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TRANSHUMANISM AS A RELIGIOUS PRODUCT OF THE WEST: A
COMPARATIVE ANALYSIS WITH CHRISTIANITY

ABSTRACT

This project examines transhumanism and its historical relationship to Christianity in the West. Through a comparison of the eschatologies of transhumanism and Christianity this project argues that transhumanist ideas which espouse the inevitability of mechanical life and the immortalization of the human mind are akin to a particular understanding of Christian eschatological belief. In doing this comparison, this project demonstrates that transhumanist theories of the future state of humanity may in fact be religious extensions of Christian apocalyptic traditions in the West. A central basis of this eschatological comparison between these two worldviews includes the equation of the transhumanist understanding of the mind with particular Christian understandings of the soul. This venture entertains the idea of conceiving transhumanism as a religion and as such discusses some potential implications of this conception. An analysis of the comparative method in this case is also discussed.

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Chapter One

INTRODUCTION

The comparative method in religious studies has proven itself as an important framework for apprehending the similarities and differences among various religious traditions around the world. The comparative method often begins juxtaposing one religion with another to compare their “supposed” religious aspects, which often includes myths, rituals, altered states, sacred objects, and the positing of supernatural beings, places, and states (amongst other things). At times this method has been used as a tool by certain religions to show the superiority of one’s own tradition and the inferiority of others. In order to reduce predilections such as these it is important to note the biases that have and may continue to underlie the comparative method. Today, the academic comparison of religions no longer seeks to identify the truth or value of a tradition. Instead, the comparative method investigates religious phenomena in terms of other religious histories and even a broader sense of human history in general. In other words, the comparative method compares religious phenomena while attempting to refrain from making particular judgments about superiority or absolute truth.

The aim of this project is to argue that transhumanist theories are related to a particular understanding of Christian millenarianism.¹ More specifically, I will argue that transhumanist ideas which espouse the inevitability of mechanical life and the immortalization of the human mind are akin to a particular understanding of Christian eschatological belief. In doing this comparison, I will demonstrate that transhumanist

¹ To be clear, the particular interpretation of Christian tradition used in this project is one found in scholarly works such as Geraci (2008) and Noble (1997).

theories of the future of humanity may in fact be religious extensions of Christian apocalyptic traditions in the West. This is not to equate transhumanism with Christianity per se, but instead to say that the very ideas held by transhumanists are both informed by and have grown out of the Christian tradition of the West, grounded mainly in Northern European Protestant thought. This venture entertains the idea of conceiving transhumanism as a religion and as such discusses some potential implications of this conception. An analysis of the comparative method in this case will also be discussed.

A central aspect to the comparison between transhumanism and Christianity involves an association between the mind and the soul as markers of individual identity. By identity I am referring to a sense of self or individuality that maintains a degree of sameness and continuity over time—a sense of self that is based mostly on memory and the self-reflexive access to that memory. In a later chapter I aim to harmonize the transhumanist understanding of the mind with a particular interpretation of the Christian soul, where both mind and soul are considered to constitute the “essence” or identity of the individual. I will argue that the transformation from soul to mind is due to a secular re-conceptualization of the soul. Such a re-conceptualization of the Christian marker of identity (the soul) as mind reflects the Christian influences in the transhumanist worldview that are retained, albeit in a new language. These Christian influences on transhumanism gradually lose their overtly religious character due to a process of secularization at work in the transhumanist community.

By making this argument it is my hope that transhumanism may be re-conceptualized in such a way that recognizes this worldview’s religious roots—roots that may have important influence on its continual growth and participation in emerging

technologies and bioethical debates, as well as have an important impact on the study of religion in academia.

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Chapter Two

THE COMPARATIVE METHOD

The intent of this chapter is to trace the history of the comparative method as it has been used in the study of religion. Today, religious studies scholars utilize the comparative method as one tool of many in the academic study of religious phenomena. The field of religious studies prides itself on trying to study human religious behaviour and belief from a perspective that rests outside any particular religious viewpoint (Paden, 1988, p. 40). This is not to say, however, that all scholars taking part in this field are unaware of the biases and subjectivities still present in their work. Nevertheless, the religious studies field has in many respects changed its approach to studying religion in order to reduce the biases that used to underlie the entire discipline (Paden, 1988). In its infancy, religious studies was known simply as “comparative religion” and concentrated mainly on the comparison of one religion to another (the comparative method) (Paden, 1988). Unlike religious studies today, which has, for the most part, become aware of its biases, its early years were very different (Masuzawa, 2005). This chapter focuses on the history of the comparative method in order to reveal the biases underlying its history and its contemporary (supposedly less biased) application in religious studies. In tracing the history of the comparative method I aim to recognize the potential biases associated with not only the early years of the comparative method, but also the contemporary usage this method as used in this project.

The Dangerous History of Comparison—The Invention of Religion(s)

As noted already, the use of the comparative method as a cross-cultural tool for

the investigation of phenomena deemed “religious” has not been without criticism. In fact, the very nature of the term or category “religion” has become problematized in recent scholarship (Dubuisson, 2003; Masuzawa, 2005). The ideology that informs the comparative method of religions has been shown to be questionable, in that comparison is based on a Western-centered notion of what should be regarded as religious. In *The Western Construction of Religion* (2003) Daniel Dubuisson argues that the West invented what we know today as religion (p. 12), and blames scholars of religion for continuing to spread and utilize this term that, according to him, is found nowhere else outside the West (p. 191). In other words, what are often used as categories of comparison (God[s], ritualistic behaviour, distinctions between sacred and profane, etc.) are categories that were created from a western, Christian-centered notion of what religion is (p. 105).

Dubuisson tracks the term *religio* as it was adopted by various Christian apologists who believed that their religion was the only “true” religion (p. 22-29). Other belief systems, if not deemed evil or completely fallacious, were seen as inferior—or in the case of Judaism and Islam, inaccurate representations of the one “true” religion. From this perspective, the Christian view of religion was the only one that could provide the correct standards by which to assess others (Engler & Miller, 2006). The term “religion” has resulted in discriminatory acts using Christianity as the basis by which to compare all others—an evaluation if you will, to see who best fits the mold of Christianity. Religion has become a concept through which the West forced others to speak of their own religions in certain ways “by inventing [it] for them” (Dubuisson, 2003, p. 9). The Christian bias underlying the history of comparison illuminates why the very notion of the term religion is suspect: it was created by the West for the West.

Dubuisson's major concern with the Western-centeredness of this term is how it became the central aspect of affirming Christian identity over and above others. The term religion, therefore, grew out of an extremely biased ideological context that continues today in a way that may only mask these biases. Its usage is always tainted with Western conceptions of the correct way to understand and study others' worldviews. Dubuisson claims that privileging the Western-created term is the reason why, for those in the West, the term seems as "indispensable as it is irreplaceable" (p. 89). Today however, non-western cultures have since appropriated the term, religion, in such a way that may help to neutralize some of its negative history. For example, Jonathan Z. Smith argues that religion has come to represent an intellectual construction from scholars in academia that should not be taken as "reality" (Smith, 2001, p. 142) or something that necessarily always translates into the real world.

Similar to Dubuisson, Tomoko Masuzawa traces the history of this term through an analysis of the concept of "world religions." Like Dubuisson she finds that the study of world religions has traditionally aimed to distinguish "the West from the rest" (Masuzawa, 2005, p. 2). Often the study of religions has meant conceptualizing the West, and specifically Christianity, as progressive and all others as venerable but certainly not progressive. Again, like Dubuisson, Masuzawa criticizes scholars of religion for not doing enough to criticize the use of the term religion (or what she often calls the creation of world religions). She argues that the eighteenth- and nineteenth- century discourse on religion was generally dominated by a European hegemony that championed a "monolithic universalist notion of history as a singular civilizing process, of which modern Europe was the triumphant vanguard... [Where non-Europeans were] merely

markers of various interim phases already surpassed...” (p. 12). Thus, other religions were placed on various rungs of a hierarchical ladder, where Christian-Europe was comfortably many rungs above and could look down upon others. To look down was to see the other religions climb the same path that the superior Europeans had already traversed.

Furthermore, Masuzawa argues that the discourse of “world religions” has grown out of the necessity to classify and understand other cultures in order to divert dangers that lurked within these cultures as the West became linked to its neighbours by its often violent colonialism (p. 41). European writers in the eighteenth and nineteenth-century who were engaged in issues of religion often narrated the historical development of other cultures along a linear bar of progress, from primitive to complex. For example, Jack Finegan in *The Archaeology of World Religions* (1952) states that “there are numerous forms of faith found among preliterate peoples in various parts of the earth. If the latter may be dealt with collectively under the heading of ‘primitivism’ the major religions of the present world are at least twelve” (qtd. in Masuzawa, 2005, p. 43). The discourse of “world religions,” which often involves ranking cultures against one another, is for Masuzawa a discourse of othering. This discourse came to differentiate and consolidate the social, cultural, and political practices of other cultures in such a way as to classify them all as informed by non-Christian supernatural traditions. Viewing all others as having cultural systems based on “false religions” clearly allowed the European writers of the time to differentiate the “good Christians” from “the evil non-Christians.”

As this discussion regarding the ideology that has informed the comparative method demonstrates, scholars must be very critical of how this system is utilized today.

With its inherent western, Christian-centric bias we must always be suspicious of how certain classification systems may miss their intended mark and fail to be accurate measures of comparison. Moreover, the very concept “religion” remains suspect as this too presupposes a western, Christian-centric view of particular phenomena. Phenomena that look like religion to the West may not be considered such by the very culture being studied or compared. Constant evaluation of the uses of this method becomes necessary due to the very nature of its inception and growth.

The Shiny New Suit of the Comparative Method

While it may be near impossible to purge the term “religion” and the very process of the comparative method of its western, Protestant Christian-centered roots, continual improvements have given this method a greater sense of validity in the last few decades. However, it must be noted that this idea is not shared by all scholars (see Engler & Miller, 2006). While being far from perfect, various enhancements to the comparative method of religion have resulted in more of an impartial view towards others outside of the western religious tradition within which this concept originated. Recently, the comparative method of religion has emphasized a more objective understanding of the material at hand in order to replace the biases that have hampered the validity of the comparative method since its inception. To be clear, my use of the term “objective understanding” is used here to communicate the idea that the method of comparison does not privilege one religion over another. I do not wish to imply a notion of objectivity that is commonly associated with the scientific standards of research. The objective understanding, then, in the comparative method must be understood as an aim that treats all religions as equal phenomena, that which does not judge the “truth” or “falsity” of

phenomena in relation to a particular scholarly standard deemed “acceptable religion.”

Allowing for variety in religious experience has resulted in a phenomenological study of religion that generally leaves out reference to whether religious experiences and beliefs hold to some outside reality. Instead, the study of religion that emphasizes the phenomenological view focuses on how the individual “reality” being studied makes sense and is important to the participants concerned in a very real way (p. 41). Holding to an objectivity that assumes the truth of different “realities” within the study of religion may be problematic in that it insists on a method that does not contend for a “single objective reality.” Consequently, a question arises as to how one can perform a meaningful comparison between religious traditions without a clear idea of what one is comparing. While recognizing the limitation of the comparative method to hold to no single objective reality, for the purposes of this project I maintain that religious comparison represents an intellectual, scholarly construction that is helpful to understanding religion in academia, even though it may not always fully translate into the real world of religion and religious experience.

Recognizing that scholarly work on religion may sometimes not represent actual lived religion and religious experience it is necessary to sketch a blueprint of some important tenants for the comparative method. This paper will use the cornerstones of the modern comparative approach as outlined by Paden:

- (1) respect for all religious facts as “phenomena” rather than as items that are intrinsically true or false;
- (2) the need to synthesize these facts through the analysis of patterns;
- (3) the need to understand religious expressions in terms of their contexts; and
- (4) underlying the whole enterprise, the need to identify what it

is about religious facts that makes them religious. (p. 39)

These key features, as outlined by Paden, are arguably very important throughout contemporary comparative analysis. I would argue that this list is beneficial to the comparative method of religion, as religion, in its many varieties, occupies an important role in people's lives across cultures. Religion has been a strong predictor of human behavior and well-being (Tarakeshwar, Stanton, & Pargament, 2003), and, as such, a demand arises for us to understand all religions on their own terms, especially with the increasing interaction of diverse religious traditions through globalization.

Cross-Cultural Comparison

The comparative study of religion rests on the very notion of a cross-cultural analysis. By cross-cultural analysis I am referring to both an analysis of different religions—Christianity and Buddhism, for example—across different cultures and the variation of one particular religion—Buddhism let's say—as it manifests in different areas. Without cross-cultural comparison (examining different manifestations of the same religion or different religions in separate and distinct areas) the study of religion would result in data that has no generalizability and no account of what religion looks like outside of one's own historical context. Scholars often try to build objective, transcultural frameworks that hold some form of generalizability across cultures (Boyer, 2001; Durkheim, 1915, Eliade, 1959; Freud, 1918; Tylor 1924). These frameworks, such as those espoused by anthropologist Pascal Boyer,² aim to explain religiosity in a universal way by conceptualizing it as a natural expression among human culture or the human mind. This is not to say that these frameworks built by scholars are always useful or are

² For example, Boyer argues that innate mental systems predispose humans towards certain cultural expressions, such as belief in supernatural beings, which in turn can lead to predilections toward what scholars understand to be religious belief (Boyer, 2001).

always correct (for reasons discussed earlier), but these frameworks aid the scholar of religion in understanding not only other religions, but perhaps even one's own.

Of course frameworks that aid in explaining similarities between religious traditions must always be approached with caution. Just because a scholar sees a similarity between two religions does not necessarily mean that the two religions (or even the similarities between them) can be equated with one another as having the same meaning. Similarities noticed by the comparative scholar may have developed from completely different historical contexts and may have completely different meanings to each respective tradition being compared. Accordingly, scholars must be very careful when comparing one religion with another so as not to simply reduce one religious phenomenon to another.

Pretend Play

Sam D. Gill, in his article entitled "Play" (2000), does well to describe the comparative method of religion as a method that does not simply reduce one religious phenomenon to another. In this article Gill explains the method of comparative religion as a type of play or 'pretend' that involves the holding together of two mutually exclusive positions at the same time. Gill depends largely on Jonathan Z. Smith to further this discourse of play. In Gill's discussion of Smith, Gill privileges the notion of juxtaposition in Smith's espousal of the comparative method (Gill, 2000, p. 455-459). According to Gill's interpretation of Smith, placing interpretations, approaches or ideas side by side demands comparison from the scholar (p. 455). Such a comparison leads to a propensity towards interplay or manipulation among the specific elements as the scholar of comparison often tries to bring both positions to some resolution (p. 455). According

to Gill's interpretation of Smith, it is not necessarily the similarities that fuel this interplay but the differences that become important. In other words, "it is in difference that the operation [of interplay] is interesting and creative," where interest is lost: the process of interplay ends when the elements can be easily reduced to sameness (p. 455). As such, Gill states further that, "[d]ifference gives rise to thought, to hypothesis and theory, to explanation" (p. 455). Understanding religious comparison as an act of "pretend play" is an important factor in the forthcoming discussion on transhumanism and Christianity. It is not simply the similarities between these worldviews that are of interest, but also how transhumanism (which we will see has grown out of a Christian cultural context) has differentiated itself from Christianity, existing as a supposedly secular worldview that yet still retains important religious structures. It is within this space of difference that this paper will compare Christianity and transhumanism on the basis of their eschatologies.

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Chapter Three

COMPARING CHRISTIANITY AND TRANSHUMANISM

Having discussed the comparative method and its pitfalls, I now move to the application of this method through a comparison of transhumanism and Christianity on the basis of their understandings of eschatology. The aim of this chapter is to compare transhumanism and Christianity on the basis of their eschatologies. The argument I develop here maintains that transhumanism is a worldview that has grown out of a particular Christian yearning to hasten the coming of God's Kingdom and to achieve ultimate perfection: a utopian existence. In other words, both Christianity and transhumanism are connected by a common concern with millenarianism. My aim is to show how transhumanist views about the future state of humanity are both informed by and serve as extensions of Christian apocalyptic traditions in the West.

Technological Redemption

Commonly, we think of religious belief and technological endeavor as two distinct phenomena with little or no connection to one another.³ Recently however, scholarship (Noble, 1997; Nye, 2003) has begun to problematize any clear-cut distinction that has existed between religion and technology, especially in the western world. By linking together Christianity and western technology, David F. Noble argues that a religious quest for transcendence and salvation underlay the entire western technological enterprise (Nye, 2003, p. 4-5). In other words, there is a Christian ideology of redemption (recovering humankind's lost divinity through mastering the forces of nature) underlying

³ On a side note, scholars such as Derrida and Geraci have argued that religion and science share a common source in testimonial faith. For a discussion on this see Derrida (2000), Geraci (2002), Murray (2008), and Naas (2009).

the West's technological endeavors. For Noble, the Christian idea that humanity can restore its divinity—which was lost in The Fall—by ruling over the earth and re-discovering the knowledge given to Adam by God is imprinted into modern technological projects (p. 88). Such technological projects include artificial intelligence, space exploration, and genetic engineering, all of which maintain a hidden theology.

According to Noble, aiming to achieve redemption through technology has spurred on many well known Christians throughout history. For example, Columbus saw himself as a “divinely inspired fulfiller of prophecy” (p. 33). Additionally, early pioneers such as Galileo and Newton were undoubtedly religious in their convictions, even though they may have had trouble with the authorities or orthodoxy (Polkinghorne, 2005, p.45). Similarly, historian David E. Nye argues that popular narratives about land use, the axe, transportation, and farming technologies were infused with divine promises related to the establishment of a Second Eden (Nye, 2003). Concentrating specifically on Noble's account of the religious history of technology we will see how a millenarian expectation shadows technological endeavors in the West. While a thorough account of Noble's work on religion and technology cannot be introduced here due to limits in space and time, a brief explanation of the important connections made in Noble's work is presented.

In the introduction of his book, *The Religion of Technology* (1997), Noble explicitly connects religious myths and ancient imaginings to technological advancements in the western world. For example, commenting on the relationship between religion and technology, he notes: “they are merged, and always have been, the technological enterprise being, at the same time, an essentially religious endeavor” (Noble, 1997, p. 4-5). Modern technology and modern faith should be thought of not as

two unrelated systems, but as inseparable ideas in the West. More specifically, modern technology and religion in the West have evolved together in such a way that technology has been and remains loaded with Christian religious belief. Today, according to Noble, many people ignore that there are devout religious believers found in all ranks in emerging technologies. For him, contemporary pioneers in technology “harbor deep-seated beliefs which are variations upon familiar religious themes” (p. 5). Although not every pioneer professes his or her faith, Noble understands all these pioneers to have similar religious compulsions that are more or less unconscious. As he states, scientists’ vocabulary has been merely secularized as they are “inheritors and bearers of an enduring ideological tradition that has defined the dynamic Western technological enterprise since its inception” (p. 5). By engaging in the technological enterprise of the West, scientists are unknowingly⁴ taking part in a system infused with religious yearnings and ideology.

To substantiate his claims Noble tracks important connections made in the history of both technology and Christianity in the western world. Noble finds an important connection between Christian religion and technology in his historical account of John Scotus Erigena in the ninth century. Erigena’s writing was instrumental in forming a perspective that understood technology (or *techné*, also understood as the practical/mechanical arts, craftsmanship, or how one does something repeatedly) as a means of recovering the image of God in humanity. Salvation was found through technology or what Erigena referred to as the “mechanical arts.” Erigena’s work grew in the 12th century most notably through the writing of Joachim of Fiore, whose interpretation of the Apocalypse of St. John regarded new technologies as important for bringing about the reign of God. Roger Bacon became influenced by this very

⁴ Or perhaps knowingly.

interpretation and urged the Pope to concentrate on developing new technologies as he was convinced that the Antichrist would use technology for evil. The Antichrist could only be stopped through the increased knowledge of technology to combat the technology utilized by the Antichrist (p. 27). The new concentration on technology by the Pope ended up resulting in an intimate relationship between technology and millenarianism where “technology now became at the same time eschatology” (p. 22). According to Noble, while the realization of heaven on earth through technology was the goal, it was also believed that a certain number of people needed to be saved in order to usher in God’s reign, and, as such, global exploration came to the forefront of theological concern.

As Noble argues, Columbus’s exploration to the new world was a mission of divine exploration where he was considered to be a messenger of God’s new heaven and new earth (p. 30-33). According to Noble’s interpretation, Columbus believed that his exploration was in accordance with fulfilling prophecy before the world’s end (p. 33). He believed that before the world’s end “all prophecies had to be fulfilled, including the conversion of all people...” (p. 33). Insisting that his voyage was an “enterprise of Jerusalem,” Columbus believed that his journey to the New World must also be accompanied by a crusade to the Holy Land to achieve the right conditions for the end of the world (p. 33). Visions of bringing about the perfect state on earth before the apocalypse always included the importance of technology which was to help in the restoration of the prelapsarian state of Adam for humanity.

According to Noble, inventors and scientists came to believe that true knowledge involved an understanding of how things were made (p. 65-67). This knowledge was seen

as divine knowledge, an understanding of the world from the Creator's perspective, a perspective understood by Adam (p. 66-67). In a utopian state it was thought that everyone would be skilled in practicing technology (p. 65). Unlike in Augustine's early writings, Adam was understood as being a master of technology (p. 65-67). As a result, to achieve a utopian state, like the one present in the prelapsarian state of Adam, was to become proficient in technological knowledge.

The growing state of technological knowledge among inventors, scientists, and academics was never far separated from the thoughts of an imminent and drastic transformation of society. Noble shows examples from many influential figures in history such as Robert Boyle, Thomas Burnet, Richard Bentley, Joseph Priestley, Isaac Newton and August Comte (among many others) who often vividly described millenarian visions, where all things in the world will be drastically changed. These millenarian visions often involved the coming of a new state of existence in new bodily forms. However, salvation came to be divorced from thoughts on God and instead came to be centered on humanity. For scientists, salvation was now attached to human action and the use of technology, and scientists, who had divorced their technological endeavor away from God, began assuming a "mantle of creator in their own right, as gods themselves" (p. 67). Noble notes that while a number of scientists began divorcing themselves from their theological roots they continued to maintain perfectionist and millenarian visions, albeit often in a new secular language. For example, Robert Owen stated that "all religions of the world are founded in error" and that all religious people were deluded by religious doctrines (qtd. in Noble, 1997, p. 86), but earnestly espoused increased technological knowledge tied to millennial visions.

Tracing similar millennial visions, Noble discovers countless influential figures in the sciences all the way up to contemporary work in atomic weapons, space exploration, artificial intelligence and genetic engineering in America. To list only a few, artificial intelligence researcher Edward Fredkin believes the only way to salvation is through the creation of a global algorithm (computer program) for the world, which he sees as a big computer (p. 154). AI practitioner Daniel Crevier advocates that Christian belief in resurrection and immortality is consistent with the future of certain technologies, especially in artificial intelligence research (p. 160-161). Geneticist, Walter Gilbert, proclaims the human genome the “grail of human genetics,” which according to geneticist Richard Lewontin was knowingly chosen due to its reflection of medieval Christianity (p. 192). Moreover, according to Noble, in many cases the researchers consciously draw on the language of Christian faith to interpret the meaning of their research. For example, Donald Munro, an evangelical Christian geneticist, believes that “God will ensure that we don’t go too far afield” (p. 196). While the examples given here of the influence of the Christian religion on scientific endeavor in the West are brief and not nearly exhaustive, further detail can be found in the work of Noble (1997) and Nye (2003). Through the various areas in contemporary technology (robotics, genetics, artificial intelligence etc.) which Noble has traced, we find the majority of professions that represent the major thinkers in transhumanist philosophy.

Through the work of Noble, who has traced the Christian influences in contemporary technological enterprise, it is apparent that we as scholars must rethink any clear separation between Christian religion and technological endeavor. Technological enterprise cannot be easily separated from the influences of Christian thought that have

arguably jump-started the very drive and ambition towards technological development that exists today in the West (at least according to Noble). There is no doubt that Christianity has had a significant impact on the state of technology in the West today as it has in the past. Although much of the language surrounding technology has changed, becoming more secular, the drive and influences from the past still pervade contemporary western technology.

An Introduction to Transhumanism and the Emerging Cyborg

Contemporary western technological thought has in the past few decades seen the creation and growing popularization of an emerging technological worldview called transhumanism. The term transhuman stands for “transitional human,” an evolution of humanity that eventually becomes “something other than human” or what is often called “posthuman.” In transhumanist philosophy an emphasis is placed on the limitations of biological human life in areas such as “life span, intellectual capacity, bodily function and self-reported well being” (Campbell, 64). This philosophy encourages the development of technologies that enhance human abilities such as artificial intelligence and nanotechnologies. In general, transhumanism advocates the need to enhance both our mental and physical capabilities and to do this we must embrace new technologies.

Stemming from the need to enhance humanity, a central idea in transhumanism is the moral right to extend human life. Transhumanist ideas in the past two decades have led to the establishment of the World Transhumanist Association (WTA), recently renamed Humanity+, which plays an active role in scientific discussions on biotechnology and is often involved in ethical debates on human nature.

For transhumanists the journey to become posthuman is a journey involving the

transformation of humanity into cyborgs. Cyborgs are an integration of human biology with machine, an organism with both artificial and natural systems, organic and synthetic. As cyborg technology continues to improve, the boundaries separating the biological human aspects and machine aspects begin to blur. For the bulk of transhumanist believers it is understood that the cyborg state is an intermediary step towards complete this-worldly salvation and what will be a perfect world in the future (Hughes, 2010; Moravec, 1988). In short, cyborgs will eventually swap their biological parts for more efficient mechanical parts. Once technology is sufficiently advanced, humanity, as cyborgs, will become subsumed by mechanical technology and exist merely as software in a mechanical or computer hardware system. While human biology becomes inferior and existence in a machine is preferred, what is required for human survival according to many transhumanists is the preservation of the human mind. Preserving the minds of individuals to maintain human survival is invaluable to many transhumanists, and, as such, I contend that the human mind may be classified as “sacred” within the transhumanist worldview much like the soul may be seen as “sacred” within particular understandings of Christianity.

Transhumanism and the Sacred

To contextualize this comparison between the transhumanist mind and the Christian soul, I will employ sociologist Bronislaw Szerszynski’s “transformations of the sacred.”⁵ The sacred, according to Szerszynski, is a term used to “understand the ways in which a range of religious framings are involved in our ideas of and dealings with nature

⁵ I maintain that Szerszynski’s theory on “transformations of the sacred” is useful in this project due to its use of what is often referred to as religious terminology in secular contexts. Furthermore, Szerszynski’s theory explains contemporary ideas and practices in ways that remain closely bound up with religious ways of thinking. I contend that this theory is beneficial for this project in dealing with transhumanism as this worldview is historically bound to Christianity.

and technology” (Szerszynski, 2005, ix).⁶ The sacred throughout the history of the West, according to Szerszynski, has been one of multiple transformations and as such has resulted in various forms of what is considered to be of absolute importance,⁷ from a religious perspective. As understood in Szerszynski’s works, transformations of the sacred involve modifications of what is deemed to be of absolute importance. These transformations happen over time as new objects or ideas are placed under high regard by the religious community.⁸ What I wish to argue here is that a form of “the sacred,” in particular Christian interpretations, may be seen as the belief in a world where human souls (whereby also having sacred status) will live on in heaven. However, through transformations in the sacred, transhumanism (a worldview that has grown out of a secularized Christian context) places the concept of the mind under sacred status. Put differently, transhumanism is a worldview that is intimately connected to Christianity and through an ongoing process of secularization has masked the idea of the soul with a more secular term, understood as the mind. Therefore it is the mind that is held in a similar position of sacrality (or absolute importance) in transhumanism as the soul is in Christianity. These forms of the sacred (represented as the soul for Christianity or the mind for transhumanism) are both forms of identity that survive beyond human biological bodies when these bodies are left behind in an apocalyptic moment (Geraci, 2008;

⁶ Szerszynski’s use of the term, “the sacred” is to aid in the categorization of a wide variety of religions and religious expressions involved in the world. The sacred then is used as a term to contrast a wide variety of religious ideas with those ideas considered to be secular in nature. To be more specific, the sacred is used to conceptualize religious framings around ideas or objects that are thought to be of absolute importance.

⁷ My use of the term “absolute importance” is meant to convey a notion of that which is held in high regard within a religious community.

⁸ For example, certain Christian groups may understand the earth as something that is sacred (having absolute or special religious importance), from their interpretation of biblical narratives. However, changes may occur in interpretation of these biblical narratives where the earth becomes understood as not having the same level of importance as it had before. The transformation of the sacred speaks to the idea that the earth may at one time be understood as something that is in need of protection and at another time be regarded as a mere resource to be taken advantage of.

Moravec, 1988).

Both the mind and the soul constitute, for their respective worldviews, an essential or core aspect of identity. With respect to transhumanism, influential writer Marvin Minsky echoes the idea that the mind constitutes identity and has the potential for immortality. Minsky understands the brain to be a “meat machine” and the body to be a mere “teleoperator” for the brain; thus, these things can be replaced by other material such as machinery (Noble, 1997, p. 156). What is important about life for Minsky and transhumanists alike is the “mind,” which is defined as a “structure and subroutine,” or a pattern if you will which can be divorced from biological material (p. 156). Similarly, transhumanist Hans Moravec, argues that human identity is a pattern. The identity of an individual as a pattern “defines the essence of a person, say myself, as the *pattern* and *process* going on in my head and body, not the machinery supporting that process. If the process is preserved, I am preserved...” (qtd. in Geraci, 2008, p. 153). Therefore the identity of an individual does not depend on their body but rather the mental processes and organization of the processes within that body. For Christianity, while there is no clear-cut consensus on what constitutes the essence of a person, a popular conception is that the soul is the essential aspect of human identity. This idea is echoed by Christian philosopher of religion Richard Swinburne when he states that “Souls are essential parts of human beings” (Swinburne, 1986). For the purposes of this project, the soul will constitute the essence of personal identity for Christianity even though this conception is an ongoing point of contention in this tradition.

This project argues that the identity of the person, existing as the soul or the mind, has the potential to exist in a new state beyond the biological body that will eventually

die. This connection between the soul and the mind is an important one that helps to frame the similarity that will be seen through the eschatologies of both Christianity and transhumanism. Through comparison of each system's eschatology we will see how transhumanism looks very much like a secularized version of Christianity. The similarity exists because contemporary scientific enterprise has grown out of a Christian desire for salvation and immortality. Over the past two decades scientists, philosophers, and people outside of academia have congregated together forming a worldview, philosophy, or if you will, a system of belief, based around the need for salvation and immortality called transhumanism. Transhumanism should be understood not as a wholly secular belief system, but rather, a belief system that has important roots in Christian belief.

A Note for Comparison

As evidenced by the arguments in this project so far, the comparative venture between Christianity and transhumanism is not as simple as the comparative method would let on. The comparison here involves two systems that are intimately tied and not necessarily two different "traditions" as may be expected in regular scholarship involving the use of the comparative method. To reiterate, this paper compares transhumanism and Christianity on the basis of their eschatologies. To make clear, the interpretation of Christian eschatology presented in this project is one proffered by scholars such as David F. Noble (1997) and Robert M Geraci (2008). The Christian eschatological interpretation presented here in no way reflects any universal Christian understanding and should be considered as only one interpretation of many.

The Religious Transformation of the Sacred Mind

In popular science various works have been produced by roboticists and artificial

intelligence (AI) researchers that present religious apocalyptic predictions for humanity (Benedikt, 1991; Kurzweil, 1999; Moravec, 1988). These transhumanists are discontented with the limitations of the human body and predict a virtual world inhabited by humans in the form of machines (Benedikt, 1991; Kurzweil, 1999; Moravec, 1988). Downloading one's mind to machines will greatly enhance humanity and results in the possibility of infinite replication, or in other words, immortality (Benedikt, 1991; Kurzweil, 1999). Put differently, if humans exist as a software program, an immortality of sorts may be achieved because there will be a plethora of backup copies.⁹ Even if something were to happen to a copy of a person there would always be copies from which to recreate the individual. The transhumanist predictions of achieving immortality mirror Christian apocalypticism in that transhumanists espouse the establishment of a new (mechanical) world and the transformation of the human body in order to enter into (a mechanical) heaven. This transhumanist vision of course should not come as a surprise (especially from our earlier discussion of Noble and the Christian influences on modern technology), for as Szerszynski tells us, transformations of the sacred have been culminating into a belief of a this-worldly salvation through technology (Szerszynski, 2005. p. 70). A this-worldly salvation results in a furthering of humanity through technology in a way that does not rely on religious language per se, but instead more secular language, such as the conception of human identity or essence existing as "the mind," as opposed to "the soul."

Robotist Hans Moravec and AI researcher Ray Kurzweil are among the most widely recognized individuals in transhumanist philosophy (Geraci, 2008; Noble, 1997).

⁹ Benedikt makes the assumption that when people exist as software all individuals will have access to an almost unlimited amount of copies in case the active copy gets damaged or destroyed.

Both are widely recognized for their scientific contributions in their respective areas of research and are also touted for their predictions on the future of human life, which include their notion of a utopia where robotics and AI come to not only improve humanity but to perfect it (Geraci, 2008). The similarities between Moravec's and Kurzweil's predictions and Christian apocalypticism start to become apparent when looking at transhumanist predictions of the future state of humanity. According to certain contemporary understandings of Christian apocalypticism (Geraci, 2008; Noble, 1997), at a particular moment in time God will build a new world and resurrect humanity in new bodies (Phil. 3:21, NIV). Transhumanists turn to the evolution of humanity through technology to reach a new world or utopia, which in many ways resembles the Christian idea of heaven (Geraci, 2008). Achieving this technological utopia or "secularized heaven," according to both Noble and Szerszynski, must be done through technology and not through God. Technology is seen as supreme: there is no longer a need for God's intervention. The transhumanist future includes the idea of bodily resurrection and establishment of a new world (Kurzweil, 1999; Moravec, 1988; 1999); however, differing slightly from Christian eschatology, the new bodies that humanity receives when resurrected will be mechanical and will not require the aid of God.

According to the interpretations of Christian tradition used in this project¹⁰ there will be an imminent apocalypse where God will raise the dead in purified and superior immortal bodies (Luke 20: 35-36). These bodies will enable humans to then take part in God's Kingdom. As noted by Robert Geraci (2008), humanity must change its bodies in order to enter into this Kingdom as the perfect bodies given by God will be immortal and will not decay like human flesh. This change in bodily form can be seen when Paul

¹⁰ To reiterate, these include my own interpretations as well as those of Geraci (2008) and Noble (1997).

claims that “flesh and blood cannot inherit the Kingdom” (1 Cor. 15:50). Similarly, Paul states that “we will all be changed” (1 Cor. 15:51). Consistent with the interpretations of Christian tradition utilized in this project, the idea of changing into new immortal bodies (that lack flesh and blood) is the transhumanist notion that humans will eventually exist in mechanical bodies, which also allows for immortality¹¹ as understood by transhumanists such as Moravec and Kurzweil.

Transhumanists, or what Geraci often refers to as Apocalyptic AI advocates, believe that biological life forms will never think as well as machines will in the future, which is the reason why human perfection entails a transformation beyond the biological (Moravec 1988; Kurzweil 1999). Silicon substrate is said to be more efficient in the transmission of information when compared to biological material. Problems such as limited memory and inadequate accuracy will no longer exist in a mechanical body (Geraci, 2008, 147). Transhumanists such as Moravec contend that what is most valuable to a person is the knowledge and experiences of the individual (Moravec, 1988). They are generally not concerned with other aspects of human life that some people believe are just as valuable, such as social relationships or biological life itself. According to Moravec there will be an apocalypse that will bring an end to the “wanton loss of knowledge and function that is the worst aspect of personal death” (qtd. in Geraci, 2008, 147). What Moravec and Apocalyptic AI advocates (transhumanists) alike fear most is the death of knowledge as opposed to the death of biological bodies. Knowledge as retained in the mind is seen as vitally important. The weight and significance transhumanists place on the mind most definitely shows that knowledge, in the form of memory, is held in such high respects so as to “sacralize” the mind.

¹¹ Immortality through infinite replication of software.

Returning to Szerszynski's notion of the sacred, the mind, which I argue is a secularized re-branding of the Christian notion of soul (an argument I will expand upon in a later chapter), is an important part of transhumanist philosophy which has been framed by religious discourse and thought. As Szerszynski argues, "The scientific revolution thus did not in itself dispose of God... its proponents changed the meaning of theological language, which allowed divine attributes to be progressively absorbed into the empirical world" (Szerszynski, 2008, p. 816). I contend that the importance (or sacrality for Szerszynski) of the soul as the essence of identity (that which is to be preserved) remains infused in technological endeavor but has since transformed into a more secular concept of personal identity, the mind. This shift or "transformation," as Szerszynski would say, from soul to mind where both retain the core of identity is a result of religious ideas inherent in western technology becoming secularized.

Building an Ark for the Imminent Apocalypse

At times, even transhumanists who identify themselves as secular can be seen to partake in the use of religious language or allusion. In the article, "When will computer hardware match the human brain?" Moravec makes explicit religious references to the Bible. In one of the sections which he names "The Great Flood," he uses an analogy to show how advancing computer performance and technologies are like raising flood waters that are encroaching on a humanity that resides on mountaintops. He predicts that the peaks of the mountains "will be submerged within another half century" (Moravec, 1998). Warning that this will surely happen he proposes "that we build Arks as that day nears, and adopt a seafaring life!" (Moravec, 1998). I argue that such a proposal invokes the story of Noah's Ark and the Great Flood, purging the world of sin, starting the world

anew. While it would be assumed that transhumanist writings would be void of religious language, as we have seen thus far religion is wrapped up (explicitly and implicitly) in the supposedly secular-technological worldview of transhumanism.

Christian apocalyptic belief as understood in this project stresses the immanency of an apocalypse that will bring the end of life on earth. The idea of apocalyptic immanency is echoed in the transhumanist belief that a cataclysmic change is on the horizon. Such an event for the transhumanist is termed “the singularity.” This event is a moment of exponential technological growth which results in a mechanical world, “culminating in the onset of the age of mind, a Virtual Kingdom in cyberspace” (Geraci, 2008, p. 149). As Michael Benedikt,¹² a software engineer, explains: in Eden humanity was characterized by its state of innocence and ignorance; but humanity in the Heavenly City, by contrast, is characterized by its glorious state of knowledge (Benedikt, 1994, p. 15). Here Eden contrasts with the Heavenly City; rather than being in intimate contact with nature, as in Eden, humanity comes to transcend nature in the Heavenly City. For humanity to reach the Heavenly City, he explains, it must “come into existence only as a virtual reality” (Benedikt, 1994, p. 16). According to transhumanist predictions, virtual reality (or cyberspace) and the new world of machines will lead to ultimate happiness and immortality, which is exactly what we are told is to be found in the Christian afterlife, according to the particular understandings of biblical tradition used in this project.

As Szerszynski explains, technology eventually becomes an end in itself and as such starts to develop its own autonomy and eventual agency (Szerszynski, 2006). This agency is what Szerszynski calls “techno-demonology.” Consistent with the idea of technological agency is the transhumanist notion that humanity’s goal is to create

¹² Benedikt, like Moravec, has been known to use Christian themes and language in his writings as well.

artificial life, where once sufficiently advanced, AI will surpass human dependency and will think and act for itself (De Garis, 2005; Kurzweil, 1999; Moravec, 1988). As AI continues to improve, far superseding the capabilities of biological life, it will lead to the eventual extinction of biological human existence. This advancement of AI superseding the biological is delineated by the capability of machines learning how to teach themselves (De Garis, 2005; Kurzweil, 1999; Moravec, 1988). Once this ability manifests itself in intelligent machines, “the singularity” will occur, creating a dramatic shift from biological to mechanical existence. Moving towards this Virtual Kingdom, humanity’s duty is to pass on their knowledge and experiences (their mind) to machines so that they may live in this perfect new world of machines (Kurzweil, 1999, p. 128-129; Moravec, 1988). Those humans who do not transfer their minds to machines will miss out on this technological utopia, which is said to bring about an egalitarian society, (Stone, 1991) ultimate happiness and better sex lives (Kurzweil, 1999, p. 148). Moreover, mechanical life will not only partake in eternal life and happiness but will eventually take over humanity’s evolutionary niche altogether (Levy, 1992). Artificial intelligence will spread throughout the universe and will reject “the useless, meaningless existence of earthly life in favor of ubiquitous computation” (Geraci, 2008, p. 151).

Replacing the biological with the mechanical is more than just replacing the old with the new: it is a radical purification of the old. As mentioned earlier, to take part in the Kingdom of Heaven the body must be purified, and this purification is the replacement of the biological body by a mechanical one. Moravec, Kurzweil and Benedikt all believe that once our minds have been downloaded onto machines, the need for biological bodies will eventually disappear and humans will have to exist as software

that moves freely from hardware to hardware. What constitutes the individual then is not the biological body or even a mechanical one necessarily, but instead the mind as software. A person's mind for Moravec is seen as a distinct pattern and process that occurs in the brain. It is this pattern in the brain that constitutes the essence of a person, not the biological material that it runs on (Moravec, 1988, p. 117).

The apocalyptic visions among transhumanist writers are very much in line with the religious history of the West and its Christian influences. According to particular interpretations used in this project,¹³ early Christians waited for the return of Jesus who was thought to bring the end of their troubles. The coming of Jesus would result in a sudden change where a radical new world would be constructed and much like the immanence of the singularity the apocalypse too was thought to be a sudden occurrence (1 Cor. 7:25-31, Rev. 22: 10). The creation of a new world by God is once again echoed by transhumanism which sees a new world existing in machines. Just as God is said to provide new immortal bodies for the souls of Christians in heaven, transhumanists see new mechanical bodies that humanity can transfer their minds to and with the potential to replicate infinitely, would too result in immortality. For this particular conception of Christian eschatology the new world is said to bring only good, leaving aside all the bad and evil in the world. For transhumanists, they too believe in a new world that will bring only good to humanity as we currently know it (Moravec, 1988; Kurzweil, 1999).

Transformation in the Making

Although the transhumanist ideas presented here about the future of humanity do not appear exactly like early Christian eschatological thought, Christianity arguably has provided a base for the transhumanist worldview. The influential Christian base that

¹³ In this particular case, the interpretation of Robert M. Geraci (2008).

pervades transhumanism, I argue, has transformed over time through a process of secularization, whereby transhumanism still retains important Christian structures. This transformation of the Christian influences within transhumanism is best explained by Szerszynski's transformations in the sacred. Such transformations in the sacred have led humanity at once to use technology as a tool for transcendence to get to an "other-worldly" realm to join in God's Kingdom. As these notions of the sacred (that is the use of technology to bring about God's Kingdom) transformed from their previous forms in history, technology became used for a this-worldly salvation, holding sacred the human body.¹⁴ Transforming again, the sacred began forming around the human mind, where technology itself gains agency and may even be seen as a competitor to the biological human existence (for a discussion of this competition see Geraci, 2007; Szerszynski, 2006).

The transformations occurring in the western sacred are indeed connected to one another and can be seen as meaningful extensions of past forms of the sacred that influence present or future formations. Such an account is explained by Szerszynski when he states, "the present is thus shaped by the meanings and possibilities of the past, and the past is a kind of calling to respond, the demand to live authentically within this embeddedness in the sacred, the flow of the changing sacred" (Scott and Szerszynski, 2006, 187). Put more simply, the religious ideas of the past influence religious ideas in the future. Moreover, the sacred continues not simply because it is religious, but because it is sacred, and therefore, it is not only a religious sacrality that influences religions but an enduring sacrality that influences all of reality. While this newest form of the sacred

¹⁴ To hold the human body sacred is to imbue it with a certain level of importance or high regard, from a religious perspective. Sacralizing the body also involves the idea of preserving the body and protecting it from harm.

seen in transhumanist writings (immortalizing the mind on a computer) creates a potential competitor for biological humanity it is important to understand that moving outside the western world we are confronted with a much different vision of artificial life. This particular vision of technology among transhumanists is a testament to the embeddedness of a Christian belief-system that is continually caught up in western ideas of religion and technology.

The technological attitude in the West is a product of a particular history. It was not latent in history but instead constructed out of cultural resources and legitimated through religious tradition and discourse (Scott and Szerszynski, 2006). This idea is presented most clearly by Szerszynski:

The debate over the proper role of technology over against religion, is in fact internal to Western religion; it is produced by Western religion. It is... produced within the Western sacred, and makes little sense outside the West. (p. 186)

The transhumanist ordering of the sacred, an ordering that sacralizes the mind, is produced from the historical transformations and culture that it has grown out of. It can then be expected that the religious history that has shaped thoughts on technology and salvation elsewhere outside of the western world is much different (for a discussion and example of this see Geraci, 2006).

Comparing transhumanism and particular interpretations of Christianity in this project has been very telling. Both worldviews share a belief in the need for salvation and a moment of drastic change where humanity will take on a new immortal bodily form to live in a new utopian world. Both worldviews hold to a particular essence of the

individual (soul for Christianity, mind for transhumanism) that contains the core of a person's identity, which remains constant or unchanging during bodily transformation. It is likely that the similarity between these worldviews is due in large part to their common history in the West.

Transhumanism, as presented here, shows very intimate connections with Christianity. As such, it is clear that in using Szerszynski's transformations of the sacred we can conceptualize how transhumanism, in its connectedness and influence from Christianity, may deserve to be classified as a religion in its own right. To understand transhumanism as a religion would be to conceptualize transhumanism as a new secularized form or strand of Christian thought. Of course this relies on the assumption that by a certain similarity—or in this case common background—that a worldview which resembles Christianity is sufficient to classify it as a religion. What should be noted in saying this is that this comparison interestingly plays into the very biases that once informed the comparative method and as such should be noted here as a complicating factor.¹⁵ However, with the evidence provided by Noble and the similarities found in the eschatologies between transhumanism and Christianity, it is apparent that transhumanism has developed out of a longstanding Christian desire for perfection and immortality. The secular (or that which is non-religious) in the West came into existence not because it made a break with religious thought but because it transformed from previous religious ideas—religious ideas which continue to inform modern secular

¹⁵ In other words, stating that transhumanism should be viewed as a religion because of its similarities with Christianity is a comparison that uses Christianity as a template to judge other worldviews as religious or not religious. This comparison which uses Christianity as a template to judge others is similar to early comparisons that at once used the comparative method in its early form.

understandings in transhumanism and the western world today (Szerszynski, 2008, p. 816).

A Dialogue with Christianity

The connections made by contemporary scholarship between Christianity and transhumanism have opened up an array of responses from the Christian community. A number of contemporary Jewish and Christian theologians have criticized transhumanism for reviving a premodern substance dualism (Tirosh-Samuelson, 2007). These theologians see this dualism as problematic because minds are embodied in our brains and should be seen as communal. Concentrating on the mind and only the mind for some theologians depreciates the createdness of our bodies. Moreover, the concept of glorifying human productions of technology may be seen as a type of idol worship, further complicating the dialogue between transhumanism and Christianity.

In a similar vein, Philip Hefner (2009) argues that recreating ourselves into mechanical/digital beings violates our essential human nature. Speaking as a Christian theologian, Hefner states that we are accountable for something that is larger than ourselves. This accountability lies on our createdness in the image of God. By destroying our biological human image (that which according to Hefner likens us to God) we are disrespecting God. According to Hefner, our humanity is part of something larger and should not be done away with in such a “meaningless” way that transhumanists see the biological body. However, transhumanism is not all bad for Hefner. He explains that the drive to be “co-creator” or fulfiller of God’s intentions in trying to usher in humanity beyond the bio-physical is a justified Christian act that constitutes a numinous moment (Hefner, 2009). However, he warns that this notion of co-creator cannot extend too far as

to go beyond the law of God, by idolizing our technology and ourselves. Self-directed rather than God-directed¹⁶ is seen as nothing short of sinful for theologians like Hefner.

In his article entitled, “Transhumanism and Christian Social Concern,” (2005) Stephen Garner presents an important dialogue between transhumanism and Christianity in relation to their common concern for social well-being. He thinks that transhumanist technologies and ideologies provide an ongoing challenge as well as an opportunity for Christians. In a positive way “traditional” Christian values such as loving your neighbour, compassion for the poor, justice for the oppressed and others can be found in some of the ideologies of a transhumanism to come (Garner, 2005). Transhumanist technologies in the future may alleviate suffering and improve the quality of life of all humanity. Garner sees this as a call to all Christians to commit themselves to an understanding and application in the development of these technologies that will improve social well-being. However, Garner also stresses that these technologies must be carefully watched so as to infringe on the religious rights of Christians who feel an intimate connection to their bodies as given to them by God.

In general, the dialogue between transhumanism and Christianity has been limited and remains in the realm of scholarship. This dialogue should not be limited in importance however, because, as technologies advance many social issues will continue to arise in the public sphere. Social issues stemming from the implementation and use of certain technologies have important consequences on all members of society. For example issues of abortion pose a challenge to many Christians and non-Christians alike in western society and have become an important political issue. Issues surrounding the

¹⁶ Stated differently, directing one’s life towards themselves is sinful; only a life directed towards God and his will is just.

proper use of technology in western society have already begun, especially those surrounding the importance of the body such as the topic of abortion (Hopkins, 2005).

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Chapter Four

THE IDENTITY OF SOUL AND MIND

In this chapter I further develop the connection between a particular Christian conception of the soul and transhumanist conception of the mind. I have thus far assumed throughout this project that both the soul and the mind constitute identity¹⁷ and are consistent with one another. By consistent I am referring to the historical “re-branding” of the Christian soul over time: more specifically, the secular re-conceptualization of the soul as the mind in the West. In other words, the mind, as transhumanists see it today, has developed from a particular Christian understanding of the soul—one which constitutes the soul as the essence of identity. I contend that the soul maintains the same importance for transhumanism as it does for certain versions of Christianity, a marker of identity that has the potential to exist in a new bodily form after an apocalyptic moment.

To make the connection between soul and mind in this project I move to conceptualize the soul as individual identity or self. My argument is that the idea of the soul as self or individual identity involves a capacity to remember. That is to say, individual identity is based mostly on memory. Stated differently, identity involves the capacity to obtain or gather memory in a self-reflexive manner. By self-reflexive I am referring to a “looking back,” or a holding together of phenomena to preserve coherence. To make this connection between self-reflexive memory and the self I rely on Paul Ricoeur’s theory on narrative identity. Within Ricoeur’s theory of narrative identity (Ricoeur, 1991), a personal narrative is involved in giving a person a sense of individual

¹⁷ To restate, identity as used in this project refers to a sense of self or individuality that maintains a degree of sameness and continuity over time; a sense of self that is based mainly on memory and the self-reflexive access to that memory.

identity and necessarily involves the creation and manipulation of memories. While it may seem obvious, the collection of memories of an individual makes up or composes the individual's identity or "mind."¹⁸ Memories stored in the mind play an important part in maintaining personal continuity which insures the mind remains relatively consistent from moment to moment and allows for ideas and events to associate in the mind and form an autobiographical memory. Autobiographical memory is an important aspect to individual identity which allows for a personal representation of events and ideas and is functionally bound to having a theory of mind (Spreng, Mar, & Kim, 2009).¹⁹ Without stored memories that can be accessed, created, and manipulated there remains no consistency or individual identity as such.

Cohesive memory, or the mind, is what transhumanists wish to retain moving towards a new existence as machines (Moravec, 1988; Benedikt, 1991). The same idea of cohesive memory resides in certain Christian understandings of the soul. The understanding of soul that I use here is from philosopher Anthony Quinton, who states that the soul is a "series of mental states that is identified through time in virtue of the properties and relations of these mental states themselves" (Quinton, 1962, p. 397). In other words, Quinton distinguishes the soul as mental states or memories that are generally distinct from the body. With an understanding of the soul as a specific collection of memories one can understand both the soul and the mind as having the same purpose in conceptualizing individual identity.

Narrative Identity

¹⁸ My use of the term "mind" is meant to convey the totality of both conscious and unconscious mental processes in the human brain. This definition necessarily includes a conscious or intelligent agency that is capable of remembrance or recollection.

¹⁹ Theory of mind as understood in this project is the ability to attribute mental states such as beliefs, desires and knowledge to both oneself and others.

A narrative or story is an account of events and experiences, which may be true or fictitious. Narratives can be recounted with ease because of their structure, which is often coherent and includes a context for understanding and assessment. Paul Ricoeur, in his work, *Life in Quest of Narrative*, (1991) posits the self as a kind of narrative or story. A person's life therefore can be explained and told by the self or others as a story that is both coherent and contextual. A potential criticism to Ricoeur's theory is that it may be "unscientific," especially when the self is seen not so much as a thing but rather more like an imaginary construction (like a story). However, research in fields such as cognitive psychology and neurobiology propose a rationale for the use of narrative as the structure for memory, brain function and even identity (Bruner, 2002; Herman, 2003). Research shows that memories are grouped into relational networks that are in turn used as structural devices to allow for fast and efficient cognitive processing (Hazel, 2008). By explaining how our brains use narrative structure for memory formation we can show that the self is actually like a narrative in that a person is a bank of memories arranged in story structure. After explaining Ricoeur's philosophical account of identity as a narrative I will move on to provide evidence for Ricoeur's narrative theory found in contemporary psychology.

Within the realm of philosophy a stable metaphysical core of the human self has been met with much criticism. Some philosophers deny the existence of a stable substance or essence at the core of every individual (Sartre, 1982). However, Ricoeur thinks that we as humans need to characterize ourselves and others in some way that excludes the notion of some "thing" (with substance) at our core. He notices that we speak of life often as if it were a story that we are recounting from past experience. For

Ricoeur, to speak of a self without a core is to understand the self within a larger context of a narrative. To understand individual action is sometimes difficult as individual actions often defy understanding and meaning. Individual actions or events often stand on their own²⁰ and can only be understood when placed in a larger context. For example, it is difficult to understand the meaning and purpose of an individual raising their arm without proper context. This action provides little explanation for what the individual is doing; he or she could be participating in a vote or wanting to ask a question. When we place this hand raising action within a larger context where the individual is raising their hand on a street in Toronto we understand that the individual is likely raising their arm to call for a taxi. We tell stories, such as the person hailing down a taxi in the city to give meaning because actions often become meaningless without a context (Ricoeur, 1991. p. 29). To give a dynamic identity to a situation, such as this example of someone raising their hand, we need to organize the heterogeneous parts into a story structure.

A synthesis between events or incidents to create a story structure is what Ricoeur refers to as emplotment. The operation of emplotment is, “a synthesis of heterogeneous elements... [Which] transforms the many incidents into one story” (Ricoeur, 1991, p. 21). Elements such as: unincorporated circumstance, discoveries, performers of action, chance or planned encounters, conflict, and results are gathered together to create the story’s plot (p. 21). Episodes (by which Ricoeur means incidents in the course of an event or events) are meaningful and can be followed when its elements are related in some fashion. Related elements are concordant, exemplifying a unity and harmony with one another, while discordant elements are fragmented and are seemingly dead ends that do not relate to other parts of the story (p. 21). Discordant elements become concordant, according to

²⁰ That is, individual actions defy meaning or do not make sense.

Ricoeur, when we can find a context for them, which may take time and may take contributions from others (not just ourselves) to make sense (p. 29).

A work done by both the author and the reader (or teller and listener) is what Ricoeur refers to as *emplotment*. The reader is not a passive spectator but is instead an active participant in the story. A story must be related to the participant's life in order for it to make sense. By integrating the world of the story to experiences of the reader the reader begins to live in that world through their imagination, which leads to an understanding of the other. Because stories require both the author and the reader (Ricoeur, 1991), it is important to note that the narrative self is constructed not just by the individual author but also by others.

The individual is not the only person to recount his or her life story and is never the sole author. When people speak of other people they are interpreting and recounting the individuals' actions for whom they speak. These interpretations may be more accurate than those of the individual who describes his or her self. Regardless of their validity these interpretations start to create conceptions of the individual and may affect how people treat that person. In essence, stories recounted by the self or other are instances of multiple authors²¹ forming an impression of the self of a particular individual. The self, understood as a story, is always in the process of being formed²² by the individual self and others, and as such is in a state of constant flux and alteration. This openness to alteration is what leads Ricoeur to state that the narrative of the self is, "a discrete succession that is open and theoretically indefinite" (p. 22). The significance of a

²¹ The term "authors" in this case should be understood as those who help to create the storied self of an individual. To be clear, creating or altering the storied self of an individual is done through oral communication, individual thought, and writing.

²² An individual's storied or narrative self is always open as the self goes through new experiences and integrates these experiences into their life story. Additionally, as others recount the individual and speak of the individual's narrative self they too are in the process of forming that person's narrative.

narrative becomes the intersection of the world of the individual self and the world of others.

To summarize, Ricoeur insists that actions and events can be organized within a certain context to create meaning. Actions can be recounted because they are, “articulated in signs, rules and norms... [which are] always symbolically mediated” (p. 28). Our actions are symbols that have a pre-narrative quality understood as narrative fragments. These fragments are given meaning when placed within a particular context which characterizes the story structure in relation to the individual’s culture. This lends all actions and events into story fragments which can be organized into narratives. These narratives are recounted in a self-reflexive manner, which describes and creates accounts of persons which are organized and deemed as the narrative of the individual self.

Psychology and Narrative Identity

Recounting narratives, or story-telling, seems to play a major role in everyday human social interaction. According to psychologists Roger Schank and Robert Abelson, the role of story-telling is far more significant than many may believe. Schank and Abelson affirm that, “all of our knowledge is contained in stories and the mechanisms to construct them and retrieve them” (Schank & Abelson, 1995, p. 1). Our memories are said to be composed of stories, or a network of interconnected experiences. Stories are formed by personal experience, having heard stories from others, or stories that we have composed ourselves. The story of one’s birthplace is one that we must rely on others to tell us about, as we cannot remember our experiences that early in life. Our birthplace stories can then be told by us once we have received the story from others and it has been networked into our memory. Shank and Abelson believe that the central aspect is that

once stories are available in someone's memory, they are relied upon for all that we can say and understand. These restrictions are closely reminiscent to those of a self. The definition of self I refer to here is the only one who knows, remembers and has access to information stored in their memory.

As stories make up all that we as humans can say and understand, Schank and Abelson think that much of social human interaction takes place in the form of various social scripts (Schank & Abelson, 1995). Scripts are a set of expectations about what will happen in a particular situation. Scripts make mental processing easier. They tell us what is likely or supposed to happen so we do not have to approach every situation with a blank slate trying to figure out how we are to act. By following certain social scripts like that of going to a restaurant, in order for the customer to get food they assume the script of sitting at a table, waiting for the menu, and asking what they want to eat. We further expect the waitress to perform his or her script by taking the order at the table and returning with the requested food. Ricoeur's theory is consistent with the notion of a script when he states that "our familiarity with the conceptual network of human acting is of the same order as the familiarity we have with the plots of stories that are known to us" (Ricoeur, 1991, p. 28). What Ricoeur explains as narrative plots, modern day cognitive psychology refers to as scripts. Scripts, or narrative plots, help us to organize and understand the action of individuals we are interacting with so that we can respond in an appropriate and knowledgeable fashion according to that situation.

People use thousands of highly personal scripts in their lives (Schank & Abelson, 1995). Mundane aspects of life that require little or no thought, such as sitting in your chair, can be assumed to be a script. In fact, "much of our early education revolves

around learning the scripts that others expect us to follow” (Schank & Abelson, 1995). A parallel can once again be drawn to Ricoeur who argues that our story structures are developed from our culture (Ricoeur, 1991, p. 23). This variation in story structure and scripts allows for the differences among various cultures in the world. For example, it is appropriate to burp after a meal in certain societies to express gratification; however, in other cultures burping after a meal is seen as rude and inappropriate. Furthermore, scripts which may be cultural and person specific help illuminate the connection between action and script, where highly personal scripts begin to form personal identity or the self.

In beginning to distinguish individual identity, the notion of scripts serves as a memory structure within the brain. Scripts store knowledge that we have about certain situations we find ourselves in. They store old experiences of a certain type in terms of which new experiences of the same type are then encoded. When something new happens to us in a familiar situation like a restaurant it serves to tell us more about restaurants. We place this new information in our restaurant script so we are wiser next time about our environment and can more appropriately partake in this situation. Scripts therefore change over time and represent what we have learned (Schank & Abelson, 1995). The idea of alterable scripts pertains to Ricoeur’s idea of stories and the self as always open and indefinite. Scripts much like stories are constantly changing to better serve the needs of individuals through their numerous interactions with people and places. Scripts and stories then are stored in the memories of individuals and effect how they behave.

Our perceptions of our environment are a series of experiences for which we move through time and space accumulating input from our senses (Hazel, 2008, p. 202). These sensory inputs are then encoded in our brain as memories (p. 202). Memories in

turn can be broken down into various linked representations that include all information from that experience. Such information may include the environment, the people involved and the actions that took place, which are organized sequentially in the order they occurred (p. 202). Relational networks are then formed because the environment, people or actions that took place are familiar to us from past experiences that are stored in our memories (p. 202). These structured experiences, or memories, can then be recounted in a structured story form (p. 203), akin to Ricoeur's concept of emplotment. The self, then, is like a narrative in that the memories which make up the self are story-structured imaginative constructions in the brain.

According to certain scholars of modern science, our understanding of the self must be understood within the realm of our brains and memories (Herman, 2003). The self, or how we understand the self, according to Ricoeur, "presents the same features of traditionality as the understanding of a literary work" (Ricoeur, p. 32), or put differently, the self is best understood as a narrative. Because humans are primarily social animals we see narratives embedded within all human culture. Myth and storytelling in oral cultures as well as school, print, media and social interaction in modern technological societies show just a glimpse of the amount of narratives we are exposed to and immersed in.

According to Bruner the core of our self is our autobiographical memory: "there is now evidence to suggest that if we lacked the capacity to make stories about ourselves, there would be no such thing as selfhood" (Bruner, 2002, p. 86). If we could not narrate we would not be able to retain information in memory that is coherent and contextual in a self-reflexive manner. For example, a patient of Oliver Sacks with Korsakov's syndrome in *The Man Who Mistook His Wife for a Hat* (1985) shows the importance of memory in

sustaining individual identity. The patient could not remember anything for more than a few seconds and according to Sacks “literally made himself (and his world) up every moment” (p. 109). Sacks states: “it might be said that each of us constructs and lives a ‘narrative,’ and that this narrative *is* us, our identities” (p. 110).

As shown, memories of the individual are grouped into relational networks which allow for efficient cognitive processing. Narrative-structure is a template that allows for effective processing of comprehension and meaning. Memories organized as narratives are, “absorbed and internalized from... culture [and] are an indelible part of our identity” (Hazel, 2008, p. 204). With the modern advancements of cognitive psychology and other sciences, research is beginning to present us with ideas of how our brains use neural networks in the formation of memories that are formed and recalled structurally in story form. As research shows, humans seem to indeed be, as Ricoeur puts it, “tangled up in stories” (Ricoeur, 1991, p. 30), which gives credence to his position for the relationship between the self and narrative.

Bridging the Gap between Soul and Mind

As evidenced by the preceding discussion on narrative identity, I have shown how identity is intimately linked to memory in story structure.²³ Identity thereby involves a capacity to gather memory in a self-reflexive manner in such a way that preserves coherence. This conception of identity as self-reflexive memory is consistent with transhumanist ideas on identity (Moravec, 1988; Kurzweil, 1999; Benedikt, 1991).

Transhumanist conceptions of identity are based solely on the mind and how important it

²³ While being beyond the scope of this paper it is of interest to note that scholars such as Bernard Stiegler argue that technology and humanity are fundamentally co-dependent (Stiegler, 1998). As such, Stiegler furthers the notion that human existence is inherently technical and depends on the technical retention of memory.

is for individual minds to be uploaded to computers (Moravec, 1988; Benedikt, 1991). According to transhumanists uploading our human minds conserve identity, at least according to those such as Moravec who claim that the identity of an individual is a pattern that, "defines the essence of a person, say myself, as the *pattern* and *process* going on in my head and body, not the machinery supporting that process... if the process is preserved, I am preserved..." (qtd. in Geraci, 2008, p. 153). This pattern (by which Moravec is referring to the mind) is the narrative that constitutes the individual; thus to preserve the mind, or the narrative of the self, the individual's identity is preserved.

The preservation of individual identity, according to some understandings of Christianity, is contained within the soul. For some Christians, the soul is that which survives beyond the worldly existence of our bodies. The soul contains the identity of the person and is that which is judged by God. This judgment by God determines if the individual in question goes to heaven or hell. This judging necessarily involves the connection of the worldly self (understood as a type of narrative) to the soul, for the soul is judged by the deeds of the worldly body, and necessarily retains that same identity. Recalling the quote from philosopher Anthony Quinton at the beginning of this chapter, the soul is a "series of mental states that is identified through time in virtue of the properties and relations of these mental states themselves" (Quinton, 1962, p. 397). In other words, the soul is that which retains the memories and relatedly the identity of the individual person.

To speak of the soul is to speak of identity as self-reflexive memory in narrative form. To speak of the mind is also to speak of identity as self-reflexive memory in narrative form. These two concepts, soul and mind, both refer to individual identity or

self. Allowing for this connection or common source between soul and mind we can, in the context of this project, see how a secular re-branding of the soul has developed into a newly conceived idea of the mind. Through a process of secularization the soul has been retained by transhumanists, albeit in a new form, as mind. In fact, in some cases transhumanists still refer to the soul as a marker of identity that is consistent or interchangeable with the mind. For example, physicist Norman Packard speaks of humans having souls as well as the potential for souls to be present in machines or in an artificial universe (Levy, 1992, p. 78-79) The purpose of both soul and mind remains the same as both are markers of individual identity that survive bodily existence and have the capability of living on in a new form (beyond a this-worldly existence) in a utopian world.

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Chapter Five

CONCLUSION

By examining transhumanism and its relationship to Christianity in the Western world I have presented an account of transhumanism that destabilizes its strictly secular appearance. To argue that transhumanism may be a religious extension of Christianity I undertook a comparative venture between these two worldviews concentrating mainly on their eschatologies. More specifically, I argued that transhumanist ideas, which advocate the inevitability of mechanical life and a subsequent immortalization of the human mind, resemble a particular understanding of Christian eschatology. The particular understanding of Christian eschatology used in this project espouses the belief in a new world where humanity will receive new immortal bodies for their souls. After connecting these two worldviews back to a similar historical context in western religious thought and comparing their similar ideas about a coming apocalypse and future existence in new bodies, I presented an important parallel between the transhumanist mind and the Christian soul.

To make the connection between the transhumanist conception of the mind and the Christian conception of the soul I argued that both mind and soul represent markers of individual identity. In other words, both mind and soul constitute the essence or core identity of individuals for their respective worldviews, where both refer to a sense of self that is grounded mainly on self reflexive memory. To bring the mind and soul in continuity with one another I furthered the argument that the mind was a secular re-branding or re-conceptualization of the soul that took place over time. This re-

conceptualization of the Christian understanding of individual identity reflects the retention of Christian ideas in the transhumanist worldview contained in a more secular language. These influences from Christianity increasingly succumb to a loss of religious appearance due to a process of secularization within transhumanism.²⁴

By arguing that transhumanism perpetuates Christian religious ideas and yearnings I have hoped to present an account of transhumanism that problematizes its outward secular appearance. In essence, my aim has been to recognize the religious roots and influence that has informed transhumanist worldview. In making this argument I have provided potential evidence for new ways in which to view supposedly secular worldviews. By recognizing the religious influence behind transhumanism this project has entertained the idea of conceiving transhumanism as a religion. As such, it is critical to consider some potential implications of this interpretation.

Potential Troubles in Adopting a Transhumanist Belief System

In consideration of what the consequences of imbuing transhumanism with a religious status or classification may have, it is important to consider the practical implications of this belief system in the public sphere. The striving towards a disembodied, mechanized paradise may not sit well with all religious traditions or with all persons, religious or not. Moreover, it is not only a question of those who are unwilling to adhere to transhumanism but also those who are unable to participate in this worldview. It is debatable whether or not contemporary technological advancements in digital and biotechnology have afforded equal opportunities for citizens or inclusive

²⁴ Although beyond the scope of this paper scholars such as Jacques Derrida argue that there is an important relationship between religion and technology, whereby religions use of technology (through a process of autoimmunity) secularizes its own religious nature. This secularization or “attack on religion by itself” is necessary to the very health and continuing existence of religion (Derrida, 2002; Naas, 2009).

forms of political agency. Often technological advancements benefit the rich or socially privileged at the expense of the poor or underprivileged (Graham, 2002, 69).

For transhumanism to be fully actualized on a societal level there is a need for a particular amount of appropriate physical resources. The ability to transfer the mind onto a machine will likely not come with a reasonable price tag. The privileged first-world or wealthy citizens around the world have the opportunity to participate in this expansion of the self in an infinite manner. For those unable to afford such an extravagance, they may find themselves both excluded and isolated. Not to mention, with the current corporate world outsourcing production to reap the benefits of cheap labour the possibility of cyborg technology resting on third-world production plants seems more than likely (Brasher, 1996). The economically advantaged stand to benefit the most at the expense of those considered to be a techno-underclass.

Issues of political standing and economic status are often not considered among transhumanist circles. Political, social, and economic concerns are thought to be unimportant once a technological utopia is achieved. However, even if we allow transhumanism its egalitarian ethos, the process of getting to an egalitarian state is generally not taken into consideration in transhumanist philosophy. This side-stepping of potential socio-politico-economic ills may well be due to the fact that transhumanists are generally wealthy scientists. The polarizing of the world, lead by a technological globalization, has resulted in both the privileged and the non-privileged. The access to technological resources necessary for a transhumanist vision of the world may not be available to all. If transhumanist values become more popularized in the public sphere in years to come these issues of inequality will be a major area of concern.

Evaluating the Comparative Method

The question of what should be considered religion is an important one in contemporary scholarship today. While many have attempted to categorize and provide frameworks and checklists for what constitutes religion and what does not, no universally agreed upon definition has surfaced. Part of the problem with trying to come up with the category or definition of what religion is is that many cultures do not obviously differentiate between religious and non-religious aspects of their culture. As such elements of culture which we in the West may classify as religious and separate aspects of our society may in another society be considered both continuous and indistinguishable from everyday life (Jordan, 2006). Similarly, the problem of who gets to classify what religion is remains. Our earlier discussion of the term helped to illuminate this very problem. It follows that there is no easy or definitive way to classify something as religious in scholarship today.

Due to the lack of a universal definition for what religion is, the aim of this chapter was to find the similarities and differences between transhumanism and Christianity. Using other religions as a prototype, in this case Christianity, we could see how other worldviews, such as transhumanism, may be classified as a religion in themselves through similarities to what we already consider to be religious. The point of comparison I employed was through an analysis of each worldview's eschatology. This point of comparison was central to this argument so as not to fall too far into prototypical notions of what religion is (such as in Alles, 2005). Prototypical religious checklists, like those seen in Alles (2005), have already been used in the comparison of transhumanism to other religious traditions (for example in Jordan, 2006) in which comparisons were

often stretched or became problematic due to the supernatural vs. natural distinction between these worldviews. Although this discussion is beyond the scope of this paper, due to limits of space and time, contemporary naturalistic explanations of religion may help to bridge the gap between the supernatural and the natural. Naturalistic explanations of religion like those presented by Pascal Boyer (2001) and Loyal Rue (2006) account for the existence as well as prevalence of supernatural aspects in human life through humanities evolutionary development. Taking these naturalistic theories into consideration the often problematic supernatural categories of prototypical religious classification (Gods, sacred objects, ritual acts focused on sacred objects, prayer etc.) may be seen in a new light and may allow for more appropriate comparisons for worldviews that do not obviously contain supernatural aspects.

The need to characterize something as religious seems to be an important aspect both in scholarship and in everyday life. Some argue that religion is vital to a sense of identity and purpose, as well as providing a social network based on common beliefs and values, a must for group survival and cohesion (Juergensmeyer, 1995). In what ways, however, is religion a useful category? Perhaps the need to call something “religion” helps to characterize, display, and understand particular worldviews that differ from one’s own. Religion seems to become an important marker to understand the heterogeneity among various human cultures and groups. As such, transhumanism no doubt has a belief system and general worldview that resembles certain structures that we see among particular religious traditions, especially Christianity. Enough similarities between these two systems may warrant the classification of transhumanism as pertaining to the category of religion, a classification this paper endorses.

The comparison that has been undertaken in this venture with respect to transhumanism and Christianity has been a complicated one. I do not wish to insinuate that transhumanism is Christianity in disguise per se, but rather they are worldviews that are intimately connected. I have argued that transhumanism grew out of the very historical and social context of a Christian West. This worldview was and remains heavily informed by Christianity and as such shares a very similar eschatology. The transhumanist eschatology was driven to its current form mainly from devout Christians hoping to usher in God's Kingdom. Whether consciously or unconsciously recognized by current transhumanists, their technological enterprise was built on religious yearnings and action.

The comparative venture that has been set in motion in this project may have important consequences for the comparative method. First, it presents us with a complicated notion of what should be two distinct entities being compared. As we have seen from the works of scholars such as Noble and Szerszynski, this contemporary worldview of transhumanism is best understood as a continuation, or rather, a related extension of a religious, specifically Christian past. This common history blurs the idea of what is commonly understood within the use of the comparative method. Instead of two separate entities being compared, the two entities being compared are in fact not completely separate and are historically connected. As such this paper may push contemporary scholarship to re-conceptualize the boundaries between two worldviews when being compared.

Second, this comparative analysis helps to open up the very idea of what we consider to be religious. To look at what seems to be a non-religious and secular belief

system at first glance and to present it as religious may help to further re-conceptualize our common notions of what it means to be religious, or what a religion is. This comparison calls for other comparisons like it, of worldviews that do not look religious but in an analysis of their beginnings and religious past may result in the classification of the worldview as religious. This consequence begins to resemble the ever-growing literature on secular forms of the sacred as discussed by scholars such as Jacques Derrida (1994; 2002) and Arnolfo C. Vento (2000). These two observations complicate the comparative method and may have important effects on its future uses.

As we have seen, the comparative method has not been without controversy. While improvements have been made to shed the Christian biases underlying the comparative method, we must always challenge the very nature of comparison, remembering that this comparison demands a subjective viewpoint that often favours one tradition over another. As noted by Paden the main concern of the comparative method is to show that structures deemed “religious” exist in human experience in a variety of different ways. Moreover, it is important to realize that this argument is a scholarly one that may not completely translate into the real world of Christianity and transhumanism. This assertion is in itself a calling: a calling to recognize the variety of religions that may exist in the world that continue to go unrecognized by our limited conceptualizations of what religion truly is or might be. Therefore, as I have shown in this project, one such variety may exist among some of the most influential scientists of our time and may become increasingly important in emerging technologies and bioethical debates in both the West and the world, [T]ranshumanism.

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