which the whole creation is longing[n] As Paul says ‘the created universe is waiting with eager expectation for God’s sons to be revealed. . . . (Rom. 8:19–23 [REB])’<sup>29</sup>

That, by the way, would include our dear departed dogs and cats.

It would also include, says Murphy, the very laws of nature, which are the conditions for our existence now. These, says Murphy are God’s creatures, “Yet, in contrast to early modern understandings of them as perfect expressions of God’s will, they are fallen—not in the sense that they once were perfect and then changed, but in the sense that they are meant to be our servants but are instead our masters; they do not enable humankind to live a genuinely free, loving life. [n] . . . Thus, the completion of Christ’s work must include a radical transformation of the laws of nature such that they do permit the fullness of human life that God intends.”<sup>30</sup>

I want to emphasize what is being said here. We have many reasons to appreciate this world and regard it as good. At the same time, we recognize that it is not the Kingdom of heaven in all its fullness, and that it can never be. Resurrection isn’t the continuation of life in this world of anthropic coincidences, quantum physics, chaos theory, and evolution by natural selection. Whatever

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<sup>29</sup> Ibid.,

<sup>30</sup> Ibid., 145.

the physics and biology of a world where that Kingdom is fulfilled may be, they will not be the same as now.

[John Polkinghorne discusses this in relation to the cost in suffering that comes with the evolutionary process. This is technical, but important.

“In evaluating the cost of evolutionary process, it is important to set theological thinking in its broadest context. This will require taking eschatology into account, not as a means of discounting the reality of present suffering by a facile kind of appeal to future glory, but because God’s creative purposes are in fact only properly understood if they are acknowledged to involve intrinsically a two-step sequence of creation and redemption. First comes this world (the old creation in Pauline terms), existing at some distance from the veiled presence of its Creator, in the manner that is necessary if finite beings are initially to be free to be themselves and make themselves. This is the world of evolutionary process, in which the death of one generation is the necessary cost of the new life of the next. It has to exist at the ‘edge of chaos’ as a world of transience and decay. However, the last word does not lie with death, but with God. It is the Creator’s purpose eventually to draw creatures into a willingly accepted closer relationship to their Creator. This will be achieved by the eschatological redemptive act that transforms the world of the old creation into the world of the new creation. [n] the new will arise from the old, but its ‘matter’ will be different, endowed with such strong self-organizing principles that it is no longer subject to the thermodynamic drift to disorder that characterizes the physics we observe. (Paul discusses just these issues in the idiom of his day in

1 Corinthians 15). Christians believe that his new creation has already begun to come into existence in the seed event of Christ's resurrection."<sup>31]</sup>

Beyond this, there is little we can know. Polkinghorne alludes to Paul. Paul, who was a witness to Jesus' resurrection, uses an analogy to compare the "before" of this embodied life with the new embodiment after resurrection. He says it is like the difference between living in a tent, and living in a house.

Murphy thinks that one thing we can expect is that "table fellowship," which is so central for the life of the Kingdom of God as Jesus made it evident on earth, must in some sense be continued. But she quickly adds that it is hopeless for us to try to imagine what that could mean regarding "digestion, metabolism and so forth."<sup>32</sup>

Rather than speculate, she decides to follow the lead of the philosopher Ludwig Wittgenstein, who emphasized the limitations of our language. Recognizing these limitations, there are subjects about which we shouldn't even try to speak. This is where, as Murphy says, the new dialogue between theology and science, "must reach a point of silence."<sup>33</sup>

It is not that nice boys don't ask questions about such things, it is that wise men and women know that there are some answers for which we will simply have to wait.

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<sup>31</sup> John Polkinghorne, "Evolution and Providence: A Response to Thomas Tracy," *Theology and Science* 7, no. 4 (2009): 320–21.

<sup>32</sup> Murphy, *Bodies and Souls, Or Spirited Bodies?*, 145.

<sup>33</sup> Ibid.

