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**Immortality Through Mind Uploading and Resurrection**

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by

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**Abstract:** Technology in the last century has flourished exponentially. Previous fantasies are becoming cutting-edge discoveries like global communications, encyclopedic knowledge at the average person's fingertips, and even medical advances used to improve and extend one's quality of life and life expectancy. As technology pushes the boundaries of what is possible, ambitious visionaries look to solve the arguably greatest problem known to humanity: death.

Transhumanists aiming to use technology to overcome this great human limitation, mortality, present the newest proposed solutions to life's oldest challenge. One of these solutions, mind uploading, is perhaps the most ambitious, but it is not without its own philosophical hindrances.

In contrast, Christian resurrection claims to not only solve the problem of death, it claims to already have a historical model in the person of Jesus Christ.

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## Chapter 1

### Introduction

In 2014, a sci-fi movie starring Johnny Depp featured an AI scientist who, out of desperation to survive his terminal illness, uploaded his consciousness and began innovating things like molecular printers, biological enhancements, and a growing society of connected, enhanced humans who appeared as though they might be plotting to take over the world.<sup>1</sup> Theatrics aside, the movie *Transcendence* offers a high-budget peak into the world of transhumanism and what it might be like to have one's consciousness uploaded and survive in some form as a virtual mind. It addresses challenging ideas like the limitations one may face in a virtual, disembodied state, having no sensory input short of what someone may plug in for him, how technology might be used to enhance biological organisms, i.e., humans, and how much power is needed to continue the growth of just one rapidly-expanding artificial intelligence.

Many other forms of popular culture have touched on these topics ranging from recent television series like Netflix's *Altered Carbon* to classic literary pieces like Mary Shelley's *Frankenstein*, which of course features a scientist using science and cadaver pieces to create life. There are many themes in these ranges of entertainment media. One common theme in these movies is that of justice. Nathaniel May performs an in-depth study of several movies featuring these topics of transhumanism and notices the role that justice plays.<sup>2</sup> Ranging from *2001: A Space Odyssey* to *The Terminator* to *X-Men: The Last Stand*, each has its own nuanced take on technology and the impact on the people involved. While May's observations are correct, there is

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<sup>1</sup> Wally Pfister, *Transcendence*, Netflix video (Alcon Entertainment, 2014).

<sup>2</sup> Nathaniel D. May, "Transhumanism in Film" (Wake Forest University Graduate School of Arts and Sciences, 2014), VII.

another theme common to many of these stories and central to the aims of transhumanists: immortality.

To understand why immortality is a common focus of transhumanists, the term “transhumanist” must be clarified. The term is difficult to define consistently and clearly because the movement is far-reaching and covers many topics. Benjamin Ross echoes this challenge in defining transhumanism,<sup>3</sup> offering the following: “transhumanism is a cultural movement which advocates a philosophy predicated on the argument that humans ought to transcend the limits imposed by our biological heritage.”<sup>4</sup> Similarly, Max More has also offered several definitions, one from an early 1990 definition and two variations from a 2003 FAQ session.<sup>5</sup> Each of More’s definitions have a similar theme to those shared by Ross. For example, consider one of the 2003 definitions: “the intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities.”<sup>6</sup> The common idea emerging from both is a cultural movement which improves the human condition by transcending human limitations through technology and science.

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<sup>3</sup> Benjamin Ross, *The Philosophy of Transhumanism: A Critical Analysis* (Bingley BD16 1WA, UK: Emerald Publishing Limited, 2020), 2.

<sup>4</sup> *Ibid.*, 1.

<sup>5</sup> Max More, “The Philosophy of Transhumanism,” *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future*, edited by Max More and Natasha Vita-More (West Sussex, UK: John Wiley & Sons, Inc., 2013), 3-4. Cf. Humanity+, “Transhumanist FAQ,” accessed December 1, 2021, <https://www.humanityplus.org/transhumanist-faq>.

<sup>6</sup> *Ibid.*, 3.

Transhumanism's many branches ultimately strive to overcome human limitations using technology, and the greatest limitation humans face is death. Immortality has been a subject of interest for millennia, so the transhumanist's interest in immortality is not novel. The objective would be to completely transcend one's humanity, like Depp did in *Transcendence*, and become posthuman, the state of being after one transcends one's own humanity or human limitations. Mind uploading may then be viewed as the ultimate success and human eschaton, or at least a major transition if not an ending. Innovators like Ray Kurzweil elevate human and technological advance to a supreme position capable of solving the woes and plight of humanity. "It is only by extending ourselves with intelligent technology that we can deal with the scale of complexity needed to address [challenges like growing population, overcoming disease, vastly extending human longevity, and eliminating poverty]." <sup>7</sup>

Philosophical questions arise in the wake of suggesting that a person's mind can be uploaded to a super computer. The mind-body problem and questions of personal identity are chief among those philosophical questions. How are the mind and body related? Is the mind a distinct, immaterial substance or merely an emergent property of the complex interactions of one's physical brain? Can or does the mind exist apart from the brain? The brain does make the most sense as the physical seat of the mind. This can be demonstrated through relatively simple thought experiments. Is a man the same person if he loses his arm or leg? How much of one's body can be lost before something essential to personal identity is lost? Even hearts can be surgically transplanted, but if one's brain could be transplanted, deep questions of personal identity emerge. If Abe's brain is transplanted into Brian's body, who occupies Brian's body?

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<sup>7</sup> Ray Kurzweil, *How to Create a Mind: The Secret of Human Thought Revealed* (New York: Viking Penguin, 2012), 278.

Consequently, when discussing the mind-body problem throughout this thesis, the body will be represented by the brain.

Conversely, the mind appears to be something more than a synonym for the brain. Many modern attempts to reduce mental states to physical explanations have been met with failure. “[T]he history of ‘standard’ physicalism, that is, the largely reductive physicalism preceding the contemporary emphasis on emergence, has been one of persistent failure.”<sup>8</sup> The “emergence” referred to here is the idea that mental states are produced, or “emerge,” from physical brain-states, or in Rachel Armstrong’s words, it is “where new features arise from the collective interaction of more simple systems that take place *en masse*, at the molecular level.”<sup>9</sup> The mind is thus treated as distinct from the brain but still derived from it. Philosophers like David Chalmers refer to this as “the hard problem of consciousness.”<sup>10</sup> The “hard problem” deals with experience, according to Chalmers.<sup>11</sup> This is the subjective experience common to every person, not only sensory experiences, but also mental experiences like imagination, emotional experiences like joy or sorrow, and the intentional focus a mind can place on some object.

Alternatively, the soul is also considered as a means of explaining the mind. The terms “soul” and “mind” will be used interchangeably here to refer to the immaterial self, but it should be noted that physicalists, though reluctant to grant a pseudo-immaterial status to mental states

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<sup>8</sup> Jonathan J. Loose, Angus J. L. Menuge, and J. P. Moreland, eds., *The Blackwell Companion to Substance Dualism* (Oxford: John Wiley & Sons, Inc., 2018), 27.

<sup>9</sup> Rachel Armstrong, “Alternative Biologies,” *Transhumanist Reader*, 104.

<sup>10</sup> David J. Chalmers, *The Character of Consciousness* (New York: Oxford University Press, 2010), 3-4. In the same place, Chalmers defines the contrasting term “the easy problem of consciousness” as “those that seem directly susceptible to the standard models of cognitive science, whereby a phenomenon is explained in terms of computational or neural mechanisms.” *Ibid.*, 4.

<sup>11</sup> *Ibid.*, 5.



and events, still largely treat the mind as strictly dependent upon the physical.<sup>12</sup> Regarding the soul's role in explaining the mind, Loose et al. list J. P. Moreland and Richard Swinburne as modern philosophers seeking alternatives to Descartes' substance dualism.<sup>13</sup> The authors also note how "some dualists have followed Aristotle and Aquinas" in asking if the soul should be treated as a distinct substance rather than the "substantial form" of a living human person. These thinkers will be considered more later.

In seeking an explanation of the mind, many neuroscientists have concluded their research with an unavoidable conclusion that the mind is distinct from the physical brain. Habermas and Moreland cite several neuroscientists arriving at these conclusions; Wilder Penfield, the "acclaimed father of modern neurosurgery," concluded "[t]here is no place... where electrical stimulation will cause a patient to believe or to decide."<sup>14</sup> Similarly, "Roger Sperry and his associates... discovered that the mind has a causal power independent of brain activity," and Richard Restak who "realized that, since willed action cannot be localized in a particular brain area, this introduces a radical means of understanding the interrelation between mind and body."<sup>15</sup> To reiterate, given these points, the term "mind" will be used throughout the thesis to refer to the subjective self, or the first-person referent, which is distinct from the physical brain.

Metaphysical implications are also pertinent for consideration. Immortality naturally relates to thanatology, the study of death. The irony with the transhumanist is how death

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<sup>12</sup> Habermas and Moreland note that "soul" and "mind," as well as other nuanced terms, should be distinct in more technical conversations, but the generalization should suffice for this thesis as well. Habermas and Moreland, *Beyond Death*, 39.

<sup>13</sup> Loose, Menuge, and Moreland, *Substance Dualism*, 32.

<sup>14</sup> Habermas and Moreland, *Beyond Death*, 166-167.

<sup>15</sup> *Ibid.*, 167.

becomes a fixation rather than a repellent. Blaise Pascal wrote of how people were compelled to distract themselves so they could avoid facing the haunting reality of their own mortality. “As men are not able to fight against death, misery, ignorance, they have taken into their heads, in order to be happy, not to think of them at all.”<sup>16</sup>

The transhumanist has swung in the opposite direction from Pascal and the average people he claimed were distracting themselves from their macabre fates. Rather than avoiding the thought of death, transhumanists have focused on it to solve or “transcend” it. Death, misery, and ignorance motivate the transhumanists to achieve immortality, joy, and enlightenment. Pascal’s following line practically predicts the transhumanist movement: “to be happy he would have to make himself immortal; but, [*sic*] not being able to do so, it has occurred to him to prevent himself from thinking of death.”<sup>17</sup> Pascal is not critical of their pursuits per se, but in the illusion that attaining their goals will ultimately make them happy.<sup>18</sup>

Pascal himself was a Christian theist. His thoughts on death and the life to come were framed in that fashion. Conversely, many transhumanists tend to hold a materialist or physicalist view, which holds that only physical material exists, and all that can be known is reducible to physical processes. Although, as has been mentioned, even physicalists may reluctantly accept an immaterial mind, however dependent upon the physical brain it may be. A physicalist position, however, is not surprising given the common secular attitudes of modern philosophy and science. Other views are worth consideration as plausible worldviews to use framing the

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<sup>16</sup> T. S. Eliot, *Pascal’s Pensées* (New York: E. P. Dutton & Co., Inc., 1958), #168.

<sup>17</sup> *Ibid.*, #169.

<sup>18</sup> *Ibid.*, #139.

questions that will be raised throughout this thesis, but this thesis will focus on contrasting Christianity and transhumanism. Christianity is chosen for reasons others have covered extensively in a variety of other sources. Topics of natural theology provide many sophisticated reasons to adopt a theistic worldview, and by extension, one of metaphysical dualism, which will be discussed more later.<sup>19</sup> Other more focused works emphasize Christian theism specifically, citing reasons like miracles, the ministry of Jesus Christ, and specifically the events surrounding his execution, death, and resurrection, the latter of which will also be discussed throughout this thesis.<sup>20</sup>

With this focus on transhumanism and Christianity, the question of immortality will be considered. The focus of this thesis is to establish that mind uploading as a means of personal immortality fails to achieve its goals due to its inability to preserve the first-person referent, the self, which is referred to introspectively, and that the Christian concept of resurrection both satisfies the expectations of immortality as well as providing a purposeful explanation for the desire to gain immortality.

To establish this focus, first the topic of immortality and how it relates to personal identity will be discussed. What is immortality? What is the problem of persisting personal identity? What should one expect from immortality? These questions will be addressed in the

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<sup>19</sup> For presentations on natural theology, see W. David Beck, "God's Existence," Douglas Geivett and Gary R. Habermas, eds., *In Defense of Miracles: A Comprehensive Case for God's Action in History* (Downers Grove, IL: InterVarsity Press, 1997); William Lane Craig and J.P. Moreland, eds., *The Blackwell Companion to Natural Theology* (Malden, MA: Blackwell Publishing, 2012).

<sup>20</sup> For presentations on Christianity in particular, see Josh McDowell, *Evidence for Christianity: The Historical Evidences for the Christian Faith* (Nashville, TN: Thomas Nelson, Inc., 2006); Gary R. Habermas and Michael R. Licona, *The Case for the Resurrection of Jesus* (Grand Rapids, MI: Kregel Publications, 2004). See also Craig, "The Empty Tomb of Jesus," and Habermas "The Resurrection Appearances of Jesus," *In Defense of Miracles*. For a broad defense of theism and Christianity, see Douglas Groothuis, *Christian Apologetics: A Comprehensive Case for Biblical Faith* (Downers Grove, IL: InterVarsity Press, 2011).

following chapter. Once the expectations for immortality have been set, the next chapter after that will consider immortality through the lens of mind uploading. More details will be provided regarding what is meant by the term, how it might be done, and powerful existential questions regarding one's humanity and personal identity. Finally, beyond that, the Christian resurrection will be assessed as a means of immortality, what that might look like, and how Jesus is the historical model for the resurrection.

## Chapter 2

### Immortality and Personal Identity

Understanding what is meant by the term “immortality” is important in achieving it as a goal, be that for the transhumanist, the Christian, the ancient Greek, or whomever. This chapter will begin by discussing what is meant by immortality and what views have been used when thinking about it. This will help reveal what is yearned for when a person dreams about everlasting life. Immortality naturally raises important questions on the nature of personal identity and the metaphysical considerations involved in how a person is distinct from others but identical to itself over time if it is. The chapter will conclude with a proposed set of requirements for what constitutes a successfully immortal state based on the views and metaphysical details that were discussed.

#### What is Immortality?

Immortality should be defined in such a way as to encapsulate the desires motivating an immortal state of being. With its long and variegated history in human thinking, immortality has taken many definitions. A simple definition comes from N. T. Wright: “a state in which death is not possible.”<sup>21</sup> Is this state one of eternal life? Is perpetual, disembodied death a state in which further death is not possible, and does that count as immortality? Does some form of “after life” follow one’s death? Does such a question make sense? Gabriel Andrade draws attention to the nebulous nature of death and its role in discussing immortality as the semantic problem of death.<sup>22</sup> Worldview plays a strong role in how “death” is understood. “We usually define [death]

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<sup>21</sup> N. T. Wright, *The Resurrection of the Son of God*, vol. 3, Christian Origins and the Question of God (Minneapolis: Fortress Press, 2003), 164.

<sup>22</sup> Gabriel Andrade, “Immortality,” *Internet Encyclopedia of Philosophy*, accessed September 14, 2021, <https://iep.utm.edu/immortal/>.

in physiological terms as the cessation of biological functions that make life possible... To be immortal is, precisely, not to suffer death. Thus, whoever dies, stops existing; nobody may exist after death, precisely because death means the end of existence.”<sup>23 24</sup>

At first glance, it appears Andrade holds to a physicalist worldview. However, it is worth noting that not only physicalists believe in ontological cessation at death. For example, a “recreation position” may be taken for theists where “a person [becomes exist at death], and at the general resurrection God recreates the person, not from preexisting materials but out of nothing.”<sup>25</sup> Habermas and Moreland are critical of this view but list it as alternative views to what they call “the traditional outlook” where, at death, a person “is translated into an entirely different nonspatial mode of existence... [and immediately] into the presence of God.”<sup>26</sup> Other nuanced views exist, but for clarity, this thesis will treat postmortem cessation of being as the physicalist position and the “traditional outlook” as the general Christian position. Worldviews aside, Andrade is right in pointing out this semantic tension between life and death, prompting the question, “What does it mean to live forever?”

To begin with, immortality in its weakest meaning will not be considered throughout this thesis. This weakest meaning is to refer to the expression that one may live on in people’s memories or as a legend or icon of fame or infamy. Andrade also considers this “vague and

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<sup>23</sup> See the section “1. Semantic Problems.” Ibid.

<sup>24</sup> Clearly Andrade holds a physicalist worldview. Also note that the terms “physicalism,” “materialism,” and “scientific naturalism” will be used synonymously throughout this thesis to refer to the view that only the material world exists and immaterial substances like the soul do not exist.

<sup>25</sup> Gary R. Habermas and J.P. Moreland, *Beyond Death: Exploring the Evidence for Immortality* (Eugene, OR: Wipf and Stock Publishers, 1998), 225.

<sup>26</sup> Ibid., 222.

general,” using the enduring memory of Babe Ruth as an example of immortality via enduring memory. Beyond these immortal memories are ancient stories of heroes striving for immortality, and among those stories is one of the oldest stories in history, or at least Mesopotamian history: The Epic of Gilgamesh. In response to the death of Gilgamesh’s friend, Enkidu, Gilgamesh becomes obsessed with a quest for immortality.<sup>27</sup> His journey takes him through many adventures, even to finding one human who gained immortality through his deeds, Utnapishtim, who is the hero of the story’s floor narrative.<sup>28</sup> Gilgamesh’s objective in seeking immortality is clearly more than just being remembered. He yearns for everlasting life; he aims to avoid dying like Enkidu. Gilgamesh, or more accurately, the people retelling the tale over the years and the author who carved it into the tablets archaeologists possess today, viewed immortality as an indefinite continuation of bodily life.

Is an embodied life strictly necessary for immortality? Some transhumanists think not, such as the proponents of mind uploading, who advocate that immortality may be more exotically defined. Ray Kurzweil refers to “limitless thinking” as a form of immortality.<sup>29</sup> Kurzweil’s view of future immortality holds that humans will upload their minds or consciousness and exist virtually, and as a result of this virtual existence, “software-based humans will be vastly extended beyond the severe limitations of humans as we know them today,” and these “[software-based] humans will be able to expand their thinking without

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<sup>27</sup> Thomas Van Nortwick, *Somewhere I Have Never Travelled: The Hero’s Journey* (New York: Oxford University Press, 1996), 10.

<sup>28</sup> *Ibid.*, 11.

<sup>29</sup> Ray Kurzweil, *The Singularity Is Near - When Humans Transcend Biology* (New York: Viking Penguin, 2005), 325.

limit.”<sup>30</sup> The only limitation for such humans will be the chore of maintaining one’s “mind file” via regular backups and updating as it becomes available. How frequently this should happen likely depends on how it becomes available or what resources a person has. Would it be expensive? What hardware is required? Many of these answers are unavailable and can only be speculated about for now. The details of mind uploading will be discussed more in the next chapter. Immortality via mind uploading reflects current human self-care for longevity and quality of life; current biological self-care via eating well, exercise, and rest would be replaced by the kind of software-care that goes into modern devices like computers and smart devices. Doing so would allow the virtual person to exist indefinitely into the future. Clearly, the human imagination and creativity has not waned in recent decades.

While the methods of attaining immortality may vary over time, there are common themes that even the ancient story of Gilgamesh and the very recent Kurzweilian predictions share: a persisting self inextinguishable by death. While the pursuit of immortality is no new project, humans have not yet discovered a way around physical death. Despite this fatal inevitability, three prominent frameworks for considering immortality have risen over time, as outlined by Andrade.<sup>31</sup> To be clear, these frameworks do not avoid the specter of death; instead, they propose ways that the self may continue consciously even after death. Consequently, each of the views requires a metaphysical commitment to some form of dualism rather than physicalism.

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<sup>30</sup> Ibid.

<sup>31</sup> See section “Three Models of Immortality,” Andrade, “Immortality.”



Before covering Andrade’s outline of immortality, what might a physicalist form of immortality entail? Transhumanism offers insight into what immortality may look like. Mind uploading, which is one of the main topics of this thesis, is one such suggested approach, and arguably the most ambitious approach. Bio-engineering is another approach where the science of aging cells becomes better understood and is manipulated so aging ceases or slows. Advances in biology like the cutting-edge gene-editing CRISPR/Cas9 platform have enabled researchers to edit genes and create medicines by manipulating life at the most fundamental levels.<sup>32</sup> Similarly, Altos Labs in the UK has been funded by Jeff Bezos to continue pursuing technology to prolong life and slow or reverse the aging process.<sup>33</sup> These are just some of the recent ways physicalists have proposed how to defeat death using technology and ambition, but how have the ancients considered immortality?

### **The Astral Body**

First is the view that an immaterial soul simply leaves the body at death and wanders about the earth. This is the view proposed when people report to have seen ghosts or experienced some haunting. These reports tend to be dubious in nature, and the veracity of the view is outside the scope of this thesis, but for believers in ghosts and hauntings, it is a kind of evidence in favor of the existence of the soul and the spiritual realm. Andrade refers to this ghostly presence as “the astral body,” though he is sharply critical of some implications of the view, specifically the idea that the astral body is clothed rather than naked, which he dismisses as “too extravagant to

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<sup>32</sup> “Mission,” *CRISPR*, accessed October 6, 2021, <http://www.crisprtx.com/about-us/mission>.

<sup>33</sup> Alexa Phillips, “Jeff Bezos: Amazon founder ‘funds’ new age-reversal company opening in UK,” *Sky News*, September 6, 2021, accessed October 6, 2021, <https://news.sky.com/story/jeff-bezos-amazon-founder-funds-new-age-reversal-company-opening-in-uk-12400621>.

be taken seriously.”<sup>34</sup> This view is a part of popular culture as well. Both film and literature tell stories which abound with ghosts that have not “moved on” yet. For example, Patrick Swayze stars in a movie called *Ghost* following this theme. Similarly, Andrade refers to Hamlet’s ghost. Paranormal television shows and movies abound in the 21<sup>st</sup> century, and this only acts as a lens into the modern fascination with ghosts and the afterlife.

While these interests are largely for entertainment purposes, many funeral and ceremonial practices indicate this same belief that the dead is present, perhaps at their burial site, and active in the world. N. T. Wright describes ancient ceremonial practices of eating with the dead where people prepare food and drink for deceased loved ones at the place of their burial, also citing Egyptian burial and mummification practices to provide the deceased with physical materials to be used in the afterlife.<sup>35</sup> All of this reveals the ways in which people demonstrate either their fascination with the dead, for modern media productions would not be made were there not sufficient demand to warrant the work and cost involved, or their reverence for the dead, indicative in ancient funerary practices and festivals, for example, the still-practiced Día de los Muertos.<sup>36</sup> Proponents of the view offer it as a way to explain how a person’s soul endures beyond death into some kind of astral-bodied afterlife.

One may draw a parallel here between the proposition of uploaded minds existing virtually with the idea of an astral body. Kurzweil suggests the “software-based,” virtual human minds might interact with the physical world using holograms or nanobot swarms to produce

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<sup>34</sup> Andrade, “Immortality.”

<sup>35</sup> Wright, *Son of God*, 61-62.

<sup>36</sup> Another modern example overlapping both the interest in the dead in media entertainment and traditional funerary festivals, i.e., Día de los Muertos, is the movie *Coco*. Adrian Unkrich and Adrian Molina, *Coco*, Disney+ video (Disney Pixar, 2017).

tangible bodies.<sup>37</sup> There are similarities between the astral and virtual person visiting an embodied person: the disembodied person would visit the embodied person, either to comfort or offer wisdom from “beyond the grave.” Wright notes numerous ancient stories of people interacting with the dead for just such reasons.<sup>38</sup> These similarities between the astral and virtual disembodied person are only superficially similar though. The metaphysical view of Kurzweil is that of metaphysical materialism which rejects the existence of souls or astral bodies. Similarly, Christian theism, which shares theological roots with Judaism, concedes that, while such contact with the dead is in some form possible, it is to be avoided (Lev. 20:27; Deut. 18:10-11).<sup>39</sup> Thus, the astral, disembodied existence is not a viable means of personal immortality for neither the transhumanist nor the Christian theist.

### **The Immaterial Soul**

The second framework to consider is a Platonic view of the afterlife. This view shares with the first some form of substance dualism, but this Platonic view treats the immaterial substance, not as some astral body mimicking the person’s appearance, but instead as an immaterial soul which is without spatial dimensions and therefore unsensible. Plato writes of this view in *Phaedo* through the teachings of Socrates prior to his execution. Additionally, contra Homer, Plato wrote about how the embodied life is a prison of sorts which clouds the soul from truth and critical thinking; it is the “source of endless trouble” due bodily distractions like the

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<sup>37</sup> Kurzweil, *The Singularity is Near*, 325. Some have assembled libraries of Kurzweil’s ideas and patents to demonstrate concepts like this, e.g., the “Utility Fog” or nanotech “foglet.” Storrs Hall, *Kurzweil: Tracking the acceleration of intelligence*, July 5, 2001, accessed September 25, 2021. <https://www.kurzweilai.net/utility-fog-the-stuff-that-dreams-are-made-of>.

<sup>38</sup> Wright, *Son of God*, 62-68.

<sup>39</sup> Wright also notes 1 Samuel 28 when Saul consults a medium, “where such contact was an anathema.” *Ibid.*, 63.

need to eat, the tendency to fall ill, and the emotional attractions of “loves, and lusts, and fears, and fancies of all kinds, and endless foolery.”<sup>40</sup>

Wright also comments on this Platonic view, citing Cicero and his “mainstream of Greco-Roman thinking,” when he quotes Cicero as having said, “‘Nobody in their right mind, having got rid of [their body], would want it or something like it back again.’”<sup>41</sup> Furthermore, Norman Geisler frames the Platonic view of death as a kind of salvation for the soul, freed from its corporeal prison; “salvation is in part deliverance *from* the body” (emphasis Geisler’s).<sup>42</sup>

The Platonic view is inversely related to the transhumanist view. Where the Platonist asserts the soul, which is good, is really the person and the body, which is evil, is a distraction and prison, the transhumanist rejects the existence of the soul in general and asserts the body is the real self and worth preserving. Max More highlights this as one of the misconceptions people have about the transhumanist movement in general, namely, because many transhumanists adhere to scientific naturalism and the view that their bodies are the products of, in Richard Dawkins’ words, “a blind watchmaker,” transhumanists simply want to choose which kind of body they inhabit.<sup>43</sup>

Similarly, the Platonic anthropological and thanatological views differ significantly from the Christian views on said topics, but they are not without their similarities. A variety of Christian views on metaphysical anthropology exist. René Descartes’ anthropological views

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<sup>40</sup> Plato, *Phaedo*, trans. Benjamin Jowett, 27, Kindle.

<sup>41</sup> Wright, *Son of God*, 60.

<sup>42</sup> Norman Geisler, “Immortality,” *The Big Book of Christian Apologetics: An A to Z Guide* (Grand Rapids, MI: Baker Books, 2012), 256.

<sup>43</sup> More, *Transhumanist Reader*, 15.

represent a common, relatively modern perspective on Christian anthropology; the body and soul are distinct and separate “substances,” which is like the Platonic view, and the self is the soul or mind, which will be used interchangeably when speaking of Cartesian substance dualism.<sup>44</sup>

Descartes arrives at this conclusion of the distinct nature of the soul from the body by doubting his body’s existence and granting the possibility by merit of its logical possibility.

Richard Swinburne parses Descartes’ “I am thinking and I have no body,” stating that it entails the meaning “I exist and I have no body,” which is conceivable.<sup>45</sup> Similarly, Descartes concludes he must not be “a collection of members which we call the human body... because I have assumed that all these were nothing.”<sup>46</sup> On this distinct nature of the soul and body, Plato and Descartes agree, but Descartes does not hold the negative Platonic view of the body. In fact, Descartes saw the soul intentionally functioning “as part of the union, specifically to receive and to interpret sensation, and to direct the body to respond in that way that avoids what is harmful and attracts what is beneficial.”<sup>47</sup> Far from being trapped in the body, distracted by its sensations, the soul is to experience and direct the body. This is a clear difference in one Christian view from the Platonist.

The human body is not an evil thing or substance. This should not be confused with passages where the spirit and “flesh” are contrasted from one another. Romans 8 provides an

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<sup>44</sup> The expression “relatively modern” is intended to mean a view which holds to mechanistic views on the physical while still affording the existence of an immaterial soul capable of asserting will over its associated body.

<sup>45</sup> Richard Swinburne, “Cartesian Substance Dualism,” in *Substance Dualism*, 189.

<sup>46</sup> René Descartes, *Meditations on First Philosophy*, trans. Elizabeth S. Haldane (Cambridge: Cambridge University Press, 1911), 10. [https://yale.learningu.org/download/041e9642-df02-4eed-a895-70e472df2ca4/H2665\\_Descartes%20Meditations.pdf](https://yale.learningu.org/download/041e9642-df02-4eed-a895-70e472df2ca4/H2665_Descartes%20Meditations.pdf).

<sup>47</sup> Fred Ablondi, “Death According to Descartes: Why the Soul Leaves the Body,” *Iyyun: The Jerusalem Philosophical Quarterly* 44 (1995): 50.

example of this teaching, but rather than the flesh being a fundamentally evil thing which only impedes, Paul is writing about the flesh's failure to provide salvation and manifest right moral behavior and attitudes. The contrast between flesh and "God's Spirit" is apparent in "mind-set, the results of one's concerns, and one's attitude toward God and God's law."<sup>48</sup> While the Christian view may treat "the flesh" as corrupted, the source of human error, it is not the physical body per se that causes the issue. It is the fleshly "nature," a pattern of behavior, that is the problem. This contrasts the Platonic view of the body which only serves to distract and tempt people away from true philosophical inquiry, i.e., salvation. The Christian theist's view of the body is not a prison from which the soul or "inner self" must be freed. It is to re-embodiment via the resurrection that ultimately transforms the person into a "spiritual being."<sup>49</sup> Its desires and hungers are contextually appropriate and, given the central role Jesus' incarnate human life and re-embodied resurrection plays, it is clear embodiment is good. Like the astral body framework, Platonism is incompatible with both transhumanism and Christian theism.

### **The Resurrected Body**

The third framework to consider for immortality is that of bodily resurrection. This view of immortality is shared by the three major Abrahamic religions and expects that dead bodies will be resurrected, and disembodied souls will be re-embodied in their original bodies for final judgment. The question may be raised, "What does it mean to be resurrected in the same body as the one someone died in?" According to Geisler, one's resurrection must be into the same

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<sup>48</sup> John Reumann, *Eerdmans Commentary on the Bible: Romans* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2003), 64.

<sup>49</sup> Steven John Kraftchick, "Bodies, Selves, and Human Identity: A Conversation Between Transhumanism and the Apostle Paul," *Theology Today* 72, no. 1 (February 27, 2015): 61. Kraftchick further emphasizes that Paul's letter to the Corinthians addresses issues caused by their faulty theological anthropology, or an attitude of the flesh as it is described to the Romans. *Ibid.*, 58-59.

physical body to count as embodied immortality, or more specifically, if Jesus was not raised in his same physical body to new life, Christians have no hope of victory over death either.<sup>50</sup>

This can be taken to mean, at least, that the resurrected body should have the same properties it had prior to death, possibly barring any accidental changes or deficiencies incurred during life. For example, if a person was blinded during life, it is conceivable that the resurrected body would possess sight given it would be a property of properly-functioning human bodies. On a Christian view, healing from such deficiencies is expected in a resurrected state, but there may be reasons for retaining some bodily evidence of injuries obtained during life.<sup>51</sup>

Taking it a step further, does the resurrected body have the same cells and matter as the body which died? This is a more difficult position to hold, but there is not a strong reason to hold it. Over the course of the average human lifespan, one's cells are replaced. Geisler noted in a Thomistic/Aristotelean fashion that the expression "same body" means "the same substantial and continuous material body, whatever accidental changes there may be in its given molecules."<sup>52</sup> Thomas Aquinas' metaphysical view has influenced Geisler's; the idea Geisler was conveying was that the sum total particular atoms do not make a body belong to a person but that the body belongs to a person because its substantial form is diachronically identical over time. If the body dies, the soul can be reinstantiated materially, i.e., it can be re-embodied, and that reinstantiated body would belong to the person because it would be the material manifestation of the person's substantial soul. "Since the soul is united to the body as its form, and since each form has the

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<sup>50</sup> Geisler, "Resurrection, Physical Nature of," *Christian Apologetics*, 498.

<sup>51</sup> Consider how Jesus still had the scars of his crucifixion when presenting his body to his disciples during the post-mortem appearances.

<sup>52</sup> *Ibid.*, 500.

right matter corresponding to it, the body to which the soul will be reunited must be of the same nature and species as was the body laid down by the soul at death.”<sup>53</sup>

Aquinas’ idea of “soul” is quite different from the Cartesian meaning of the term. Aquinas, like Aristotle, did not treat the material and immaterial as distinct substances of the human, but as two components of the same substance. This is known as hylomorphism.<sup>54</sup> The soul is the animating force which moves the body and gives it life.<sup>55</sup> The soul as a substantial form also animates the incorporeal operations of the human, as Feser explains. At death the “[corporeal powers] of that substance are no longer manifest, while the [incorporeal powers] continue.”<sup>56</sup> Whatever incorporeal operations may exist apart from the soul’s corporeal presence, which would include the five empirical senses and bodily extension in space and time, those incorporeal operations would continue apart from any physical presence. These might be things like self-reflection or self-awareness, depending on what a disembodied state’s experience is like. Feser notes this is a greatly diminished and incomplete state of existence, but it is existence nonetheless.<sup>57</sup> In this way, a disembodied soul would be severely deprived in nature, like a living person lacking almost all his empirical senses. So, while the body may die or be destroyed, the

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<sup>53</sup> Thomas Aquinas, “Chapter 154: Miraculous Nature of the Resurrection,” *Compendium Theologiae: Compendium of Theology*, ed. Paul A. Böer, Sr., trans. Cyril Vollert, S.J. (Veritatis Splendor Publications, 2012), 187.

<sup>54</sup> Edward Feser, *Aquinas: A Beginner’s Guide (Beginner’s Guides)* (Oxford: Oneworld Publications, 2009), 132.

<sup>55</sup> *Ibid.*

<sup>56</sup> Feser, “Aquinas on the Human Soul,” *Substance Dualism*, 142.

<sup>57</sup> *Ibid.*, 143-144.



soul's continued existence ensures a continuity of personal identity over time in the absence of a physical body as Geisler proposed.

Andrade rightly points out that the Resurrected Body framework for immortality faces serious difficulties if dualism or the soul is denied. Resurrection in some form is not impossible if the soul is denied. Such a view where personal identity is based on the body or psychology, as will be covered in the next section, could offer explanation for a person being brought back to life. If God is permitted in the scenario, God could raise the person's identical body back to life, or even just place the person's memories in a similar body. Alternatively, if cloning procedures were advanced enough and allowed to replicate human bodies, that would provide a sort of immortality. Also, if technology were exceptionally advanced and adept at duplicating one's brain perfectly from some snapshot in time, some brain state captured by scan or preservation of the organ itself, maybe the pattern of psychological features could "resurrect" a person, but these suggestions are farfetched and largely conjectured.

Suppose for arguments sake that the resurrection of the body is granted. Two further questions arise in response to it. First is the question of how one knows the resurrected body is properly ensouled with the same soul that inhabited the body originally. This sparks the problem with persisting personal identity, and it will be addressed in the next section. The second question regards the intermediate state between life and resurrection, i.e., the body's death state. For both the Jew and the Christian, this intermediate state is one where the disembodied soul retains some level of consciousness and self-awareness. Daniel 12:13 is an important verse for the Jew and Christian speaking directly of this intermediate state saying "[Daniel] will rest" and

rise again in the last days.<sup>58</sup> Wright contrasts this against “Plato, Cicero, and other expressions of the classic ‘astral immortality.’”<sup>59</sup> Death does not introduce the soul immediately into a state of immortality, nor the resurrection; first is an intermediate state.<sup>60</sup> Wright goes so far as to say that the idea of an immediate resurrection or state of immortality is completely without support in second-temple Jewish thinking when Christianity began.<sup>61</sup>

Habermas and Moreland also extensively cover this intermediate state, considering both the traditional view that has just been briefly discussed, as well as several non-traditional alternatives and reasons they are less likely to be true.<sup>62</sup> The main points Habermas and Moreland offer in support of the traditional view come from the New Testament documents, the source of traditional Christian thinking. Specifically, Paul’s desire to be present with Christ (Phil. 1:23) which means being “away from the body and at home with the Lord” (2 Cor. 5:8). Similarly, two stories present the deceased in conscious states: the parable of Lazarus and the rich man and the apocalyptic vision of the righteous martyrs seeking justice from God. Habermas and Moreland make the point that these two stories should not be pressed too far, especially related to spatial details, but the expressions of the parable and the vision depict those who have died as being conscious after death.<sup>63</sup>

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<sup>58</sup> Unless otherwise noted, all biblical passages referenced are in the New International Version.

<sup>59</sup> Wright, *Son of God*, 111.

<sup>60</sup> *Ibid.*, 113.

<sup>61</sup> *Ibid.*, 164.

<sup>62</sup> See “Life in Between: The State Between Death and Eternity.” Habermas and Moreland, *Beyond Death*, 221-235.

<sup>63</sup> *Ibid.*, 223.

Given the centrality of the resurrection of the body in Christianity, there is obviously no conflict between the third framework of immortality and Christianity. However, transhumanism conditionally clashes with the resurrection of the body model. This condition depends on the transhumanist's metaphysical views. The materialist will reject the view partly due to most people dying before the promised resurrection occurs, so there is a significant article of faith involved which the materialist does not hold.<sup>64</sup> However, for any transhumanists that are also substance dualists, bodily resurrection is not out of the question. Consequently, there can be overlapping dialog between the transhumanist and the Christian. Kraftchick cites and agrees with Heidi Campbell on the three areas of conversation both views share: a shared longing for transformation in eschatological terms, the place of the human in the world, and an ethical framework for the human's role in said transformation.<sup>65</sup>

Similarly, but more critically, Knut Alfsvåg believes Christian ethics should remain critical of "biotechnology," which is central to transhumanism, that seeks to transform humans in radical ways.<sup>66</sup> Alfsvåg grants that the two views look forward to relief from illness and death, but he concludes the division is due to conflicting expectations. One is that "the Christian idea of improvement does not entail liberation from embodiment," and in fact looks forward to re-embodiment at the resurrection as has been discussed already. Transhumanism does not, by necessity, seek to abolish the body per se, but as More mentioned, transhumanists do want the

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<sup>64</sup> This assertion that faith is involved is not intended to imply that faith is offered without reason, as is commonly caricatured by critics. The road of faith may be foggy looking forward, but reasons come from what is known behind us and a certainty that will continue forward.

<sup>65</sup> Kraftchick, "Bodies, selves, and human identity," 54-55.

<sup>66</sup> Knut Alfsvåg, "The New Issues in Bioethics -- and Ethics of Reproduction," *European Journal of Theology* 24, no. 2 (2015): 109-110.

freedom to choose what kind of body they inhabit, if at all.<sup>67</sup> The other reason for the divide is that Christians do not expect the transformation to be accomplished by human efforts; instead, it is offered as a divine gift. Transhumanists, especially physicalists, have no interest in waiting for a promised gift they do not believe will come. The divide between the transhumanist and the Christian regarding human transformation and immortality is fundamentally metaphysical, and as a result, irreconcilable.

After having considered these different views of immortality, the common subject through them all is the persistence of self and personal identity indefinitely into the future. The reason to focus on “self and personal identity” is because one’s worldview and how preservation of self is executed will affect whether one’s brain or body is necessary for the persistence of the self. For example, the Platonist looking forward to preservation is not relying on the brain or body to survive; only the immaterial soul must survive for the self to endure, which is the sought-after goal for the Platonist.<sup>68</sup> Conversely, the transhumanist may want to preserve her physical brain if she thinks it is the locus of her personal identity. Alternatively, an uploaded mind, as will be discussed more in the following chapter, may only need to mimic the brain virtually to preserve one’s personal identity, if possible.

Thus, throughout the thesis, immortality will refer to self which persists indefinitely into the future. It is worth noting here that if Wright’s simple definition of immortality is used, i.e., that death is an impossibility for an immortal, then no form of transhumanist techno-immortality would qualify. No amount of technology can permanently prevent death in all its forms. Even if

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<sup>67</sup> More, *The Transhumanist Reader*, 15.

<sup>68</sup> Cf. Plato, *Phaedo*, 26.

immortality were achieved by mind uploading, for example, the uploaded mind would still be dependent upon the new substrate to continue “living.” Therefore, the “indefinitely-persisting self” definition of immortality will be used in the interest providing a definition that at least allows the possibility of mind uploading. Having now defined immortality as an “indefinitely-persisting self,” the problem of persisting identity has returned and will now be considered.

### The Problem of Persisting Personal Identity

Immortality naturally prompts discussions on the problem of persisting personal identity. What causes a person at  $t_1$  to be the same as the person at  $t_2$  and onward until  $t_n$ ? The three frameworks or modes of immortality from the previous section demonstrate how the question of personal identity centers on some concept of immaterial soul, be it an astral substance, an already immortal substance, or a potentially immortal substance meant to be embodied. What is it about the soul that commonly fixes the discussion of personal identity on itself? As it is traditionally understood, the soul as a locus of the self provides a clear explanation for how someone can change over time. Even to discuss the idea of something or someone changing over time, there must be some common referent as the object of consideration.

Even inanimate objects have what might be called a “loose, popular sense of identity.”<sup>69</sup> One example of loose identity might be what Gallois calls the Cup and Tcup, where “Cup” refers to a tea cup or mug that is whole, and “Tcup” refers to the “truncated cup” with its handle broken off, hence, “Tcup.”<sup>70</sup> A loose identity grants the Tcup is identical to the Cup despite its total

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<sup>69</sup> J.P. Moreland and William Lane Craig, *Philosophical Foundations for a Christian Worldview*, 2nd ed. (Downers Grove, IL: InterVarsity Press, 2017), 535.

<sup>70</sup> See the section “4.3 Identity: ‘Strict’ and ‘Loose.’” Andre Gallois, “Identity Over Time,” *Stanford Encyclopedia of Philosophy*, 2016, accessed on September 26, 2021, <https://plato.stanford.edu/entries/identity-time/>.

composition being less than the Cup prior to being broken. Similarly, a sports team is loosely identical to itself over time despite potential change of players, coaches, managers, mascots, and even inanimate things like slogans, marketing, logos, or brands. Any of these details may change over time, but the team may remain the same in a loose, popular sense. Another classic illustration of this issue is the Ship of Theseus.

The Ship of Theseus thought experiment asks if a ship's identity is the same or different after the parts of the ship are steadily replaced over time. The issue is complicated further if the parts that were replaced are used to be reassembled into another ship, thereby reconstructing "the original" ship but resulting now in two ships. As was mentioned with the team illustration, there is an "absolute, strict sense of identity" at play where the ship is different as soon as a part is replaced.<sup>71</sup> Strict identity follows Leibnitz's law of the indiscernibility of identicals: "for any  $x$  and for any  $y$ , if 'they' are identical to each other, then for any property  $P$ ,  $P$  will be true of  $x$  if and only if  $P$  is true of  $y$ ."<sup>72</sup> Among some of the lessons learned from the Ship of Theseus, according to Moreland and Craig, it appears that artifacts cannot maintain a strict identity but, instead, must be identified loosely by some arbitrary definition of parts that persist over time.<sup>73</sup> Given these differences in senses of identity, what can be said of personal identity?

### **Criteria for Personal Identity**

Commonly discussed when determining personal identity are the criteria for personal identity. These are typically broken up into three criteria: "soul, body, and psychological

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<sup>71</sup> Moreland and Craig, *Philosophical Foundations*, 535.

<sup>72</sup> Cf. *Ibid.*, 307.

<sup>73</sup> *Ibid.*, 537-539.

continuity.”<sup>74</sup> To help illustrate and test each criterion, consider a heinous tyrant guilty of the worst behavior known to man. The 20<sup>th</sup> century has had plenty to choose from, so someone on par with Hitler, Stalin, Mao, or Pot should suffice. This tyrant will help illustrate each criteria’s viability.

First, what Craig and Moreland call the “absolute [or simple] view of personal identity” points to an entity, the soul, as the source of personal identity which is absolute, indivisible, and “does not come in degrees” or partials.<sup>75</sup> This will be referred to as the soul criterion. This view explains how a disembodied, deceased person might maintain personal identity even in death; “sameness of soul is what constitutes personal identity through change, even death.”<sup>76</sup> This calls back to Daniel 12:13 where he is told he will rest until “the end of the days [when] you will rise to receive your allotted inheritance.” Daniel could not keep his personal identity through his “rest” and receive his “allotted inheritance” if his personal identity was lost in death.

Swinburne agrees with the indivisibility of the soul on this view; this follows his consideration of the classic split-brain thought experiment which questions which brain would house his identity were it split and placed in two separate bodies.<sup>77</sup> Swinburne notes that he is still fully himself after the split and that “there is no room for [the other consciousness] to be me, even in small part.”<sup>78</sup> Similar thought experiments, including the split-brain, will come up in

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<sup>74</sup> See section “6. A Brief Digression: Criteria for Personal Identity.” Andrade, “Immortality.” Moreland and Craig’s terms are different but equivalent: “the absolute view, the body view, and the memory view.” Moreland and Craig, *Philosophical Foundations*, 542.

<sup>75</sup> Moreland and Craig, *Philosophical Foundations*, 540.

<sup>76</sup> Habermas and Moreland, *Beyond Death*, 106.

<sup>77</sup> Richard Swinburne, *The Evolution of the Soul* (New York: Oxford University Press, 1986), 150.

<sup>78</sup> *Ibid.*

later chapters. It should also be noted, much like this thesis uses “soul” and “mind” interchangeably, that Swinburne treats the term “soul” as interchangeable with “mind.”<sup>79</sup>

Swinburne holds to the soul criterion of personal identity.

The challenges that face the soul criterion are related to the questions on how it might know a resurrected person was really the same person. For example, if the illustrative tyrant is resurrected in an Abrahamic sense for final judgment by a sufficiently competent judge, is it safe to expect that the tyrant raised for judgment will be the same tyrant that lived and committed the acts to be judged? Yes, the competent judge would have the means for rationally and justly judging the tyrant for his life’s actions. If the re-embodied soul were not the tyrant, it would make no sense and would be utterly unjust to judge anyone by the tyrant’s actions other than the tyrant himself. The soul criterion holds up.

Second is the body criterion which holds that personal identity is associated with body itself. To hold this view rationally and still maintain that a person maintains some identity over time, a loose view of identity is required. The same issues that plague the Ship of Theseus face the body criterion, metaphysically speaking. The body, including the brain, regularly replaces its cells over time, so the strict molecules composing the body must not be the requirement or else no one is ever the same person over time as cells are replaced. This view also calls back to the discussion earlier regarding whether a resurrected body must be made of the same matter or not. The body and brain already undergo a Theseus-like series of part replacement. Consequently, the loose identity view must be held. To reiterate an earlier illustration, it would appear most body parts can be replaced without questioning the person’s identity, but upon considering

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<sup>79</sup> Ibid., 2.



replacement of one's brain, questions of personal identity naturally arise. Even substance dualists like Swinburne grant that the brain appears to be the seat of consciousness for the physical body.<sup>80</sup>

So, if the brain is selected as the assembly of parts by which the body is the measure of personality, what problems does this view face? One has already been mentioned regarding Swinburne's claim that the soul or mind cannot be divided into partials. Granted, Swinburne was speaking of the mind being indivisible, even if the brain is, but the question here regards what in the brain is responsible for personal identification. To return to the illustration of the tyrant, if he sought to evade capture by undergoing the split-brain procedure where the two halves went to separate bodies of his coerced subjects, and assuming the procedure successfully produced two conscious people, which person would deserve the punishment for the tyrant's acts should one or both be captured? The temptation may be to punish both, but is that a just punishment? Which body holds the person responsible for the tyrannous acts, the tyrant other or one's self? Concluding this type of scenario, Moreland and Craig offer two important points. "First, a person is not identical to his body or his memories and character traits... [Second], persons are not capable of partial identity and survival as are physical objects."<sup>81</sup> The two conscious people are new people and cannot be identified with the initial tyrant.

Additionally, if personal identity is located strictly in the body, some kind of continuity must loosely identify the person in the same way the Ship of Theseus is the "same ship." This presents challenges for advocates of bodily resurrection since the body would likely be

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<sup>80</sup> Ibid., 148.

<sup>81</sup> Moreland and Craig, *Philosophical Foundations*, 548.

decomposed over time for most people through history. If some deity was to recreate the body exactly as it were at death, the body would be totally new and have a new bodily continuity, even if the behaviors and brain-states were “the same” as before. There is no obvious difference between this recreated body and a perfectly cloned body apart from the effective causes. To illustrate, could the tyrant who escaped the courts be cloned, tried, judged, and punished? Such an idea mocks one’s sense of justice. The body view is replete with insurmountable issues of identity, especially when it comes to preserving the FPR, whether that be for the individual’s preservation or for the enacting of ultimate justice.

The third criterion to consider is the psychological, or memory, view. Andrade explains John Locke’s view how identity is determined by consciousness or memories, i.e., psychological details.<sup>82</sup> The self is a culmination of the psychological traits possessed by a person, so memories, interests, preferences, and the like determine one’s identity.

This criterion is more favorable for physicalists as it can be explained in naturalistic ways, but how well does it hold up? Consider once more the tyrant. If the tyrant and another person somehow had their memories switched, the result would be the tyrant’s memories in the other person’s body ( $O_T$ ) and the other person’s memories in the tyrant’s body ( $T_O$ ). Now suppose  $T_O$  was captured by enemy forces trying to stop him and bring him to justice. Would the enemy forces be judging the right person  $T_O$  instead of  $O_T$ ? From the outside perspective,  $T_O$  would appear to be the target, but if the captive has no memory of the actions and is appalled by the accusation, can that person be the same tyrant? It would seem  $O_T$  should be held accountable since the memories, behavior, and apparent psychology of the tyrant reside there.

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<sup>82</sup> See the section “c. The Psychological Criterion.” Andrade, “Immortality.”

Conversely, if the tyrant suffered a serious blow to the head that caused amnesia and recalled none of his previous actions, would he still be responsible for his crimes? The surviving victims would certainly think so. This scenario reveals a fault in the psychological continuity view of personal identity. Loss of one's memories does not change who the person is, i.e., memory loss does not change the first-person referent who is the focus of introspection. It only changes what that self-referential "I" remembers about himself. For the proposition "the tyrant lost his memories" to be a logical chain of events, it is required that the tyrant be the subject experiencing the memories loss. For these reasons, it would appear this criterion of psychology, namely the possession of one's memories, is insufficient for establishing personal identity.

Having considered the criteria of the soul, body, and mind, the soul criterion best captures what is expected when trying to identify a person over time due to its absolute, indivisible nature. The body criterion struggles with maintaining identity during radical bodily changes, especially when dealing with the brain which typically represents the seat of consciousness; this will be more relevant as mind uploading is discussed in the next chapter. The memory criterion suffers issues of coherence in a consistent subject of experience remaining "the same" through a sequence of events, e.g., memory loss. Personal identity in the soul does not allow for strange scenarios like those covered with the body or psychological criteria. By extension, this restricts metaphysical views to those compatible with the personal soul.

### **Metaphysical Considerations**

First, recall how the terms "soul" and "mind" are being used interchangeably in this thesis. Then, considering the criteria explored, the accompanying metaphysical views will now be considered regarding how compatible they are with the personal soul. Physicalism is clearly incompatible with the soul as described in the criteria above. It comes close with concepts of

emergent properties which are said to form when matter becomes sufficiently complex to cause patterns to emerge, but it does not mesh with the results of the criteria for personality and faces the same hurdles as the body and psychological criteria. Additionally, Habermas and Moreland present a strong case establishing that the brain and mind do not share the same “properties, states, and dispositions,” which reinforces the difference between the brain and mind.<sup>83</sup>

The brain and mind do not possess the same properties, so where the brain’s properties may possess electrical charge, chemical makeup, weight, or spatial location, mental properties do not. Mental details are also self-presenting, privately known, and incorrigible to the subject. Observers may infer via brain scans what the subject is thinking or feeling, but the details must be confirmed by the thinking subject before the observing subject can be certain of the specific mental contents. Similarly, the nature of experience is purely subjective, so whatever the stimuli may be, the experiences per se are real experiences for the subject. Additionally, secondary qualities like “colors, tastes, sounds, smells, and textures” cannot be reduced to primary qualities like “weight, shape, size, solidity, [or] motion.” Color may possess wavelengths which trigger optic receptors and send signals to the brain, but the subjective experience of secondary qualities like redness or blueness are real experiences in the mind. Finally, intentionality is a kind of mental state that purposefully refers to some object of consideration. This intentional consideration can manifest as a desire, e.g., “John wants a burger,” or the sensation of it, e.g., “John tastes a burger.” These points are Habermas and Moreland’s case for dualism over physicalism.

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<sup>83</sup> Habermas and Moreland, *Beyond Death*, 48-54.

Of the points listed above, intentionality is an important one. Moreland and Craig make a similar point, describing intentionality as “a natural affinity or intrinsic directedness towards its intentional object.”<sup>84</sup> Elsewhere, they define intentionality as “the ofness or aboutness of the mind,” and that the mental state “is always a state of or about something beyond it.”<sup>85</sup> Particularly interesting is how the intentional mental state does not have to be about something that exists; it could be about something like the Greek god Zeus or a mystical creature like a phoenix. These intentional mental states are properties the physical brain cannot contain in the same way they do properties like size, charge, or spatial orientation.

Similarly, Feser notes intentionality’s “capacity to represent, refer, or point beyond itself” is an example of “natural phenomena difficult to account for in mechanistic terms.”<sup>86</sup> Feser also highlights how intentionality has a teleological aspect in that the directedness of the thoughts are an end or goal of the mental state like Aristotle’s analysis of “the generation of the flame and heat as its final cause.”<sup>87</sup> Finally, Feser lists this directedness as one of the disqualifying features as to why neuroscientific findings could not threaten the immateriality of intentionality, or stated otherwise, intentionality could never be accounted for on strictly mechanistic terms. “Nothing devoid of final causality can possess the directedness characteristic of intentionality.”<sup>88</sup> As represented by Feser, the Thomistic/Aristotelean view of hylomorphism rests comfortably in

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<sup>84</sup> Moreland and Craig, *Philosophical Foundations*, 222.

<sup>85</sup> *Ibid.*, 279.

<sup>86</sup> Feser, *Aquinas*, 56.

<sup>87</sup> *Ibid.*

<sup>88</sup> *Ibid.*, 164.

accordance with neuroscientific findings because they will only be able to describe the matter, not its form.

Habermas and Moreland further defend substance dualism against property dualism.<sup>89</sup> Property dualism states that “the brain is the real possessor of [the] mental life.”<sup>90</sup> The brain is not something which possesses consciousness. Through a “basic awareness of the self,” the subject can be aware that she is the one having experiences and is not the set of experiences herself. This also means there is “no amount of third-person descriptions [that] captures my own subjective, first-person” experiences. This calls back to the example of an observer reading brain scans being unable to capture the subject’s private inner experiences fully by scans alone. As has also been discussed, personal identity is best explained by the soul criterion. “Personal identity is constituted by sameness of soul, not sameness of body or mental abilities.”<sup>91</sup> Finally, free will, morality, personal responsibility, reward, and punishment depend on identity enduring as the soul endures. This echoes what was said regarding the soul criterion for the same reasons.

Before proceeding, some versions of substance dualism should be addressed. Probably the most famous substance dualist was Descartes. The Cartesian form of substance dualism is like the Platonic form in that the self is the soul or mind which possesses a body. Recall that Descartes could come to this conclusion by doubting everything he formerly knew, but he was not able to doubt that he was a thinking thing. His body could be doubted as an illusion of the mind, but his mind per se could not be doubted. The instant he thought of himself in any way, he

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<sup>89</sup> Habermas and Moreland, *Beyond Death*, 55-65.

<sup>90</sup> *Ibid.*, 54.

<sup>91</sup> *Ibid.*, 58.

knew he must logically exist. “I am, however, a real thing and really exist; [*sic*] but what thing? I have answered: a thing which thinks.”<sup>92</sup> Similarly, Descartes reasoned that, even if he were being deceived by some malevolent demon, he must exist to be deceived in the first place.<sup>93</sup>

While Descartes was confident in his ability to doubt the reality of the body, Aquinas in his Aristotelean fashion was not so confident due to an important difference in their concepts of the soul. Descartes viewed the soul as the entirety of the self which probably possessed a body in life, provided it was not being deceived by a malevolent demon. Aquinas, as has been discussed, viewed the soul as the substantial form of the body, or the essence of the body. “The essence of a thing is that which makes it the sort of thing it is.”<sup>94</sup> Aquinas asserted the soul was the animating life force, “the act of [the] body.”<sup>95</sup> The word “act” here is short for “actuality,” which contrasts with “potentiality.” A body may be potentially alive or not, so a living body is one actualized or animated by its form, i.e., its soul.<sup>96</sup>

Similarly, in line with Aristotle, Aquinas considered the soul to be the form of the body like the seal is to the wax.<sup>97</sup> Aquinas’ view of the soul is more intimately related to the body, including the brain, in its causal interactions with the body. The body is not just some vehicle the

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<sup>92</sup> Descartes, *Meditations*, 10.

<sup>93</sup> *Ibid.*, 9.

<sup>94</sup> Feser, *Aquinas*, 31.

<sup>95</sup> Thomas Aquinas, *Summa Theologica*, trans. Fathers of the English Dominican Province (Benziger Bros., 1947), Ia, q. 75, art 1, <https://www.ccel.org/a/aquinas/summa/FP.html>.

<sup>96</sup> Feser, “Aquinas on the Human Soul,” *Substance Dualism*, 133.

<sup>97</sup> See section “8. Body and Soul.” John O’Callaghan, “Saint Thomas Aquinas,” *Stanford Encyclopedia of Philosophy*, 2014, <https://plato.stanford.edu/entries/aquinas/>.

soul controls, it is a necessary component to the human as a complete and living creature. As has been mentioned already, a human without a body is severely deprived.

Feser sees another important difference on the essential soul between Descartes and Aquinas. Descartes placed heavy importance on “thinking as the essence of the soul,” but that implies that any amount of a person’s life wherein she is incapable of having actual thoughts excludes the presence of a soul. This is a sobering possibility for those in utero, early post-partem infancy, or even a vegetative state. In contrast, Aquinas would assert that a living body necessarily meant the body was ensouled as the soul is the animating force of the body.<sup>98</sup> Although, it is worth granting that Descartes’ emphasis on self-reflection and thinking principally assured him of his own existence. This emphasis does not mean humans incapable of thought lack a soul, but that they lack the ability to ensure their own existence.<sup>99</sup> This emphasis also does not mean the lack of such assurance concludes an absence of soul. Simply put, a living body is one animated by an essential soul and is fully human only when said soul enlivens the body. In addition to Aquinas’ sophisticated view, some other experiences suggest compelling evidence to believe that disembodied souls retain consciousness in the intermediate state discussed earlier. Those experiences are near-death experiences.

Near-death experiences (NDEs) have a mixed reception. For those already believing, they are an encouraging sign of confirmation for the hopes already held. For those already skeptical or doubting, they are yet another unreliable phenomenon caused perhaps by hallucinations or final

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<sup>98</sup> Aquinas, *Summa Theologica*, Ia, q. 75, art 1.

<sup>99</sup> However, a person incapable of thinking or self-reflection will not care about ensuring his own existence, so the privation has no real impact.



brain-states trying to cope with the experience of dying.<sup>100</sup> After a patient experienced an NDE, Melvin Morse began investigating the phenomenon. His studies took him from Raymond Moody to developing a genuine interest in understanding more so that his colleagues could speak with patients about death more openly and knowledgeably.<sup>101</sup> Morse's research was intentionally and carefully crafted to avoid leading the patient or subtly skewing results. Habermas and Moreland discuss several other medical professionals to have taken up Moody's challenge to research the subject more objectively, and the reports and evidence for the phenomena is significant. However, extensive coverage of these medical studies on NDEs is outside the scope of this thesis.<sup>102</sup>

There are those among theists who would also draw a critical conclusion to NDEs. Geisler questions whether reports of NDEs really constitute the biblical definition of "death," i.e., that the soul left the body.<sup>103</sup> Geisler reasons that a soul that leaves and returns to the body is a resurrection which conflicts with the Christian teachings on one general resurrection for all at the end. On his definition, if the wide reports of NDEs were true, it would mean resurrections were happening frequently. Geisler also cites Scripture to indicate people only die once (Heb. 9:27).

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<sup>100</sup> See section "A Near-Death Experience." Melvin L. Morse and Paul Perry, *Close to the Light: Learning from The Near-Death Experiences of Children*, 2011, Kindle.

<sup>101</sup> See section "Traditional View Questioned." Ibid.

<sup>102</sup> "Near-Death Experiences," Habermas and Moreland, *Beyond Death*, 155-172.

<sup>103</sup> See section "Argument from near-death experiences." Geisler, "Immortality," *Christian Apologetics*, 260.

Habermas and Moreland respond to these challenges by asserting that there are two kinds of death: clinical death, which is reversible, and biological death, which is final.<sup>104</sup> NDEs are cases of clinical death, not the final biological death. Therefore, clinical death, which may be reversed, is only a “near” death experience where “death” implies biological death. Similarly, the passage Hebrews could be referring to a general rule rather than a hard restriction. Several people throughout Scripture other than Jesus were reported to have been raised from the dead (1 Kings 17:17-24; 2 Kings 4:18-37; 13: 20-21; Luke 7:11-17; 8: 40-56; Matt. 27:50-53; John 11; Acts 9:36-43; 20: 7-12). Geisler is right to be guarded, though. These reports do not confirm much about the afterlife and should not be taken as sources of theology, but even if they are deceptions on par with Descartes’ malevolent demon or legitimate experiences, it reveals there is some form of post-mortem consciousness and evidence of an intermediate state.

Much has been said about immortality to this point, and much more could be said, but enough has been covered to propose the expectations for immortality that will be used for the remainder of this thesis before turning to mind uploading specifically.

### Expectations for Actual Immortality

The following expectations have been extracted from the content covered so far. Reflecting on why an individual might be seeking immortality, the fear of death and possible oblivion is a strong motivator. At the heart of this desire, though, is a desire for the individual person to persist and not be annihilated. If people were certain of what happens after death, it would not likely carry the same power of fear. In fact, this lack of fear of death is a probable outcome for people who have experienced NDEs. The concern that people disappear at death is

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<sup>104</sup> Habermas and Moreland, *Beyond Death*, 156, 181.

an old one. Even considering the burial practices and ceremonies of the ancient world, there still lingered a “fear that when [the soul] has left the body [its] place may be nowhere, and that on that very day of death [it] may perish and come to an end.”<sup>105</sup>

The most important expectation for actual immortality then should be that the first-person referent (FPR), the subject being referenced during introspection, must exist indefinitely. Moreland and Craig note how an FPR’s consciousness exhibits what is called “point-of-view subjectivity,” and highlight two noteworthy things about it. First, “for any conscious state whatsoever, it belongs to a subject of experience,” and “the idea of a subjectless conscious state... is just ridiculous.” Second, “conscious states are always features of a subjective point of view [which] characterize [the subject’s] unique and distinct standing point in the world.”<sup>106</sup>

It is not enough for memories or psychological details to carry on alone; if a person loses his memories and all past and present knowledge of himself, he still has the same FPR who experiences this loss of psychological identity. The subject of memory loss is the same subject who had the memories initially. Additionally, if he were being tortured or pampered in this ignorant state, the same FPR would still experience those things while being ignorant of his past. Further, to even make sense of the thought experiment that the person had memories, lost memories, then wondered about the loss logically means a continuing personal identity to have such experiences. The FPR must be identical through these experiences.

Following the reasoning for preserved responsibility of one’s actions in life, the ontological history of the FPR must be diachronically identical in the immortal state as in the

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<sup>105</sup> Plato, *Phaedo*, 27.

<sup>106</sup> Moreland and Craig, *Philosophical Foundations*, 371.

living state. This should ensure that the immortal person is equally responsible for her actions after gaining immortality as she would be prior to immortality. Related to an unbroken ontological history is an identical count of FPRs that might refer to memories held of previous life events. This will account for the indivisibility of the soul and closely relates to the single ontological history of the FPR.

The final picture of immortality then is a persisting FPR that is singular in ontological history and total count of referents who endures indefinitely into the future. Despite having ruled out some modes of immortality already, this definition would allow for astral or immaterial, immortal soul models of immortality to qualify. It is intended to be graciously considerate while still attaining the apparent objectives of gaining immortality, and it should suffice for the remainder of the thesis.

## Chapter 3

### Mind Uploading and Metaphysics

In this chapter, the reasons for why mind uploading fails as a means of immortality will be explained. The concept of mind uploading has already been briefly mentioned, but further analysis is required to consider both the nuances of mind uploading and the metaphysical implications. This chapter will provide that elaboration of meaning and intent. Next, mind uploading will be discussed and analyzed to establish expectations for actual immortality in the context of mind uploading. It will become apparent how some of the already-discussed thought experiments will contribute to the conversation in the section covering the proposed mind uploading methods. Finally, having explored those methods and noting where the thought experiments parallel the methods, some concluding metaphysical questions will be addressed regarding the nature of being an uploaded mind and, most important to the topic of immortality, the nature of identity in the context of mind uploading.

Before defining mind uploading, briefly consider the following mind uploading terms. “Substrate” describes a physical grounding for consciousness, like a biological brain or a synthetic artifact housing the uploaded mind. A computerized brain is a brain or substrate that mimics the functionality of the organic brain but is constructed by small devices like nanobots or a larger computer may be simulating or emulating the brain. A computer emulation is then considered a “virtual” brain, as opposed to a nanobot brain, which is a physical brain. The terms “synthetic” and “artificial” will be used synonymously to contrast a “biological” brain. Other terms will be introduced when appropriate. An excellent source for more in-depth definitions can

be found in Keith Wiley's Glossary.<sup>107</sup> So, starting at the beginning, what is mind uploading and what does it mean?

### What is Mind Uploading?

Definitions for mind uploading vary greatly, which might be due to the ambiguity with which the mind/brain distinction is handled. The transferal of the FPR is difficult to attain, if even possible, when the mind/brain distinction is vague. Consequently, this chapter will only be able to cover the available concepts regarding minds, brains, and mind uploading. A simple definition with modest objectives is "a process of transfer of a mind from a biological brain to another substrate."<sup>108</sup> Koene here is using the term "mind" as distinct from "brain." The entire chapter deals with "substrate-independent minds," and Koene is considering how one's mind could exist apart from one's original biological brain. A better term to replace "mind" in Koene's definition might be "consciousness" to indicate what would be transferred.

Also, Koene's definition does not mean that he is metaphysically inclined towards the mind being immaterial. Like many other transhumanists, Koene treats the mind as an emergent feature of one's material substrate, i.e., the brain. "The mind continues to depend on a substrate to exist and to operate, but there are substrate choices."<sup>109</sup> Just as a smiley face can be drawn in sand, condensation, or a film of dust, the material is less important than the pattern instantiated

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<sup>107</sup> See chapter 2 "Glossary," Keith Wiley, *A Taxonomy and Metaphysics of Mind-Uploading* (Seattle: Humanity+ Press and Alautun Press, 2014), 13-30.

<sup>108</sup> Randal Koene, "Uploading to Substrate-Independent Minds," *The Transhumanist Reader*, 147.

<sup>109</sup> *Ibid.*, 146.

from it.<sup>110</sup> Thus, Koene believes a physical substrate can be a biological brain or a synthetic machine operating identically to a brain, and the mind emerges from the substrate.

One of the better definitions that captures the goals for immortality outlined in the previous chapter is “the transfer of a human mind, memories, personality, and ‘self’ to a new high-performance substrate,” which the author describes as “the ultimate technology for immortality” and “the ‘holy grail’ of transhumanism.”<sup>111</sup> Both Prisco and Koene treat the mind as an emergent feature of the brain, and properties like “memories, personality, and ‘self’” are the features that construct one’s personal identity and consciousness.<sup>112</sup> Even though these definitions come from emergentists, they do not rule out dualist views of the mind.

The expression “upload” is also somewhat vague. In modern information technology vernacular, the word implies a copying of the digital contents from a source to a target location. If any programs “move” a file from source to target, there is an implicit step included to delete the source after the target has completed its upload. In modern computer terms, the “Cut” command moves a file from one location to another, while the “Copy” command duplicates it to a new location. Mind uploading that meets the criteria for immortality defined in chapter two would be closest to a “Cut” command. When uploading files between computers, though, uploading does not strictly mean to transfer, i.e., “Cut,” it means to “Copy.” Therefore, the term “upload” is vague and unclear.

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<sup>110</sup> Recall Kurzweil’s patternist position related to this assertion of pattern over matter.

<sup>111</sup> Giulio Prisco, “Transcendent Engineering,” *Ibid.*, 235.

<sup>112</sup> Cf. “The goal of substrate-independence is to continue personality, individual characteristics, a manner of experiencing, and a personal way of processing those experiences.” Koene, “Substrate-Independent Minds,” 146.

Therefore, some have chosen different terms to better represent the action being performed. For example, Keith Wiley prefers the term “mind splitting” to “mind uploading” because it better reflects his expectations of the process. Similarly, Michael Cerullo uses the term “branching” synonymously with “splitting.”<sup>113</sup> To clarify his view, Wiley uses the terms “type” and “token” when describing mind splitting. Types are universal properties that group like things, “e.g., red things, sharp things;” a token is a “spatio-temporal occurrence of a type,” or a “particular” instance of that type.<sup>114</sup> Given those terms, Wiley describes mind splitting accordingly: “where once there was a single occurrence of a mind-state type, there are now two occurrences of the same mind-state type, along with two tokens of the corresponding brain-state type... To be precise, splitting is a two-step process, both doubling and divergence.”<sup>115</sup> For Wiley, both brain-states and mind-states are types which are instantiated as tokens in a person. If the person uploads, or splits, there are duplicate brain-state tokens for that person’s biological brain and duplicate mind-state tokens for that person’s mental states, both based on their respective types corresponding to that person. The divergence Wiley notes is when either mind begins experiencing different events from each other “at the next dynamic moment.”<sup>116</sup>

Wiley discusses elsewhere his metaphysical inclination to Platonism. “I prefer the Platonic approach, that universals exist independent of any association, requiring neither

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<sup>113</sup> Michael A. Cerullo, “Uploading and Branching Identity,” *Minds & Machines* 25, no. 1 (July 11, 2014): 17.

<sup>114</sup> Wiley, *Mind-Uploading*, 28. Wiley’s Platonic use of tokens and types also makes sense given his computer science background and the similarities of types and tokens to the object-oriented programming principles of classes and objects, where a class is a type that defines what each instance of an object, or token, will be like. This framework can be helpful for thinking about the brain and mind.

<sup>115</sup> *Ibid.*, 129.

<sup>116</sup> *Ibid.*



physical instance nor conscious recognition in order to exist.”<sup>117</sup> Wiley’s view demonstrates the failure of mind uploading, specifically the branching and forking variations, as a means of immortality in that it does not preserve the FPR. The act of divergence immediately disqualifies it because the source mind being uploaded is merely undergoing the “Copy” command and not persevering indefinitely into the future as it may when using the “Cut” command. While these alternative terms are helpful to better describe what authors are talking about regarding the procedure, any form of uploading which parallels branching or forking cannot meet the defined criteria for immortality. Moving forward, the term “upload” will not be treated synonymously with branching and forking when discussing immortality.

Some metaphysical details must be considered as well. Consciousness has been a complicated matter for materialists. Some like Wiley reluctantly accept metaphysical components which they would not otherwise consider absent the puzzle of consciousness. Wiley admits he “came to metaphysics reluctantly,” by which he means that he was reluctant to broach the topic of metaphysics in his studies, but it was required for him to work out his view.<sup>118</sup> Most important to Wiley’s metaphysical views is the idea that the mind is an emergent feature of a sufficiently-complex brain, an idea he handles almost axiomatically. “The coordinated behavior of the brain might simply be consciousness.”<sup>119</sup> He uses flocking birds as an analogy of how interactions within complex physical systems may cause shapes or patterns to emerge. Others

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<sup>117</sup> Ibid., 69.

<sup>118</sup> Ibid., 68. It is ironic that Wiley is repulsed by metaphysics given the topics of mind, mind uploading, and personal identity are so inextricably metaphysical. Wiley is upset that his metaphysical topic required metaphysical concepts.

<sup>119</sup> Ibid., 121.

have pointed to emergentism as being the most common modern explanation for consciousness among “highly complex systems” like the human mind.<sup>120</sup>

Not all emergent views require a commitment to something as exotic as abstract Platonic objects, though. In what has become characteristic of Kurzweil’s cleverness and creativity, Kurzweil proposes a form of materialism related to emergentism that he terms “patternism,” because patterns describe a more intelligent instance of the otherwise “dumb” material which lacks the order of patterns. “It’s through the emergent powers of the pattern that we transcend... The pattern is far more important than the material stuff that constitutes it.”<sup>121</sup> Kurzweil compares the random strokes of paint on a canvas as simple material, but when the material forms patterns, “they transcend the material stuff and become art.” Similarly, noises and sounds are materials of a sort, but when they are ordered sufficiently into patterns, they become music. Extending this analogy further, human consciousness emerges in ordered patterns from the otherwise material brain. The order which causes the emergent patterns, like the flocking birds, is a “natural” result of the complex system interacting with its neighboring parts and responding accordingly.

Kurzweil’s patternist explanation maintains that the emergent pattern is still only material; “we don’t need to go beyond the capabilities of patterns of matter and energy to account for the capabilities of human intelligence.”<sup>122</sup> To be clear, Kurzweil views consciousness as information, not strictly the material, like the river is not strictly the water composing it at any

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<sup>120</sup> Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (Signal, 2015), 109.

<sup>121</sup> Kurzweil, *Singularity is Near*, 388.

<sup>122</sup> *Ibid.*, 431.

given moment. The consciousness has a pattern to it like the shape of the river, and that tends to change slowly over time. So, Kurzweil's brand of materialism is a bit less "material," so to speak, but he still views the material world of physics, matter, and energy as the only existing substance.

Materialism holds no consensus, though. Modern property dualists, or epiphenomenalists, and even "type-E dualists" by David Chalmers's taxonomy, hold that the mental or phenomenal states are real and more than just material; Chalmers does claim, though, that epiphenomenalism is compatible with substance dualism but maintains that the causation is a one-way relationship. "Physical states cause phenomenal states, but the converse is not true."<sup>123</sup> Chalmers treats the issue of consciousness as persistently open-ended and perhaps one of the most difficult things that we do not understand, a problem he describes as "baffling" given that subjective consciousness is the most intimate thing a person can know.<sup>124</sup> Materialism, property dualism, and substance dualism were addressed in the previous chapter, so critiquing or evaluating them here will not be necessary, but it is valuable to be aware of related metaphysical concepts while considering immortality in the context of mind uploading.

Given the expectations for actual immortality outlined at the end of the previous chapter, those same criteria will be used as the standard in this mind uploading context. The three criteria defined for actual immortality were a single FPR, an identical ontological history, and an identical count of FPRs after the procedure as was before. Notice that these criteria focus on ontological details rather than epistemological ones; for true immortality to succeed, it is not

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<sup>123</sup> Chalmers, *The Character of Consciousness*, 130.

<sup>124</sup> *Ibid.*, 3.

enough to think one's self is the same the remembered self. Objective success of immortality requires the enduring personal identity to match the person who initiated the immortalizing process. In mind uploading, this means any successfully uploaded minds, where "success" should include the presence of an active consciousness, must possess introspective powers where the referent of the first-person is identical to the source mind prior to the procedure. The upload must share an identical ontological history with the source mind as well. This means the uploaded mind may not be created in the process of the upload, it must be transferred from the source substrate to the target substrate, i.e., it must perform the "Cut" command. In the same way, no upload where multiple minds are the product of the procedure may count as a successful immortalizing of the FPR as each duplicate would possess its own FPR under the best conditions. These would be the branching or forking scenarios ruled out earlier.

Given the wide range of definitions, it is easy to see how many scenarios do not meet the needs of immortality outlined above. Although not all mind uploading methods should be excluded; what methods are being considered to implement such a Gilgameshian goal?

#### How Might Mind Uploading Work?

The question of methodology will be drawn largely from Wiley's taxonomical work. He offers the disclaimer that his writing generally assumes that the neuron is the "structural and functional" level of the brain that must be modeled for these methods.<sup>125</sup> This contrasts with smaller, more granular levels, or conversely, larger, more regional levels of the brain. Earlier in his writing, Wiley asserts that researchers must all simply pick some level of the brain's composition beneath which the underlying functionality and nuances are treated as a black box.

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<sup>125</sup> Ibid., 31.

The measure, according to Wiley, for determining this black-box threshold is where the designated details are “*intrinsically irrelevant* to the larger model” (emphasis Wiley’s).<sup>126</sup> This may be an appropriate guideline, but it is hard not to see the metaphysical implications already being presented. Wiley, and many mind-uploading advocates, view the brain through the lens of functionalism, i.e., the view that mental states are describable based on their functionality of receiving input and performing output.

For another example, Martine Rothblatt writes that the goal of AI and Turing Testing, which will be discussed more later, is to “replicate the functionality of a specific human consciousness in software.”<sup>127</sup> Rothblatt’s clear focus on replication of functionality reveals a popular view that consciousness and the mind can be viewed through the lens of functionalism. Using the Terasem model of Turing Testing, AI is measured “as good as, or equivalent to, or a continuation or analog of, the original biological consciousness.”<sup>128</sup> The functionalist perspective of mind uploading is really nothing more than emulation and simulation, which may work from a third-party perspective, but the implications on the survival of the individual are.

Related to functionalism, two more pairs of definitions should be provided briefly before continuing.<sup>129</sup> One was hinted at in Wiley’s statement regarding the “structural” and the “functional.” Replication of the structure means the brain’s composition and neurophysiology is recreated accurately. Functional replication is where the functions of the lowest replicated level,

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<sup>126</sup> Ibid., 6.

<sup>127</sup> Martine Rothblatt, “The Terasem Mind Uploading Experiment,” *International Journal of Machine Consciousness* 4, no. 1 (2012), 143.

<sup>128</sup> Ibid.

<sup>129</sup> These definitions can also be found in Wiley’s Glossary.

e.g., the neuron, are replicated regarding the data input and the behavioral output. The other pair is with regards to the upload processes side-effects on the source brain itself. Any process where the source brain remains in-tact is a non-destructive upload. Conversely, if the process destroys the source brain, it is a destructive upload. Each of the following methods can be destructive or non-destructive depending on what is being proposed. Wiley went into great depth, covering practically every variation on the following methods, so only a high-level survey of his work will be provided here.<sup>130</sup>

### **Gradual Replacement**

The first method being considered is called Gradual Replacement. In this process, nanobots attach to each neuron and analyze the input and output of the neuron. The result is a computerized brain. Depending on the objective, the nanobots may non-destructively remain along-side the neurons for some period, but eventually, the objective for the computerized brain would be for the nanobot to destructively replace the neuron, effectively killing it and resuming its functions. The full range of replacement options have been considered, replacing neurons immediately at some designated rate of neurons/second to “neuron-batches.”<sup>131</sup> Given the computerized brain could hypothetically reside alongside the biological brain, this creates scenarios called “brain-doubling.”<sup>132</sup>

The brain-doubling scenario clearly fails to meet the criteria for immortal. On a best-case scenario where the computerized brain possesses personal identity and consciousness, this would

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<sup>130</sup> To read more on this topic from Wiley, see “Taxonomy of Mind-Uploading Scenarios,” *Ibid.*, 31-62.

<sup>131</sup> *Ibid.*, 38-39.

<sup>132</sup> *Ibid.*, 41. In contrast to classic brain-splitting thought experiments, this hypothetically generates two brains in one body and a whole different range of philosophical pontification.

constitute two identities simultaneously which violates all three criteria outlined for immortality. Two consciousnesses possess separate FPRs, so the “I” referent cannot be the same for the two persons. The uploaded consciousness would also be new, even if it possessed the memories from the source mind; contra Locke and the psychological criterion for personal identity, having memories of past life events is not enough to constitute sameness of personal identity. This new person would possess its own ontological beginning gained during the construction of the artificial brain. It is not clear at what point of the artificial brain’s construction when the consciousness would be bound to the brain, even from materialistic or property dualist positions. Additionally, and most obviously, the identity count would have incremented from one to two. No person’s self can belong to any other person.

Given the piece-by-piece nature of gradual replacement, the Ship of Theseus may come to mind. Also provided the complications discussed in the previous chapter with artifacts not being able to hold a strict sense of identity, it is difficult to see how gradual brain replacement would be different from gradual plank replacement, especially on a materialistic metaphysic or a body criterion for personal identity. One possible explanation would likely be an appeal to emergent consciousness. As the neurons would be replaced one at a time, the physical structure would be roughly the same regarding complex material interactions and functionality. If emergentism is accurate, the pattern of consciousness emerging from the brain, part biological, part artificial, would still emerge.

One point of identity covered by Moreland and Craig already is important to recall here. “Since temporal (and spatial) parts are essential to physical artifacts... it follows that a specific

artifact could not have had a different temporal origin and still be the same object....”<sup>133</sup> This strains the case for a gradually-replaced brain for the materialist since the brain is the physical object taken to be the source of personhood. If people are their brains, given the artificial brain cannot be identified with the previous brain, it is clearly not the same person. Personhood and identity must come from something more than the mere material brain. Similarly, the emergent mind is dependent upon its material for its being, i.e., for the pattern generation that defines it.

Still, regardless of the obstacles mentioned, Gradual Replacement is viewed by many to be a preferable route as it offers a more seamless process than its alternatives. Anders Sandberg thinks this approach might settle people’s concerns regarding the preservation of their consciousness and personal identity since there is not a distinct separation between source and uploaded minds, though he admits it is not universally held as the best solution to that problem; Sandberg cites that John Searle suspects the source mind could instead gradually lose consciousness as more of the replacement occurs.<sup>134</sup> So Gradual Replacement offers some prospects for maintaining personal identity, i.e., the same FPR. What other the other methods?

### **Scan-and-duplicate**

Following the Gradual Replacement procedure is the scan-and-duplicate procedure. Rather than replace the biological brain one neuron at a time, the brain is scanned to image and map its structure so that it can be replicated physically or virtually.<sup>135</sup> Again, Wiley provides a granular taxonomy of scan-and-duplicate methods. Supposedly the most attainable in the soonest

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<sup>133</sup> Moreland and Craig, *Philosophical Foundations*, 539.

<sup>134</sup> Anders Sandberg and Nick Bostrom, *Whole Brain Emulation: A Roadmap* (Oxford: Oxford University, 2008), accessed August 7, 2021, <http://www.fhi.ox.ac.uk/Reports/2008-3.pdf>, 108. See also footnote 26, Ibid.

<sup>135</sup> Wiley, *Mind-Uploading*, 49.



time frame, the “frozen scan-and-copy procedures” use a “frozen and static” brain as the source of the upload and produce the upload from whatever state the brain is in at the time it was frozen.<sup>136</sup> These can be destructive or non-destructive, but, according to Wiley, the frozen destructive method appears the most attainable currently.<sup>137</sup> Wiley also attempts to describe what this might perceptually be like for the uploaded mind’s perspective, namely, what the experience of being uploaded must be like. In the “frozen non-destructive scan-and-copy” scenario, Wiley also touches on the most relevant detail of mind uploading regarding immortality: “this procedure permits the original brain and mind to awaken after the procedure, which has the dramatic implications on assignment of identity.”<sup>138</sup>

It is difficult to see how a frozen brain being scanned, however precise the scanning may be, could be considered a form of immortality. On a strictly materialistic view, there is no way the scanned brain could produce an uploaded, emergent mind identical to the one who had died. Ironically, substance dualism is required, i.e., the soul, for any upload that is scanned from death to produce an identical mind. An enduring soul must somehow exist and be relinked to the matching pattern of consciousness. From the first-person point of view, it is not clear what would anchor a person’s identity between death and the first moment of uploaded life apart from a soul. Memory would be the closest next option, but memory was ruled out as an option in the previous chapter. On physicalism, emergent consciousness is a direct result of its underlying substrate.

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<sup>136</sup> Wiley clarifies the term “frozen” does not necessarily mean literally frozen in ice or at low temperatures; it is used as a synonym for “static,” or the opposite of dynamic or active. *Ibid.*, 91.

<sup>137</sup> This is described under section 2.1.1 “Frozen destructive scan-and-copy.” *Ibid.*

<sup>138</sup> *Ibid.*, 53.

There is no enduring substance like the mind or soul to persist beyond death. Hence, any uploaded mind based on a deceased, frozen brain could not be an identical FPR.

Each variation of mind uploading where the original or source mind is allowed to persist presents the glaring question of identity. Rather than some of the scenarios listed in the previous chapter on identity, i.e., the tyrant illustrations, the mind puzzles focus instead on the duplicity of identities rather than the switching of identities. The brain-split thought experiments are very similar though. If a person uploads their mind and survives the experience, it seems clear this cannot be considered a form of immortality from the first-person perspective. Kurzweil illustrates this when he quips of his response to the morning after an upload procedure, “‘Good news, Ray, we’ve successfully reinstantiated you into a more durable substrate so we won’t be needing your old body and brain anymore,’ I may beg to differ.”<sup>139</sup>

Swinburne’s point on no other consciousnesses being identifiable with his own other than the one he possesses is applicable here.<sup>140</sup> Even if all memories, skills, and mannerisms have been replicated in the upload, and even if the uploaded mind possesses an actual consciousness, it still cannot be identical with the source mind’s consciousness, its FPR. The “self” reference is never identical when duplication is involved, even if the upload’s FPR appears to match the memories that were uploaded or copied. Something of the source mind must be moved, not just copied, from the original substrate to the new substrate for the FPR to have a chance of being identical. All scenarios where the upload produces more than one FPR fail to meet the proposed criteria for immortality. More than one FPR also means the resulting FPR is not identical to the

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<sup>139</sup> Kurzweil, *The Singularity is Near*, 384.

<sup>140</sup> Swinburne, *Evolution of the Soul*, 150.

source mind's FPR. This is most apparent when one considers what it would be like for a single FPR to still refer to the same "I" from multiple consciousnesses. It is an incoherent idea.

To Wiley's point, his metaphysical view is that the upload is a split rather than a copy. He grants that a copying is occurring, namely the copying of the token, i.e., the brain, but the mind type itself is not being copied or duplicated, it is just being reinstated as the upload.<sup>141</sup> Even if it is granted that a person is a type that can be reinstated infinitely, this is not the same as attaining immortality. The original instance is left behind, so to speak. The upload may behave and think the same as the original, but it cannot be the same FPR, and preservation of the FPR indefinitely is the entire purpose of immortality. Despite all that can be granted for the scan-and-duplicate method, it also does not meet the criteria for immortality.

### **Brain Division Scenario**

The final approach, the Brain Division Scenario, is a variation on the split-brain thought experiments.<sup>142</sup> Wiley begins with the 50% split version where two brains are made from one, both being half biological and half computerized. The computerized portions of the brain are presumably following the same structural composition. Any number of variations on what percentage is computerized versus biological can be proposed, but in the 50% split, it is not so easy to assign what Wiley calls "primacy" of the original mind.<sup>143</sup> He even asserts that "even from the internal subjective perspective of the various resulting minds, there is no way to tell who is who [*sic*]."<sup>144</sup> This latter assertion is perhaps assuming too much. To begin, it is not clear

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<sup>141</sup> Wiley, *Mind-Uploading*, 109-110.

<sup>142</sup> *Ibid.*, 57.

<sup>143</sup> *Ibid.*, 58.

<sup>144</sup> *Ibid.*

what differences in qualia, if any, there will be in possessing a partly computerized brain. Will the common sensations of seeing colors or hearing sounds be the same with a computerized brain? Will those experiences be the same as when the brain is fully biological or is there distinct qualia for being a partly computerized brain? Additionally, if the upload possesses significant bodily or mental upgrades as transhumanists intend, it is reasonable to suspect a radically different brain or body will feel different from the original biological body, but even this, like Wiley's expectations, is only conjecture.

Wiley offers a thought-provoking question for those who would assign primacy of identity to any brain divisions that hold most of the original brain. What is the threshold for assigning some division of brain primacy of identity?<sup>145</sup> While it is tempting to suggest that 51% or greater is the original mind, it is not clear if primacy of identity can be granted to either mind after the split. One possible conclusion, following Moreland and Craig, is that the original person prior to the split has died and two new persons are made from the procedure; another conclusion is that the original person will be identical to either of the uploads.<sup>146</sup> Inherent in these questions is the following question: assuming substance dualism is correct, and the soul is the self which asserts its will over the body through the brain, how much of, or which parts of the brain are necessary for a mind to continue to successfully assert its will over its corresponding body?

How does the mind assert its will over the body through the brain? Does the brain act as some receiver that respects only a particular "pattern" of will asserted by a particular mind, a kind of emergent mounting point for the will? If so, does this mounting point duplicate if the

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<sup>145</sup> Ibid.

<sup>146</sup> Moreland and Craig, *Philosophical Foundations*, 548.

brain states are successfully duplicated and behave in the same way as the original brain? While this emergent mounting point for the will provides minimal explanation for the connection between the mind and body, it only pushes the question back a step. The phenomenon of intentional will over the physical body is elusive, but the initial question remains regarding how much of one's brain must be present for the mind to assert its will over the body. Similarly, if the brain is split by some percentage into some number of additional brains as the Brain Division Scenario proposes, which brain and body will the mind assert its will over? It is easy to see how concluding that the division of the original brain caused the original mind to become disembodied, i.e., die, independent of whether the new brains were successfully linked by some phenomenological means.

One final point of critique on the Brain Division Scenario is that it is not clear how this option is preferable to the Gradual Replacement method. Wiley even admits they are the same in some variations.<sup>147</sup> In the long-term, it would appear this only pushes back the goal of avoiding death, especially in cases where the biological brain is in the majority. The same problems that vex the whole biological brain, disease, aging, and decay, are all still present in this scenario, so immortality has not really been attained since the life expectancy is not extended limitlessly. Additionally, given the ambiguity regarding whether either of the resulting minds can be identified with the original, it is, at best, inconclusive. At worst, it is a negative result that the FPR has been preserved during the Brain Division Scenario. Each proposed uploading method transforms the human brain radically in the efforts to imbue the person with everlasting life,

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<sup>147</sup> Wiley, *Mind-Uploading*, 59.

freeing it from death. That is the transhumanist objective, but what happens if that goal is achieved? What becomes of the person then?

### “Would I Still Be Human?” – Post Humanism and Artificial Intelligence

The question of whether the uploaded person would be human is a complex but important one. The issue of what it means to be human is not new. Modern definitions may point to a scientific taxonomy, e.g., *homo sapiens*. Older definitions like those from Aquinas, and by extension, Aristotle, instead define humans as rational souls, i.e., animal souls with the power of intellect and intentionality.<sup>148</sup> Many other potential definitions and essential properties exist; defining humanity with great resolution is beyond the scope of this thesis. Instead of striving for an acceptable explanation for what it means to be human, it may be more expedient to follow Nick Bostrom’s lead and instead define what must be transcended to be considered posthuman. Bostrom outlines three human capacities that must be transcended to be qualified as a “posthuman capacity:” health span, cognition, and emotion.<sup>149</sup> Health span, or lifespan, is most pertinent for this thesis, but transcendent cognition and emotion will be briefly discussed.

A transcendent cognition means one’s cognitive and mental abilities are significantly enhanced beyond the average human’s capacity. “Memory, deductive, and analogic reasoning, and attention” are some Bostrom lists. This is already happening to some degree with the prevalence of smart phones and devices integrated into so many people’s lives. Rather than find a hard copy encyclopedia to find information on some topic, modern inquirers pull out their pocket computers or use voice-activated assistants to query a vast network of worldwide

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<sup>148</sup> Feser, *Aquinas*, 137.

<sup>149</sup> Nick Bostrom, “Why I Want to be a Posthuman, *Transhumanist Reader*, 28-29.

knowledge. Modern humans in contrast to humans 30 years ago are already well on their way to transcending the natural cognitive capacities. The greatest latency that is yet to be removed is the time it takes for a person to pull out her phone and type in the question or speak to her voice AI. Should technologies like Elon Musk's Neuralink become approved and refined enough for commercial use, that latency will disappear, and computer use will be a thought away.<sup>150</sup>

Similarly, emotional capacities like joy, anger, sadness, loneliness, etc., are within the realm of capacities which may be transcended, Bostrom thinks. He admits conceptualizing what transcendent emotion looks like may be difficult, but he notes it is not surprising how difficult it is given the range of novel emotions that might come with a posthuman existence.<sup>151</sup> The most attainable examples might be how technology could help fight depression and thoughts of suicide by helping maintain a balanced brain chemistry. In short, any emotional state that a posthuman could plausibly attain would be one which is impossible by human efforts unaided by technology or medicine.

As was mentioned, a health span or lifespan that significantly exceeds human health and life expectancy qualifies as being posthuman, and certainly mind uploading meets that standard. The limits would be available data, regularly maintaining software updates, and the underlying hardware quality, as mentioned by Kurzweil in the previous chapter.<sup>152</sup> It is important to note that not all posthuman forms of extended lifespans are identical to immortality. Michael Rose suggests people at the end of the current century will still be susceptible to "aging-related

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<sup>150</sup> See *Neuralink.com*. <https://neuralink.com/>.

<sup>151</sup> Bostrom, "Posthuman," 37.

<sup>152</sup> Kurzweil, *The Singularity Is Near*, 325.

diseases” and other forms of “[accidental death], homicide, suicide, or infection.”<sup>153</sup> Similarly, Russell Bjork lists three categories of death after stating the same point that most technological solutions to death “do not offer any possibility of being a reliable total solution to death and none offers such a possibility for all people.”<sup>154</sup> Bjork’s list includes natural death, e.g., aging, disease, etc., accidental death, and intentional death, either by others or self, homicide or suicide, respectively. Bjork and Rose agree on both the range of deaths.

Transcending human limitations by merging with machines is the essence of Kurzweil’s famous term, “The Singularity.” In what Kurzweil labels “Epoch Five,” of which there are six, human-machine hybrids will transcend human limitations and grow at an unstoppable rate.<sup>155</sup> This merging with machines, the Singularity, would be the dawn of a new kind of intelligence. In many scenarios where posthumanity would be reached, it becomes a distinctly new species. This is the transhumanist goal, to use technology to guide the evolution of humans. Some disagree that such a leap would still qualify as being human, hence “post-” human. Robert Harle asserts “the new entity will cease to be human, and [Harle] contends it will not be the next step in human evolution but the creation of a new species, which may or may not treat the other species with intrinsic worth.”<sup>156</sup>

Some have gone so far as to already deify the transcendent posthuman entities. In Dinello’s eloquence, humans are to “become electronic gods who have downloaded their minds

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<sup>153</sup> Michael R. Rose, “Immortalist Fictions and Strategies,” *Transhumanist Reader*, 204.

<sup>154</sup> Russell Bjork, “Will Transhumanism Solve Death?,” *Perspectives on Science & Christian Faith* 72, no. 2 (June 2020), 90.

<sup>155</sup> Kurzweil, *The Singularity is Near*, 15, 20-21.

<sup>156</sup> Robert F. Harle, “Cyborgs, Uploading and Immortality -- Some Serious Concerns,” *Sophia* 31, no. 2 (October 2002): 83.



into robotic technology and cast off their diseased bodies, cyber-existing forever in a virtual reality of disembodied perfection and simulated bliss.”<sup>157</sup> Similarly, Harari entitles his book *Homo Deus* as a focus on how humans will be upgraded “into gods, and turn *Homo sapiens* into *Homo deus*.”<sup>158</sup> However, Harari suggests the transformation will be a steady one, upgrading in steps, until the era of posthumans reflect upon who their ancestors were and realize they are no longer the same kind of people.<sup>159</sup> To clarify, these techno-deities are god-like in a Greco-Roman sense; morally imperfect, finite-but-powerful individuals who have some beginning and are dependent other external efficient causes.

Kurzweil’s “Singularitarians,” his term for posthumans who have merged with machines via uploading, take things a step further. Rather than steadily transforming with technology over time, posthumans upload their consciousness and copyable brain-state and perhaps mental-state to software programs capable of supporting such complexity. This becomes the first true artificial general intelligence (AGI). The popular conception of AI and the modern instances of AI are not identical. Modern AI that exists in smart devices everywhere and govern complex Google searches, and govern driverless cars are all what are called “narrow AI.”<sup>160</sup> These narrow AIs are exceptionally good at learning a particular thing deeply provided the right training. If the IBM *Deep Blue* AI, which was the first computer to beat the world chess champion in 1997,

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<sup>157</sup> Daniel Dinello, *Technophobia!: Science Fiction Visions of Posthuman Technology* (Austin, TX: University of Texas Press, 2005), 9.

<sup>158</sup> Harari, *Homo Deus*, 20.

<sup>159</sup> *Ibid.*, 49.

<sup>160</sup> John Lennox, *2084: Artificial Intelligence and the Future of Humanity* (Grand Rapids, MI: Zondervan Reflective, 2020), 23.

were installed to drive a car or even win a game of checkers, it would fail.<sup>161</sup> AGI in Kurzweil’s vision would be provided with everything the AI would need to “know” what it is like to be human instead of needing to learn how to be human through many iterations of testing and training. Humans merging with machines may be the closest that AGI comes to reality.

Kurzweil’s Singularity and the posthumans that emerge from it possess a quasi-divine role in Kurzweil’s expectations. Kurzweil is a sort of pantheist, though it might be more appropriate to term it “dumb pantheism,” as he clarifies he both views the universe to be “God,” in a sense, due to the universe being the greatest phenomenon science is aware of, but also that this “universe is not conscious – yet.”<sup>162</sup> The greatest thing Kurzweil can conceive of, the universe, is loosely what he considers to be God, and it will be the waking of matter into consciousness that brings “God” to awareness; this is Kurzweil’s Sixth Epoch.<sup>163</sup> “So in a sense, we can say that the Singularity will ultimately infuse the universe with spirit.”<sup>164</sup> Ronald Cole-Turner agrees that Kurzweil views posthumans as quasi-divine while noting the centrality of the Singularity in Kurzweil’s view of posthumans. “Kurzweil almost seems to say that the pathway to transhumanism is through the singularity.”<sup>165</sup>

Additionally, a contested topic within this realm of mind uploading and AI development is the question of one’s body. How necessary is a body for mimicking the “human” experience?

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<sup>161</sup> “IBM-100 Deep Blue,” *IBM.com*, accessed October 2, 2021. <https://www.ibm.com/ibm/history/ibm100/us/en/icons/deepblue/>.

<sup>162</sup> Kurzweil, *The Singularity is Near*, 390.

<sup>163</sup> *Ibid.*, 21.

<sup>164</sup> *Ibid.*, 389.

<sup>165</sup> Ronald Cole-Turner, “The Singularity and the Rapture: Transhumanist and Popular Christian Views of the Future,” *Zygon* 47, no. 4 (December 2012), 790.

It has already been answered whether the posthuman is still human or not, so why should it matter if the posthuman continues to have a humanesque experience? Given Socrates', and perhaps by extension, Plato's, emphasis on the importance of death freeing the person from the body so that the admirable pursuits of philosophy, wisdom, and knowledge may be gained without distraction, disembodiment on such a view is preferrable. This would be compatible with virtual mind uploads. Similarly, the Cartesian perspective of mind and body may compatibly allow such a disembodied existence, for that was what Descartes was questioning in the first place. The virtual mind, were it conscious, would still be able to ponder itself introspectively, which should validate its existence like it did for Descartes.

Conversely, there are reasons to suspect embodiment is necessary. Victoria Lorrimar cites several studies that indicate the importance of "embodied cognition," and she also notes the irony that AI researches "are turning emphatically *toward* the body in their work" (emphasis Lorrimar's).<sup>166</sup> She suggests that the "mind as a computer" concept is part of the reason why embodiment is so commonly neglected in the study of the mind.<sup>167</sup> Lorrimar also touches on the question of "adequate communication between embodied and nonembodied intelligence," but she warns of the "swampy territory of strong (AGI) verses weak (narrow) AI," Turing Testing, and the Chinese Room (parentheticals mine). Turing Testing and the Chinese Room will be discussed further in the next section, but Lorrimar summarizes her argument at that point that, whatever the AI is supposed to be, "it cannot really be a *human* mind, because human minds

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<sup>166</sup> Victoria Lorrimar, "Mind Uploading and Embodied Cognition: A Theological Response," *Zygon* 54, no. 1 (March 2019): 199.

<sup>167</sup> *Ibid.*

come in human bodies” (emphasis Lorrimar’s).<sup>168</sup> For Lorrimar, the question of human vs posthuman can be reduced to the sort of body the mind possesses.

An argument can be made loosely that virtual minds, AI, possess a sort of body, though certainly not human. Apart from whatever hypothetical virtual body it may possess, it is “embodied” within the computer setup that holds its massive simulation. Herzfeld describes Deep Blue as “embodied in a bank of super computers. So, the question is not whether super intelligence requires a physical body, but what kind of body.”<sup>169</sup> Herzfeld also quotes Rodney Brooks of MIT as having claimed that AI needs to experience the surprises of this world like we do to mimic us successfully.<sup>170</sup> This would certainly be the case for non-uploaded minds, but it is uncertain how necessary a body might be for an uploaded mind. It stands to reason that even a virtual body might be the minimum necessity for the uploaded mind to interact with whatever virtual world it inhabits. Given the experience a mind would have in being an embodied human up to the point of being uploaded, adjusting to a disembodied existence would seem a substantial shock on top of the likely trauma of the upload in the first place. Bodily experiences and sensation play an important role in how humans interact with most external realities, both empirical and social.

One final question focuses on a subtle point Bjork touched on earlier. None of the solutions offer something that necessarily would be available to all people. While some may transcend to their posthuman status, other humans incapable of such transcendence will be stuck

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<sup>168</sup> Ibid., 200.

<sup>169</sup> Noreen Herzfeld, “Artificial Intelligence and the *Imago Dei*,” J. B. Stump and Alan G. Padgett, eds., *The Blackwell Companion to Science and Christianity* (West Sussex, UK: John Wiley & Sons, Inc., 2012), 505.

<sup>170</sup> Ibid., 506.

in their human lives. It is not hard to imagine billionaires like Bezos and Musk being the first to access such technologies at their exorbitant costs. Costs for uploading would likely be considerable and, certainly at the beginning, storage size at a premium. Would the attitudes of the posthumans look down on and devalue the humans who were either unable or unwilling to take this next step? The most human thing about posthumans may end up being how technology is used as a weapon to mistreat and oppress others.

Pondering this same question, Ronald Green wonders, considering the last century of human history and its large-scale malevolence and horrifying development of weapons like nuclear weapons, how the technology would not “lead to horrors and cruelties on an unprecedented and unimaginable scale.”<sup>171</sup> Citing history to illustrate this point, Adam Rutherford’s cautioning reminds readers that eugenics was viewed positively in the early 20<sup>th</sup>-century and was a popular scientific topic. Rutherford notes how Harry Laughlin authored “a ‘Model Eugenical Sterilization Law’ to standardize state legislation to prevent people with ‘undesirable’ characteristics from having babies... It would eventually be translated and adopted by the Third Reich.”<sup>172</sup> Powerful people already do terrible things to “inferior” people. The Holocaust of the Third Reich is just one example in history, let alone the last century. Why would posthumans be any different upon transcending humans using rapid technological advancement and enhancement?

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<sup>171</sup> Ronald M. Green, “Challenging Transhumanism’s Values,” *The Hastings Center Report* 43, no. 4 (August 2013), 47.

<sup>172</sup> Adam Rutherford, “A Cautionary History of Eugenics,” *Science* 373, no. 6562 (September 24, 2021): 1419.

Consider what a Nietzschean posthuman might think or do with vastly transcendent cognition and access to technology or proficiency which regular humans lack. Yunus Tuncel notes how Nietzsche scoffed at the idea of immortality, not because he thought it impossible, but because he did not think some people were worth keeping alive indefinitely, or “that most of us are far too insignificant and worthless to deserve immortality.”<sup>173</sup> Along this line of concern, Benedikt Göcke voices concern that technology like what transhumanists are seeking should not be researched and attained due to the inherent threat and potential of it being misused.<sup>174</sup> Göcke believes “transhumanism might lead to morally unacceptable social consequences” similar to the plight of the 20<sup>th</sup> century.<sup>175</sup> Göcke speculates, perhaps reasonably, that not all would be able to afford technological enhancement and social inequality could be rampant.<sup>176</sup>

Also, considering the Nazi example of eugenics in the Holocaust, party support for social oppression like that of the Nazi Party and the “policies of racial hygiene” developed in part by Madison Grant is a historic reality.<sup>177</sup> An objection may be that cultures have learned from their mistakes could be made, but this would be a somewhat naïve claim for two reasons. First, the current Chinese Communist Party appears to be exercising similar oppression tactics regarding the Uyghur Muslim minority group, among others.<sup>178</sup> Knowing history is different than learning

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<sup>173</sup> Yunus Tuncel, *Nietzsche and Transhumanism: Precursor or Enemy?* (Tyne, UK: Cambridge Scholars Publisher, 2017), 35.

<sup>174</sup> Benedikt Paul Göcke, “Christian Cyborgs: A Plea for a Moderate Transhumanism,” *Faith and Philosophy* 34, no. 3 (July 2017), 352.

<sup>175</sup> *Ibid.*, 353.

<sup>176</sup> *Ibid.*

<sup>177</sup> Rutherford, “A Cautionary History of Eugenics,” *Science*, 1419.

<sup>178</sup> Office of the Secretary of State, The Policy Planning Staff, *The Elements of the China Challenge*, November, 2020, accessed December 4, 2021, <https://www.state.gov/wp-content/uploads/2020/11/20-02832-Elements-of-China-Challenge-508.pdf>. Cf. footnote 14 for a list of articles on the revelation.

from it. Second, the ethical problems of eugenics were a new topic during the early 20<sup>th</sup>-century and had not been fully explored by the time Nazi Germany executed them. Posthuman transcendence would be at least as novel as eugenics was during the early 20<sup>th</sup>-century, if not more unique and revolutionary. If similar oppression were to occur of “lesser” humans at the hands of “greater” posthumans, it may be the most human thing about posthumans.

This posthuman status would be the techno-immortality transhumanists have been seeking for decades now. This immortality could be considered a mid-level immortality, not as weak as immortality via memorialized legend, but not as strong as pseudo-godly immortality that cannot be killed at all. An uploaded posthuman is still subject to the material degradation of her new substrate. Any cataclysmic worldwide technological failure could threaten the integrity of techno-immortality, but hopefuls like Kurzweil would likely suggest that, with the advance in cognitive abilities, solutions would be proposed faster than threats would arise.

Beyond this posthuman techno-immortality is the question of what it means to be alive. Can an uploaded mind akin to AGI be considered a living being? Can any AI be considered “alive?” One position may be that the absence of life cannot be considered immortality, which is certainly a position the transhumanist would maintain. An opposing position may be that only consciousness of an enduring, immaterial is required for immortality, which would align with the Platonic view of the immortal soul. In that case, the definition of life is irrelevant to immortality so long as the soul’s consciousness is maintained, but even in a conscious post-mortem state, disembodiment is still considered a state of death. It stands to reason that some form of embodiment then must be a necessary qualifier for being considered alive. Reconsider also Wright’s definition of immortality, a state in which death is impossible. Immortality coupled with the condition of embodiment means any state in which disembodiment is possible would

not qualify as immortality. So, if embodiment is a condition for life and immortality, even in the loose sense of being embodied within a super computer per Herzfeld, what might be said of the hypothetical uploaded mind and how it relates to the antecedent source mind from which it was derived?

#### “Would the Upload Still Be Me?” – Mind Uploading and Identity

Kurzweil asks this ultimate subjective ontological question considering a successful mind upload, “is it really me?” and considers this as the most important question in mind uploading.<sup>179</sup> Given the objective to prolong one’s own life indefinitely, i.e., immortality, centers on the FPR enduring and being identical after the procedure to the FPR before the procedure, Kurzweil is right in identifying this as the central question that must be answered in the affirmative for mind uploading to be considered a successful means of immortality. How might this question be answered? There are similarities between mind uploading and confirming AI. The Turing Test was proposed by Alan Turing as a means of testing whether computers “think” in a way indistinguishable from humans. Kurzweil himself is confident the first Turing Tests will be passed by the late 2020s.<sup>180</sup> This would then offer support for the idea of Turing Testing specific uploaded people to assess the results of the mind upload.<sup>181</sup> This expectation calls into question the important distinction between being identical and only appearing identical.

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<sup>179</sup> Kurzweil, *The Singularity is Near*, 201, 383.

<sup>180</sup> *Ibid.*, 25.

<sup>181</sup> *Ibid.*, 200.



## The Ontology and Epistemology of Uploaded Identity

Is a Turing Test sufficient to establish the identity of the uploaded mind? Unsurprisingly, the opinions are mixed. While Kurzweil proposes uploaded minds can be tested to establish their identity, others disagree. John Lennox, for example, disagrees with the notion that computers can be conscious, be they uploaded or otherwise. “It is one thing to say that the brain *functions* in a certain way like a computer. It is an entirely different thing to say that it *is* nothing but a computer. Simulation is not duplication.”<sup>182</sup> Lennox turns to Searle’s thought experiment, The Chinese Room. In the thought experiment, Searle describes a man who does not speak Chinese locked in a room with instructions on how to manipulate the characters. Chinese speakers then pass in slips of paper under the door, which are questions in Chinese, and the man inside the room, ignorant of the Chinese queries, answers the questions with the appropriate Chinese symbols using a Chinese rule book. The people outside the room think the room can answer their Chinese questions, but the man inside the room is merely blindly following rules for taking in symbols and returning appropriate symbols per the provided guide. Searle’s point is clear and echoes Lennox’s point. Functional intelligence is not the same thing as actual comprehension and intelligence. This is partly why the term is “artificial” intelligence.

Lennox furthers his position, even if computers could demonstrate intelligence, i.e., they could pass the Turing Test, Lennox would assert “that humans have something more than the intelligence of the AI, no matter how advanced, will never have.”<sup>183</sup> By this, Lennox is surely inferring the possession of a human soul. His skepticism is grounded in the present reality that no

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<sup>182</sup> Lennox, 2048, 98.

<sup>183</sup> Ibid., 99.

program has come close to passing the Turing Test, but by Kurzweil's predictions, there is still just shy of a decade of progress to make.

As was mentioned earlier, this topic raises the issue of the ontological vs the epistemological questions of identity. Moreland and Craig also emphasize the importance of keeping distinct these types of questions so as not to confuse the conversation. The ontological aspects, which they call the metaphysical aspects, focus on "what constitutes personal identity," whereas "the epistemological aspects focus on the criteria for a personal identity."<sup>184</sup> Recall in the previous chapter the section on the "Criteria for Personal Identity," and that it dealt with epistemic questions of identity. The Turing Test also falls under this category for the upload and the AGI. The reason it is epistemological is that almost all people asking the question are asking from a third-party perspective and do so with fundamental uncertainty. "Fundamentally we cannot penetrate the subjective experience of another entity with direct objective measurement," Kurzweil asserts.<sup>185</sup> Consequently, it is from the subjective experience that the identity of uploading must be answered, namely the subjective perspective of the source mind; any other perspective will not be reliable enough.<sup>186</sup>

This restriction of authority is appropriate for the topic of immortality because it is the subject himself who is striving to live on. While family and loved ones might be satisfied with a Turing-passing simulation, he who yearns for immortality will be disappointed in the worse way. This reveals a complication in the uploading methods already discussed: destructive uploading

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<sup>184</sup> Moreland and Craig, *Philosophical Foundations*, 535.

<sup>185</sup> Kurzweil, *The Singularity is Near*, 378.

<sup>186</sup> Recall also that this is what makes the "hard problem of consciousness" so hard in Chalmers' view. There is no clear way yet how to explain consciousness from a third-party perspective, and yet it is the most intimate thing we can know about individually. Chalmers, *Character of Consciousness*, 5.

veils the success or failure of the uploading process. While non-destructive uploads can clearly never be successful immortalizing processes given the source mind continues to live in his original body, the destructive process leaves uncertainty regarding the success of the upload. Even if the uploaded mind would perceive himself to be the same person as the source mind, non-destructive processes would yield the same result, so mere belief in one's identity is not a guarantee for accurate perception of identity. Russell Blackford agrees with this line of reasoning, citing Massimo Pigliucci, with whom he also agrees, that the uploaded identity would be "no more than a psychological duplicate" and that the source mind in both the destructive and non-destructive processes would "straightforwardly be the original person."<sup>187</sup>

This may raise the question how the source mind knows it is the original as opposed to one already uploaded and distinct from an older mind.<sup>188</sup> One can imagine the confusion of an original source mind, say Mind A, who uploads to produce Mind B. A series of uploads may occur where B produced C, D, and E, then C produces F and G. If Mind C was not aware of his status as an upload, he may think he is the original source mind rather than a subsequent source mind. While this question can be just as puzzling, it is still largely an epistemic question. What matters is the ontological existence of the mind which has a particular history to it. To answer the ontological question, consider what a perfect observer would witness of the mind's history. Was the person birthed in a natural process of human gestation or did it originate by some uploading process? This is the importance of the identical ontological history criterion for determining the success of immortality; it breaks through any epistemological complications to focus on the

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<sup>187</sup> Russell Blackford and Damien Broderick, eds., *Intelligence Unbound: The Future of Uploaded and Machine Minds* (Malden, MA: John Wiley & Sons, Inc., 2014), 18.

<sup>188</sup> The term "older" is meant to refer to a mind's time existing, which starts new for each upload since the upload brought the mind into existence, in a manner of speaking.

objective reality of the mind and its history. So, proceeding forward, an ontological focus will be maintained, and epistemological questions will only be considered when explicitly specified.

### **The Metaphysics of Uploaded Identity**

What does it mean to refer to the self in an uploading context? The metaphysical presuppositions must be considered to address what is meant in each case. Reasons have been provided to reject materialism and property dualism in the previous chapter, but they will still be consulted for the sake of understanding what is meant by self-identity. Kurzweil's materialist view is presented perhaps more stylistically than other materialists may, but he holds to his patternist view; "patterns of information [are] the fundamental reality."<sup>189</sup> This is no surprise given Kurzweil's work in pattern recognition and the emphasis he places on developing a strong neocortex.<sup>190</sup> The self is an emergent feature that is able to think, feel, and experience. "The pattern is far more important than the material stuff that constitutes it."<sup>191</sup> Similarly, Jonah Goldwater considers the action of faxing documents as analogous to mind uploading. "If the information in my brain is uploaded to a neural network or server, then I am uploaded only if I am the information, rather than the object(s) it's stored in."<sup>192</sup> The information is transferred, not the physical material. This aligns with Kurzweil's patternist approach; the information pattern is transferred, which is the self or the person on such views. In contrast to materialism where the self is simply another animal higher on the food chain, at least this patternist view elevates the

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<sup>189</sup> Kurzweil, *The Singularity is Near*, 5.

<sup>190</sup> Kurzweil, *How to Create a Mind*, 113.

<sup>191</sup> Kurzweil, *The Singularity is Near*, 388.

<sup>192</sup> Jonah Goldwater, "Uploads, Faxes, and You: Can Personal Identity Be Transmitted?," *American Philosophical Quarterly* 58, no. 3 (July 2021), 235.

conscious self to something greater than its material, albeit still strictly dependent upon its underlying material.

Wiley also takes a patternist approach to identity, though he refers to his view as a restatement of pattern identity theory.<sup>193</sup> He laments how quickly the position is branded as “unspecified dualism” and prefers to “avoid dualistic labels entirely” because dualism is equally disregarded by many, or at least many Wiley would like to have the attentions of.<sup>194</sup> He takes a Platonic approach to his use of types and tokens viewing them as abstract objects and universals.<sup>195</sup> Accordingly, the self is an emergent phenomenon, but in addition to being a pattern of information strictly dependent upon underlying material, the mind is an abstract type which may be instantiated multiple times provided the right brain token instance.<sup>196</sup> Even with this understanding of the self, each instance of a mind type would still be a distinct FPR, an individual self. Wiley treats each subsequent mind split from the source mind as holding equal primacy as the source itself. He does so because he rejects the metaphysical idea of copying a mind. The new brain token would refer to the same mind type and begin experiencing its own sequence of mind states branching from the original. Such a move is near to word play since the question of identity requires a unique reference per Leibnitz’s Law. If the mind is a sharable type, the question of identity is merely pushed off to the instances of mind. The FPR on such a view is then the instance of mind and the thing which must be preserved for immortality to be successful.

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<sup>193</sup> Wiley, *Mind-Uploading*, 90.

<sup>194</sup> *Ibid.*, 91.

<sup>195</sup> *Ibid.*, 69.

<sup>196</sup> *Ibid.*, 93-97.

Wiley's point on primacy of mind also misses an important point; the reason the source mind is awarded primacy is due to it being the antecedent instance of mind. It is logically and ontologically prior to any instances that come after it. The source mind is rewarded primacy because all derivative, uploaded minds depend on the source mind for their occurrences. Wiley anticipates this conclusion but defends his shared primacy position concluding the confusion comes from limitations in the semantics of the English language.<sup>197</sup> For the reasons given, this is more than an issue of semantics. The source mind must exist prior to the upload for any uploading or splitting to occur. Therefore, the source mind holds primacy. It is not an issue of semantics.

Any view of mind uploading compatible with substance dualism must transfer the mental substance, i.e., the mind or soul, to the new substrate for the upload to successfully achieve immortality. Many if not most transhumanists striving for mind uploading hold to physicalism and avoid any form of dualism due to its common association with the spiritual and religious. However, as has been mentioned already, for the FPR to transfer in the upload process, some component of the self must exist independent of the material being replaced so that the FPR continues to exist and is identical to itself while disembodied or transitioning to its new substrate. Despite the physicalist's ardent resistance to substance dualism, dualism ironically makes the most sense of any version of mind uploading as a means of immortality, if such a transfer is possible, because it has the greatest chance of preserving the FPR and meeting the other criteria for immortality.

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<sup>197</sup> Ibid., 1-5.

If mind uploading could meet the criteria for immortality, a persisting FPR that is singular in ontological history and total count of referents who endures indefinitely into the future, what would be expected of the substrates? Consider a non-destructive upload where the uploaded mind identifies as the person in her new substrate, but the original body is brain dead. The mind would leave the body and is exchanged with the void of consciousness that the new substrate held prior to the upload. If any uploading procedure is to succeed in granting personal immortality, an exchange of animating life must be made, and whatever is exchanged is likely immaterial to transfer between the material substrates and still retain its identity.

Perhaps the closest method proposed has been Gradual Replacement, but this only serves to replace the original brain, which is only part of the body subject to decay and deterioration. Additionally, if Searle is right, the gradual replacement of neurons would not seamlessly transition to the new substrate but would likely cause the consciousness to gradually fade until it was lost. The other proposed methods face the same hurdles that traditional brain-splitting thought experiments face. Ultimately, each version's struggles with maintaining the criteria for personal immortality present insurmountable resistance to mind uploading providing a reliable form of immortality where the identical FPR is preserved, the referent's ontological history remains the same, and the total count of minds after the upload are the same. Given these complications, the Christian theistic view of resurrection will now be assessed in its ability to meet these criteria and provide a means to personal immortality.

## **Chapter 4**

### **Christian Resurrection**

Following the discussion on mind uploading's inability to preserve one's FPR, the focus now turns to the Christian concept of bodily resurrection as a means of immortality. The first section specifically outlines what is meant by resurrection as immortality. The next focus will be on some expectations for resurrection, specifically regarding the role of being embodied, what might happen during a disembodied state, and how resurrection is a step towards ultimate justice. The following section identifies Jesus as the model for bodily resurrection, brief coverage on historical facts grounding his resurrection in history, and how his resurrection models a general future embodied state for all people. The importance of identity and resurrection is then re-emphasized and the three criteria for immortality considered for resurrection. The final section touches on the yearning for immortality people appear to have and provides a teleological explanation for that yearning beyond avoiding oblivion.

#### **Resurrection as Immortality**

The Christian concept of resurrection is central to the movement as a faith system, not just for the expectations of its believers for their own resurrection into immortality, but because of Jesus Christ's resurrection upon which the faith has been built. Consequently, Christians have pontificated the details of Christian eschatology for over two millennia now. Cole-Turner contrasts this long discussion on eschatology with the disagreements within the transhumanist camp, noting the reason why transhumanism may have less quarreling on the topic is simply a



matter of seniority: Christians have reflected on the future for 2000 years longer than thinkers like Kurzweil and Wiley.<sup>198</sup>

To be clear on the terminology, in Christian eschatology, immortality and resurrection are synonymous ideas. Not being mutually exclusive, Wright highlights how Paul's writings on the resurrection as a kind of immortality was not the combination of "two disparate beliefs; [Paul] is simply describing resurrection itself, a new bodily life in which there can be no more death."<sup>199</sup> Expressions of immortality in Jewish, and therefore, Christian, teaching took the form of resurrection as an expected future event where people would be raised bodily for the final judgment as indicated in Daniel 12. This is different than the expectations of the transhumanist where death is to be avoided, but it should be noted that the ancient world's views on immortality as they have been covered in chapter 2 all presuppose death.

While death is mostly expected in each view, including the resurrection view, early teachings in Christianity also present immortality through resurrection as the solution to death. Paul speaks extensively of resurrection and its role in "defeating" death. "For if the dead are not raised, then Christ has not been raised either. And if Christ has not been raised, your faith is futile; you are still in your sins" (1 Cor. 15:17-18). Paul speaks of a general resurrection where the mortal will "clothe itself... with immortality," and in that resurrected state, "Death has been swallowed up in victory" (1 Cor. 15:53-54). The obvious theme to this part of Paul's letter is the role that the resurrection has in overcoming death. The hold disembodiment and death have on a

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<sup>198</sup> Cole-Turner, "The Singularity and the Rapture," 791.

<sup>199</sup> Wright, *Son of God*, 164.

person is a temporary one for believers who, in Paul’s words, have “clothed themselves in the imperishable.”

It is important to note here how Paul’s explanation of resurrection immortality is “imperishable,” which is likely where Wright’s definition of immortality originates. Death and “perishing” is no longer an issue in this view. This contrasts the immortality of mind uploading where one’s continued existence is still dependent on the maintenance of the new substrate.<sup>200</sup> Destruction of the substrate would have the same result as destruction of the original substrate, i.e., the brain; the person would die. Also recall how Andrade’s definition of immortality included not experiencing death.<sup>201</sup> Early Christian concepts of the resurrection body clearly portray it as a means of everlasting life not subject to death. Given these points on resurrection as immortality, what should be expected of immortality in a resurrection context?

### Resurrection Expectations

In contrast to the Platonic immortal soul and the astral body views, Judeo-Christian resurrection view on the complete and ultimate state of a person is an embodied person.<sup>202</sup> Recall Descartes’ position on the soul’s role in interpreting bodily stimuli and directing it to “what is beneficial.”<sup>203</sup> Similarly, Aquinas took so seriously the role of embodiment that those who are disembodied are not even considered human anymore. Even Jesus during his disembodied period

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<sup>200</sup> Recall the discussion in the previous chapter’s section on “Brain Division Scenario” and how immortality is not really attained because life expectancy is not extended limitlessly.

<sup>201</sup> Andrade, “Immortality,” *Internet Encyclopedia of Philosophy*.

<sup>202</sup> The expression “Judeo-Christian” is an explicit reference to the integral relationship between Jewish and Christian teachings. It should be expected that the general usage of the term “Christian” will include Jewish eschatological views.

<sup>203</sup> Ablondi, “Death According to Descartes,” *Iyyun*, 50.

of death was not considered by Aquinas to still be a human, though he was still considered divine due to his divine nature still being connected to both matter and soul.<sup>204</sup> While Descartes viewed the body as important to the nature of the individual for sensory experiences, Aquinas considered the person necessarily embodied to be human.

Also recall from the previous chapter the role embodiment has been playing in AI research. Lorrimar claims AI researchers are “turning emphatically toward the body in their work.”<sup>205</sup> Kurzweil also expects the necessity for embodiment “since so much of our thinking is directed toward physical needs and desires.”<sup>206</sup> It can be more clearly seen why embodiment is so important. From the Christian view, embodiment is the natural state of a human. The human is incomplete without his body just as he may be when missing a hand or eye sight. So, if embodiment is a view of human completion, what shall be said of the disembodied state experienced during one’s death?

Most humans have already or will experience death and disembodiment.<sup>207</sup> This state of disembodied death has also been discussed in chapter 2 on the Resurrected Body, but again, the conversation thus far has revealed perspectives that may contribute to the topic. Considering

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<sup>204</sup> It appears Aquinas treated “being human” as implying “being a living human.” In this case, the assertion that Jesus was not a (living) human while he was dead is obvious. The soul is the animating force of the material body, after all, so if the animating force exits the body, it is now inanimate, i.e., dead. Aquinas, “Chapter 229: The Death of Christ”, *Compendium Theologiae*, 296.

<sup>205</sup> Lorrimar, *Mind Uploading and Embodied Cognition*, 199.

<sup>206</sup> Kurzweil, *The Singularity Is Near*, 199.

<sup>207</sup> Jewish and Christian traditions hold that some figures in history have been swept up into heaven without experiencing death, like Enoch (Gen. 5:24) and Elijah (2 King 2:11). It is not clear if these characters experienced an instant kind of death as they were spirited away to heaven, but Elijah, along with Moses, appeared to Jesus such that the disciples with him could see their bodies or some representation of them (Matt. 17:1-8). Some Christian traditions also hold that an event called “the rapture” will occur and those who are raptured will not experience death, but this is a debated topic in Christian eschatology.

NDEs again, some people report to experience events and know information that would otherwise be impossible were they totally unconscious after their clinical deaths. One such popular story is that of Colton Burpo told in the book *Heaven Is for Real*.<sup>208</sup> While discussing the book, William Lane Craig in a podcast discusses Burpo's experience as well as the risks involved in taking the stories too seriously. Craig cautions listeners to remember that Scripture is the "authoritative resource on matters of doctrine, including the theology of the afterlife."<sup>209</sup> Not wanting to dismiss Burpo's account, nor the hope and awe inspired in readers of his story, Craig offers an interesting hypothetical explanation for how such experiences may square with the Scriptures.

One of the complications Craig points out is that experiencers of NDEs often interact with loved ones, sometimes people they have never met but are family, and they describe bodily details of the person like hair color, apparent age, and so on. How can this be if the person's body and soul are separated? Have they already been resurrected in a sense? Wright hints at this as a possible view, but he notes there is no Jewish teaching in support of such an expectation, and consequently, there is no support for it in the Christian Scriptures either.<sup>210</sup> These people do not have photons bouncing off them and entering some spiritual eye such that they can be visible. How might Burpo and the others be witnessing other deceased loved ones if they are not

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<sup>208</sup> Todd Burpo and Lynn Vincent, *Heaven Is for Real: A Little Boy's Astounding Story of His Trip to Heaven and Back* (Nashville, TN: HIFR Ministries, Inc., 2010).

<sup>209</sup> William Lane Craig, "Near Death Experience of Colton Burpo," Reasonable Faith Podcast, accessed September 18, 2021, <https://www.reasonablefaith.org/media/reasonable-faith-podcast/near-death-experience-of-colton-burpo>.

<sup>210</sup> Wright, *Son of God*, 164.

embodied? Craig's clever suggestion is something akin to the virtual reality mind uploaders look forward to.

“Suppose... in fact that God has so constituted souls in the intermediate state that they project bodily images of themselves and one another for the purpose of mutual recognition and interaction with each other.”<sup>211</sup> This suggests God is enabling the soul or mind to experience virtual, spiritual interactions with others for the continued aim of fellowship with himself and others. Craig compares this to the popular movie series *The Matrix*, which conceptualizes the scenario of humans interacting in a fictional world, the Matrix, but it is a fabrication impressed upon their minds. They really interact with each other in this virtual space, but their physical bodies are not directly interacting. In the case of NDEs, should Craig's proposed idea be accurate, there are no bodies for the dead to interact with in the intermediate state, but their minds are connected through the grace of God so that they may interact consciously while they await the final resurrection. Two things must be remembered, though. First, this is not the final state of humans. It is only a waiting period for the final judgment. Embodiment is the natural and complete state of a person. This intermediate state of “virtual” interactions is a grace provided to the dead, if true. Second, this is a hypothetical view presented by Craig; it is conjecture to offer explanation how NDEs might be true and still compatible with Scriptural teachings. Like the NDE experiences themselves, it should not be taken as doctrine. It is just an interesting idea allowing for elements of hope.

Finally, in addition to the expectation that resurrection facilitates human embodiment, which is the intended state of humans and some probable intermediate state where souls await

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<sup>211</sup> Craig, “Colton Burpo.”

resurrection back into their bodies and the land of the living, this final resurrection inaugurates the final resurrection of all souls. This is the event where the apparent injustices that occur during life are finally addressed. Tyrants like Hitler who may have killed themselves before receiving just punishment will receive it in full during this final judgment. Apart from this final judgment, there is no ultimate justice.

The Christian view of resurrection holds that all people, just and unjust, will be raised for their judgment, after which a new creation is ushered into existence (Rev. 21). As was discussed on the soul criterion for personal identity, this final resurrection and subsequent judgment requires the resurrected person to be identical with the one who died. A clone, even a divinely-created clone, is not accountable for the actions of her source person. Only if a person is identical by means of some personal soul can justice be served. Now, with the expectations laid out, the model for the resurrection may be considered.

#### The Model for Resurrection – A Case Study

Jesus Christ is the standard model for resurrection in Christian teaching. It was through Jesus' resurrection that his previous teachings were ultimately and thoroughly vindicated. Up to that point, the Jews were charging him with blasphemy regarding his declarations which were frequently characterized by divine statements about Jesus himself and his relation to God his Father (e.g., Matt. 26:64-65; cf. Psa. 110:1; Dan. 7:13). Once the resurrection had occurred and the reports of Jesus' post-mortem appearances to his disciples spread, which C. S. Lewis identifies as "the first fact in the history of Christendom," it was clear from the reports and teachings of those first witnesses that Jesus had returned from the dead.<sup>212</sup> These are not ghostly

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<sup>212</sup> C. S. Lewis, *Miracles: A Preliminary Study* (New York: HarperCollins Publishers, 1947), 235.

appearances like Wright covers when discussing popular Greco-Roman expectations of seeing ghosts or visions of the dead, and Wright asserts “we should not make the mistake of supposing that [these popular expectations] had anything to do with resurrection.”<sup>213</sup>

The historicity of Jesus’ resurrection is an important point that Lewis picks up on. While it may be dismissed as a religious dogma or fairytale teaching, it has strong reasons for being treated as a historical fact. Habermas has done extensive work supporting the historicity of the resurrection, so only a summary of his points will be covered here. Habermas and Licona present what they call the “minimal facts approach” to confirming the historicity of Jesus’ resurrection.<sup>214</sup> First, Jesus was executed by crucifixion.<sup>215</sup> Second, his disciples genuinely believed he rose and appeared to them, evidenced by their proclamation of it and their radical belief in his resurrection, which took them to their deaths.<sup>216</sup> Paul, as well as various ancient oral and written traditions, are the proclamations mentioned here; some of the earliest creeds support this idea of an early belief in Jesus’ resurrection, as opposed to a later legend or myth. Habermas and Licona are careful to remind their readers that their “minimal facts approach” is only dealing with the facts and not with a canonical or authoritative teaching on Scripture; the New Testament is treated as “an ancient volume of literature containing twenty-seven separate books and letters.”<sup>217</sup>

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<sup>213</sup> Wright, *Son of God*, 64.

<sup>214</sup> Gary R. Habermas and Michael R. Licona, *The Case for the Resurrection of Jesus* (Grand Rapids, MI: Kregel Publications, 2004), 48.

<sup>215</sup> *Ibid.*

<sup>216</sup> *Ibid.*, 63.

<sup>217</sup> *Ibid.*, 51.

Third in their list of facts is the abrupt change in Saul of Tarsus, i.e., Paul, as an early persecutor of the church to one of its most prolific advocates.<sup>218</sup> Fourth, Jesus' skeptical brother, James, was also suddenly changed and became the leader of the Jerusalem church.<sup>219</sup> Fifth, Jesus' tomb was empty, which was significant given the drama surrounding his death and burial in Jerusalem, i.e., any doubters could easily check the tomb's location, it was attested by the Jewish leaders opposed to Jesus and his disciples, and it was attested to by his women followers, which would not be a detail of the account if the disciples fabricated the account given the diminished role women's testimony played in ancient Judea.<sup>220</sup> These details present a comprehensive case for the resurrection of Jesus as a historical event, and the facts presented this way are not based on religious tradition but on historical facts. So, how has this information about Jesus' resurrection influenced the Christian idea of resurrection, immortality, and one's identity?

Jesus was embodied physically upon his resurrection. Far from being some specter or Greek shade, the disciples knew he was in a physical body. It is also not enough that he be in any body, which is not resurrection but reincarnation. Following Geisler's point, Jesus must have been raised in his own body so "that the believer can triumphantly proclaim, 'Where, O death, is your victory? Where, O death, is your sting?' (1 Cor. 15:55)."<sup>221</sup> The conquering of death for which the transhumanists strive is demonstrated most clearly in the body which died being raised back to life. Jesus demonstrated it was his physical body raised again when he told Thomas to

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<sup>218</sup> Ibid., 64.

<sup>219</sup> Ibid., 67.

<sup>220</sup> Ibid., 74.

<sup>221</sup> Geisler, *Christian Apologetics*, 498.



touch the wounds in his hands and side (John 20:27). For Thomas to handle his body and touch his wounds, it was made evident that Jesus was embodied once more, not some ethereal, astral specter. Similarly, the tangibility of his body excludes the possibility for a Platonic, permanently disembodied, immaterial soul. The encounter clearly means to communicate Jesus' resurrection returned him to the same body in which he died.

It is also not enough to claim he was merely a heavenly vision. Jesus presents himself as "flesh and bones" to the disciples before asking them for something to eat (Luke 24:39). Not only does he assert his body is tangible and alive, but he proceeds to eat fish with them. Similarly, the Gospel authors clearly point out when someone is having a spiritual vision instead of seeing embodied people in their presence. Stephen saw Jesus standing at the right hand of God as he was being stoned to death; Luke explicitly relays the event as a vision experience instead of seeing a "physical" portal in space opening to heaven that all would have seen if they would have looked (Acts 7:54-60). Jesus presents a model of the resurrection for people to be raised in the last days.

Resurrection is also not just some arbitrary return to life. Jesus returned to life a purpose; it was not just to demonstrate it could be done. It showed his followers, and the world, that death was not the end, that humans belong in bodies, but also importantly, it points to a future event. The future general resurrection is to follow his special resurrection. When all people in the future are raised and judged according to their works. Jesus' resurrection points to an eschatological event and so too will the general resurrection. People are raised to judgment, some whose debt has been paid in full by Jesus and applied to the believer's account, and some whose debt sticks with the individual who has not trusted Jesus' works over their own. The model Jesus portrays here is a bodily resurrection prepared for the final day of judgment and ultimate justice.

Jesus is the model for the Christian's hope of resurrection. Fully embodied, dining with others, and purposefully aiming at the eschaton, the expectation for resurrection has been set, but how does this view of resurrection align with immortality as it has been defined? Why should adherents be confident in their identities being preserved in the resurrection?

### Identity and Resurrection

Regarding one's identity in the general resurrection, if there is any ultimate justice, it will surely include judgment of the identical person who is responsible for the actions being judged. This has been discussed elsewhere in this thesis, but it is an important point worth restating. For justice to be served, the people responsible must be judged accordingly according to their actions. This cannot happen without those same, identical people being held accountable. More than one's memories, more than one's physical body, the immaterial soul which endures in the intermediate state awaiting resurrection retains a person's identity and is the same FPR in one's initial life, intermediate state of date, and return to life for the general resurrection.

Jesus was also the same person in life, death, and resurrected life. He interacted with the disciples in an intimate manner that would be bizarre were the resurrected Jesus not the same as the pre-mortem Jesus. For example, Jesus reinstates Peter after Peter denied him three times during his trial (John 21:15-19). Also, Jesus showed himself to Thomas and challenged him to believe since Thomas had experienced Jesus directly after his resurrection. The wounds act to identify Jesus' resurrection body with his old body as well as his familiar interactions with his friends and disciples. Interestingly, despite the soul criterion being favored for the reasons mentioned above, Jesus' interactions with Peter depend on Peter's bitter memories of the denials. Also, Jesus' interactions with Thomas depend on his bodily wounds from before death. The memory and body criteria may have been ruled out, but they remain useful ways to identify a

person with his past. This does not negate the reasons preferring for the soul criterion, but it demonstrates the value of the body and memories as helpful tools for identification however imperfect they may be.

Apart from serving ultimate justice, the central aim of immortality is not accomplished unless the FPR is retained and identical to the referent in his first life. The chief reasons for most of the mind uploading scenarios' failures have been the inability to preserve the FPR. Resurrection only succeeds if this central aim is successful. In the resurrection itself, whether Jesus' special resurrection or the general eschatological resurrection, the three criteria for immortality are maintained. The resurrected person must be the same FPR as the individual who died and whose actions will be judged. That same FPR's ontological history continues from life to death, to the intermediate state, and to the resurrection itself via a personal soul. Also, there is an identical count to the number of FPRs before the resurrection as after.<sup>222</sup> To have more than one would generate the same problems of identity faced by mind uploading, but the problems would be further compounded regarding the assigning of one's responsibility to one's life actions. For these reasons, resurrection has succeeded in meeting the criteria for someone expecting immortality.

#### How Christian Theism Explains the Desire for Immortality

One final point on Christian resurrection. *Prima facie*, the desire for immortality may be for one to persist indefinitely into the future, largely because the fear of oblivion and annihilation terrifies people. However, there appears to be another reason deeper than just self-preservation.

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<sup>222</sup> On Aquinas' view, a person could never be resurrected into another body since the soul forms the necessary material into the "same" body; "since the rational soul that survives remains numerically the same, at the resurrection it must be reunited to numerically the same body." Aquinas, "Chapter 153: The Soul's Resumption of the Same Body", *Compendium Theologiae*, 187.

Rather than appealing to self-interest and self-preservation, the deeper purpose for seeking immortality and everlasting life is to continue in fellowship with God and others. Everlasting life implies life has some meaning worth persisting forever, but what is that meaning? When asked what the most important commandment was, Jesus answered to “love the Lord your God with all your [heart, soul, mind, and strength]” and to “love your neighbor as yourself” (Matt. 22:37, 39). In a teleological sense, then, the most important things a person can do is have a right relationship with God and others, so rather than focusing on one’s self, it is best to focus on others instead. In other words, the meaning of life is building others-focused relationships. Everlasting life is then an everlasting mission to this end. The reason Christian resurrection to immortality coheres best and is successful is partly because the FPR is preserved singly through the major events of life and death. Also, in each state of life and death, others-focused relationships are facilitated by God.<sup>223</sup>

Conversely, in addition to this point, if the facilitator and source of life is abandoned or rejected, so too are life and relationships. Whatever disembodied consciousness exists for people, that state, apart from God, life, and relationships, is naturally left with death, isolation, and separation. The Bible tells of the final judgment and those who will not be found in “the book of life” will be subject to “the second death” (Rev. 20:11-15). Immortality then is not merely meant to allow an individual to endure forever, it is meant to continue the fellowship life provides.

The desire for immortality reflects a teleological purpose to human nature. More than having one’s self exist forever, it indicates the desire to accomplish some end that is innate and purposeful. What value would life be without a driving purpose? This is like Aristotle and

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<sup>223</sup> This assertion regarding relationships in death admittedly assumes something like Craig’s explanation for NDEs is accurate and post-mortem consciousness is a reality.

Aquinas' view on intentionality, which is not just a mental focus on some object or goal but is also what Aristotle would call "final causality," even if the mind is unaware of the purpose.<sup>224</sup>

The desire for immortality stems from the intrinsic feature in all humans to live on in embodied life to fulfill the relational purposes that shape much of the human life.

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<sup>224</sup> Feser, *Aquinas*, 56.

## Chapter 5

### Conclusion

The long-sought after goal of immortality and everlasting life has inspired contemplation, literature, spirituality, and innovation. The objective for an individual to gain immortality is to persist into the future as they do in life; one's self, the first-person referent and subjective perspective, must continue consciously in life to be immortal. The criteria defined for immortality has been framed to accomplish this simple goal of the persisting self. The self must endure, and any branching, splitting, or duplicate instances of one's personality and memories are not enough to accomplish the FPR's everlasting endurance, so there must be a single, identical ontological history that could be traced from a perfect observer's perspective which would not be tainted by uncertainty. Coupling this history with the same number of FPRs possessing that same reference to the self, immortality has thus been defined.

Mind uploading fails in this pursuit. The closest it comes to success is in gradually replacing the brain so that maybe the FPR remains intact and identical to whoever or whatever self-identifies as the uploaded person, but if Searle is right, even gradual replacement may destroy consciousness. Non-destructive procedures most clearly fail because the source mind remains with its same FPR while the upload enjoys the benefits of the innovated substrate it would then call home. The essential failure here is that the source person was not uploaded, the person would be simulated or copied, at best. Destructive procedures likely result in a single mind, though not necessarily. While the source mind is not present to complicate issues of identity, the destruction of the previous substrate masks whether any actual transfer has occurred. Many ideas are available for research, but the fundamental problem of consciousness, i.e., humanity's critical ignorance of how it works, is still a hinderance.

Christian resurrection offers a better explanation for how personal immortality can be obtained. Granted, a period of death in an intermediate state of post-mortem consciousness may await everyone, that does nothing to diminish the prospects of a general resurrection where all are resurrected into immortal bodies. Jesus of Nazareth's models this in his special resurrection marking the success of his life's work on earth. He demonstrates the resurrection is a physical, embodied one, complete with a capacity for eating, physical interactions with others, and identifying features of the body. Ultimately, Christian teaching predicts that all people will be resurrected and present in a final eschatological judgment day where their deeds are weighed (2 Cor. 5:10) and those trusting in Jesus' works rather than their own will be ushered into an everlasting life of fellowship with God and others (Rom. 3:20-24). Those who choose to be apart from that are left with the absence of life and fellowship with God and others. After all, no forced relationship is built on the love for another over self, and this extends even to God.

An intriguing reminder is that the transhumanist and Christian share the same hope in eschatological outcomes. Both want the abolition of sickness, disease, and death. Both want to be radically transformed and enter a new state of everlasting life. The difference is in the approach. Freedom from sickness, disease, and death, as well as being transformed and gaining everlasting life, are found in Christ demonstrated by his own resurrection to immortality. The human attempt to simulate what God has already done again shows that there is "nothing new under the sun" (Ecc. 1:9). Technology, though powerful and helpful, does not achieve what Jesus already has, and trust is best placed in Jesus rather than technology (Psa. 20:7). There are good reasons to believe in Jesus' resurrection and the hope in a life to come, as well as a hope in new life here and now (2 Cor. 5:17; 1 Pet. 3:15).

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