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Patrick S. Franklin

## Essay Book Review

# The Human Person in Contemporary Science and Theology

Patrick S. Franklin

*Questioning what it means to be human is perennial, going back millennia. The Psalm often quoted is, "What is mankind that you are mindful of them, human beings that you care for them?" (Ps. 8:4, NIV). It is an analytical as well as an existential question, with implications for understanding not only what we are (descriptively) but also what we are to become (ethically) in light of our purpose.<sup>1</sup> In this article, I interact with four recent books that are part of the interdisciplinary discussion of human personhood in contemporary science and theology. My goal is to highlight some of the key issues currently being addressed, identify important points of consensus and disagreement therein, and offer brief theological reflection on the significance of these issues for Christian believers. I will begin with a concise introduction to each book and then identify and discuss four prominent issues concerning human personhood currently being addressed in the literature.*

### Four Recent Books on the Human Person in Science and Theology

**IN SEARCH OF SELF: Interdisciplinary Perspectives on Personhood** by J. Wentzel van Huyssteen and Erik P. Wiebe, eds. Grand Rapids, MI: Eerdmans, 2011. xi + 387 pages. Paperback; \$45.00. ISBN: 9780802863867.

*In Search of Self: Interdisciplinary Perspectives on Personhood* (hereafter designated ISS), edited by J. Wentzel van Huyssteen and Erik P. Wiebe, is a volume comprising eighteen essays (plus introduction) written by scholars across the scientific disciplines. In their introduction, van

Huyssteen and Wiebe point out that the general thrust of the book has been shaped by the work of Paul Ricoeur, especially his writings on time, memory, imagination, and narrative. A major theme of the book is that "personal identity, or 'self,' is both articulated *and* constructed solely through the temporal and relational dimensions of our embodied existence" (ISS, 5). The book is divided into four major sections: The Self and Origins (five essays), the Self and Multiplicity (five essays), the Self and Identity (four essays), and the Self and Emergence (four essays).

**RETHINKING HUMAN NATURE: A Multidisciplinary Approach** by Malcolm Jeeves, ed. Grand Rapids, MI: Eerdmans, 2011. xi + 337 pages. Paperback; \$45.00. ISBN: 978-0802865571.

*Rethinking Human Nature: A Multidisciplinary Approach* (hereafter designated RHN), edited by Malcolm Jeeves, is com-

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posed of twelve essays plus an introduction and an afterword by the editor. It is divided into six parts: History (two essays); Philosophical Analyses (three essays); Human Distinctiveness—Clues from Science (four essays); Archaeology and Paleoanthropology (one essay); and Theological Accounts of Human Distinctiveness: The *Imago Dei* (two essays). The impetus for this book began with a multidisciplinary working group, sponsored by the Templeton Foundation, which convened at the Pontifical Academy of Sciences at the Vatican in 2006 to discuss the question: “What is our real knowledge about the human being?” The editor compiled many of the essays presented there and elicited contributions from other scientists and one biblical scholar to create the present volume.

**HUMAN IDENTITY AT THE INTERSECTION OF SCIENCE, TECHNOLOGY, AND RELIGION** by Nancy Murphy and Christopher C. Knight, eds. Burlington, VT: Ashgate, 2010. ix + 243 pages. Hardcover; \$99.95. ISBN: 9781409410508.

*Human Identity at the Intersection of Science, Technology, and Religion* (hereafter designated HI), edited by Nancy Murphy and Christopher C. Knight, includes twelve chapters plus an introduction and is divided into three major sections: The Limits of Religion, the Limits of Science (three essays); The Emergence of the Distinctively Human (four essays); and The Future of Human Identity (five essays). In the introduction, Murphy highlights the significance of the book’s use of the term “human identity” rather than “human nature.” This shift in terminology is meant to acknowledge the now widely endorsed move away from essentialism and inwardness (following Augustine) toward the current stress on openness/becoming and relationship/sociality (following Wittgenstein and the linguistic turn). Murphy also explains that the book addresses themes that have been profoundly impacted by four major intellectual developments: (1) the historicity of concepts of “human nature,” (2) the changing nature of religion/theology, (3) postmodern influences in epistemology that have challenged various forms of reductionism (including scientism), and (4) developments in science and technology that point toward possibilities for radical revisions of our current understanding of “human.”

**HUMAN SIGNIFICANCE IN THEOLOGY AND THE NATURAL SCIENCES: An Ecumenical Perspective with Reference to Pannenberg, Rahner, and Zizioulas** by Christopher L. Fisher. Eugene, OR: Pickwick, 2010. xvi + 351 pages. Paperback; \$40.00. ISBN: 9781606080535.

*Human Significance in Theology and the Natural Sciences* (hereafter designated HSTS), by Christopher L. Fisher, is a reworked edition of the author’s doctoral dissertation. Fisher argues in favor of what he calls “critical anthropocentrism,” a position that advocates a high view of human significance in the cosmos on the basis of recent scientific and theological developments. The book comprises two sections. The first section, Human Significance in Theology, engages the thought of three modern theologians (Wolfhart Pannenberg, Karl Rahner, and John Zizioulas) whose theological proposals resonate with trends in contemporary science and whose theology is “critically anthropocentric.” In the second section, Human Significance in the Natural Sciences, Fisher discusses human uniqueness and the question of divine providence in cosmic evolution, and addresses ecological concerns that his “critically anthropocentric” thesis might raise for his critics.

## Prominent Issues in Scientific and Theological Considerations of Human Personhood

1. The Human Self: Identity vs. Multiplicity  
One prominent theme in contemporary social scientific discussions of the human self is the question of “identity” versus “multiplicity.” On the one hand, proponents of multiplicity emphasize the outward-openness and malleability of the self and criticize theorists that overemphasize the centeredness of the self. For example, Léon Turner (ISS, 125–40) criticizes the tendency of some theologians to depict all forms of self-multiplicity as pathological, charging them with a failure to distinguish between pathological and nonpathological forms of multiplicity. In contrast, Turner argues that self-multiplicity is both necessary and desirable (though some forms can become pathological). Without it, people would not be able to respond creatively and effectively to novel situations. Turner proposes that the goal of a healthy self is not self-unity, but learning to surrender one’s angst for unity and to cope with multiplicity. In place

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of an essentialist self, Turner supports the notion of narrative identity, which “provides a means of understanding how individual persons can remain continuous despite the structural plurality of self and the diversity of self-experiences over time” (ISS, 129).<sup>2</sup>

Pamela Cooper-White (ISS, 141–62) suggests that humans possess a kind of “core self,” but not one that is a constitutional, inherent essence. Instead, she offers the image of “braided selves,” which depicts multiple parts of the self as being interwoven into a single (nonessential) braid. Strands of the braid include such things as embodied life, relationships, spirituality, and ethical practices.

Other writers emphasize the relational underpinnings of the multiple self. Hetty Zock (ISS, 163–81) employs Hubert Herman’s theory of the dialogical self to describe the self as characterized by conflict, tension, and power. Helene Tallon Russell and Marjorie Hewitt Suchocki (ISS, 182–97) reject settled notions of personhood in favor of continual openness to the richness of interpersonal relations. Drawing on Kierkegaard and Whitehead, they argue that the “self” is not a thing but a relation that precedes, evokes, and creates subjectivity.

On the other hand, those emphasizing identity aim to preserve a greater emphasis on the individuality and continuity of the self. Calvin O. Schrag (ISS, 223–42) revisits Kant’s account of the transcendental unity of apperception and agrees that the transcendental ego plays a decisive role in providing the origin and source of knowledge claims. However, he thinks Kant’s account needs to be modified in light of hermeneutical theory, historicity, embodiment, and sociality. Prior to the formalization of time and space as abstract, transcendental conditions for perceiving experience, time and space must themselves be seen as situated *within* experience (as *lived* time, *lived* space). As a result, the transcendental ego as the unifying principle of self-identity itself undergoes change. This unified self is dynamic in that it is conditioned by its immersion in space and time, history, the body, and the social realm of relationships. It is a unity that holistically synthesizes multiplicity.

Jan-Olav Henriksen focuses on the crucial role that relationships play in shaping and defining the self (ISS, 256–72). He argues that love is the most important factor in the shaping of the self and high-

lights the role of desire in directing the self outward in openness to others and to God.

### *Reflection*

While some contemporary scholars are emphasizing multiplicity and others identity, virtually all agree that essentialist views of human self and personhood must be rejected. As Cooper-White (arguing for multiplicity) suggests, we may hold to some notion of a “core self,” but we should envision this as a “braided self” rather than as an inherent essence (ISS, 141–62). The rejection of essentialist views of the human self or personhood is an important and positive emphasis, with historical precedents in both philosophy and theology. In philosophy, a radical rejection of essentialism developed from Nietzsche’s critique of metaphysics<sup>3</sup> and then from Sartre’s critique of idealism.<sup>4</sup> The writings of Nietzsche and Sartre helpfully exposed and discarded the myth of the essentialist self. Unfortunately, however, their proposals tended to erode any sense of continuity or “groundedness” concerning human identity. Moreover, they promoted an individualist conception of selfhood, one which prized the individual’s will-to-power and free choice for self-actualization but downplayed the role that relationships play in healthy identity construction.

A mediating philosophical position is what might be called “narrative philosophy,” represented by thinkers such as Alasdair MacIntyre and Charles Taylor. Narrative philosophy conceives of human personhood and identity within the context of formative relationships, communities, and cultural contexts, which impart to individuals (perhaps explicitly but often implicitly) a value-laden view of the world. This includes both *conceptual* content (basic convictions and value distinctions, which Taylor refers to as “frameworks”) and *affective or motivational* content (Taylor’s “social imaginary”). The latter fosters and shapes the desires and passions of individuals through their immersion in the stories, rituals, and practices of their communities and cultures.<sup>5</sup> It is important to note that it is not just religious communities that are shaped by such stories, rituals, and practices. Rather, all human communities and traditions of inquiry are so formed, since all human worldviews or “rationalities” are embedded in social narratives.<sup>6</sup> Narrative philosophy promotes the continuity of the self without falling prey to essentialism. The self has continuity

not because it is predetermined exclusively by some “essence,” but because it exists within a narrative that is oriented by a conception of what is good and true.<sup>7</sup>

Christian theology also has rich resources for maintaining the continuity of the self without falling into essentialism. One example can be found in the writings of Søren Kierkegaard, as Helene Tallon Russell and Marjorie Hewitt Suchocki rightly point out (ISS, 182–97). For Kierkegaard, the human self is a *relation*; the human self is a self relating to itself.<sup>8</sup> In other words, the human self is a synthesis in which a subject (I) relates to itself as an object (me). This means that human self-identity is both dialectical (actively and passively being and becoming) and temporal (oriented to past, present, and future). It is both a gift to be received and a goal to be attained. Thus, the human being is characterized by what Wolfhart Pannenberg calls “exocentricity,” a term which defines the self’s relational constitution as being both centered and other-oriented (in openness to the world and to the future).<sup>9</sup> This means that humans are by nature constituted as relational beings that gain their identity through a continual, dialectical negotiation of the self with itself, the world, and other human selves—a process which Miroslav Volf calls “differentiation.”<sup>10</sup> This relational, other-oriented view of the human self as a person-in-relation has many historical precedents in Christian theology, some of which include modern theologians such as Karl Barth and Dietrich Bonhoeffer, the Reformers Martin Luther and John Calvin, medieval writers such as Richard of St. Victor, and the patristic writers<sup>11</sup> (especially the Cappadocians<sup>12</sup>). Its roots ultimately go back to the Bible (e.g., Paul’s depiction of the church as the Body of Christ). As Joel Green argues, the biblical narrative holds being and becoming together in creative tension. Its view is neither essentialist nor existentialist, but relational and holistic (RHN, 276).

## 2. Human Uniqueness or Distinctiveness

Many contemporary writers prefer to speak of human distinctiveness rather than uniqueness, because they wish to emphasize the biological continuity of human beings with other animals (especially other primates). For such writers, “distinctiveness” indicates a quantitatively higher degree of human complexity

relative to other species rather than a qualitative difference. For example, Felipe Fernández-Armesto places greater weight on the similarities shared by humans and other animals and argues that differences are in degree, not in kind (RHN, 18ff; see also Barbara J. King’s article, “Are Apes and Elephants Persons?” in ISS, 70–82). Other writers prefer to retain the term “uniqueness,” because they believe that the uniquely human capacities that have emerged from lower systems and levels of biological existence are qualitatively different (e.g., HSTS, 204–15). Such capacities differ in kind, not just in degree, from their lesser counterparts. For instance, human language is qualitatively different from various forms of prelinguistic communication observed among apes, specifically in its use of systems of symbols to communicate abstract concepts. Still other writers use both terms, employing “distinctive” to describe the biological roots of human capacities shared with other animals (DNA, subsystems, etc.) while reserving the term “unique” for the specifically emergent human capacities that are qualitatively superior (e.g., HI, 97–115).

Scientists propose different lists of distinctive human capacities. For example, Alison Brooks (RHN, 227–68) provides one of the most comprehensive lists, which includes six capacities: abstract thinking; planning depth; problem solving through behavioral, economic, and technological innovation; imagined communities (recognizing kin or community with others never met); symbolic thinking (language, ritual, culture); and a theory of mind (awareness of and empathy for the thoughts and feelings of others). Other writers prefer to focus on a smaller subset of differences (e.g., Fisher, HSTS, 204–23; Haag, HI, 131–43; Brown, HI, 97–115). Still others focus on the uniqueness or distinctiveness of human relationships (David G. Myers, RHN, 206–33; Malcolm Jeeves, RHN, 176–205; and Warren S. Brown, HI, 97–115). As Brown puts it, “What is unique about humankind emerges from the characteristics of our brains, but only as we are embedded within social relationships and interactions with human culture” (HI, 114).

### *Reflection*

Most contemporary scholars, both scientists and theologians, affirm that human beings are special in some distinct way(s) and yet are also interconnected

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with all of life. There is consensus in affirming that humans are part of the global ecosystem even while playing a special role within it. Present disagreement pertains to just how unique human beings are with respect to the rest of creation. Underlying this scientific discussion of human uniqueness is the ethical question of how human beings ought to relate to and interact responsibly with the natural world, particularly nonhuman creatures and the environment. I suspect that a major concern of those urging us to see greater continuity between humans and other nonhuman creatures is the (not wholly unfounded) fear that an emphasis on human uniqueness leads to a sense of human superiority, which then encourages various abuses of creation.

Fernández-Armesto (RHN, 11–29) hints at this when he states that our current definition of humanity is inadequate because it excludes nonhuman animals from our moral community. More disparagingly, Lynn White famously accused the Genesis creation narrative of being responsible for the world's current ecological crisis, because it depicts human beings as having dominion over the earth.<sup>13</sup> Despite his argument being unpersuasive both exegetically and historically, it does raise an important question about what adherents of human uniqueness *mean ethically* by the term “unique.” For example, is being unique a privilege, a responsibility, or both?

Unfortunately, the biblical notion of human dominion has, at times, been distorted and exploited by those with malevolent and greedy ends, which, of course, can happen to any doctrine or moral position.<sup>14</sup> However, one must read the Genesis passage in context, and thus notice that it does not give humans *carte blanche* to treat creation any way they desire, whether with benevolent or with self-serving and destructive intentions. Very specifically, Genesis 1 portrays human beings as uniquely created in God's image to be steward-priests of God's creation.<sup>15</sup> In their *stewardship*, they are to honor the true King (Yahweh, the one they were created to mirror) and to administer God's creation in ways that accord with God's good character, purposes, and explicit commands. In its historical-narrative context, Genesis envisions creation as God's palace-temple and human beings as God's steward-priests. This has significant and far-reaching implications for creation care.<sup>16</sup>

Both groups identified above want to emphasize the importance of caring for creation. The question thus arises: Which view of human beings better grounds and motivates the duty or responsibility to care for the earth—the human being as unique steward-priest, or the human being as one animal among fellow animals? I am not arguing that ethical utility can or should determine ontology; I am simply recognizing that in ethics both the nature of reality and the basis for motivation are important and interrelated. It seems to me that the notion of a common fellowship or family among all creatures is too vague to ground human responsibility and takes too much for granted morally. It is vague because it offers little more than biological similarity (with some added human complexity) as the ground and motivation for care.

But why, on a strictly biological basis, should care be normative? Is this what nature tells us? We do not see the animal kingdom demonstrating this kind of care, especially at an interspecies level. Why should tooth-and-claw survival of the fittest not be considered normative? Moreover, it seems that advocates of this view cannot finally avoid depending upon an (implicit) assumption that human beings are unique in some sense in order to make their moral argument. Specifically, they view humans as having a greater moral responsibility than other species, since humans alone have the capacity to recognize other animals as brothers and sisters and could thus be morally required to treat them as such (or, to put it another way, they do not expect other animals to reciprocate this benevolence).

If this is the case, why downplay human uniqueness? This would seem only to undermine rather than promote human responsibility toward creation. As Fisher argues, “Such a leveling ethical principle is ‘ecopathy,’ because it has destroyed its own moral underpinnings” (HSTS, 291). To frame the question theologically, is moral responsibility toward creation something that we confer upon ourselves or is it something we receive as a charge from God? If it is something self-conferred, why assume benevolence? Why not argue, with Nietzsche, that we should be strong and employ our willpower to achieve dominance? Conversely, it is precisely humanity's significance and uniqueness *as God's stewards* that grounds a proper sense of respect toward and responsibility for the cosmos (HSTS, 278–93). As God's stewards,

human beings are to cultivate and care for the creation that God has entrusted to them, thus bringing glory to God and serving God's creative purposes.

### 3. The Evolution of Self or Personhood

Another major theme in contemporary literature about the human person in science and theology is the biological evolution of human beings as selves or persons. Helpful surveys of human origins are provided by Ian Tattersall, Ian Hodder, and Alison Brooks. Tattersall (ISS, 33–49) tracks the use of tools and technology to demonstrate that the human sense of self has arisen from the distinctly human capacity for symbolism, which makes advanced communication possible.<sup>17</sup> Hodder (ISS, 50–69) focuses his attention on the correlation of human evolution with the establishments of settlements and farming. Surveying the archaeological evidence of ancient settlements throughout his account, Hodder argues that humans attained a greater, more precise sense of self over against the things they possessed as they gained a stronger sense of ownership. Brooks (RHN, 227–68) traces the emergence of modern human capacities by drawing inferences from the archaeological evidence of evolutionary changes.<sup>18</sup> Utilizing her archaeological method, Brooks examines the emergence of six distinctly human capacities.

Fernández-Armesto (RHN, 11–29) provides a historical account of the development of the recognition of universal human personhood. He points out, "For most people, in most societies, for most of the past, the limits of humankind were narrow" (p. 11). Contemporary people tend to take for granted modern notions of universal human recognition, global human kinship, or a common humanity (with accompanying human rights). However, historically, humans did not normally recognize the co-humanity of other groups. Typically, members of one human group acknowledged no kinship with others. The notion of a common, universal humanity is a relatively recent development.

#### *Reflection*

One of the things that immediately struck me (as a conservative theologian in the evangelical tradition) was the high level of consensus, unanimous in the books surveyed, in affirming the biological evolution

of human beings from lower ancestral forms. Of course, such consensus is not surprising in the world of scientific scholarship, even among those who identify themselves as conservative Christians.<sup>19</sup> However, in many conservative Protestant circles, the debate over human origins is still highly controversial, even serving as a litmus test of orthodoxy in some cases.<sup>20</sup> The British evangelical theologian Alister McGrath, himself a supporter of evolutionary theism, reports that old earth creationism has a long history in the Christian tradition and is probably the majority view within conservative Protestant circles.<sup>21</sup>

Why is biological evolution so controversial for conservative Christians? Aside from the politics and cultural wars in late modern America, what deeper issues are at stake? First, the Bible clearly teaches that human beings are unique in that they alone are created to reflect God's image. The evolution of human beings from lower primates seems to blur the distinction between humans and animals and is perceived as a threat to human uniqueness. The challenge then, for Christians in the sciences and theologians alike who affirm evolution, is to demonstrate how evolution is compatible with the Christian affirmation that humans are uniquely created in the *imago Dei* (see Fisher, HSTS, 246–77).<sup>22</sup> One fruitful response to this problem is the contemporary discussion of emergence theory, addressed in the next section.

A second issue this raises for conservative Christians is whether evolution contradicts the creation accounts provided in Genesis 1–2 and thus threatens the inspiration of the Bible. Most of the heated arguments are taking place around this question. In response, several evangelical theologians have attempted to demonstrate that evolutionary theory does not contradict Genesis, usually by considering what the Ancient Near Eastern context of Genesis implies about the purpose and implications of the creation account.<sup>23</sup>

A third issue that evolution raises for conservative Christians is that it threatens some theological persuasions concerning the creation and Fall of humanity. For example, it contradicts the belief that physical death originated with the Fall of humanity into sin. Such problems are not insurmountable, but they do undermine overly literalistic interpretations of the Genesis creation narratives.<sup>24</sup>

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One of the challenges this poses for Christians in the sciences and theology is to clarify an epistemology that does justice to the truth questions being asked and to employ an accompanying hermeneutic that does justice to the biblical texts. Many recent proposals have been helpful in this regard, but they have not yet had a significant impact on popular conservative Christian subculture. Many conservative Christians would be surprised (perhaps disturbed) to know what the scientists in their own midst believe. Part of the problem is the hurtful rhetoric of fundamentalists, whether religious or atheistic, which serves only to elevate emotions, confuse the real questions, and ridicule and alienate those who hold opposing views. We need more examples of those who break the stereotypes (Denis Lamoureux's book *I Love Jesus & I Accept Evolution* is a good example of this). In terms of epistemology, the question needs to be asked forthrightly: what evidence counts for and against evolution and who are the right people to adjudicate that evidence? I suggest the following guideline: *the nature of the question posed must determine the methodology employed to answer it*. Science can neither prove nor disprove the Trinity. The Bible can neither prove nor disprove the law of gravity. These are different kinds of truth questions with different criteria for answering them, belonging to corresponding traditions of inquiry. What kind of truth question is evolution? I am not sure that we have even agreed on that *clearly* yet, at least not in evangelical circles.

### 4. Emergence Theory

Emergence theory attempts to explain how uniquely human capacities and qualities "emerge" from their biological rootedness in complex systems (e.g., language and self-consciousness emerging from the prefrontal cortex), which have in turn "emerged" from lower-level biological systems and parts (e.g., those observed in nonhuman animals). Such unique, emergent human capacities are greater than the sum of their constituent parts. They are qualitatively distinct from those parts, amounting to changes of kind and not just incremental advances of degree.<sup>25</sup> Some examples of emergent capacities in human beings include consciousness, language, the forming of interpersonal relationships, morality, spirituality, abstract thinking, art, music, and culture.<sup>26</sup> Emergence theory combines observations and discoveries in evolu-

tionary biology and neurophysiology with insights gained from information systems theory to depict human development.<sup>27</sup>

### Reflection

One of the contributions of emergence theory is that it provides a way for us to talk about the biological rootedness of human beings and their evolution from less complex forms of life without falling into various types of reductionism. For example, it avoids the biological reductionisms of sociobiologists such as Edward O. Wilson and Richard Dawkins, in which human beings are depicted basically as reproducing biological machines with no greater transcendent purposes (see HI, pp. 152–6). It also debunks the common twentieth-century portrait of the human being as merely a "cerebral subject," which fosters the idea that we simply *are* our brains (see Fernando Vidal's historical narrative and critique of this development in RHN, 30–57).<sup>28</sup>

A second major contribution of emergence theory is that many are employing it to "resolve" the age-old problem of the relation of body to soul—or, in modern terms, mind to brain (or in extreme materialist-reductionist conceptions of the "cerebral subject," body to brain).<sup>29</sup> I use the term "resolve" somewhat loosely and tentatively, because many recognize that while emergence theory contributes to a more comprehensive understanding of the *whole* human person, it also leaves some important questions and criticisms unanswered.

While emergence theory is helpful in some respects it does not completely close the gap between scientific and religious descriptions of reality (ISS, 338–56).<sup>30</sup> Restricted to physical description, scientific vocabulary ends up speaking rather vaguely about what precisely is an emergent capacity: what precisely *is* consciousness? what precisely *is* the "soulish thing" we call the soul?<sup>31</sup> Physical description, even of the nonreductive sort, also seems to fall short when explaining transcendent experiences. For example, Fisher points out that physical approaches lacking reference to the soul have difficulty explaining accounts given by people who have endured near-death experiences, especially those resuscitated from clinical death (HSTS, 232–6). Nevertheless, emergence theory provides categories of understanding that allow both "soft" dualists

and nonreductive physicalists (or holistic monists) to find common ground.

Theorists advocating or leaning toward monism or nonreductive physicalism can still speak of human beings possessing “souliness” (e.g., see HI, 115). Conversely, dualists can now speak in a more nuanced way about the body-soul relation. Malcolm Jeeves (RHN, 176–205) suggests that we can speak of duality without substance dualism and argues in favor of “irreducible intrinsic interdependence” between the mental/spiritual and the physical. Along these lines, Roger Scruton argues that what is needed is a theory of the soul that detaches the concept from the outdated “inner self” idea (ISS, 349). Martinez Hewlett endorses Aquinas’s view that body and soul form one substance (HI, 147–63), and Catherine Keller suggests that the human person emerges as a “pneumatic complex” (ISS, 318).

In sum, emergence theory takes human biological rootedness seriously while preserving an important emphasis on mystery and transcendence, or what might be called the realm of spirit. Those inclined to stress the biological nature of human existence require something like emergence theory in order to have a holistic account of human consciousness, knowledge of God, and morality. Those inclined to stress the spiritual dimension of human existence require something like emergence theory to explain how their spiritual life affects and is affected by their daily existence in the world. As one recent example, Paul Markham has convincingly employed emergence theory to demonstrate the importance of the spiritual disciplines for “hard-wiring the brain” for spiritual growth and character transformation.<sup>32</sup>

## 5. Conclusion

I have explored some of the prominent issues currently being discussed in the sciences and theology concerning human personhood. Throughout the essay, I have suggested areas of consensus and disagreement, and have attempted to probe beneath the surface of the factual details of the debate in order to bring to light some of the theological and ethical assumptions and implications at stake. One important theme discussed in this essay is whether the human self should be conceived in terms of “identity” or of “multiplicity.” The underlying concern of

the proponents of both positions is that we reject essentialism but retain some measure of continuity of the self. Theologically, the Christian tradition has described the human being, in terms analogous to the Trinity, as a person-in-relationship.

A second pertinent issue concerns the uniqueness of human beings relative to other animals. The underlying concern here is how best to account for and motivate human responsibility toward the environment and toward nonhuman creatures. I suggested that a theological conception, grounded in the narrative of scripture, of human beings as steward-priests of creation who are accountable to God, does the job better than a vague conception of all creatures being in a universal-ethical animal family.

A third prominent issue is the evolution of human beings, which has raised theological concerns for many conservative Christians. I suggested that we need to follow an epistemology that does justice to the nature of the truth question(s) being posed and employ a hermeneutic that does justice to the purpose of the biblical texts being interpreted.

Finally, the last pertinent issue I identified is emergence theory. I suggested that emergence theory helps us to take seriously the biological rootedness of human beings even while preserving an appropriate emphasis on the mystery of human existence. Similarly, emergence theory helps us to account for transcendence and the realm of spirit without falling prey to substance dualism. \*

## Notes

<sup>1</sup>Ellen Wondra puts the relevance of theological anthropology to ethics well:

How theologians speak of persons is crucial to Christian ethics and the Christian life. How persons understand themselves deeply shapes how they approach others, how they cherish and judge their relationships, and how they go about being faithful to the truth of the gospel proclamation that God’s work of creation, providence, and salvation is carried out in part through human life with its various structures, groupings, and modes of reflection and expression. (Ellen K. Wondra, “Participating Persons: Reciprocity and Asymmetry,” *Anglican Theological Review* 86 [Winter 2004]: 58–9)

<sup>2</sup>Bergemann, Siegel, Eichenstein, and Streit propose that one of the functions of spirituality is to foster a sense of interconnectedness, which can help people integrate the strands of their fragmented lives (ISS, 96).

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<sup>3</sup>Nietzsche rejected metaphysics as a starting point for philosophy and as a valid source of knowledge for human existence. He especially disliked all forms of Platonism, which he believed prioritized the beyond over present existence, the universal over the particular, and the absolute over the concrete (his immediate targets were Enlightenment thinkers such as Kant who attempted to construct philosophical and ethical systems on the basis of *a priori* universal truths). He also rejected Christianity, regarding it to be a form of “Platonism for the people.” See Friedrich Nietzsche, *Beyond Good and Evil: Prelude to a Philosophy of the Future* (Mineola, NY: Dover, 1997).

<sup>4</sup>Jean-Paul Sartre, *Existentialism and Human Emotions* (New York: Philosophical Library, 1957).

<sup>5</sup>See Charles Taylor, *Modern Social Imaginaries* (Durham, NC: Duke University Press, 2004) and *Sources of the Self: The Making of the Modern Identity* (Cambridge, MA: Harvard University Press, 1989).

<sup>6</sup>See Alasdair MacIntyre, *Whose Justice? Which Rationality?* (Notre Dame, IN: University of Notre Dame Press, 1988). James K. A. Smith goes so far as to identify and analyze the “secular liturgies” that shape the desires and capture the imaginations of people in contemporary postmodern Western culture. See his *Desiring the Kingdom: Worship, Worldview, and Cultural Formation* (Grand Rapids, MI: Baker Academic, 2009), 89–129.

<sup>7</sup>Thus, a human life directed toward the human *telos* is characterized by both continuity and development, which are held together in what MacIntyre calls “the unity of a narrative quest” (Alasdair MacIntyre, *After Virtue: A Study in Moral Theology* [Notre Dame, IN: University of Notre Dame Press, 1984], 219).

<sup>8</sup>Søren Kierkegaard, *The Sickness unto Death: A Christian Psychological Exposition of Edification and Awakening*, trans. Alastair Hannay (London: Penguin Books, 1989), 43.

<sup>9</sup>Wolfhart Pannenberg, *Anthropology in Theological Perspective*, trans. Matthew J. O’Connell (Edinburgh: T&T Clark, 1999), 43–79.

<sup>10</sup>Miroslav Volf, *Exclusion and Embrace: A Theological Explanation of Identity, Otherness, and Reconciliation* (Nashville, TN: Abingdon, 1996), 64–6.

<sup>11</sup>Karl Barth, *The Doctrine of Creation: Church Dogmatics III*, no. 1 (London: T&T Clark, 2009); Dietrich Bonhoeffer, *Creation and Fall: A Theological Exposition of Genesis 1–3*, vol. 3 of *Dietrich Bonhoeffer Works*, ed. John W. de Gruchy, trans. Douglas Stephen Bax (Minneapolis, MN: Fortress, 1997); Oswald Bayer, *Martin Luther’s Theology: A Contemporary Interpretation*, trans. Thomas H. Trapp (Grand Rapids, MI: Eerdmans, 2008); Richard of St. Victor, *Book Three of the Trinity*, trans. Grover A. Zinn (Mahwah, NJ: Paulist, 2002); Thomas F. Torrance, *Calvin’s Doctrine of Man* (London: Lutterworth, 1949); —, *The Christian Doctrine of God: One Being Three Persons* (New York: T&T Clark, 1996); John Zizioulas, *Being as Communion: Studies in Personhood and the Church* (Crestwood, NY: St. Vladimir’s Seminary Press, 2002).

<sup>12</sup>A key development in the Christian understanding of personhood took place when the Cappadocian fathers (Basil the Great, Gregory of Nyssa, and Gregory of Nazianzus) reflected on the nature of God’s triune personhood. By admitting the category of “relation” into the concept of

“being,” the Cappadocians reconceived being itself (*ousia*) in dynamic and relational terms, a major development from classical Greek ontology. See Torrance, *The Christian Doctrine of God*, 88–102 and Zizioulas, *Being as Communion*, 27–46.

<sup>13</sup>Lynn White Jr., “The Historical Roots of Our Ecological Crisis,” *Science* 155, no. 3767 (March 10, 1967): 1203–7.

<sup>14</sup>Michael S. Northcott, “The Dominion Lie: How Millennial Theology Erodes Creation Care,” in *Diversity and Dominion: Dialogues in Ecology, Ethics, and Theology*, ed. Kyle S. Van Houtan and Michael S. Northcott (Eugene, OR: Cascade, 2010), 89–108. Cited in James C. Peterson, *Changing Human Nature: Ecology, Ethics, Genes, and God* (Grand Rapids, MI: Eerdmans, 2010), 23.

<sup>15</sup>See John Walton, *The Lost World of Genesis One: Ancient Cosmology and the Origins Debate* (Downers Grove, IL: InterVarsity Press, 2009).

<sup>16</sup>As Watts puts it,

If this creation is Yahweh’s palace-temple, then we had best take good care of it ... God’s anger against violators of the earth is perfectly understandable. It is his palace-temple they are defiling, whereas he is committed to renewing it. (Rikki E. Watts, “Making Sense of Genesis 1.” <http://www.asa3.org/ASA/topics/Bible-Science/6-02Watts.html>, third last paragraph, no page numbers)

<sup>17</sup>Tattersall’s narrative tracks the use of the first stone tools appearing 2.5 million years ago (mya), to the hand axe appearing 1.5 mya, to the controlled use of fire in hearths 800 thousand years ago (kya), to the deliberate construction of shelters and the use of wooden spears appearing 400 kya, to the appearance of clearly symbolic artefacts (i.e., Blombos Cave, Africa, 77 kya), and finally to the full flowering of the symbolic capacity approximately 40 kya (e.g., cave wall images, carvings, engravings, clay figures, and notational systems appearing 35 kya).

<sup>18</sup>Brooks explains the validity of her approach as follows:

For example, one cannot recover fossil languages, at least not until the development of writing, although dead languages can be reconstructed up to a point from words preserved in living languages. But one can recover traces of symbolic behavior (D’Errico et al., 2003), or morphological traces of changes in brain or vocal tract morphology, that suggest an ability for language. Ideologies or the capacity for abstract thought are not preserved, but one can recover traces of practices that seem to conform to ideas about spirituality—burial of the dead and cave art. Problem solving and innovativeness cannot be directly observed in the past, but one can document increases in technological sophistication and rates of innovation ... (RHN, 236)

<sup>19</sup>For example, a recent survey of the members of the American Scientific Affiliation found that 65.9% of respondents believed that the following statement is supported by credible scientific evidence: “Biologically, *Homo sapiens* evolved through natural processes from ancestral forms in common with primates.” And 65.1% affirmed the statement: “Plants and animals developed through evolutionary processes with natural causes from ancestral forms.” Richard Blaine, *ASA Origins Survey with Correction*,

<http://www.asa3online.org/Voices/2010/07/16/asa-origins-survey-with-correction/>.

<sup>20</sup>For the historical roots and developments of this cultural debate, see Mark A. Noll, *The Scandal of the Evangelical Mind* (Grand Rapids, MI: Eerdmans, 1994), 178–208.

<sup>21</sup>Alister McGrath, *Christian Theology: An Introduction* (Oxford: Wiley-Blackwell, 2011), 373.

<sup>22</sup>R. J. Berry suggests that God planted his image into an existing animal (our most recent human ancestor), thus transforming *Homo sapiens* into *Homo divinus*. He writes,

If this is accepted, the species *Homo sapiens* whose fossil history we know and whose genetic history we can infer, could be described as being transformed into *Homo divinus*, a distinction apparently made first by John Stott. (RHN, 173)

For the Stott reference, see J. R. W. Stott, *Understanding the Bible* (London: Scripture Union, 1972), 63. For an alternative reading of how the image of God relates to being *Homo sapiens*, see James C. Peterson, “*Homo Sapiens* as *Homo Dei*: Paleoanthropology, Human Uniqueness, and the Image of God,” *Toronto Journal of Theology* 27, no. 1 (2011): 17–26.

<sup>23</sup>See, for example, Walton, *The Lost World of Genesis One* and Denis O. Lamoureux, *Evolutionary Creation: A Christian Approach to Evolution* (Eugene, OR: Wipf and Stock, 2008).

<sup>24</sup>See, for example, the answers proposed on the BioLogos website, <http://biologos.org/questions>.

<sup>25</sup>For instance, F. LeRon Shults (HI, 39–55), in dialogue with C. S. Peirce and Terrence Deacon, argues that human beings are distinct from other biological life forms because they have reached a “symbolic threshold” leading to a qualitatively different state (following Deacon, a human being is thus *homo symbolicus*).

<sup>26</sup>Nancey Murphy (HI, 79–96) provides a lucid discussion of emergence theory by answering two crucial questions. First, how do downward causes happen? For example, when one reaches for a cup of coffee, one’s mind causes one’s neurons to fire, leading to the anatomical mechanics of raising an arm, grasping, and then lifting the cup. But how is this possible when the mind is itself an emergent quality arising out of and depending upon lower neural systems and processes? Second, then, how do complex systems come into existence in the first place? The problem is that one must explain how a complex system as a whole can be the cause of its own behavior, even (in a sense) the creator of its own components. Murphy explains that the system acts as its own self-cause by *constraining* the behavior of its components. It is able to do this because it interacts with and is impacted by its environmental context and relationships. To elucidate this process further, she distinguishes between context-free constraints and context-sensitive constraints. See also Haag, Deacon, and Ogilvy (ISS, 319–37).

<sup>27</sup>Information theory has described the emergence of complex systems through feedback loops that utilize new information gained from external input (in the case of biological systems, environmental influences) to provide constraints on lower processes. These processes, in turn, redirect the flow of information leading to greater system complexity.

<sup>28</sup>Roger Scruton dismisses such reductionist accounts as “neurononsense,” because they attribute what properly

belongs to the whole emergent person to some elemental part or process, for instance self-consciousness to the prefrontal cortex (ISS, 346).

<sup>29</sup>Catherine Keller argues that emergence theory effectively counters both naturalistic reductionism and supernatural inflationism (substance dualism). Consequently, the human person emerges as a “pneumatic complex,” not as something simple and unitary but as a result of the vast multiplicity encountered in its embedded relations (ISS, 301–18).

<sup>30</sup>Roger Scruton employs the analogy of a painting to explain this. A theory of pigments (corresponding to scientific description) belongs to another level of pictorial analysis than iconography (corresponding to the personal-religious description). Applying the analogy, emergence theory helps to describe the development of increasingly complex physical systems that give rise to the human capacity for transcendence, but it cannot help science *as science* describe the transcendent realm.

<sup>31</sup>See Dallas Willard’s essay “Non-reductive and Non-eliminative Physicalism?” <http://www.dwillard.org/articles/artview.asp?artID=48>.

<sup>32</sup>Paul N. Markham, *Rewired: Exploring Religious Conversion* (Eugene, OR: Pickwick, 2007).

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