Western SGraduate & Postdoctoral Studies

Western University Scholarship@Western

Electronic Thesis and Dissertation Repository

4-20-2016 12:00 AM

Rethinking Resurrection: Choosing Interdisciplinary Dialogue Over Dualism

Jesse Dymond The University of Western Ontario

Supervisor Dr. Darren Marks *The University of Western Ontario*

Graduate Program in Theology A thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts © Jesse Dymond 2016

Follow this and additional works at: https://ir.lib.uwo.ca/etd

Part of the Christianity Commons, Neuroscience and Neurobiology Commons, and the Practical Theology Commons

Recommended Citation

Dymond, Jesse, "Rethinking Resurrection: Choosing Interdisciplinary Dialogue Over Dualism" (2016). *Electronic Thesis and Dissertation Repository*. 3672. https://ir.lib.uwo.ca/etd/3672

This Dissertation/Thesis is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Electronic Thesis and Dissertation Repository by an authorized administrator of Scholarship@Western. For more information, please contact wlswadmin@uwo.ca.

Abstract

Christianity is plagued by two dualistic concepts: first, an ontological dualism that divides the human person into body and soul, and second, an epistemological dualism that claims science and theology are incompatible. However, these polarized (and polarizing) theological frameworks are no longer sufficient, especially as scientific research provides new understanding about the brain and human identity. The existence of the nonphysical soul has long been called into question, thereby creating a theological crisis at the very core of Christian belief: the resurrection. This thesis will examine the crisis as it manifests itself in contemporary Christian society, pointing to the perpetuation of dualistic philosophies as the source of a theological impasse. Finally, it will propose an interdisciplinary solution, revisiting resurrection theology in dialogue with modern science, and providing a way forward for those who seek a way both to participate in the resurrected life, and to proclaim the promise of general resurrection without dismissing scientific research.

Keywords

Science, theology, dualism, interdisciplinary, resurrection, non-reductive physicalism, Peacocke, Murphy, Van Huyssteen, Bynum, Brown

Acknowledgments

This work would have been impossible without the support and guidance of a number of others: some who taught and supervised me in the process of this degree, others who provided intellectual and emotional support as I moved between ministries, and all of whom have kept asking questions, refusing to be satisfied with easy answers, and reminding me that the questions I am asking are ones to be asked again and again, as we seek to better understand who we are, and how we fit into God's creation.

I must offer my sincere thanks to The Rev. Canon Dr. Bill Danaher, Jr., who first encouraged me to pursue these questions, to Dr. Darren Marks and Dr. John Thorp, who provided fair and helpful direction as they advised my studies, and to Erin Green and Bishop Elect Bruce Myers, for their friendship and collegial support.

Most importantly, I must thank my wife, Karen, for her love and patience over the course of these studies. Only in the context of relationship can I draw the conclusion I have: *this life matters*.

For now we see in a mirror, dimly, but then we shall see face to face. Now I know only in part; then I will know fully, even as I have been fully known. And now faith, hope, and love abide; and the greatest of these is love. (1 Cor 13:12-13)

Table of Contents

Al	ostract	i	
Acknowledgmentsii			
Table of Contentsii			
Preface			
Cł	Chapter 1		
1	The Problem	1	
	1.1 The Problem of the Soul	1	
	1.2 Are Science and Theology Incompatible? The Historical Answer and its Legacy	75	
	1.3 Does the Nonphysical Soul Exist?	12	
Chapter 2			
2	How Did We Get Here?	25	
	2.1 Thomas Aquinas and the Soul	25	
	2.2 Bynum and the Problem of Thomistic Dualism	37	
	2.3 The New Testament and the Search for Understanding	43	
	2.4 Resurrection, Death, and Life in the Hebrew Scriptures	46	
Chapter 3			
3	Interdisciplinary Dialogue	52	
	3.1 Science and Theology Need One Another	52	
	3.2 Method for Dialogue	60	
	3.3 The Postfoundational Model	69	
	3.4 Postfoundationalism in Practice	74	
Cł	napter 4	80	
4	Postfoundationalism Applied, Conclusions	80	
	4.1 Resurrection, in Dialogue with Science	80	

4.2 Conclusions	
Reference List	
Curriculum Vitae	

Preface

Life is messy. And as I have come to find, life as a priest exposes one to a particular kind of messiness: one that is honest about the raw physicality of birth and the irreversible finality of death and the decay that follows. No doubt this is true for many others: for those who live and die in poverty, for those who seek peace in the midst of armed conflict, and for those employed as first responders, surgeons, and nurses.

The Christian narrative offers profound hope in the midst of this unending cycle of birth and death: for the Christian, death does not have the last word. And yet, it seems, at times, that our faith has blinded us from the holy certitude of death. Too often, I have witnessed believers refuse to grieve the death of a loved one, claiming sure and certain hope in the resurrection. Too often, I have known Christians to put more energy into religious piety than into the relationships that surround them. Too often, I have watched as my community has put aside the ways of peace, love, healing, and stewardship of creation for callings considered to be more spiritual. And too often, I have prayed that God's kingdom come, and God's will be done, without seriously considering what we mean when we claim this hope "on earth, as it is in heaven."

I began this work as an escape into the metaphysical: the works of John Polkinghorne, Ian Barbour, and Arthur Peacocke were a welcome departure from what seemed to be an always fleeting and often cruel experience in this physical plane of existence, and refreshing evidence that science and theology could not only co-exist, but work together. What I did not expect, as I moved into the world of human nature and our place in the cosmos, was to be challenged with one simple question: *do we need a soul?*

v

That question lies at the core of my thesis: I no longer believe that the non-physical soul is a necessary element of human identity. And while that shift provides room for the theologian to consider movement in the area of brain science, it seems that accepting a holistic and material human identity is probably also closer to the views of the Ancient Hebrew community and of some in the Early Church.

I offer this document to those who, whether due to education or the generation into which they were born, find themselves caught between the worlds of religious tradition and scientific questioning. I believe there is a middle way. I offer it to those who have seen the minds of those they love decay or change, raising very real questions about the nature of the soul and human identity. And I offer it to those committed to asking questions: what I propose here is only one path, and one means of revisiting scripture and tradition, armed with new knowledge.

This thesis is an answer to the question posed above: no, the soul is not necessary for Christian belief. However, abandoning generations of belief is not without its caveats: the Christian community has inherited many years of theology, music, and art centered around the existence of a non-physical soul. For those who adopt Christian materialism, pastoral concerns around those who maintain dualistic beliefs may outweigh the advantages that interdisciplinary dialogue has to offer. As well, it should be noted that while abandoning the need for a non-physical soul's existence between the time of death and the General Resurrection creates few theological problems for us, it raises some very real questions about Jesus' resurrection: was the earthly Jesus, fully human, a material being? Did Jesus, who was also God, embody God's Spirit? In what ways was the earthly Jesus different than humanity, if at all? For our purposes, we will approach only the General Resurrection, leaving Jesus'

vi

resurrection to further studies around the ways Christology and Trinitarian theology might relate to psycho-physical materialism.

Life is messy. It is raw, and it is physical. My hope is that this work might inspire us to accept the permanence of death: a holy end to our God-given time on earth, until that time when all of creation is made new. But I hope it might also challenge us to live in the ways of the resurrected Christ, here and now.

Thy kingdom come,

Thy will be done,

On earth as it is in heaven.

Chapter 1

1 The Problem

Before we can approach the theology of the resurrection, we must consider the soul. Namely, what do we mean when we refer to the human soul? After identifying the current state of confusion, this chapter will examine whether or not the existence of a nonphysical soul can be rationalized by contemporary thought and the doctrine of creation. It will argue that logic, science, and scripture point to humanity's physical identity: a material identity separate and distinct from that of its creator (who exists as spirit), but with the unique physical ability to interact with that spirit.

1.1 The Problem of the Soul

Christians have a problem. That problem is, quite literally, a matter of life and death: it is the resurrection.¹ For without the theology of the resurrection, Christianity, at least in any historically orthodox form, would cease to exist. In the words of Peter Carnley, who defines Christianity as being post-Easter:

If anything it is the resurrection which is the foundation of the Church, its worship and its theology, for the Church gathers not just around the

¹ This thesis refers specifically to the doctrine of the General Resurrection of the Body, considering the Resurrection of Jesus of Nazareth to be a separate matter.

rehearsal of the story of the incarnation of God, but around perceived presence of the raised Christ himself. (Carnley 1987, 8)

Indeed, Christianity *is* resurrection! And while Carnley speaks specifically to the Church's identity in the risen Jesus of Nazareth, one must also question how this Easter faith is interpreted and lived out in the hope of the general resurrection. What happens after death, and how can theologians reconcile their tradition with a growing body of knowledge that suggests that the human brain is, in fact, the location of what we call the soul? While the scientific community has moved ahead in its understanding of the human person and its place in nature, the Church, by and large, has failed to respond theologically. As a result, it finds itself ill-equipped to speak to a culture informed by science, and especially to a new generation of educated youth.

David Kinnaman quotes one of these modern thinkers, in *You Lost Me: Why Young Christians Are Leaving Church... And Rethinking Faith*:

> To be honest, I think that learning about science was the straw that broke the camel's back. I knew from church that I couldn't believe in both science and God, so that was it. I didn't believe in God anymore." (Kinnaman 2011, loc. 2141)

However, it seems that those leaving the Christian faith are not the only ones ill-equipped to comprehend the soul, life after death, or the resurrection. In the book, *Bodies and Souls, or Spirited Bodies*, Nancey Murphy shares the text of an informal quiz she often gives when providing a lecture. The quiz asks the following: Which of the following comes closest to your understanding of human nature?

1. Humans are composed of one "part": a physical body

(materialism/physicalism).

- 2. Humans are composed of two parts:
 - 2a. A body and a soul

2b. A body and a mind (dualism)

- 3. Humans are composed of three parts: body, soul, and spirit (trichotomism).
- 4. Humans are composed of one "part": a spiritual/mental substance (idealism).
- 5. Who cares? (Murphy 2006, 2-3)

Not surprisingly, Murphy reports that the results vary depending on the nature of her audience. While scientists and liberal seminarians lean towards materialism, she notes that both Evangelical students and (of particular interest for our purposes) general audiences continuously provide dualistic or trichotomistic answers. And although she suggests that the fifth answer, "who cares?" is likely the most accurate representation of the biblical view, it seems both that the biblical witness may be more diverse and complicated than we have come to understand (as will be explored in a later chapter), and that Murphy's fifth answer is unsatisfactory for the theologian, and as this chapter will suggest, for the modern world.

Should the variety of answers surprise us? Perhaps not: Swinburne writes, "In more modern times, the view that humans have souls has always been understood as the view that humans have an essential part, separable from the body, as depicted by Plato and

Aquinas" (Swinburne, Soul, nature and immortality of the). But why the confusion? What has challenged the traditional dualistic view, which requires the existence of the nonphysical and eternal soul? Robert Delfino looks to two revolutions in science:

> The first revolution came from Charles Darwin. His theory of evolution, though he did not use that word, raised serious questions about the origin and nature of human beings. If humans evolved from non-human animals it would seem that the difference between humans and other animals is merely a matter of degree. In addition, if life itself emerged from nonliving matter, as some scientists have hypothesized, then appealing to a nonphysical soul would seem to be superfluous. This view appears to be reinforced by the second and currently occurring revolution, which comes from neuroscience. Thanks to new discoveries about the brain, scientists seem to be able to explain more and more of the functions that were once attributed to the soul. (Delfino 2008)

Murphy, too, observes this conflict, concluding that our current understanding of the soul needs further exploration and interdisciplinary dialogue:

A major part of current neuroscience research involves mapping the regions of the brain (neuroanatomy) and studying the functions of the various regions (neurophysiology). Studies of this sort intersect, in fascinating ways, the philosophical issues canvassed above. First, they provide dramatic evidence for physicalism. As neuroscientists associate more and more of the faculties once attributed to mind or soul with the functioning of specific regions or systems of the brain it becomes more and more appealing to say that it is in fact the brain that performs these functions. (Murphy 1998a, 13)

Herein lies the problem: against growing evidence to the contrary, not only does a large cross section of the general public perceive, for whatever reason, that the human person is composed of something more than its physical properties, but the very resurrection theology on which Christianity is built seems to depend on the existence of the nonphysical soul.

1.2 Are Science and Theology Incompatible? The Historical Answer and its Legacy

Arthur Peacocke's book, *Creation and the World of Science: the Re-Shaping of Belief* begins with a section titled, "The Two Books." While Peacocke points to a particular dilemma regarding the use of textbooks in the public school system, his title suggests a greater problem: for many, science and theology are seen as two opposing voices in humanity's quest to understand its own origin and purpose. While scientific research has forced us to rethink the very composition of ourselves and of our world, many have dismissed the traditional religious view: the doctrine of creation. Meanwhile, others committed to upholding religious tradition have rejected commonly accepted scientific theories and conclusions. The notion that science and theology possess irreconcilable differences has polarized both the academic and religious worlds, as well as many who

look to these places for direction. While this division is often cause for public and political debate in the North American landscape, the problem is not a new one. A brief survey of the historical conflict between science and theology reveals a conversation that has remained at a virtual stalemate since it began.

Even in the early days of modern science, some in both camps were willing to see science and theology as complementary, even natural partners.² However, this view has always called for reformation of both religious and scientific thought. Following a brief examination of the current polarization, this chapter will survey some of the historical conflicts in the seventeenth and eighteenth centuries. Specifically, it will consider the compatibility of science with the Judeo-Christian theology of God as creator. Using these historical accounts, it will demonstrate that current conflicts stem from an unresolved (or at least unsatisfactorily resolved) problem in our history: namely, a presumption that a dualistic understanding of creation is required for science and theology to be reconciled.

Peacocke begins his book with reference to the November 10, 1972 edition of the *San Francisco Chronicle*. The newspaper had documented the results of a legal battle regarding curriculum in the public school system: specifically, the lawsuit regarding the inclusion or exclusion of the Genesis creation account from textbooks that favoured the Darwinian theory of evolution. Rather than supporting either explanation, the courts settled on a compromise. Peacocke quotes the article:

² Speaking to van Huyssteen's methodology, Randy L. Maddox observes, "The German word *Wissenschaft* is often translated "science." However, it is conceived to include all self–critical approaches to knowledge and thus has a broader scope of meaning than is typically assigned to "science" in the Anglo-American realm." (Maddox 1984)

The new guidelines would allow books to discuss the 'how' of man's origin but would prohibit them from mentioning 'ultimate causes' of life. They would have to avoid, then, naming either God or the random chemical reactions of several billion years ago that evolutionists say led to living cells. (Peacocke 2004, 1)

Unfortunately, rather than paving the way for critical thought or the search for meaning in schools, the verdict resulted in what could only be called an ignorant truce. For fear that either traditional religious doctrine or commonly accepted scientific theories might be promoted, schools were banned from exploring the question of the source of life. The reasoning for the ban comes down to one concept, as resolved by the National Academy of Sciences in that same year:

> WHEREAS religion and science are, therefore, separate and mutually exclusive realms of human thought whose presentation in the same context leads to misunderstanding of both scientific theory and religious belief... (Peacocke 2004, 2)

These same words could be used to describe the uneasy truce held by many scientists and theologians today: a *scientific explanation of the natural order is valid; the religious account of creation is valid; however, both are exclusive and independent. Each approach provides different answers because each approach asks different questions.* However, as the questions asked move beyond those easily answered by observation, their differences become difficult to distinguish: how did humanity come to be; what is the mechanism of human consciousness; what happens when we die? To support this uneasy truce, science and theology must be viewed as operating in two separate planes or realms of existence: theology in the spiritual realm, and science in the physical realm. If we are to accept the existence of both a physical realm and a spiritual realm, our understanding of creation might provide the necessary framework for those two conflicting realities to coexist. Barth seemed to support this mystical approach in his reflections on "God the Creator":

> If we take this concept seriously, it must be at once clear that we are not confronted by a realm which in any sense may be accessible to human view or even to human thought. Natural science may be our occupation with its view of development... but when could natural science have ever penetrated to the fact that there is one world which runs through this development? (Barth 1959, 51)

However, Peacocke rightly challenges this approach as one that is dependent on a dualistic ontology. He notes that body-soul dualism is not only inadequate in regards to our understanding of the natural world, but that it is inconsistent with the Christian doctrine of creation, in that the only acceptable dualism exists between God and creation, not within creation itself (Peacocke 2004, 24). We must ask ourselves: if our creeds portray an undivided creator, can the same God be divided into the physical and spiritual? Furthermore, can creation, and especially humanity, as created in God's image, be dualistic?

In many ways, this struggle began in the seventeenth century, as Galileo sought to understand his scientific observations in a world dominated by the picture of the universe formed by Thomas Aquinas:

Earth was a fixed central sphere surrounded by the concentric spheres of the heavens. Every entity... in the graded *hierarchy of reality*: God, planets, angels, men, women, animals, and plants. It was a law-abiding world, but the laws were moral and not mechanical. (Barbour 1997, 6)

More important for our current purposes,³ however, is the Thomistic understanding of God's relationship with the world. In this cosmological argument, God the creator is the cause of all that exists. Furthermore, God exists as the "continuing ruler of nature," rather than simply as its original creator (Barbour 1997, 8).

As Galileo began to challenge the historical understanding of the earth and the heavens, he did so with a particular consideration of and respect for the scriptures. However, his proposal suggested not only a departure from the old cosmological model, but also a departure from the medieval understanding of God as continuing ruler (Barbour 1997, 15-16). Furthermore, Galileo's observations called into question the literal interpretation of scripture that supported the hierarchical and geocentric model of creation. As he drew criticism from the religious and political leaders of his day, Galileo's explanation was quite similar to the modern approach discussed earlier in this paper: he claimed that theology and science have different goals and stand independent of one another.

³ Aquinas' views on the soul will be explored in chapter 2.1.

However, to rationalize his argument, he leaned on the theologian whose work was the basis for the Western world's cosmological model: Thomas Aquinas.

It follows that since the Holy Ghost did not intend to teach us whether heaven moves or stands still... so much the less was it intended to settle for us any other conclusion of the same kind... Now if the Holy Spirit has purposely neglected to teach us propositions of this sort as irrelevant to the highest goal (that is, our salvation), how can anyone affirm that it is obligatory to take sides on them? (Barbour 1997, 14)

Newton followed in Galileo's footsteps, proclaiming a morally ordered universe, designed by God, and left to the governance of human reason. Newton's God was present in the world through both the designed order, and the presence of humanity (Barbour 1997, 24). But it was not until the eighteenth century that the worlds of science and religion were truly separated, in the work of Immanuel Kant. Kant proposed that limitations in the scientific method left room for religious belief (Barbour 1997, 45), and proposed a coexistence of the two through a 'division of labour.' According to Kant, religion did not need to defend its gaps to the scientific community, and science did not need to reconcile its observations with the mysteries of faith (Barbour 1997, 46).

Later that century, John Wesley penned the preface to Milton's *Survey of the Wisdom of God in Creation: or a Compendium of Natural Philosophy*. In his introduction, Wesley praised the work of the natural sciences for displaying "the invisible things of God, his power, wisdom, and goodness" (Milton 1770, iii). Yet as he went on, Wesley supported the view that science and theology coexist independently of one another, and without threat:

It will be easily observed, that I endeavour throughout, not to account for things, but only to describe them. I undertake barely to set down what appears in nature, not the cause of those appearances. (Milton 1770, v-vi)

While at times, the tension between science and theology in our modern age seems to be at a peak, a brief survey of history reveals that this tension has long since existed. Moreover, the common solution cited in our world, which claims religion and science both ask and answer different questions or operate in different realms, seems to be no more than the evolution of a solution offered in one form or another since the beginning of the conflict.

Where does that leave us? Nancey Murphy describes the situation well:

It is undeniable that a serious theological problem awaits a solution. Philosophers see dualism as no longer tenable; the neurosciences have completed the Darwinian revolution, bringing the entire human being under the purview of the natural sciences. Scientists and philosophers alike associate dualism with Christianity, and the "evangelical atheists" among them (such as Daniel Dennett) use these specific and philosophical developments as potent apologetic tools. (Murphy 1998a, 24)

If we are to accept Peacocke's claim that these answers result in a dualism incompatible with Judeo-Christian belief, then we might also assume that as science continues to explore the natural world in greater and greater detail, the tension will only increase. And if that is the case, there seem to be only two solutions: either science and theology *are* irreconcilable, or, as I will suggest in a later chapter, we must consider a new model for dialogue.

1.3 Does the Nonphysical Soul Exist?

C.S. Lewis is often quoted as having said, "You don't have a soul; you *are* a soul. You have a body." In fact, despite the absence of these words in any of his books, and the lack of any other credible source, contemporary religious media and Internet sources show no hesitation in attributing the quote to Lewis. These words, whatever their source, have struck a chord with humanity: so much so that they have become what Dawkins would call a meme:

Examples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots or building arches. Just as genes propagate themselves in the meme pool by leaping from body to body via sperm or eggs, so memes propagate themselves in the gene pool by leaping from brain to brain via a process which, in the broad sense, can be called imitation. (Dawkins 2006b, 192)

And while this seemingly viral idea has been propagated culturally, its popularity has little to say about whether or not it is true. Dawkins describes this phenomenon using what he calls "the god meme": Remember that 'survival value' here does not mean value for a gene in a gene pool, but value for a meme in a meme pool. The question really means: What is it about the idea of a god that gives it its stability and penetrance in the cultural environment? The survival value of the god meme in the meme pool results from its great psychological appeal. It provides a superficially plausible answer to deep and troubling questions about existence. (Dawkins 2006b, 193)

And yet, whether or not cultural memes hold any scientific merit, whether or not they are theologically valid, or whether or not the meme in question can be attributed to anyone, these words reveal something important about society: people need to understand who and what they are, and as our cultural understanding of the human person changes, respected voices of authority are called upon to clarify new developments. The words' popularity points to a dilemma unique to the religious world: as science progresses, modern persons of faith crave a new or more developed understanding of what we mean when we refer to the soul. And while the words quoted suggest a departure from the traditional understanding of soul (i.e. secondary to the physical being), it maintains a dualistic understanding of human ontology. This should strike us as odd, for the notion conflicts with both the scientific mind and the religious mind. Modern science would explain emotion, creativity, and even religious experience as functions of the brain. Likewise, regardless of popular religious views, humanity cannot be understood to be dualistic in nature, given its creation in the image of an undivided God.

What, then, is the soul? Does it describe a uniquely nonphysical part of the human person, or does it, instead, describe the metaphysical functions of the brain? Is the

concept of soul nothing more than an historical understanding of human identity that science has made obsolete? And finally, if the soul turns out to be nothing more than a function of the human brain, then what are the religious implications?

In a debate hosted by *The Guardian*, Richard Dawkins introduced two definitions. The first, he distinguished as 'soul one':

It's the theory that there is something non-material about life, some nonphysical vital principle. It's the theory according to which a body has to be animated by some anima. Vitalized by a vital force. Energized by some mysterious energy. Spiritualized by some mysterious spirit. Made conscious by some mysterious thing or substance called consciousness... In the sense of Soul One, science has either killed the soul or it is in the process of doing so. (Radford 1999)

Dawkins suggests that all definitions of 'soul one' are both circular and non-productive, and counters this understanding with 'soul two':

"...intellectual or spiritual power. High development of the mental faculties. Also, in somewhat weakened sense, deep feeling, sensitivity." (Radford 1999)

He is not, of course, describing the existence of two different souls, but of two different understandings, the first of which he dismisses as false. To Dawkins, no part of the human person exists beyond its physical form. To Dawkins, the word "soul" describes only the higher functions of the brain. Others, like Richard Swinburne, support a dualistic understanding of human identity. Adopting Descartes' explanation, Swinburne proposes a model which resembles Dawkins' "soul one," or what Gilbert Ryle cleverly calls "the ghost in the machine" (Ryle 2009, 5-6).

> The body is separable from the person and the person can continue even after the body is destroyed. Just as I continue to exist wholly and completely if you cut off my hair, so, the dualist holds, it is possible that I continue to exist if you destroy my body... The person is the soul together with whatever, if any, body is linked temporarily to it. (Swinburne 1997)

The notion that a person is composed of both body and soul, but may continue to exist even without the body, is not a new one, having been most effectively realized by Thomas Aquinas, as will be explored in a later chapter. But to the modern mind, Swinburne's reasoning may seem illogical. Cutting one's hair seems to be different than cutting one's soul (if there is such a thing). But what of cutting one's brain? What of recent developments in neurotheology, like the work of Andrew Newberg, that draws connections between religious ritual and healing in the brain (Anastasi and Newberg 2008; Moss, et al. 2012)? After all, if Dawkins is correct, and if the soul is simply a function of the brain, then the human person is necessarily connected to the body because the human person *is* the body. If the body dies, the person no longer exists.

In his logic, Swinburne has considered these things. He notes the known continuity of the human person after surgery: specifically, after the transplant of any part, save the brain. However, here he seems to side with Dawkins, identifying the brain as the core of human function, and the core of human identity. Swinburne concludes simply: "I go where my brain goes" (Swinburne 1997, II, 8).⁴ Yet the location of the person becomes more complicated as neuroscience progresses. One must take into account the possibility of survival after stroke or injury to the brain. Experience tells us that even if part of the brain dies or is removed, the person remains: even in cases of removal of an entire hemisphere, or injuries causing significant disability, the person retains a sense of continuity, or self.⁵ Swinburne takes this one step further, asking what would result from the transplant of an entire hemisphere, were it possible. Would the person (and for our purposes, the soul) remain with the donor, leaving the recipient soulless, or would the person/soul be transferred to the recipient? In the latter case, would the procedure result in two identical individuals/souls, or would the soul be divided?

This, I will propose, is where Swinburne's theory begins to break down. As he considers the possibility of the divided mind, he leans to Bernard Williams' essay, *The Self and the Future* (Williams 1970). By transposing William's dilemma to the question at hand, Swinburne claims to prove that "there is something other to the continuity of the person, than any continuity of parts of brain or body" (Swinburne 1997, II, 8). The proposal is simple:

⁴ While Swinburne's logic is faulty, brain transplants may not be impossible. In her book, *Stiff: The Curious Lives of Human Cadavers*, Mary Roach documents a series of dog and monkey head transplants conducted by Vladimir Demikhov in the 1950s, and by Robert White in the 1960s. In 1971, White transplanted the head of one monkey on to the body of a second, observing "Each cephalon [head] gave evidence of the external environment... The eyes tracked the movement of individuals and objects brought into their visual fields, and the cephalons remained basically pugnacious in their attitudes as demonstrated by their biting if orally stimulated." (Roach 2004, loc 2657-2733).

⁵ Swinburne agrees that this is the case, as proven in (the now dated) S. P. Springer and G. Deutsch, *Left Brain, Right Brain,* W. H. Freeman, San Francisco, 1981

Suppose that a mad surgeon captures you and announces that he is going to transplant your left cerebral hemisphere into one body, and your right one into another. He is going to torture one of the resulting persons and free the other with the gift of a million pounds. You can choose which hemisphere [sic] is to be tortured and which to be rewarded... but you do not know which resultant person will be you. (Swinburne 1997, II, 8)

Due to the obvious fear and confusion such a situation would bring about, Swinburne draws on Williams' own conclusion:

This seems to show that to care about what happens to me in the future is not necessarily to care about what happens to *this* body (the one I now have); and this in turn might be taken to show that in some sense of Descartes' obscure phrase, I and my body are "really distinct." (Williams 1970, 164-165)

It is Swinburne's claim that this theoretical uncertainty allows one to conclude that there is more to the human person than the sum of its parts, and that this, in turn, allows for a dualistic understanding of body/soul.⁶ However, Williams himself admits that his own

⁶ In light of this conclusion, it is worth making of note of Warren Brown's suggestion that the human capacity for personal relatedness creates that which is semantically called "soul." Brown avoids dualism by presenting the soul as an *emergent property* of cognitive ability: "a unique mode of functioning that becomes possible on the basis of both a significant increase in the capacity of some lower-level abilities and the interaction among these capacities... the emergent property *cannot be understood by close scrutiny of the lower abilities*, nor can the behaviour in the realm of the emergent property be totally accounted for using the descriptive concepts of lower-level phenomena." (Brown 1998a, loc. 1423) While this proposed "non-reductive physicalism" works, one wonders if it might more clearly be named *emergent physicalism/materialism*. Furthermore, some materialists will remain unsatisfied by a materialism that leaves room for the mystical or ineffable.

conclusion does not allow for the person to exist without a body! Furthermore, both have made theoretical conclusions based on theoretical situations that bring about an emotional reaction—one that may or may not be logical. That one cares about the possibility that their person (in whatever form) may suffer in no way implies that said person exists separate from the body. To fear being tortured as either Williams' A-body-person or Bbody-person cannot, in itself, lead us to the conclusion that the person exists outside of the body. In either case, the fear is torture. In either case, it would be experienced by both the physical body and the person (especially if we are unable to distinguish between the two). Finally, both Williams' and Swinburne's proposals elicit emotional responses to theoretical and (currently) impossible situations. Swinburne's conclusion is not dissimilar to suggesting that fear of eternal damnation proves the existence of hell, or that fear of hell proves the existence of the soul. By attempting to confirm the existence of the soul in a dualistic manner, Swinburne has stepped outside of what is logical. By attempting to explain an abstract concept in a logical manner, he has resorted to the imaginary. It seems that in this case, like in the case of proving the existence of God, logic meets its limitations: just as it can neither prove nor disprove the existence of God, it can neither prove nor disprove body/soul dualism. In fact, using logic to make such universal claims has a certain danger: the argument bears the risk of becoming either illogical (like the argument above), or so abstract that it confuses the issue, as demonstrated by John Allen Paulos in this apocryphal story:

> Catherine the Great had asked the famous French philosopher Denis Diderot to her court, but was distressed to discover that Diderot was a vocal atheist. To counter him, she asked the visiting mathematician

Leonhard Euler to confront Diderot. On being told that there was a new argument for God's existence, the innumerate Frenchman expressed a desire to hear it. Euler then strode forward and stated, "Sir, (a+bⁿ)/n=x. Hence God exists. Reply." Having no understanding of math, Diderot is reported to have been so dumbfounded he left for Paris. (Paulos 2008, 43)

Here, it seems worth drawing a parallel to where similar conversations are taking place in the field of philosophy. Specifically, around what David Chalmers calls "the hard problem of consciousness". Chalmers writes,

It is undeniable that some organisms are subjects of experience. But the question of how it is that these systems are subjects of experience is perplexing. Why is it that when our cognitive systems engage in visual and auditory information-processing, we have visual or auditory experience: the quality of deep blue, the sensation of middle C? How can we explain why there is something it is like to entertain a mental image, or to experience an emotion? It is widely agreed that experience arises from a physical basis, but we have no good explanation of why and how it so arises. Why should physical processing give rise to a rich inner life at all? It seems objectively unreasonable that it should, and yet it does. (Chalmers 1995)

Chalmers differentiates these secondary or emergent properties from the "easy problems:" phenomena that can be explained scientifically:

- the ability to discriminate, categorize, and react to environmental stimuli;
- the integration of information by a cognitive system;
- the reportability of mental states;
- the ability of a system to access its internal states;
- the focus of attention;
- the deliberate control of behaviour;
- the difference between wakefulness and sleep. (Chalmers 1995)

Others, like Murphy's interlocutor, Daniel C. Dennett, believe that Chalmers is inflating the problem, and that the hard problem of consciousness could, in fact, be explained once the easy problem is better understood. Dennett compares the necessity for the hard problem to create something out of nothing to magic:

Any bag of tricks in the brain just *couldn't be* consciousness, not *real* consciousness. But even those who don't make this preemptive mistake often have a weakness for exaggerating the phenomenon of consciousness. (Dennett 2013, 313)

Finally, Robert Wright summarizes the materialist's problem with not only the hard and soft problems of consciousness, but with consciousness itself:

In my view, the problem here is that consciousness is "identical" to physical brain states. The more Dennett et al. try to explain to me what they mean by this, the more convinced I become that what they really believe is that consciousness doesn't exist. (R. Wright 2001, 308) What, then, remains? A growing body of evidence seems to point to the existence of the person, and therefore what we would call the soul, within the human brain. While this creates a number of theological problems in areas from free will to morality, the immediate concern for our purposes is that of the eternal soul. Namely, this: if what we refer to as the soul exists within the brain itself, and if we cannot accept Swinburne's (or Aquinas') rationale for the existence of the soul aside from the body, then what becomes of the soul at the time of death? Logic would suggest that when the brain dies, the soul dies. And this presents us with a theological crisis. Popular Christian understandings of the afterlife must be called into question. Concepts like 'the communion of saints' are no longer feasible, at least in the way they once were. What I will propose is not a new understanding, but an old one. It is a return to the basics of the Christian faith—because problematic understandings of the soul most likely spring from inherited tradition rather than from scripture itself. As Murphy points out,

...there is an increasing consensus that neither dualism nor trichotomism is to be found in the Hebraic or Christian Scriptures. Instead, interpreters, working in light of later dualist theories of human nature, have read dualism back into the texts, and the texts have been translated this way into modern languages. (Murphy 2013, 12)

To begin, we must acknowledge that a dualistic human ontology cannot be reconciled with the doctrine of creation. Calling, again, on Peacocke, the only acceptable dualism exists between God and creation. God is not divided. Creation is not divided. Humanity, created in the image of an undivided God, cannot be dualistic (Peacocke 2004, 24). If we accept that this is true, we can also accept the possibility that the entirety of human capacity is realized in its physical form. Such a departure from dualism allows the Christian to accept the possibility that what we call the soul may, in fact, be a physical function of the human brain.

In terms of death and general resurrection, it is prudent to return to the scriptures. Ted Peters points us to the epistles of the apostle Paul as we consider the soul (T. Peters 2003, 293-317). Paul, in his letters, considered death and resurrection as necessary elements of the Christian life. However, the modern concept of the eternal soul seems . Peters writes, "For Paul, there is no abiding life force at all that perdures through death" (T. Peters 2003, 306).

N.T. Wright supports this claim, confirming that for Paul, not only was resurrection most certainly a bodily one, but that his culture had no concept of what we might call a nonphysical soul:

There was, in any case, no indication in Judaism either before or after Paul that 'resurrection' could mean anything other than 'bodily'... we should not assume that the ontological dualism between what modern westerners since Descartes at least think of as 'physical' and 'spiritual', or 'material' and 'non-material', would have meant very much to Paul's audiences. Most pagan philosophers of the period who believed in the existence of souls would have thought that they, like the body, were composed of material, albeit in finer particles (N. Wright 2003, loc 6395).

For the Early Christians, life was life. Death was death. Sharing in Christ's resurrection was miraculous not because the believers' eternal souls would be reunited with their

bodies, but because they who were fully dead would experience new birth! Peters calls us to Paul's use of eschatological images: "what you sow does not come to life unless it dies" (1 Cor. 15:36), explaining that "resurrection is not exactly creation out of nothing, but creation of something out of something else. A dead seed is sown, but what is harvested is new life" (T. Peters 2003, 307). Joel Green writes,

> How are we capable of traversing from life to life-after-death? Simply put, we are not. The capacity for resurrection, for transformed existence, is not a property intrinsic to the human person (nor to the created cosmos). That is, as Paul emphasizes, God's doing. (Green 2008, 178)

The permanence of death was not a new concept for the Early Church, but was in many ways inherited from Judaism: a religious tradition that, like Christianity, carried a well-developed resurrection theology. But as Jon D. Levenson explains, the Classical Jewish doctrine of resurrection depended on death in its fullness:

...the finality and irreversibility of death is in fact, everywhere the belief. On this reading, the position of the Hebrew Bible is nicely and exhaustively stated by the wise woman of Tekoa to King David, "We must all die; we are like water that is poured out on the ground and cannot be gathered up." (2 Sam 14:14) (Levenson 2006, 167)

Joel Green expands on the importance of the physicality of both human life and death by reminding us that personhood need not be defined only by its physical form, but by the way the human person interacts with the rest of creation: in the very social relations that define human identity. That is particularly important when we consider death, because death marks not only the loss of the material person, but of the relationships that define that person's identity:

This means, second, that death must be understood not only in biological terms, as merely the cessation of one's body, but as the conclusion of embodied life, the severance of all relationships, and the fading of personal narrative. It means that, at death, the person *really dies*; from the perspective of our humanity and sans divine intervention, there is no part of us, no aspect of our personhood, that survives death. (Green 2008, 178)

While what I suggest may seem to be a departure from both historical and contemporary Christian tradition, it seems that leaving dualistic ontology behind is not only faithful to much of historical Christian and Hebrew doctrine, but that it also solves the mystery of the soul's location. And while the Early was diverse in its understanding, one can read in Paul's letters the certainty of death, and hope for a new creation in the resurrection. In that light, how we might reinterpret the theology of resurrection, and how it might manifest itself in the Christian community will be explored in the final chapters.⁷

⁷ It seems important, at this intersection, to observe that this dilemma is not unique to theology's body/soul dualism, but to philosophy's mind/brain dualism. Daniel C. Dennett writes, "scientists and philosophers may have achieved a consensus of sorts in favor of materialism, but as we shall see, getting rid of the old dualistic visions is harder than contemporary materialists have thought. Finding suitable replacements for the traditional dualistic images will require some rather startling adjustments to our habitual ways of thinking, adjustments that will be just as counterintuitive at first to scientists as to laypeople." (Dennett, Consciousness Explained, 37)

Chapter 2

2 How Did We Get Here?

In the first chapter, I noted that while scientific research may have brought us closer to understanding both the location and function of what we call *the soul*, it has also resulted in a departure from ancient beliefs that may, in fact, be easier to reconcile with the sciences than current religious views (T. Peters 2003).⁸ It seems fitting, then, to question the historical sources which have informed our theology, especially as such conflicts arise.

If Pauline Christianity did not support the concept of the eternal soul, then how did bodysoul dualism become so prevalent in Christian theology? This chapter will look to one significant voice in the Church's definition of the soul: Thomas Aquinas. It will also look to the Hebrew Scriptures, in search of understanding regarding the theology regarding death and resurrection that the Early Church might have inherited from the Jewish tradition.

2.1 Thomas Aquinas and the Soul

The classical view of the human soul is one that developed over time: Plato's dualistic theory of forms established a model where matter was ultimately superseded by form.

⁸ Ted Peters observes that Pauline Christianity does not support the existence in an immortal soul, except through the miracle of the resurrection.

Aristotle's response was one that aimed to unite matter and form in a way that both could coexist. "One of the most significant features of the problem of the soul in the thirteenth century," writes Anton Charles Pegis, "is the evidence it gives of the resistance of Christian thought to Aristotle" (Pegis 1978, 121). It was within this environment that Thomas Aquinas considered the soul, and ultimately turned from Aristotle's united model to one that more closely reflected Platonic dualism:

That intimate union between soul and body, which seemed to rob the soul of all its native glory and to reduce it to the status of the form of the body, is a doctrine which... did not please the early as well as (for the most part) the late nineteenth century. Under such circumstances it was natural to turn to Plato, and St. Thomas himself has outlined the difficulties which led to such a solution. But in thus safeguarding the substantial character of the soul and its radical independence of the body, Christian thought was open to the charge of endangering the unity of man. (Pegis 1978, 121)

What follows is the Thomistic view, as described in *Summa Theologiae*. By surveying his *Treatise on Man*, this chapter will explore Thomas Aquinas' understanding of the soul, and its relationship to the human body, making note of Thomas' reliance on dualism, and how the *Summa* continues to influence modern Christian thought (Thomas Aquinas, *Summa Theologica* I, Q. 75-102).

Thomas described the soul as the "first principle" of all living things: that which animates life (Aquinas, *Sum* I, Q. 75, Art. 1). Life, as he described it, may be observed in both knowledge and movement. But what of the soul? One might argue that the soul, without

physical form, may be observed in neither knowledge nor movement. However, Aquinas made a clear distinction between the body, which acts, and the soul, which causes the body to act. The human person, as he understood it, was composed of both soul and body. It seems to follow that the body does not possess life independent of the soul: if the soul is the first principle of life, the without the soul, the body is lifeless—dead. And yet, Aquinas did allow for the possibility that the soul could exist without the body. The human soul, as he described it, is nonphysical. And though it is separable and self-subsistent, without the body, the soul is an incomplete human (Aquinas, *Sum* I, Q. 75, Art. 4).

Lest we risk misreading the *Summa*, it is important to understand what, exactly, Aquinas referred to by the word "soul". Though he described the soul as existing without matter (Aquinas, *Sum* I, Q. 75, Art. 5), Aquinas did not refer to a mystical or apparitional quality in the modern sense of the word, but rather to "the principle of intellectual operation" (Aquinas, *Sum* I, Q. 75, Art. 2). He was careful, however, to separate this principle from the human body, noting the necessity of objectivity in understanding:

Now whatever knows certain things cannot have any of them in its own nature; because that which is in it naturally would impede the knowledge of anything else... therefore, if the intellectual principle contained the nature of a body it would be unable to know all bodies. (Aquinas, *Sum* I, Q. 75, Art. 2)

For Thomas, the human soul alone was subsistent (Aquinas, *Sum* I, Q. 75, Art. 3). In regards to the souls of animals, he drew on the works of Plato, who made a distinction

between the intellect and sensory apparatus, and of Aristotle, who maintained that understanding is performed without corporeal action (Aquinas, *Sum* I, Q. 75, Art. 3). Animals, as Aquinas understood them, were sensory creatures that did not share these subsistent and separable intellectual properties of humans.

Thomas also made an important distinction between the human soul and the angel, clarifying a perceived similitude that continues to our present age. He proposed that both the angel and the soul are nonphysical, and acknowledged the argument that proposed the soul and the angel are of the same species, based on the assumption that the two do not differ aside from the soul's union with the body (Aquinas, *Sum* I, Q. 75, Art. 7). But here, he reminded the reader that those things with different natural operations, as is the case with the angel and the soul, are necessarily of different species. Meanwhile, Thomas further separated the human soul and the angel in terms of intellect: the human soul, of varied and indeterminate intellectual capacity, and the angel, of superior intellectuality and moral knowledge.

However, while Aquinas was keen to separate the human body and soul, he did not allow for either to define the human person independently:

The body is not of the essence of the soul; but the soul by nature of its essence can be united to the body, so that, properly speaking, not the soul alone, but the "composite," is the species. (Aquinas, *Sum* I, Q. 75, Art. 7)

The paradox of both this separation and composite nature created a number of problems, which Thomas addressed in logical fashion.

One such problem presented itself in the number of souls present among human beings. As already stated, Aquinas understood the soul to be immaterial. According to the logic of his day, an immaterial substance within a species could not be multiplied. However, the alternative would suggest that all humans share one soul, a principle Thomas called absurd, as it conflicted with the diversity present in humanity (Aquinas, *Sum* I, Q. 76, Art. 2). Another problem was found in the very nature of the body and soul's unity: for if the soul is incorruptible, but the body is not, the two might seem to be incompatible. To rationalize this inconsistency, Thomas forwent his usual logic, and leaned on his theology: "God, however, provided in this case by applying a remedy against death in the gift of grace" (Aquinas, *Sum* I, Q. 76, Art. 5).

In one of the most interesting sections of the Treatise on Man, Aquinas considered whether the soul was present in each part of the body. It had been proposed that the soul's presence was not necessary in all parts of the body: specifically, the soul was neither needed nor present in parts of the body thought to be inorganic (Aquinas, *Sum* 1, Q. 76, Art. 8). Thomas admit that different parts of the body (the ear, eye, etc.) possessed different powers, each granted by the soul. However, no part, he observed, seemed to have complete access to the power rooted in the soul's essence: the eye could not hear, and the ear could not see (Aquinas, *Sum* I, Q. 76, Art. 8). Likewise, each part of the body to accomplish that which it could not, rather than being granted all powers by the soul. These observations do seem to support the non-presence of the soul in the body's entirety. However, they do not suggest in which, or in how many parts the soul may be located. But Thomas sided with Augustine, who said that "in each body the whole soul is in the whole body, and in each part is entire"

(Aquinas, *Sum* I, Q. 76, Art. 8). He went on to explain that the soul is united to the body as its form, and therefore can neither be divided, nor be present in only certain parts. He stressed that any animal (and therefore any human) is composed of both the soul and the *whole* body: part of an animal is not an animal (Aquinas, *Sum* I, Q. 76, Art. 8). Finally, Aquinas clarified the aforementioned observations by noting that the powers of the soul exceeded those of the body's parts: most interestingly, the soul's powers of intellect and will, neither of which were believed to be present in any part of the body.

Thomas perceived the soul to have five distinct powers: intellectual, locomotive, appetitive, sensitive, and vegetative. He described these powers as existing within a particular hierarchy. He named the soul's first operation, not performed by any corporal organ, as that best reflecting God's image (though lower in perfection than the intellect of either God or angels), the *rational soul*. Below this was the *sensory soul*, observing the qualities of the physical world—in many ways that which bridged the rational and vegetative soul. Finally, and least honorable, the *vegetative soul*, which by intrinsic principle, caused the operation of corporeal functions (Aquinas, *Sum* I, Q. 78, Art. 1, 2).

Of most interest for our purposes is the intellectual soul, for according to Aquinas, it is this intellectual operation that sets humanity apart. This intellectual power was understood to be passive, due to its potentiality: until the intellectual soul acts, it possesses only the potential to understand (Aquinas, *Sum* I, Q. 79, Art. 1, 2). However, Aquinas allowed for an active intellect as well, noting that although the soul responds passively to sensibilities outside itself, the action of abstracting these sensibilities is necessary for understanding (Aquinas, *Sum* I, Q. 79, Art. 3, 4).

Memory, as Thomas described it, cannot be separated from the intellect, but rather serves as the soul's power of retention. "Intelligence," said Aquinas, "arises from memory, as act from habit" (Aquinas, *Sum* I, Q. 79, Art. 7). However, he divided what we call memory into two parts: first, memory as knowledge, and second, sensory memory. For Aquinas, memory as knowledge was contained in the intellectual part of the soul, but sensory memory, having no understanding, was separate from the intellect (Aquinas, *Sum* I, Q. 79, Art. 6).

This transition from potential to knowledge, which we call reasoning, was not distinct from the Thomistic intellect. By the powers of the intellect, Thomas said, "…man arrives at the knowledge of intelligible truth by advancing from one thing to another, and therefore he is called rational" (Aquinas, *Sum* I, Q. 79, Art. 8). This, he believed, was a power unique to humanity. It was not shared by other animals, nor was it shared by angels, who knew truth in full, without this process of reasoning. Therefore, concluded Aquinas, human knowledge (by way of reasoning) could be described as imperfect, as compared to the perfect knowledge of the angels (Aquinas, *Sum* I, Q. 79, Art. 8).

Finally, we must take note of Aquinas' contributions in regards to the conscience. For as one considers the relationship between the body and the soul, moral and ethical issues arise. Especially as one considers the human person in respect to Aquinas' (or our own) religious framework, the conscience arises with particular importance. Thomas observed that conscience implies the very act described above: reasoning based on experience and knowledge, and application of that knowledge to something else.

Summarized simply, "knowledge applied to an individual case" (Aquinas, *Sum* I, Q. 79, Art. 13). Here, Thomas connected what we call the conscience to the soul, as an intellectual operation. However, this connection also made a particularly important distinction: the conscience, as he described it, is a function of the human person, rather than a seamless and mystical connection to higher truth. The conscience, therefore, can be denied or ignored. Thus, Thomas concluded that the conscience must be described as an *act* of the soul, rather than as a *power* of the soul, as powers are concrete and inescapable (Aquinas, *Sum* I, Q. 79, Art. 13). However, while Aquinas made a strong case for the development of conscience through reason (which would result in a variety of consciences based on differing knowledge and experience), he fell back on the concept of a universal truth inherent in first principles:

Now all the habits by which conscience is formed, although many, nevertheless have their efficacy from one first habit, the habit of first principles, which is called "synderesis." And for this special reason, this habit is sometimes called conscience, as we have said above. ^{9, 10} (Aquinas, *Sum* I, Q. 79, Art. 13)

⁹ The term *synderesis* is thought to have been introduced in a passage in St. Jerome's *Commentary on Ezekiel*. Further, as Douglas Kries reports, "most scholars acknowledge that the appearance of *synderesis* in the medieval manuscripts of Jerome's commentary is in all likelihood a corruption of the Greek work *syneidēsis*, which is the standard correlate in Greek Patristic literature for the Latin *conscientia*. (Kries 2002)

¹⁰ A good example of this concept's influence on modern theology is found in Roger Scruton's *The Soul of the World*. Scruton writes, "...the overreaching intentionality of interpersonal responses presents us with meanings that transcend the domain of any natural science. The "order of the covenant" emerges from the "order of nature" in something like the way the face emerges from the flesh or the movement of tones from the sequence of sounds in music. It is not an illusion or fabrication, but a "well-founded phenomenon," to use the idiom of Leibniz. It is out there and objectively perceivable, as real as any feature of the natural

For today's theologian, a greater understanding of Thomas Aquinas' perception of the human soul seems to be quite important. Whether we are aware of it or not, these classical views continue to shape our understanding: in the Church, in the academy, and in the general public (both religious and non-religious). The common dualistic understanding of body and soul, or the normative Christian (and secular) belief in the immortal soul are widespread, as noted in the first chapter of this paper.

The neurological sciences have suggested that those human functions once associated with the soul are, in fact, functions of the human brain. This, perhaps, is the basis of all conflict with the classical view. For while Thomas went so far as to suggest that soul=mind=intellect, he did not go so far as to suggest that soul=brain. And if that is true, many of the classical assumptions and conclusions that follow become invalid. For instance, Aquinas' soul is entirely dependent on its nonphysical existence. The notion that the brain is responsible for human intellect and reasoning throws the *Summa* into disarray.

First, questions regarding the eternal and incorruptible soul become very real: for if the location of intellectual function is, in fact, corporeal, then it follows that the soul may also be damaged. A corporeal soul may be injured, or killed. What then, becomes of the soul? Does the soul die? In the case of injury or dementia, does the victim become an incomplete human? Do those that heal lose their soul, only to take on another?

world. So it is, at least, for the self-conscious subject; for all other sentient creatures, however, the order of the covenant is invisible, unknowable, irrelevant." (Scruton 2014, 175)

Second, one must question the implications of corporeal intellectual functions in relation to the uniqueness of humanity among all of creation. If the intellect is a physical function, then one must conclude either that it is a physical function that non-human animals are incapable of performing, that there is some other aspect separating humanity from the rest of the animal kingdom, spiritual or otherwise, or that humans are simply not as unique as we once perceived. One need only look to recent research in animal intelligence to find that we are not the only species capable of critical thought, reason, logic, or emotion. Chimpanzees, parrots, and even cuttlefish have challenged our assumptions about intellectual superiority. Nancey Murphy writes,

To claim that humans alone have the gift of a soul seems to force an arbitrary distinction where there is much evidence to the contrary." (Murphy 1998a, 12)

If we lean, as some do, on our ability to conduct moral reasoning as evidence for human uniqueness, we may find ourselves challenged by Thomas' description of the conscience as a corporeal act of the intellect. What, then, makes the human unique? How might we interpret creation in God's image? Furthermore, how will new interpretations of the eternal soul and eternal life take other species into account?

Finally, Aquinas' conclusion that the soul may not be divided is hard to square with the idea that the brain is the body's intellectual centre. For if it is true that the soul is present in the entire body, we must also question what happens when the body is divided. In Thomas' day, this occurrence may have been as simple as losing a leg in war, a child losing a tooth, or even cutting one's hair. Does part of the soul leave the body in these

instances? Does the amputee become an incomplete human (one assumes that our answer to this question has evolved)? Does the severed leg or tooth retain some of the soul? While Thomas' definition of the human person calls for both body and soul, his definition of *body* does not seem to account for the diversity of physical states now accepted as being *fully human*.¹¹ Many other questions stem from this concept of the united soul: is the brain the most (or only) honorable part of the human body, or does knowledge of its corporeal status render the intellect dishonorable? Do organ transplants move one soul into another body, or does the donor organ adopt the soul present in its new body? As discussed in an earlier chapter, how does hemisphere division or electroconvulsive therapy change matters? Finally, were it possible, would a partial brain transplant move one soul into another body, and if so, would the patient then be a combination of two souls?

To the modern mind, this portrayal of the soul raises many questions. And while it is true that Aquinas developed on the dualistic philosophies that preceded him, it is also worth noting that Thomistic dualism was not without opposition. In the early 14th century, Pope John XXII expressed serious doubts regarding the location of the soul after death, preaching that the beatific vision could not be experienced until the final resurrection.¹²

¹¹ Joel Green considers the problem, and those it creates for the resurrection, through modern eyes: "What is more, with the natural decay of the body, its consistuent ingredients become so much part of the fabric of the natural world that it would be impossible to reconstitute the body of one individual without violating the integrity of other bodies. This is because my body is made up of molecules that, in the long expanse of biological time, have belonged to other bodies, and are likely yet to be constitutive of more bodies in the future. If the resurrection requires the reassembly of our bodies at the end of the age, how will God adjudicate the inevitably competing claims to these elements?" (Green 2008, 178)

¹² Bynum notes John XXII's opinion that souls "linger in the air" until final judgement. (Bynum 1995, 282)

(Douie n.d.) However, his views were later dismissed by Pope Benedict XII in the encyclical, *Benedictus Deus:*

...all these souls, immediately (*mox*) after death and, in the case of those in need of purification, after the purification mentioned above, since the ascension of our Lord and Saviour Jesus Christ into heaven, already before they take up their bodies again and before the general judgment, have been, are and will be with Christ in heaven, in the heavenly kingdom and paradise, joined to the company of the holy angels. (Benedict XII 1336)

As we continue to live and work in a pluralistic and secular society, it seems that questions regarding the human soul and its relationship to the human body will only become more prevalent. As the neurological sciences progress, it will be the responsibility of the theologian to be in communication with, and to interpret these developments in light of sacred scripture and historical belief. However, we must first come to terms with many of our beliefs and assumptions regarding the soul and the body. A better understanding of Aquinas' views helps to explain many of the underlying (though perhaps unfounded) beliefs of our society. By taking Aquinas' work into account, the theologian might gain a better understanding of our present, and be better equipped to look towards our future.

2.2 Bynum and the Problem of Thomistic Dualism

An interesting critique of Thomistic dualism is found in Carolyn Walker Bynum's book, *The Resurrection of the Body in Western Christianity*. In it, Bynum points out contradictions in Aquinas' model that are problematic not only for our modern day purposes, but may have been so for those living around the turn of the 13th century.

Bynum's writes, "The nature of the body-soul, matter-form nexus had obvious implications for transubstantiation, the transmission of original sin, the growth of the fetus in the womb, the processes of nutrition and decay..." She continues, "theologians of the 1280s did not fail to explore these questions at new and great length" (Bynum 1995, 272). As novel as the developments in the neurological sciences and their implications for the Christian faith might seem, in many ways, the questions we ask reflect questions asked throughout Christian history. This chapter will look specifically at the conflict between unicity and plurality in the decades that surrounded the year 1300, as described by Carolyn Walker Bynum. It will compare the Thomistic understanding of the soul to those that challenged it, specifically in light of the resurrection as described by the apostle Paul.

Bynum points to Aquinas' work on 1 Corinthians 15 to begin her exposition: work composed before his death, but completed by a close disciple (Bynum 1995, 232). He rejected the seed image in vv. 36-38 and 42-44, specifically because Paul's imagery suggests a distinction between the sheaf and the seed. The passage seemes to imply that the reborn seed is fundamentally different than the organism from which it came. For Thomas, it was necessary that resurrection imagery support a new creation identical to the original creation (Bynum 1995, 234). Bynum summarizes Thomas' conflict this way:

Resurrection is not a natural process. There is no force (no "seminal reason" or "virtue") in things that directs them toward return. Body dissolves into a dust that has no more power or fertility than any other dust. Resurrection is exactly the opposite of germination. Grain returns as an adult sheaf similar to the sheaf that bore the dissimilar seed; it returns by natural (internal and organic) process as a like but numerically nonidentical instance. Body returns not naturally but by divine power... (Bynum 1995, 235)

Aquinas viewed the soul and body as being distinct, but intricately linked. The [human] soul, as he viewed it, eternal and nonphysical, was the first principle of life, necessary to animate the body. He allowed for the possibility that the soul, being self-subsistent, could exist without the body, however as an incomplete human (Bynum 1995, 236, 257).¹³ Even still, Thomas (and others of his day) never suggested that a person was "a soul using a body", or as described in our time, "a ghost in the machine" (Bynum 1995, 256). The human person existed only as the sum of its parts. Herein lies the dilemma: because the Thomistic human was interpreted as the holistic combination of body and soul; and because physical death was without question, the Thomistic soul required a continued existence until the resurrection, at which point the body (and in Thomas' case, the same

¹³ See also S.T., 1, q.75, art. 4.

body) would be reunited to the soul. In a way, it seems that Aquinas came very close to "a soul using a body," albeit indirectly: by moving towards a theory of formal identity, where the soul contained the human person's form (that which *informed* matter), the body's value comes into question: without the soul, the body is nothing. As Aquinas wrote, "It is more correct to say that soul contains body... and makes it to be one, than the converse" (Bynum 1995, 259).^{14, 15} Bynum elaborates:

Thomas argues that the soul without a body is a fragment. "When separated from the body, [it] is, in a way, imperfect, even as any part is when severed from the whole; [for] the soul is naturally part of human nature." "Not every particular substance is a hypostasis or a person, but that which has the complete nature of its species. Hence a hand or a foot cannot be called a hypostasis or a person; nor likewise is the soul so called, since it is part of the species human being." (ST Ia, q.75, art. 4) Thus the soul is a fragment, mute and limited; without body, it is blocked up. The blueprint of all we are—our shape and size, our gender and intellectual capacity, our status and merit—may be carried in soul, but it is realized in the body. Without bodily expression, there is no human being (homo), no person, no self. Aquinas can be read both as eclipsing and guaranteeing the ontological significance of the body. (Bynum 1995, 269)

¹⁴ ST Ia, q.76, art. 3 (translation Bynum)

¹⁵ It seems the quote mistakenly attributed to C.S. Lewis, as noted in chapter 1.3, might be more accurately credited to Aquinas.

Bynum is not alone in her interpretation of the Summa. Robert Pasnau summarizes,

The soul is responsible for all of what makes me be me, in the sense that my defining attributes, physical and mental, 'flow from' the soul. (Pasnau 2002, 389)

Likewise, in *Resurrection, Reassembly, and Reconstitution: Aquinas on the Soul,* Eleonore Stump looks to the soul's necessity in the resurrection of the body:

> ...on Aquinas's account, the soul is what makes unformed prime matter into this human being by configuring prime matter in such a way that matter is this living animal capable of intellectual cognition. In the resurrection of the body, by informing unformed matter, the soul makes unformed matter this human being again, (Stump 2006, 170)

Thomas was not alone in these views. In fact, "the Fourth Lateran Council in 1215 required Cathars and other heretics to assent to the proposition that 'all rise with their own individual bodies, that is, the bodies which they now wear,' and the Second Council of Lyon in 1274 reaffirmed the requirement" (Bynum 1995, 272). But this unicity of form was not without its critics. Henry of Ghent rejected it because he believed it suggested that a relic was not really the saint (Bynum 1995, 275). In Thomas' day, such a theological statement had wide-ranging effects. Accordingly, he and his contemporaries dedicated much energy to matters of the broken body: cannibalism, injury, and relic. The solution, for Aquinas, seems to rest in God's ability to 'reassemble' the body (Bynum 1995, 263).

Bynum notes that Thomas "does not specifically ask what the resurrection body adds to the soul," concluding,

the fundamental contradiction in Aquinas' thought thus rests in exactly the place where philosophers have seen his greatest creativity... it is not finally clear whether Thomas places primary emphasis on soul as substantial form, united with God in beatific vision and spilling forth its glory in an expression of self we call body, or whether he gives first importance to the substance *homo*, whose components are each incomplete without the other. (Bynum 1995, 268)

In Thomas' case, it seems that the resurrection of the body must be considered only because the soul must have a vessel to animate. Still, today's reader may question the very necessity of the soul. Swinburne clarifies:

> Aquinas claimed that the soul does not need any bodily organ for thinking, and that is a main reason why he supposes that the whole soul can continue to exist without a body. (Swinburne 1998)

In that sense, the notion that the holistic human is made of both body and soul seems to be defeated. Aquinas' ideas were condemned in both 1277 and 1286 (Bynum 1995, 274-275). While Thomas' contradictions might seem obvious to the modern reader, they describe a theology that attempts to make sense of a tradition steeped in piety, which understood human biology very differently than we do today. Following Bynam's examination of Thomas' body-soul, matter-form nexus, it seems appropriate to look to a contemporary theologian for comparison. Again, we look to Ted Peters, and his attempt to reinterpret human ontology and the resurrection in light of modern scientific research. In doing so, Peters looks to 1 Corinthians 15, just as Aquinas did.

But Peters is compelled to respond to the issues of our day: namely, to scientific research and the materialism that follows it. He reads the Pauline seed imagery with cultural context in mind: a tool not accessible to Aquinas. And Peters, reading Paul through the lenses of both modern science and historical criticism, writes, "there is no abiding life force at all that perdures through death." (T. Peters 2003, 306)

Here, we revisit Peters' reading of the Pauline epistle: he describes a world where the human person was seen as a united whole: body and soul united in form and substance. Peters calls us to verse 36: "what you sow does not come to life unless it dies" (1 Cor. 15:36), explaining that "resurrection is not exactly creation out of nothing, but creation of something out of something else. A dead seed is sown, but what is harvested is new life" (T. Peters 2003, 307). Like Aquinas, Peters identifies a difference between the seed and the sheaf, but without the necessity of a continuing soul or a reunited body, he (perhaps like St. Peter) is able to see the resurrection as a more miraculous event. For Peters, sharing in Christ's resurrection was miraculous not because the believers' eternal souls would be reunited with their bodies, but because they who were fully dead would experience new birth!

Truly, Carolyn Walker Bynum's words, "the nature of the body-soul, matter-form nexus had obvious implications for transubstantiation, the transmission of original sin, the growth of the fetus in the womb, the processes of nutrition and decay" could be used to describe a modern theological problem. But the problem of body-soul dualism is one the Church has long struggled with, as we see in Aquinas' interpretation of 1 Cor 13. Bynum correctly points out the contradiction in his attempts to unite the body and soul. By looking to contemporary theologians like Ted Peters, we see that by looking through a materialist lens, we are better able to see the human person a holistic being: an interpretation that might not only bring us closer to the implications of the text, but provide the hope of new birth in a renewed understanding of the resurrection.

2.3 The New Testament and the Search for Understanding

In the first chapter, I drew attention to a survey Nancey Murphy frequently offers during speaking engagements. The quiz asks, "which of the following comes closest to your understanding of human nature?" Murphy comments on one of the possible answers:

"Who cares?" is included as a teaser, since I shall argue that it actually represents the biblical view. (Murphy 2006, 3)

Following our analysis of Aquinas' proposal, and before we look to the Hebrew scriptures, it seems appropriate to consider Murphy's reading of what the New Testament offers—perspectives that might not only explain the paradox we find in Aquinas, but that provide a rationale for looking to the Hebrew tradition for clarity. Murphy explains the

teaser offered in her survey with a simple statement: "*the Bible has no clear teaching here*" (Murphy 2006, 4).

She makes this bold statement in light of changing views on the New Testament's offerings over time: while Kant and theologians of the eighteenth and nineteenth centuries promoted body-soul dualism as an enlightened Christian view, others, like H. Wheeler Robinson, looked beyond the New Testament to the Hebrew texts:

Robinson argued that the Hebrew idea of personality is that of an animated body, not (like the Greek) that of an incarnated soul. (Murphy 2006, 8)

Why? Because the New Testament, it seems, provides multiple and occasionally conflicting perspectives. For instance, while this paper makes reference to Pauline texts that note the finality of death and the hope of resurrection, it is true that other Pauline texts seem to support a dualistic model. Murphy references a few:

(1) Matthew 10:28 (REB), "Do not fear those who kill the body, but cannot kill the soul. Fear him rather who is able to destroy both soul and body in hell;" (2) Luke 16:19-31, the story of Lazarus in which (without reference to prior resurrection of the body) Lazarus is said to be with Abraham; (3) Luke 23:39-43, in which Jesus says to one of those crucified with him that he will be with him today in Paradise; and (4) 2 Corinthians 5:1-10, in which Paul says that "in this present body we groan, yearning to be covered by our heavenly habitation put over this one, in the hope that, being thus clothed, we shall not find ourselves naked." Murphy admits that "it is not clear what to make of these passages" (Murphy 2006, 19). But she goes on to say that given the diversity of views present in the Early Church's communities, our confusion may be due to our looking for answers that simply aren't there:

> The unlikelihood of a positive answer to my rhetorical question leads me to this conclusion: the New Testament authors are not intending to teach *anything* about humans' meta-physical composition. If they were, surely they could have done so much more clearly! (Murphy 2006, 21)

In this case, James Dunn provides a distinction between the Hebraic understanding and the Greek understanding that influenced the Early Church:

> ...in simplified terms, while Greek thought tended to regard the human being as made up of distinct parts, Hebraic thought saw the human being more as a whole person existing as on different dimensions. As we might say, it was more characteristically Greek to conceive of the human person "partitively," whereas it was more characteristically Hebrew to conceive of the human person "aspectively." That is to say, we speak of a school *having* a gym (the gym is part of the school); but we say I *am* a Scot (my Scottishness is an aspect of my whole being). (Dunn 1998, 54)

For our purposes, Dunn's definitions are particularly helpful, as they clarify that the seemingly conflicting views present in the New Testament, and particularly in Paul's letters, probably say more about what we read into them than about they intend to imply. As Murphy concludes, "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 of conformity with the Spirit of God, and the other with the old aeon before Christ" (Murphy 2006, 22). Given the complexity (and the possible irrelevance) of these texts in our goal of interdisciplinary dialogue, we will look further back, to the inherited Hebrew texts and tradition.

2.4 Resurrection, Death, and Life in the Hebrew Scriptures

It is not uncommon to think about the resurrection of the body as a Christian concept. After all, resurrection central in both the Easter story and in apocalyptic literature. It could be said that without the resurrection, there could be no Christianity. Furthermore, Jesus' resurrection and the promise of humanity's share in the same is often interpreted as Christianity's addition to Judaism: that which sets it apart.

However, a theology of the resurrection has long been an important element of the Jewish faith. In *Resurrection and the Restoration of Israel: The Ultimate Victory of the God of Life*, Jon Levenson recognizes this fact, observing a gradual development of resurrection theology throughout history. He describes the resurrection of the dead as "a weightbearing beam" in Judaism:

...the rabbis' vision of redemption and their understanding of Jewish peoplehood. Without the restoration of the people Israel, a flesh-and-blood people, God's promises to them remain unfulfilled, and the world remained unredeemed. (Levenson 2006, ix) Levenson asserts that the common view that Judaism is lacking resurrection theology is a recent phenomenon—a product of the rationalistic and scientific thinking of the past 350 years (Levenson 2006, 23). He observes the modern suspicion of the Mishnah, the first of the Rabbinic texts, suggesting that a misreading leads to an unnecessary dismissal of the resurrection: "as they [modernists] read the Bible... the religion of even the great prophets... was without suspicion of either Resurrection or Immortality as these came to be understood" (Levenson 2006, 24). Levenson observes that modern readers, looking to Isaiah 60:21 as a proof text, read a future that is both universally inclusive, and without resurrection, into the text. But here, he calls the reader back to the Mishnah as evidence that the tradition did, in fact, refer to an exclusive resurrection of the dead:

And why so much? A Tanna taught: he denied the resurrection of the dead. Therefore he shall have no share in the resurrection of the dead. For all the measures [of retribution] of the Holy One (blessed be He!) operate on the principle that the consequence fits the deed. (b. Sanh. 90a) (Levenson, 25)

Levenson suggests that this text was likely aimed at the Sadducees, quoting Acts 23:8: "the Sadducees say that there is no resurrection, or angel, or spirit; but the Pharisees acknowledge all three" (Levenson 2006, 25). The Mishnah, he says, is both exclusive in the sense that it requires Jews to believe that the Torah itself proclaims resurrection, and inclusive in the sense that it included all Jews who held allegiance to the Torah (and therefore all Jews) (Levenson 2006, 26). In this way, he not only provides evidence that the resurrection was included in the Mishnah, but that the Mishnah's rabbinic authors believed that the Torah itself affirmed the resurrection of the body. Levenson also looks to the Talmud to make his case, as it comments on Num 18:28, "and from them you shall bring the gift for the LORD to Aaron the priest":

Did Aaron exist forever? Was it not the case that he never entered the Land of Israel; and yet the gift should be rendered to him? Rather, it teaches that he will be resurrected and Israel will give him the gift. Hence, resurrection of the dead can be derived from the Torah (b. Sanh. 90b) (Levenson 2006, 28).

That being said, Levenson does not go so far as to suggest that the Torah itself contains the concept of resurrection in any blatant or literal form: rather, he concludes that there was considerable distance between the scriptural sources and the rabbinic interpretation. He writes, "their exegeses mediate the difference by assimilating the Pentateuch to the pattern of religion of the rabbinic expositors themselves. They are, in a word, *derash*, the product of midrashic interpretation and not historico-grammatical exegesis" (Levenson 2006, 28).

Levenson suggests that a modern interpretation of the rabbis' exegeses might compare it to that of the early Christians. Both, in this case, read their own eschatological beliefs into scripture. However, despite each community's tendency to read its own beliefs into the text, both recognized one common theme in the scriptures: the irreversibility of death. Acknowledging death's permanence, Levenson quotes 2 Sam 14:14: "We must all die; we are like water that is poured out on the ground and cannot be gathered up" (Levenson 2006, 167). It is a reading that, for some, may provide relief: life concludes with a natural and holy end. It is interesting to note that as Levenson describes this interpretation, he

places the modern reader in much the same exegetical place he does the historic rabbis one of interpretation based on belief and context rather than historico-grammatical exegesis. The problem, he suggests, is that this kind of reading neglects the familial and social aspects of Jewish life. Quoting Robert Di Vito, "ancient Israel is an 'aggregate of groups rather than a collection of individuals, and, apart from the family, the individual is scarcely a viable entity--socially, economically, or juridically" (Levenson 2006, 167).

Levenson draws our attention to a theological tension that exists between the certainty of death and the promise of life. He asks, "how can the same God who creates human beings mortal and decrees their death also promise them life as a consequence of obedience to his commands, or even as a gracious gift made despite their failure to obey" (Levenson 2006, 169)? He answers by clarifying the meaning of the word *life*. While the phrase, "to bring to life" might suggest healing or even resurrection to the modern mind, says Levenson, it is likely that the ancient Israelite would have understood it to mean health and happiness rather than deathlessness (Levenson 2006, 169). The opposite of life, then, is "weakness, disease, depression, and the like, but also a humiliating death, especially one that is violent or premature" (Levenson 2006, 170).

As Levenson revisits the question of whether resurrection of the body is present in the Hebrew Bible, his answer is twofold. No, he says, resurrection is not present in the ancient texts, save for Elijah and Enoch. Death is "universal and inevitable." And yet, he is quick to lean on the ancient understanding of life:

> But I have been at pains to argue that the irreversibility and inevitability of death in the Hebrew Bible is only part of the story. The other part is

the ubiquitous promise of life, sometimes conditional, sometimes not, offered by a God who enjoins his people, in the words of Deut 30:19, to "choose life." (Levenson 2006, 180)

The only direct reference to general resurrection that exists in the Hebrew Bible, Levenson concludes, is that found in Dan 12:1-3. Daniel's eschatological vision stands alone in the Jewish texts, as one developed from a long tradition that began with the Torah, though Levenson is quick to note Canaanite and Zoroastrian influences (Levenson, 214-15). The common thread throughout is the tension between the certainty of death and the promise of life.

But what of the divide between modern belief and that of the rabbinic tradition? Levenson chides,

> By revising the Jewish tradition in the direction Silver takes, one can claim to be a good Jew while at the same time adhering to a modern materialist sense of human existence and destiny of the sort that dismisses resurrection as an embarrassing relic of the childhood of humanity, a groundless fantasy. Christianity, by way of contrast, founded on the proclamation of Jesus' Resurrection, thus appears not only as incompatible with modern thought but as a deviation from the teaching of Scriptures that Jews and Christians hold in common to boot. (Levenson 2006, 2)

And sarcastically,

The Christians, vulnerable to a crude superstition about a god-man who came back from the dead, have perverted the Hebrew Bible by introducing something altogether foreign into it. In contrast, the Jews, by adhering to their Bible's belief in the naturalness of death, are the true and exclusive heirs to the Scriptures and, what is more, exemplars of a position altogether in line with modern scientific thinking." (Levenson 2006, 6)

Levenson's reading of the Jewish tradition is important in our task. While he denies the existence of the resurrection in the Hebrew Scriptures, suggesting that the tradition's theology was read into the text, he clarifies that the certainty of death that was present throughout—the same certainty that would have informed the world into which Jesus proclaimed the good news, and the same certainty that would have informed the Jewish Apostles. Meanwhile, he presents a hopeful relationship between death and life—one into which we may willingly find ourselves guilty of reading our own experience, as we look for new ways to understand the general resurrection without relying on the trap of dualism. Perhaps Levenson summarizes it best: "In the case of the resurrection, the last word lies once again not with death—undeniably grievous though it is, but with life" (Levenson 2006, 216).

Chapter 3

3 Interdisciplinary Dialogue

If theologians wish to prevent cultural stalemate by avoiding the uneasy truce identified in the preceding chapters, then what is the way forward? This chapter will suggest interdisciplinary dialogue: first, by exploring Robert Delfino's paper, "Science and the Inescapability of Metaphysics," it will consider the limits of scientific research, concluding that all disciplines, including the natural sciences, rely on metaphysics and speculation to make conclusions beyond those easily observable. It will then explore those limits, and the perceived need for dialogue between the two disciplines as presented by Wentzel van Huyssteen. Finally, it will look to van Huyssteen's postfoundational model for a solution.

3.1 Science and Theology Need One Another

In an earlier chapter, I explored the problem of dualism fostered in recent centuries by attempts to allow science and theology to coexist, albeit independently. It seems that this dualism has not developed over the years in the process of dialogue, but rather has been present from the moment science and theology were first identified as asking different questions, or as operating in different realms. In this chapter, I will continue the dialogue between religion and science. However, noting the problem of dualism, I will consider a different approach. Rather than suggesting that science and theology both ask and answer

different questions, or that the two operate in different realms, I will allow the two to overlap. Using examples in the area of creation and cosmology, I will consider the advantages of allowing both disciplines to ask the same questions, and suggest that further dialogue between scientists and theologians may lead to an objectivity that is advantageous, though not without problems.

In his paper, "Science and the Inescapability of Metaphysics," Robert Delfino rightly identifies scientism as a barrier to dialogue between science and metaphysics (Delfino 2010). If one begins this conversation with the assumption that knowledge can be achieved only through science, all other means will, by definition, either be nullified, or will need to be explained under the blanket of science.¹⁶ However, Delfino argues that science does not function independently of non-scientific disciplines, but relies instead on a foundation of metaphysics. Calling on Garcia's *Metaphysics and its Task:*

Metaphysics, then, turns out to be the categorical foundation of knowledge... All our knowledge depends on metaphysical views whether we are aware of it or not, and all our thinking involves metaphysical thinking... Metaphysics is inescapable. (Garcia 1999, 220-221)

Delfino's argument is strongest in his reference to terms adopted by Stenmark: first, *epistemic scientism*, which limits human knowledge to only that which science has access to, and second, *ontological scientism*, which limits reality itself to only that which science

¹⁶ Delfino suggests that these other disciplines must undergo significant changes for absorption into science. One must question the integrity of the product that follows such changes, as both true science or as its original discipline.

has access to (Stenmark 2001, 8). He claims that both these approaches are problematic: epistemic scientism, because it limits human knowledge to only one discipline, and ontological scientism, because it claims that science offers a complete understanding of all that exists. The latter method's failures are obvious: if reality consists of only that which science has access to, the purpose of further scientific exploration must be called into question. If that which is outside of [current] scientific knowledge does not exist, research is no longer necessary, and the scientific discipline itself is without purpose. However, problems with epistemic scientism are not as clear. For those who support it, limiting human knowledge to only that obtained through science would not seem to be problematic.

Here lies the core of Delfino's proposal: citing two of Stenmark's observations, he argues that epistemic scientism cannot stand on its own, and that science itself cannot escape metaphysics:

First, he argues that epistemic scientism is self-refuting. This is because, once again, we cannot use scientific experimentation to know that "the only reality that we can know anything about is the one science has access to"... Second, Stenmark notes that if we are able to know some things independently of science then epistemic scientism is falsified... memory, observational knowledge, introspective knowledge, linguistic knowledge, and intentional knowledge. (Delfino 2010)

This comes as no surprise. The notion that any one path to knowledge can be interpreted without objectivity leads to problems for both the scientist and the theologian. Known theist, Richard Swinburne, deals with this very matter in his book, *The Existence of God*. In regards to his cosmological argument for the existence of God, he states plainly,

> ...in the absence of any worthwhile argument to the contrary known to me, I shall assume that the non-existence of God is logically compatible with the existence of the universe, and so that the cosmological argument is not a valid, and so not a good, deductive argument. (Swinburne 2004, 268)

Such a conclusion would be easily reconciled with the atheist views of Quentin Smith, who quotes Swinburne's acknowledgement of deductive logic's inability to prove the presence of God in creation, and specifically, in the Big Bang (Smith 1998). But Swinburne recognizes that science, by itself, cannot provide an exhaustive explanation of the universe, and so he goes on to provide a long (and somewhat circular) argument that allows for inductive reasoning to support the existence of God. In the process, he provides a fascinating comparison between the 'gaps' of religious belief, and the 'gaps' of science:

> [Hume and Kant] produce principles designed to show that reason could never reach justified conclusions about matters much beyond the range of immediate experience, and above all that reason could never reach a justified conclusion about the existence of God... Hume and Kant are mistaken and... reason can reach justified conclusions outside the narrow boundaries drawn by those philosophers. Those who believe in the ability of modern science to reach justified (and exciting) conclusions about

things far beyond immediate experience, such as subatomic particles and nuclear forces, the 'Big Bang' and cosmic evolution, ought to be highly sympathetic to my enterprise. (Delfino 2010)

Indeed, modern science, and especially modern physics, requires the reader, researcher, and believer to look far beyond immediate experience. In matters such as the relationship between time and space, the structure of the universe(s), and what occurs at the time of death, one must call upon inductive reasoning to make any conclusions.

Yet Quentin Smith seems unable to see, or at least to acknowledge, the gaps in his own beliefs. In his paper, "Atheism, Theism and Big Bang Cosmology," Smith defends a nontheistic interpretation of the Big Bang Theory, noting that while a theistic interpretation "has received both popular endorsement and serious philosophical defense... the nontheistic interpretation remains largely underdeveloped and unpromulgated" (Smith 1991, I). Smith concludes, most notably, that the universe exists "without cause". However, in his attempt to prove this claim, Smith makes certain theological assumptions that seem questionable. For instance, as he makes his atheistic argument, he makes the claim (calling it a theological premise) that "an animate universe is better than an inanimate universe." Such a claim seems beyond what could be observed by either science or by theology. Science would never claim to know the mind of God, and while one might acknowledge that in the Genesis narrative, God calls creation "very good," it seems presumptuous to suggest that God would prefer an animate creation over any other kind. Smith defends this claim, and others, by resting on the God of pop-Christianity: "the idea that God has no more reason to create an animate universe than an inanimate one is inconsistent with the kind of person we normally conceive God to be."

One might wonder exactly what Smith means when he, as an atheist, refers to "the kind of person we normally conceive God to be". The assumption in question seems to rely on a particularly conservative theology and/or a literal interpretation of scripture. It seems fair to assume that most modern theologians and biblical scholars are able to view the scriptural accounts of creation as attempts by historical cultures to make sense of their place on the earth and their relationship with God. It seems to follow that if the universe (or another universe) existed in a different state of animation, different creatures might have documented different accounts of creation. Regarding Smith's preference for an animate creation, even a conservative/literal reading of scripture points to a God who lives in relation with the inanimate (or those things thought to be inanimate):

Some of the Pharisees in the crowd said to him, "Teacher, order your disciples to stop." He answered, "I tell you, if these were silent, the stones would shout out." (Lk 19:30-40)

For the creation waits with eager longing... the creation was subjected to futility... the creation itself will be set free from bondage... the whole creation has been groaning... (Ro 8:19-22).

It seems that causality is at the crux of Smith's argument. Given Quantum physics' rejection of the principle that all explanations must be deterministic (Delfino 2010), Smith's theory is based on the notion that the infinite universe must exist without reason or cause:

There are numerous possible universes, and there is possibly no universe at all, and there is no reason why this one is actual rather than some other one or none at all. Now the theistically inclined person might think this grounds for despair, in that the alleged human need for a reason for existence, and other alleged needs, are unsatisfied. But I suggest that humans do or can possess a deeper level of experience than such anthropocentric despairs. We can forget about ourselves for a moment and open ourselves up to the startling impingement of reality itself. We can let ourselves become profoundly astonished by the fact that this universe exists at all. (Smith 1991, VIII)

Yet as William Craig suggests, Smith's reasoning is "infected with positivism," leading to the assumption that there is a connection between predictability and causation (Craig 1993). While the breadth of his criticism is beyond the scope of this paper, one of Craig's conclusions serves our purposes well:

> Smith has failed to show that [the theistic hypothesis] is unreasonable. Moreover, for the theist, it is not the case that all things are equal in this matter, for he has independent reasons (from philosophy and revelation) for accepting *creatio ex nihilo* apart from the scientific evidence (Craig 1993).¹⁷

¹⁷ It should be noted that *creatio ex nihilo*, the only theological option Smith considers, is only one of a few possible theological concepts, such as *creation ex materia*, or *creation ex deo*. the latter of which is preferred by Levenson as the intended meaning of the Hebrew texts: "The traditional Jewish and Christian doctrine of *creatio ex nihilo* can be found only in this chapter if one translates its first verse as "In the beginning God created the heavens and the earth" and understands it to refer to some comprehensive creative act on the first day. But... it is true-and quite significant-that the God of Israel has no myth of origin." (Levenson 1988, 5)

As Delfino suggested, interdisciplinary work can be helpful: in this case, the theologian can make good use of scientific research to understand cosmology/creation more fully¹⁸. The question, then, is this: if it is true that theologians can look to science to fill gaps their discipline cannot, can scientists look to theology? The answer, at least in the scope of this paper, seems to be that they can, but not that they must. The obvious risk of a narrow view is scientism. As noted by Swinburne, the nontheistic cosmological argument is plausible, despite its gaps. The theistic argument, on the other hand, cannot be seen as a plausible model by means of deductive logic, though it can be by means of induction. However, as Willem Drees observes, it does provide answers that science alone cannot:

Even if complex phenomena within reality are understood naturalistically, the world as such is not thereby explained. Hence, there remains room for a sense of wonder and gratitude. The world may still be seen as dependent upon some source which transcends the world. (Drees 1995, 236-237)

There are implied risks to this proposed relationship: statements like Drees' could easily lead us to fall back on the "God of the gaps"—that is, convenient supernatural explanations for any questions which science has not yet answered. History shows us that such beliefs may lead not only to a lack of progress and development, but to serious religious crises as science does make progress (one of which this paper seeks to address).

¹⁸ On a related note, in an interview with CBC TV's George Strombopolous, noted atheist Richard Dawkins said of his book, *The Greatest Show on Earth: The Evidence for Evolution*, "there is nothing in it that should bother a clergyman, who is a well educated clergyman, who accepts, necessarily, the evidence for evolution." http://www.cbc.ca/thehour/video.html?id=1436229362

I would argue that Delfino's interdisciplinary model is useful in the conversation between theology and science. However, I make that claim as a theologian, well aware that many scientists would disagree. While Delfino is correct in that science cannot escape metaphysics, it seems that it can escape theology, or in the case of the cosmological argument, theism. However, one who falls into scientism must be satisfied with unanswered questions of purpose, as Smith claims to be:

It is arguably a truth of the 'metaphysics of feeling' that this fact is indeed 'stupefying' and is most fully appreciated in such experiences as the one evoked in the following passage: '[This world] exists nonnecessarily, improbably, and causelessly. It exists *for absolutely no reason at all*. It is *inexplicably* and *stunningly actual*... The impact of this captivated realization upon me is overwhelming. I am completely stunned. I take a few dazed steps in the dark meadow, and fall among the flowers. I lie stupefied, whirling without comprehension in this world through numberless worlds other than this one. (Smith 1991, VII)

3.2 Method for Dialogue

Today's theologian is faced with a difficult challenge. In an ever-changing secular and pluralistic society, the voice of the theologian often goes unheard. Furthermore, tensions within the Church often result in theological discussions that remain internal. When those engaged in theological reflection fall into, or become victims of privatism, they fail to engage with the world around them. They are quite literally 'preaching to the choir.'

What, then, is the alternative? How might theology continue to support its claims of relevance and truth? David Tracy's proposal is this:

Theology, by the very nature of the very kind of existential questions it asks and because of the nature of the reality of God upon which theology reflects, must develop *public, not private criteria and discourse*. Yet the publicness which theology achieves must also speak from and to three publics: *society, academy, and church*. (Tracy 1981, ix)

The development of Tracy's approach, some thirty years ago, and its application in our time should come as no surprise. After all, Lambeth 1968 supported what has become known as the three-legged stool (The Lambeth Conference 1968), a theological reasoning more open to public discourse than originally proposed by Richard Hooker (Hooker 1876, 8:2). In many ways, public theology has now become the norm, as theologians seek to engage the public spheres in their work.¹⁹

However, with few exceptions, many theologians of our day have failed to participate in continuing discourse with the scientific community. While acknowledging the wisdom of a theology that engages and is engaged by the public at all levels, this chapter will identify theology's general reluctance and inability to allow science to be part of this ongoing dialogue (and vice-versa). It will look specifically to the work of J. Wentzel van Huyssteen for a model which suggests not only discourse, but interdisciplinary work.

¹⁹ See, for example, The Primate's Theological Commission, "The Galilee Report," The Anglican Church of Canada, <u>http://www.anglican.ca/primate/ptc/galilee/1-report.htm;</u> http://www.anglican.ca/primate/ptc/galilee/toc.htm.

Finally, it will look to Van Huyssteen's most recent book, *Alone in the World? Human Uniqueness in Science and Theology*, and specifically to his reinterpretation of the *imago Dei*, as an application of this proposed interdisciplinary theology.

In regards to recent developments in the world of science, many Christians have reacted in one of two ways: either resorting to fundamentalism, and necessarily denying the rational and logical observations that science provides, or avoiding engagement altogether, settling on an uneasy truce.²⁰ Both reactions serve only to fuel what Taylor calls disenchantment, allowing our society to "slough off the transcendent." (Taylor 2007, loc. 8614)

Often times, an uneasy truce is rationalized by making certain assumptions: *a scientific explanation of the natural order is valid. The religious account of creation is valid.* However, both are exclusive and independent. Each approach provides different answers because each approach asks different questions.

To support these assumptions, science and theology are sometimes portrayed as operating within two separate planes or realms of existence: theology in the spiritual realm, and science in the physical realm. If we are to accept the existence of both a physical realm and a spiritual realm, our understanding of realms might provide the necessary framework for two conflicting realities to coexist.

²⁰ Note the striking example of this uneasy truce given in chapter 1: namely, the account of the San Fransisco Public School Board's 1972 decision to ban all discussion regarding the source of life.

The simple truth is that quite often, science and theology ask the same questions. And many times, they provide different answers. While the theologian may choose to ignore or avoid this reality, scientific development provides not only a unique way for theologians to maintain relevant dialogue with the academy and with society, but to accept and interpret new revelation.

What Van Huyssteen suggests is interdisciplinary dialogue. This uncomfortable proposal is, perhaps, more in line with the aforementioned model of theology within the public sphere than we have been willing to admit. As Van Huyssteen reminds us, "while the rationality of theological reflection is shaped by its concrete embeddedness in specific traditions, it also is definitively shaped by its location in the living context of interdisciplinary reflection" (van Huyssteen 1998a, 4). What that implies, for theologians, is that in fields outside of our expertise, we must be willing to let someone else do the work. And though many are willing to look to news media or to film and other forms of popular culture as they interact with public theology, Christian theologians generally continue to keep science at an arm's length. However, few outside fundamentalist traditions would claim to understand or explain how the physical world around us came to be, or by what means our physical bodies are capable of interacting with the Spirit.²¹ Van Huyssteen asks only that we remain aware of the boundaries of our own discipline (van Huyssteen 1998a, 45). Likewise, he calls on scientists to do the same,

²¹ For our purposes, the Holy other: God.

acknowledging that while the natural sciences often provide us with answers to the *hows*, they find their own limitations with questions such as these:

Why does our universe exist?

Where do the universal laws of physics come from?

What is the status of these laws of nature, and are these particular laws so absolute that no alternative laws could be imagined?

Why can we describe complex physical processes by using simple mathematical formulae? (van Huyssteen 1998a, 66)

These questions, he observes, are of crucial importance to science, but cannot be answered without interdisciplinary dialogue. Postfoundationalism's demands remind us of Hans Küng's similar conclusion:

> Science has rightly become the foundation for modern technology and industry, indeed, for the modern picture of the world, modern civilization and culture. But science will meaningfully do justice to this role only if the foundation is not made the whole building; if people see the relativity and provisionality, the social conditioning and ethical implications of every picture of the world, of all sketches, models, and aspects; if alongside scientific methods those of the humanities and social sciences are also

allowed, and with them those of philosophy and—in yet another way—theology. ²² (Küng 2007, loc 510)

As an illustration of the stalemate disciplinary independence can cause, Van Huyssteen draws us to the field of cosmology: one which raises questions of particular importance to both the scientist and the theologian. Likewise, it is a field of science which often steps into the metaphysical, the speculative, and even faith. And rightly so: it is a field which explores things unseen, and time unknown. Science itself, as observed by many, requires a willingness to vision beyond empirical data. Metaphysics is inescapable.

Because the boundaries between science and theology are constantly shifting, Van Huyssteen suggests that in this case, rather than identifying the shifts in science and theology as a duel, the metaphor of a duet may be more productive for all those involved (van Huyssteen 1998a, 40). He leans on the work of astrophysicist and theologian William Stoeger, advising that rather than viewing science and theology as disciplines which "focus on different objects (for instance, a focus on empirical problems vs. divine mystery), what we should emphasize, rather, is precisely their important differences in focus, experiential ground, and heuristic structures" (van Huyssteen 1998a, 54).

As perhaps one the most conspicuous examples of interdisciplinary stalemate in the field of cosmology, Van Huyssteen calls on the work of Stephen Hawking: specifically, his book, *A Brief History of Time*. He draws our attention to the fact that Hawking recognizes the fact that the Big Bang Theory implies that there is an absolute beginning, opening the

²² Küng makes the same demand of theologians.

possibility for the Bang itself to have a cause, and for some, implying the possibility of the existence of God (van Huyssteen 1998a, 58).

When most people believed in an essentially static and unchanging universe, the question of whether or not it had a beginning was really one of metaphysics or theology. (Hawking 1998, 6)

Van Huyssteen writes,

Hawking's cosmology essentially tries to avoid this question and argues that the cosmos may not have a beginning in time, in which case we would not be needing the God hypothesis. (van Huyssteen 1998a, 58)

Hawking's proposed solution is the Grand Unified Theory (Hawking 1998, 41). This theory (which remains undiscovered,) would unify the behaviours of strong nuclear forces, electromagnetic forces, and weak forces. Once unified in strength, these forces could be seen as three aspects of the same source. Currently, there exists no method or facility to test the theory, as the proposed energy requirements are simply too great. However, Hawking's desire to deny the existence of a beginning, and therefore God, depends on a leap of faith:

...if we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason – for then we would know the mind of God (Hawking and Mlodinow 2010, 94).

Hawking's statement reveals a number of interesting anomalies about his unwillingness to entertain theological dialogue: first, his statement regarding the results of a 'theory of everything' invites philosophers and ordinary people to take part in public existential reasoning. Surely such a conversation would include both philosophers and ordinary people, but one may question why Hawking does not invite theologians in on the discussion. Surely, by nature of their vocation, theologians would read and interpret this revelation from their own unique perspectives. In the words of David Tracy,

> Every theologian provides both interpretations of a religious tradition and interpretations of the religious dimension of the contemporary situation. Every theologian, therefore, provides some interpretation of the meaning and meaningfulness of the religious tradition for the present situation. (Tracy 1981, 61-62)

Second, Hawking seems to assume that the rejection of a definitive beginning to the universe as we know it will end theological discussion and response. What he fails to acknowledge is that Christian theology professes a God who was, is, and ever shall be (world without end). Belief in an infinite and eternal God, much less eternal life, opens up the possibility of endless theological responses to the metaphysical proposals of modern physics, whether they include non-linear time, multiple dimensions, or extraterrestrial life. Hawking's scientism seems to rely on a mistakenly stereotypical view of the Christian theologian: dogmatic, literal and unchanging, and unable to make use of constructive rationality. Hawking's only real enemy is religious fundamentalism.

Van Huyssteen responds:

This much, however, is clear: the kind of God Hawking is rejecting is a kind of God that would fit our contemporary cosmology and our current scientific theories, a God that is ultimately needed to explain whatever still remains unexplained in science. This, however, is the typical (deistic) God-of-the-gaps that by no stretch of the imagination qualifies as the God of the Christian faith. This kind of God seems to be only a philosophical, abstract, first cause, and provides us with a 'divine' explanation whenever scientists fail to give us a 'natural' explanation. It is also, of course, a classic deistic notion of God, where God brings the cosmos into existence at the beginning and then leaves it to run according to its built-in natural laws. The Christian, theistic notion of God is, however, radically different: whatever God, as Creator of the universe, did at the beginning, God is still active and present in the events and history of our universe. (van Huyssteen 1998a, 63-64)

Whatever the case, Huyssteen's analysis of Hawking's response to theology reveals a particular danger in any attempt to participate in interdisciplinary dialogue. The risk is that the theologian (or the scientist, for that matter) may be tempted to fall back on the 'god of the gaps,' as described by Drees:

Whatever strength scientific explanations have, there always remain limit questions about reality and about understanding. These may evoke an attitude of wonder and gratitude. Even when phenomena within the world are understandable in a naturalistic way, the world as thus understood may be interpreted from a religious perspective as dependent on, or created by, a transcendent source. (Drees 1995, 236-237)

The theologian who hopes for an equal partner in interdisciplinary work will find that resorting to the "god of the gaps" will not only degrade the position of theology in such a relationship, but will find that as science makes progress, God's perceived role in the world will also become lesser and lesser. Eventually, both the scientist and theologian will find themselves asking the question, "do we need God anymore?"

Having witnessed the religious criticism and wide public support of Stephen Hawking, Richard Dawkins, and others, one might ask: can we hope for any productive interdisciplinary work between science and theology, especially in controversial areas such as theology? Is Van Huyssteen realistic in his expectations?

3.3 The Postfoundational Model

In the book, *Rethinking Theology and Science: Six Models for the Current Dialogue*, Gregersen and Van Huyssteen assure us that this interdisciplinary work is not only plausible, but that it is alive and well around the world (Gregersen and van Huyssteen 1998, 1). One might immediately think of a number of leading scientist-theologians: Peacocke; Barbour; Polkinghorne. However, this sort of interdisciplinary work remains something of a specialty.

Van Huyssteen provides a particularly interesting model for dialogue. His postfoundationalist proposal is refreshing, and might not only allow theologians, scientists, and the general public to leave some particularly unhelpful baggage behind, but might even allow for a rediscovery and revisioning of both scientific and theological truths.

Van Huyssteen suggests that a number of stereotypes have continued to fuel the polarization between science and theology. He lists the following assumptions as obstacles to be overcome:

- scientific statements are hypothetical, fallible, and tentative, while statements of religious faith are dogmatic, ideological, and fideistic;
- scientific thought is always open to critical evaluation, justification, or falsification, while religious faith goes against the facts and often defies empirical evidence;
- scientific thought delights in critical dissent and constructive criticism, while faith more often than not depends on massive consensus and uncritical commitment;
- scientists therefore seem to base their beliefs on evidence and rational argument, while religious beliefs appear to be founded on "faith" only;
- scientific rationality is thus revealed as not only a very manicured and disciplined form of human reflection, but as also incommensurable with, and vastly superior

to, religious faith and theological reflection. (Gregersen and van Huyssteen 1998, 15)

One might recognize the assumptions as the stereotypes implied in Hawking's *A Brief History in Time* (though one might debate the stereotype of scientific fallibility): assumptions seldom spoken or acknowledged, but ingrained deeply within our society. The natural sciences continue to be perceived as "the paradigm and apex of human rationality" (Gregersen and van Huyssteen 1998, 14). Meanwhile, theology continues to be intellectually marginalized: a phenomenon Tracy suggests results in "the short-run enchantment of self-fulfillment and the long-run despair of societal bankruptcy" (Tracy 1981, 14).

Lest we believe that the postmodern condition affects only theologians, Van Huyssteen reminds us that there have been recent criticisms (Moore, Wertheim) of the scientific community, as well. The world of science remains one of patriarchy, which he maintains continues to be isolated from feminist critique (Gregersen and van Huyssteen 1998, 18-19). It seems important, for our purposes, to note Van Huyssteen's observation that science's "modernist, foundationalist metanarrative... reveals itself primarily in science's innate conviction that natural scientific rationality is not only superior, but in its controlling, patriarchal grasp can actually claim to know and understand everything, and as such be totally rational, logical, and objective" (Gregersen and van Huyssteen 1998, 18).

In other words, science (or perhaps more accurately, scientism,) paints the natural world as a single grand narrative: one reality, one experience, one interpretation, one truth. This same rationality resembles religion at its worst. What postmodern thinking like the aforementioned feminist critique challenges both science and theology with is the necessity of avoiding fundamentalism (in both religion and science) by looking beyond privatized discipline and experience: even to consider interdisciplinary work, as both seek to understand the world.

Van Huysteen proposes what he calls *a postfoundationalist model of rationality*. This implies what could require drastic change for both the scientist and the theologian. Rejecting assumed authority, in either case, would mean rejecting privatized and internal assumptions about truths. Participating in dialectic inquiry under these terms would often mean looking to other disciplines for answers.

While a postfoundationalist model may first seem daunting, it may be the most logical step forward. Both modern science and theology are internally pluralistic. Therefore, any claims on authority are already born into conflict. And if it is true that theological reflection is shaped by functioning within a pluralistic and interdisciplinary landscape, and that the culture of our world is shaped by a scientific rationality (Gregersen and van Huyssteen 1998, 42), then fruitful theological reflection can be shaped only by interaction with science.

Van Huyssteen respectfully concludes that "science can still, but only in a very qualified sense, be seen as the clearest available example we have of the cognitive dimension of human rationality at work (Gregersen and van Huyssteen 1998, 43). However, he reminds us that this does not imply superiority over other forms of rationality, but simply

expertise in cognition: a resource to be shared with other disciplines as they share their own perspectives and rationalities.

But perhaps Van Huyssteen's most challenging and accurate observation lies in his description of what both scientists and theologians share:

- the crucial role of being a rational agent, and of having to make the best possible judgements within a specific context, and within and for a specific community;
- the epistemological fallibilism implied by contextual decision making
- the experiential and interpretative dimension of all our knowledge
- the fact, therefore, that neither science nor theology can ever have demonstrably certain foundations (Gregersen and van Huyssteen 1998, 37)

Few would deny that these observations ring true of both scientists and theologians. The challenge, however, is whether those in both disciplines can be honest enough, *postfoundationalist* enough to live as if these observations are true. Epistemological fallibilism looks good on paper; it even relieves those in both disciplines of the tension of an impossible task. But can we live and interact as if this is true? The same may be asked of our experiential and interpretive knowledge. Are we willing and able to look beyond our own experience? Finally, we must ask if we are willing to let go of our foundations, at least those regarding the observations in disciplines that overlap. Christian foundations have morphed and changed (or dare we say, *evolved*,) over time. The same is true for the natural sciences. But are we willing to allow our foundations to be shaped across disciplines? For our purposes, as we seek to understand the resurrection, are we willing to let go of body-soul dualism?

If so, Van Huyssteen suggests that we can move beyond understanding our differences as obstacles to interdisciplinary work, and begin to look at specific differences as advantages for shared insight: namely, *epistemological focus, experiential scope*, and *heuristic structures* (Gregersen and van Huyssteen 1998, 44).

3.4 Postfoundationalism in Practice

While Van Huysteen's proposal is eloquent, one may question whether the execution of his method is realistic, or even possible. On the other hand, given the current trajectory our pluralistic landscape, it seems likely that postfoundationalist reasoning alone may allow theologians to overcome polarization, and to participate in public discourse with sciences.

Rather than simply developing a model, Van Huysteen has used and published work demonstrating this interdisciplinary reasoning, most notably in his book of lectures, *Alone in the World? Human Uniqueness in Science and Theology*. Here, we will briefly consider his method for interdisciplinary dialogue with a working example of the model.

In what may seem a bold, and perhaps even a foolish move, Van Huysteen explores one of the very cornerstones of Christian theology: the *imago Dei*. But his concerns are very real: human uniqueness, long assumed to reflect God's image, has been called into question. Not only have the natural sciences blurred former boundaries between humanity and other creatures (i.e. apes, chimpanzees,) but cultural and religious pluralism has reminded us that the concept of human superiority is not universally accepted. But as public understanding changes, the theologian's role remains the same: one of

interpretation, speaking both from and to the public sphere. In that light, Van Huysteen looks *beyond* theology as he considers the significance of the idea of human uniqueness in Christian theology, the biblical account of creation in God's image, and how the concept's meaning has changed over time (van Huyssteen 2004, loc 1707).

However, despite the necessity of interdisciplinary study, Van Huyssteen stresses the importance of identifying, contextually, the theological problem of human uniqueness as a backdrop for discussion (van Huyssteen 2004, loc 1753). The canonical tradition, he notes, is always the starting point, though it should never be argued in abstraction from the concrete historical and social context in which we find ourselves (van Huyssteen 2004, loc 1734)²³.

This being the case, Van Huyssteen begins with the Hebrew and Christian Scriptures. A careful reading of the creation story reveals humanity as those created in God's image: "... walking representations of God, in no sense superior to other animals, and with an additional call to responsible care and stewardship to the world, also to our sister species in this world" (van Huyssteen 2004, loc 2421, loc 4654). He draws on the Genesis 3 text: "Then the Lord said, 'See, the human being has become like one of us, knowing good and evil" (van Huyssteen 2004, loc 2423). From the text, he interprets the created humanity as a moral creature, with the gift of reason, much as a contemporary biblical scholar might do, using the tools of biblical criticism. Finally, Van Huyssteen looks to Jesus of Nazareth, who, like the first humans, defined a unique relationship between

²³ See also *The Christian Classic*, Tracy, 248-

humanity and God (van Huyssteen 2004, loc 2426, loc 2428). The *imago Dei*, to Van Huyssteen, describes the creation of a humanity that shares in a unique relationship with God, possesses the gifts of reason and of moral awareness, and holds a unique responsibility of care for creation and for other creatures:

The image of God, therefore, is not simply human beings in relational dialogue or in plural sociality. It is found in men and women of flesh and blood who exercise responsible care as they multiply and spread over the earth. This obviously includes the fact that at the same time they also live in relationships with one another in ways that are dialogical and socially open. (van Huyssteen 2004, loc 2328)

At first glance, Van Huyssteen's analysis seems no different than the sort of exegesis any other theological or clergyperson might take part in. It is important to note, however, that in his interpretation, no claims are made that could be seen to be in conflict with what scientific research has already revealed to the world. Van Huyssteen does not rest on literalism or fundamentalism, but rather interprets the classic Christian text into the context in which we live—one informed by science. Still, he is quick to remind us that the canonical tradition is the basis for dialogue across disciplines:

Against this background the notion of the *imago Dei* still functions theologically to express a crucial link between God and humans, and should give Christian theologians *intra*disciplinary grounds for redefining notions of evil, sin, and redemption within Christian theology (van Huyssteen 2004, loc 2426, loc 2428). In an interesting exploration of the Christian tradition, Van Huyssteen proceeds to survey the diverse interpretations of the *imago Dei* across the ages: one with intellect and rationality; one who loves and loves itself; praying creatures; co-creators with God; united in community; and so forth. He does so not as a search for the proper interpretation (recognizing that all interpretations are historically and culturally contextual), but to make a *transversal* interpretation. That is, he makes a common connection between the interpretations that have allowed the *imago Dei* to exist not simply as an abstract notion, but as a concrete symbol for use in human life. He concludes,

An imaginative, embodied interpretation of the *imago Dei* specifically directs us toward recognizing that our very human disposition or ability for ultimate religious meaning is deeply embedded in our species' symbolic, imaginative behaviour, specifically in religious ritual as that specific embodiment of discourse with God and with one another. (van Huyssteen 2004, loc 2428)

As he continues his reflection, Van Huyssteen reaches to interdisciplinary work: namely, feminism—a field that has long identified the *imago Dei* as an oppressive theological doctrine. He draws us back to the text, reminding us that both male and female were created in the image of God, a textual detail often ignored in earlier generations (van Huyssteen 2004, loc 1990). While for most theologians, this reading and interpretation are likely accepted, it remains the case that many in this world still use the Genesis accounts of creation as rationale for discrimination or abuse against women. Van Huyssteen brings the feminist voices into his reinterpretation of the imago Dei to point us

to the power of interdisciplinary work: by adopting and interpreting the work of anthropologists, archaeologists, language scholars and feminists, the theologian is in a unique position to interpret classic text into contemporary context. Van Huyssteen says,

On this view the liberating character of the *imago Dei* is revealed as a theological move away from speculative abstraction and toward embodied human persons, and as a powerful symbol that points to justice, liberation, and reconciliation. (van Huyssteen 2004, loc 2428)

While many of Van Huyssteen's conclusions in this particular dialogue are shared with other theologians, his approach is unique. What contrasts most with others is his adoption of postfoundationalist reasoning. And though this methodology requires that the theologian begin on level ground with science and other disciplines, Van Huyssteen does not allow either his interpretation or his response to resort to 'the God of the gaps.' Allowing the natural sciences to answer the specific questions regarding the manner in which God created the earth, and the means by which humanity developed, he maintains his role as theologian: interpreter of the canons of scripture. But by speaking both from and to the dominant culture (science), he is able to interpret meaning in the classic text that not only avoids the 'God of the gaps,' but continues to provide helpful and unique answers to questions science and other disciplines cannot: what is our relationship with God? In what ways are humans spiritually or intellectually unique? What relationship do we have with creation and other creatures? What does the tradition have to say about the relationship between men and women?

With few exceptions, the theologians of our day have failed to participate in continuing discourse with the scientific community. This may be because many feel poorly educated or ill-equipped to engage in scientific research or dialogue. However, it seems more likely that most avoid this interdisciplinary dialogue for lack of an appropriate model with which to do so. Postfoundationalism provides a certain freedom for theologians: asking only that they *do theology*, in dialogue with experts in science and other fields. And in that sense, this kind of interdisciplinary sharing of knowledge differs from Thomistic synderesis: a habitual (rather than actual) human property Linda Hogan describes as, "a natural, inborn and indestructible inclination or habit of practical reason which allows us to discern the fundamental principles or natural law," (Hogan 2006, 132-133) because it implies that both theologians and scientists can be incorrect. Humans of all disciplines need one another—because no field has either the tools or the "habit of practical reason" for exhaustive understanding.

It remains, then, the responsibility of the theologian (and those of other disciplines) to develop public, not private criteria and discourse. While acknowledging that theology should engage and be engaged by the public at all levels, this chapter has identified theology's general reluctance and inability to allow science to be part of this ongoing dialogue (and vice-versa). It has looked specifically to the work of J. Wentzel van Huyssteen for a model which suggests not only discourse, but interdisciplinary work. Finally, it looked to Van Huyssteen's reinterpretation of the *imago Dei* in his most recent book, *Alone in the World? Human Uniqueness in Science and Theology*, as an application of this proposed interdisciplinary theology.

Chapter 4

4 Postfoundationalism Applied, Conclusions

4.1 Resurrection, in Dialogue with Science

The problem, for theologians, seems to be daunting: we have inherited a tradition that, despite having informed Western society for generations in regards to human form and its relationship with God and creation, has fallen behind. As Nancey Murphy observed, "the neurosciences have completed the Darwinian revolution, bringing the entire human being under the purview of the natural sciences" (Murphy 1998a, 24). If Tracy is correct (and I believe he is), in that theology must speak both from and to three publics: *society, academy, and church* (Tracy 1981, ix), then it seems our refusal or inability to engage with the natural sciences has only aggravated the problem.

A postfoundational model provides an elegant solution: not only would it demand that theologians engage with science, but it would provide theologians the freedom to accept their limits, respecting the work of scientists as the rational conclusions of experts in their fields, rather than as threat to religious tradition.

The primary question for our purposes, as we apply the postfoundational model, is this: *does Christian theology require the soul*? I propose that there are two answers to the question, as well framed by Warren Brown's description of the soul:

...two theological uses of the concept of soul, one as that substantial entity that survives death, and the other as a designator of our deepest

experiences of personal relatedness. The theological status of a human person with respect to eternal life need not be dependent on a pre-existing nonphysical soul but on God's re-creation in another space and time; whereas soul-as-experience is embodied, emerging out of personal relatedness. (Brown 1998a, loc 1721)

These two distinct uses are not unfamiliar: in fact, they seem similar to the two souls described by Richard Dawkins in chapter 1.2. That distinction between the two is important for our purposes, because the first use relates to life after death—though here, Brown does not distinguish between the eternal soul and the re-created soul. The second use refers to human capacity for relationship with the Creator and the creation, as experienced in this material and embodied life.

Keith Ward unpacks Brown's view:

Warren Brown argues that there is no need to introduce any such entity as the soul, which he sees as an immaterial agent. Mental acts are causally influenced by neural systems to a very great extent. There is very little left, he says for an allegedly immaterial "soul" to do. "The concept of a nonmaterial human 'soul' or 'spirit' as a causal force within the mental and behavioral life of a person is difficult to reconcile with what can be demonstrated scientifically about the impact of changes in brain systems on thought and behavior." (Ward 2008, 156)

The short answer, at least in terms of Brown's second definition, is no. It seems there is little theological need for the immaterial soul. Neurological research has explored and

explained much of human emotion, sensory experience, social and relational capability. For the theologian, this is reason to celebrate: the creation of material beings with the capacity to love, to feel, and to relate not only with one another, but with their Creator who is spirit, is a wonderful thing! However, the first definition is more problematic: it seems that the persistence of body-soul dualism in the life of the Church is most directly related to believers' hope to share in the resurrection. For those who lived and died in the generations that followed the Early Church (which inherited not only Hebrew tradition, but Greek philosophy among other ideals), the desire for one's person to exist after death until the time of the general resurrection was met by a dualistic theology: one that allowed the soul to perdure without the body. However, I will propose that here, too, the answer is no—because there is no need for the person, or soul, to exist between death and resurrection.

As examined in chapter 2, the solution to the problem is almost surely a return to the Hebraic views that shaped the culture Jesus and the Apostles inherited, and that revealed in a certain reading of Pauline Epistles, as the Early Church discerned how best to understand the promise of resurrection.

For us, that means reclaiming the finality and certainty of death. Levenson writes:

To some modern people, this sad observation may be greeted with a certain joy. Those displaying the characteristic modern skepticism about the traditional doctrines of resurrection, whether in their Jewish or their Christian form, for example, can thus find in the Hebrew Bible a resource for religious justification for their own naturalism. In this approach, the Hebrew Bible is interpreted to support the idea that death is natural, irreversible, and most important, altogether in accordance with God's will... (Levenson 2006, 166)

Do I suggest that Christians live without hope? By no means! Scruton touches on the hope present in the finality of death:

Here, it seems to me, is a way faith verges on hope. We can shun death as an annihilation, or greet it as a transition. We can see it as a loss of something precious, or as the gain of another way of being. It is, in a sense, up to us. When we live in full awareness and acceptance of our mortality, we see the world as making a place for us. We open ourselves to death, and accept death as our completion. (Scruton 2014, 196)

And further, the Christian faith looks to hope in the resurrection. But just as Brown suggested two different uses for the word soul, I will suggest two uses of the word resurrection. The first applies specifically to the general resurrection: the belief that through Christ, God will resurrect the faithful, as realized in the Nicene Creed:

We look for the resurrection of the dead,

and the life of the world to come.

And as Brown suggests, the general resurrection is dependent not on the persistence of the eternal soul, but rather on God's re-creation in another space and time. If we believe that God is God, then recomposing those who have died is hardly a problem (especially given the scriptures' reference to new bodies and new creation). In fact, the general resurrection opens the theological imagination to infinite possibilities, especially for those in dialogue with the scientific community. Where do material beings go, when they return to the earth? What do death and new life look like, for those who understand that matter is never destroyed, but only converted into other forms? What possibilities do new understandings around the relationships between time and space, or matter and energy provide? While it seems unlikely that interdisciplinary dialogue on this topic will be bilateral, the theologian is sure to step into the sort of metaphysical and creative work that Delfino described in chapter 3.1. In that same creative spirit, Hans Küng writes:

> I do not believe in the later legendary elaboration of the New Testament message of the resurrection but in its original core: that this Jesus of Nazareth did not die into nothingness, but into God. So trusting in this message, I hope as a Christian, like many people in other religions, not to die into nothingness, which seems to me to be extremely irrational and senseless. Rather, I hope to die into the ultimate reality, into God, which beyond space and time in the hidden dimension of the infinite—transcends all human reasoning and conceiving. (Küng 2007, loc. 2346)

The general resurrection is shrouded in mystery—but as we look beyond what can see and touch within the boundaries of this life, interdisciplinary dialogue prevents us from falling back on the "god of the gaps": here, theologians are invited into the imaginative visions of physics and cosmology.

The second use is that commonly understood by Christians who seek the kingdom in the here-and-now—a theology that has taken on many names: *living in the resurrection*,

Easter people, the Jesus movement. To live in the resurrection, then, is to live in relationship with the God who is spirit—the same God present in Jesus of Nazareth, and who continues to live in relationship with the creation, undefeated by the finality of death.²⁴ For if we can accept, as it seems that the Hebrews and some in the Early Church did, that there is no immaterial part of the human person that remains after death, then we can come to only one conclusion: *this life matters*. Relationships matter, peace matters, love matters, healing matters, the creation matters, *people matter*. If the human soul is, as Ray Anderson describes it, "that which represents the whole person as a physical, personal, and spiritual being, especially the inner core of an individual's life as created and upheld by God" (Anderson 1998, 193), then it seems that the resurrected life is one that is lived with concern for the things that oppose death. Anderson likens this to "concern for the soul," as portrayed by Thomas Moore:

Concern for the "soul"... does not necessitate a view of the soul as a separate mental or spiritual entity alongside or within the body. Rather, concern for the soul is concern for the quality of human life at the deepest core of our existential life, at the center of the ecology of our physical life as life in the cosmos, in the manifestation of the divine image in our manifold social relations, and as the spiritual beings that we are by the breath of God's Spirit. (Anderson 1998, 194)

²⁴ As noted early in this paper, we have limited the scope of this discussion to the general resurrection, assuming that Jesus' resurrection is an entirely different matter. However, Christian materialists should continue to explore the ways human ontology reflects and differs from the Christological/Trinitarian model.

It is in this both/and living of the already-but-not-yet resurrected life that we share in Christ's resurrection. Jesus taught his followers about the coming kingdom, but also said,

The Kingdom of God is not coming with things that can be observed; nor will they say, "Look, here it is!" or "There it is!" For, in fact, the kingdom of God is among you. (Luke 17:20-21)

To live the earthly resurrected life, then, is to join in the life of the one who overcame death:

God's Kingdom is the antithesis of all oppression, domination, manipulation... a condition of well-being, justice, mutuality of concern, harmony between all creatures, gratitude for being... the gospel *means*: stewarding life! (Hall 1988, 16)

4.2 Conclusions

Christianity is plagued by two dualistic concepts: first, an ontological dualism that divides the human person into body and soul, and second, the concept that perpetuates this misunderstanding, an epistemological dualism that claims science and theology are incompatible. However, these polarized (and polarizing) theological frameworks are no longer sufficient, especially as scientific research provides new understanding about the brain and human identity. The existence of the nonphysical soul has long been called into question, thereby creating a theological crisis at the very core of Christian belief: the resurrection. In the first chapter, this thesis examined the crisis as it manifests itself in contemporary Christian society, pointing to the perpetuation of dualistic philosophies as the source of a theological impasse. It observed a body-soul dualism that leaves Christian theology in conflict with the scientific community, and examined an age-old science-theology dualism that has stalled progress in regards to Christianity's redefinition of what we call the soul. It introduced the holistic, Pauline understanding of the human person, as well as the certainty of death present in the Hebrew Scriptures.

In the second chapter, one major source of Western Christianity's views on the soul was identified, as Thomas Aquinas' *Treatise on Man* was explored. Thomas' work was challenged by Bynum, and in turn, we turned to the Hebrew scriptures, seeking a theology of death and resurrection present before Jesus and the Early Church.

Finally, the third chapter asked how interdisciplinary dialogue between science and theology might help us to solve the problem of body-soul dualism, thereby providing a way forward in terms of resurrection theology. It heard Delfino's proposal about science's dependence on metaphysics, then turning to Wentzel van Huyssteen, and to his postfoundational method for interdisciplinary dialogue.

Having considered the issue from all these different angles: the current theological crisis, the basis of the classical body-soul, matter form nexus, the beliefs of the Early Church and the Hellenistic Jews, and by exploring new methods of interdisciplinary dialogue, our conclusions are simple: we need not perpetuate the divide between science and theology.

By way of interdisciplinary dialogue, like that enabled by van Huyssteen's postfoundational method, theologians can both accept the gifts presented by scientists

who work within their respective disciplines, and speak both from and to the culture that surrounds them as they interpret new discoveries in light of scripture and tradition. In that light, it seems that body-soul dualism is no longer useful, but that the assessment of the holistic human is: it is a model more easily reconciled with a growing body of neurological research that identifies soul-like qualities in the brain.

Finally, the disposal of these dualistic tendencies leaves room for the theology of the resurrection: in fact, it solves a good number of problems. Without an immaterial soul, the theologian has no need to explain the location of the person between the event of death and the general resurrection. Death becomes a final and natural end (save for the resurrection), and alongside that permanence, life itself becomes all the more urgent: a time where the appreciation for and stewardship of that life—ours, and that of all creation—is of utmost importance for those who live in the resurrection.

Until He comes.

Reference List

- Alper, Matthew. 2008. *The "God" Part of the Brain: A Scientific Interpretation of Human Spirituality and God.* Naperville: Sourcebooks.
- Anastasi, W. Matthew, and Andrew w. Newberg. 2008. "A Preliminary Study of the Acute Effects of Religious Ritual on Anxiety." *The Journal of Alternative and Complimentary Medicine* 14 (2): 163-165.
- Anderson, Ray S. 1998. "On Being Human: The Spiritual Saga of a Creaturely Soul." In Whatever Happened to the Soul?, by Warren Brown, Nancey Murphy and H. Newton Malony. Minneapolis: Fortress Press.
- Aquinas, Thomas. 2010. Summa Theologica (Complete and Unabridged) [Kindle Edition]. Claremont: Coyote Canyon Press.
- Ayala, Fransisco J. 1998. "Human Nature: One Evolutionist's View." In Whatever Happened to the Soul?, by Nancey Murphy and H. Newton Malony Warren Brown, 31-48. Minneapolis: Fortress Press.
- Bacon, Francis. 1885. *The Advancement of Learning*. Edited by William Aldis Wright. Oxford: Clarendon Press.
- Barbour, Ian G. 1997. *Religion and Science: Historical and Contemporary Issues*. San Fransisco: Harper Collins.
- Barth, Karl. 1959. Dogmatics in Outline. New York: Harper & Row.
- Brown, Warren S. 1998a. "Cognitive Contributions to Soul." In *Whatever Happened to the Soul?*, by Warren S. Brown, Nancey Murphy and Newton H. Malony.
 Minneapolis: Fortress Press.
- —. 1998b. "Conclusion: Reconciling Scientific and Biblical Portraits of Human Nature." In Whatever Happened to the Soul, by Nancey Murphy and H. Newton Malony Warren S. Brown, 213-228. Minneapolis: Fortress Press.

- Bynum, Caroline Walker. 1995. *The Resurrection of the Body in Western Christianity,* 200-1336. New York: Columbia University Press.
- Cantor, Normal L. 2010. *After We Die: The Life and Times of the Human Cadaver.* Washington: Georgetown University Press.
- Carnley, Peter. 1987. The Structure of Resurrection Belief. Oxford: Clarendon Press.
- Chalmers, David J. 1995. "Facing Up to the Problem of Consciousness." *Journal of Consciousness Studies* 2 (3): 200-19. http://consc.net/papers/facing.html.
- Craig, William Lane. 1993. "The Caused Beginning of the Universe: A Response to Quentin Sminth." *British Journal for the Philosophy of Science* 44: 623-639. http://www.leaderu.com/offices/billcraig/docs/smith.html#no.
- Darwin, Charles. 1985. The Origin of Spiecies By Means of Natural Section, or The Preservaton of Favoured Races in the Struggle for Life. London: Penguin.

Dawkins, Richard. 2006a. The God Delusion. London: Bantam Press.

—. 2006b. *The Selfish Gene*. Oxford: Oxford University Press.

- Delfino, Robert A. 2008. "Christian Physicalism and Personal Identity." *Global Spiral*. http://www.metanexus.net/magazine/tabid/68/id/10449/Default.aspx .
- —. 2010. "Science and the Inescapability of Metaphysics." *The Global Spiral* 10 (9). http://www.metanexus.net/essay/science-and-inescapability-metaphysics.

Dennett, Daniel C. 1991. Consciousness Explained. Boston: Little, Brown and Company.

- —. 2013. Intuition Pumps and Other Tools for Thinking. New York: W. W. Norton & Company.
- Distin, Kate. 2005. The Selfish Meme. Cambridge: Cambridge University Press.
- Douie, Decima L. n.d. "John XXII." *Britannica Academic*. http://academic.eb.com/EBchecked/topic/304898/John-XXII.

- Drees, William. 1995. "Gaps for God?" In *Chaos and Complexity*, by William Drees. Vatican: Vatican Observatory Publications.
- Dunn, James D. G. 1998. The Theology of the Apostle Paul. Grand Rapids: Eerdmans
- Einhorn, Stephan. 2002. *A Concealed God: Religion, Science, and the Search for Truth.* Translated by Linda Schenck. Radnor: Templeton Foundation Press.
- Garcia, Jorge J.E. 1999. *Metaphysics and its task: the search for categorical foundation of knowledge*. Albany: State University of New York Press.
- Green, Joel B. 2008. Body, Soul, and Human Life: The Nature of Humanity in the Bible (Studies in Theological Interpretation). Grand Rapids: Baker Academic.
- Greene, Brian. 2003. *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory*. New York: W.W Norton & Company.
- Gregersen, Niels Henrik, and Wentzel J. van Huyssteen. 1998. *Rethinking Theology and Science: Six Models for Current Dialogue*. Grand Rapids: Eerdmans.
- Hall, Douglas. 1988. *The Stewardship of Life in the Kingdom of Death*. Grand Rapids: Eerdmans.
- Hammett, Edward H., and James R. Pierce. 2007. Reaching People Under 40 While Keeping People Over 60: Being Church for All Generations. St. Louis: Chalice Press.
- Hawking, Stephen. 1998. A Brief History of Time. New York: Bantam.
- Hawking, Stephen, and Leonard Mlodinow. 2010. *The Grand Design*. New York: Bantam Books.
- Hogan, Linda. 2006. ""Synderesis, Suneidesis" and the construction of a theological tradition." *Hermathena* (Trinity College Dublin) (181): 125-140. http://www.jstor.org/stable/23041625.

- Hooker, Richard. 1876. "On the Laws of Ecclesiastical Polity, Book V." In *The Works of the Learned and Judicious Divine, Mr. Richard Hooker: with an Account of his Life and Death*, by John Keble. Oxford: Clarendon Press.
- Jenkins, Philip. 2002. *The Next Christendom: The Comiing of Global Christianity*. New York: Oxford University Press.
- Benedict XII. 1336. "Benedictus Deus." *Papal Encyclicals Online*. http://www.papalencyclicals.net/Ben12/B12bdeus.html.
- Kinnaman, David. 2011. You Lost Me: Why Young Christians are Leaving Church... and Rethinking Fatih [Kindle Edition]. Grand Rapids: Baker Books.
- Kries, Douglas. 2002. "Origen, Plato, and Conscience (Synderesis) in Jerome's Ezekiel Commentary." *Traditio* 57: 67-83.
- Küng, Hans. 2007. *The Beginning of All Things: Science and Religion [Kindle Edition]*. Grand Rapids: Eerdmans.
- Levenson, Jon D. 1988. Creation and the Persistence of Evil: The Jewish Drama of Divine Omnipotence. Princeton: Princeton University Press.
- —. 2006. Resurrection and the Restoration of Israel: The Ultimate Victory of the God of Life [Kindle Edition]. New Haven: Yale University Press.
- Lyotard, Jean-François. 1984. *The Postmodern Condition: A Report on Knowledge*. Manchester: University of Manchester.
- Maddox, Randy L. 1984. "Responsible Grace: The Systematic Perspectie of Wesleyan Theology." *Wesleyan Theological Journal* 19 (2): 7-22.
- McGrath, Alister, and Joanna Collicutt McGrath. 2007. *The Dawkins Delusion: Athiest Fundamentalism and the Denial of the Divine*. Downers Grove: InterVarsity Press.

- Milton. 1770. A Survey of the Wisdom of God in Creation: or a Compendium of Natural *Philosophy*. Bristol: William Pine.
- Moss, Aleezé Sattar, Nancy Wintering, Hannah Roggenkamp, Dharma Singh Khalsa,
 Mark R. Waldman, Daniel Monti, and Andrew B. Newberg. 2012. "Effects of an 8-Week Meditation Program on Mood and Anxiety in Patients with Memory Loss." *The Journal of Alternative and Complimentary Medicine* 18 (1): 48-53.
- Murphy, Nancey. 1998a. "Human Nature: Historical, Scientific, and Religious Issues." In Whatever Happened to the Soul, by Warren S. Brown, Murphy Nancey and Newton Malony, 1-29. Minneapolis: Fortress Press.
- . 1998b. "Nonreductive Physicalism: Philosophical Issues." In *Whatever Happened to the Soul?*, by Warren S. Brown, Murphy Nancey and Newton Malony H., 127-148. Minneapolis: Fortress Press, 1998.
- —. Bodies and Souls, or Spirited Bodies? New York: Cambridge University Press.
- —. 2013. "Do humans have souls?: perspectives from philosophy, science, and religion." *Interpretation* 67 (1): 30-41.
- Murphy, Nancey, and Warren S. Brown. 2006. *Did My Neurons Make Me Do It?* New York: Oxford University Press.
- Pasnau, Robert. 2002. *Thomas Aquinas on Human Nature: A Philosophical Study of Summa theologiae Ia* 75-89. Cambridge: Cambridge University Press.
- Paulos, John Allen. 2008. Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up. New York: Hill and Wang.
- Peacocke, Arthur. 2004. Creation and the World of Science [electronic resource]: the Re-shaping of Belief. Oxford: Oxfrod University Press ebooks.
- Pegis, Anton Charles. 1978. *St. Thomas and the Problem of the Soul in the Thirteenth Century.* Toronto: Pontifical Institute of Medieval Studies.

- Peters, K. 2010. "Why Zygon? the journal's original visions and the future of religionand-science." *Zygon* 45 (2): 430-436.
- Peters, Ted. 2003. "The Physical Body of Immortality." In *Science, Theology and Ethics*, by Ted Peters, 293-317. Burlington: Ashgate.
- Peterson, Gregory R. 2008. "Uniqueness, the Image of God, and the Problem of Method: Engaging van Huyssteen." *Zygon* (Blackwell Publishing Ltd.) 43 (2): 467-474.
- Pew Research Centre. 2010. "Millenials: A Portrait of Generation Next." http://pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-tochange.pdf.
- Polkinghorne, John. 2002. *Quantum Theory: A Very Short Introduction*. New York: Oxford University Press.
- Post, Stephen G. 1998. "A Moral Case for Nonreductive Physicalism." In Whatever Happened to the Soul?, by Warren S. Brown, Murphy Nancey and Malony Newton, 195-212. Minneapolis: Fortress Press.
- Radford, Tim. 1999. "Is Science Killing the Soul: Richard Dawkins & Steven Pinker." *Edge* 53. http://www.edge.org/documents/archive/edge53.html.
- Roach, Mary. 2004. Stiff: The Curious Lies of Human Cadavers. London: Viking.

Robinson, John. 2001. Honest to God. London: SCM Press.

- Ryle, Gilbert. 2009. *The Concept of Mind, 60th Anniversary Edition*. New York: Routledge.
- Schoemaker, Paul J.H., and Joyce A. Schoemaker. 2010. *Chips, Clones, and Living Beyond 100.* Upper Saddle River: FT Press Science.

Scruton, Roger. 2014. The Soul of the World. Princeton: Princeton University Press.

- Smith, Quentin. 1991. "Atheism, Theism and Big Bang Cosmology." Australasian Journal of Philosophy 69 69 (1): 48-66.
- —. 1998. "Big Bang Cosmology and Atheism: Why the Big Bang is No Help to Theists." *Free Inquiry Magazine* 18 (2).

Stenmark, Mikael. 2001. Scientism: sceince, ethics and religion. Burlington: Ashgate.

Stump, Eleonore. 2006. "Resurrection, Reassembly, and Reconstitution: Aquinas on the Soul." In *Die menschliche Seele: Brauchen wir den Dualismus?*, by Bruno Niederberger and Edmund Runggaldier (eds.). Ontos Verlag. file:///C:/Users/Jesse/Downloads/ResurrectionReassemblyetc.pdf.

Swinburne, Richard. 1997. The Evolution of the Soul. Oxford: Clarendon Press.

—. 1998. "Soul, nature and immortality of the." In *Routledge Enclopedia of Philosophy*, by E. Craig (Ed.). London: Routledge. http://www.rep.routledge.com/article/K096.

—. 2004. The Existence of God. Oxford: Oxford University Press.

- Taylor, Charles. 2007. A Secular Age [Amazon Kindle Edition]. Cambridge: Belknap.
- The Lambeth Conference. 1968. "Resolutions from 1968." *The Lambeth Conference Official Website*. Accessed August 12, 2010. http://lambethconference.org/resolutions/1968/1963-3.cfm.
- Tracy, David. 1981. The Analogical Imagination: Christian Theology and the Culture of Pluralism. New York: Crossroads.
- van Huyssteen, J. Wentzel. 1993. "What Epistemic Values Should we Reclaim for Religion and Science? A Response to J. Wesley Robbins." *Zygon* 28 (3): 371-376.
- —. 1997. "Systematic Theology and Philosophy of Science: The Need for Methodological and Theoretical Clarity in Theology." In Essays in

postfoundationalist theology, by J. Wentzel van Huyssteen, 105-123. Grand Rapids: Eerdmans.

- —. 1998a. Duet or Duel? Theology and Science in a Postmodern World. London: SCM Press.
- —. 1998b. "Postfoundationalism in Theology and Science: Beyond Conflict and Consonance." In *Rethinking Thelogy and Science: Six Models for Current Dialogue*, by J. Wentzel van Huyssteen. Grand Rapids: Eerdmans.
- —. 2004. Alone in the World? Human Uniqueness in Science and Theology [Amazon Kindle Version]. Grand Rapids: Eerdmans.
- Ward, Ketih. 2008. *The Big Questions in Science and Religion*. West Conshohocken, PA: Templeton Foundation Press.
- Wildman, Wesley J. 2008. "Hand in Glove: Evaluating the Fit Between Method and Theology in Van Huyssteen's Interpretation of Human Uniqueness." *Zygon* 40 (2): 475-491.

Williams, Bernard. 1970. "The Self and the Future." The Philosophical Review 79 (2).

- Wright, N.T. 2003. *The Resurrection of the Son of God [Kindle Edition]*. Minneapolis: Fortress Press.
- Wright, Robert. 2001. Nonzero: The Logic of Human Destiny. New York: Vantage Books.

Curriculum Vitae

Name:	The Rev. Jesse Dymond
Post-secondary	Huron University College
Education and	London, Ontario, Canada
Degrees:	2005-2008 MDiv
Honours and	Irish Benevolent Society,
Awards:	Canon Maurice Farr Prize for Pastoral Care
	2013
Related Work	Online Community Coordinator
Experience	The Anglican Church of Canada
	2011-2016
	Rector
	St. George's New Hamburg, Christ Church Ayr
	2008-2011