"FILL AND SUBDUE"? IMAGING GOD IN NEW SOCIAL AND ECOLOGICAL CONTEXTS

by Jason P. Roberts

Abstract. While the social and ecological landscape of the twenty-first century is worlds away from the historical-cultural context in which the biblical myth-symbols of the *image of God* and the *knowledge of good and evil* first emerged, Philip Hefner's understanding that *Homo sapiens* image God as *created co-creators* presents a plausible starting point for constructing a second naïveté interpretation of biblical anthropology and a fruitful concept for envisioning and enacting our human future.

Keywords: Biocultural; created co-creator; *Enuma Elish* (EE); image of God; knowledge of good and evil; Philip Hefner; Paul Ricoeur; second naïveté; transhumanism; wholesomeness

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Working constructively across the disciplinary boundaries of the natural sciences and Christian theology. Philip Hefner defines *wholesomeness* as that which is "empirically discernible as in some manner beneficial" to nature (1993b, 60–61; cf. 41–42). *Nature* is taken here to include human beings, other animal species, and the abiotic elements of the environments in which they have coevolved and continue to live interdependently. Also included within nature are all interactions among living organisms and their environments, including the historical outworking of human culture.

At the conclusion of his seminal article concerning "biological perspectives on fall and original sin," Hefner urges scholars interfacing religion, science, and technology to begin "fulfilling the task that [Paul] Ricoeur set before us—to transport the traditional symbols, where they are important vessels of information for us, into the realm of contemporary, second-naivete [sic] experience, and enable them to coalesce with our experience to provide genuine knowledge of reality, for the sake of our wholesome living" (1993a, 99–100). In light of recent biblical scholarship, theological exegesis, and scientific understandings of human distinctiveness, I focus here on the second aspect of Hefner's call—to promote "our wholesome living" in the present and future, through a critical reassessment of the

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biblically grounded concepts of the *image of God* and the *knowledge of good and evil*. Viewing the first few chapters of Genesis through a scientifically informed hermeneutical lens projects a Judeo-Christian anthropology in which human beings emerge with an ambivalent condition of freedom through which our species bears the capacity and call to represent the creative beneficence of the God who shares power and does not create through violence.

I set out to grind, polish, and shine some light through this lens in the following five sections. The first section outlines some ways in which the biblical symbols of the *image of God* and the *knowledge of good and evil* likely emerged and functioned in their original historical-cultural context. The second section provides some guidance for interpreting the commands of Genesis 1:28 to "fill the earth and subdue it."[1] This depiction of humankind's relationship to the rest of the world can present difficulties for theologians and ethicists addressing the ecological and technological challenges of the present and future. The third section describes Hefner's *created co-creator* model of human being and becoming as an intellectually and morally fruitful way to begin framing a second naïveté characterization of the image of God. The fourth section notes briefly how the concept of *transhumanism* presents both opportunities and challenges for the ongoing created co-creation of the image of God. The final section builds upon the previous four in order to propose a set of principles for stepping forward into our human future as created co-creators responsible for that future.

The Genesis of the Concepts

A "myth," according to hermeneutical philosopher Paul Ricoeur, is "not a false explanation by means of images and fables, but a traditional narration which relates to events that happened at the beginning of time and which has the purpose of providing grounds for the ritual actions of men [sic] of today and, in a general manner, establishing all the forms of action and thought by which man understands himself in his world" (1967, 5). A second naïveté appropriation of ancient mythology and key symbols like the *image of God* and the *knowledge of good and evil* means living out of an ever-revisable symbolic worldview in which the myth has been exegeted critically and its significance contemporized hermeneutically. Ricoeur defines second naïveté as "a creative interpretation of meaning, faithful to the impulsion, to the gift of meaning from the symbol, and faithful also to the philosopher's oath to seek understanding" (1967, 348). He goes on to explain that such a critical-hermeneutical endeavor begins "as an awareness of myth as myth," which here means engaging the biblical myths of creation and "fall" as such. This project of "demythologization is the irreversible gain of truthfulness, intellectual honesty, [and] objectivity"—a task intended to revivify myth-symbols, not repudiate them (1967, 350).

Through interpretation, ancient myth-symbols may continue, as Hefner has alluded, to remain "important vessels of information" able "to provide genuine knowledge of reality for the sake of our wholesome living." Careful hermeneutics allow the interpreter to locate the enlightening and humanizing insights of the myth and reframe its ancient meanings with background concepts taken from the present. In short, the second naïveté is not equivocal to the primitive or first naïveté of the myth's original hearers—their "immediacy of belief" (Ricoeur 1967, 351). Rather, the relation of the first naïveté to second is analogical, because the latter must appropriate and reformulate the ideological kernel of the former. A second naïveté must locate itself on what Ricoeur calls a hermeneutical "trajectory" (*trajectoire*) that is traceable in the creation of the myth itself and from its ancient contexts into present and future interpretations (cf. Ricoeur 1971, 70–71, 73; Wallace 1990, 51–71; LaCocque and Ricoeur 1998, 6).

Many historical and biblical scholars have argued convincingly that the hermeneutical trajectory of the Genesis cosmology owes its direction to a number of conceptual and historical forces apparent in older biblical source material and extrabiblical literature.

In light of contemporary Ancient Near Eastern parallels like the Babylonian epic *Enuma Elish* (EE), the Genesis cosmology distinguishes itself by introducing an unrivaled deity—Yahweh Elohim (2:4)—who does not create through violence but through speaking into existence a reality able to sustain and challenge humanity in meaningful ways. Biblical scholars like J. Richard Middleton and Richard J. Clifford note that in the royal ideology of the ancient Near East, rulers represented (imaged) their gods by waging holy war against other peoples. These acts of domination intentionally paralleled those of the creator god(s) whose enemies' defeat made way for the establishment of the Earth, creatures, and civilization (cf. Clifford 1981, 87–89; 1985, 507–23; 1994, 132–33, 142–76, 185–97, 202–03; Middleton 2005, 235–69).

Relying upon Gerhard von Rad's analysis of how established source material fed into the final composite narration of origins in Genesis 1–3, and acknowledging the influence ancient near eastern parallels apparently had on these passages in the historical-cultural context of their redaction, Ricoeur concludes that "the very idea of Creation emerges enriched from this kind of proliferation of originary events" (LaCocque and Ricoeur 1998, 49).[2] Within this process of theological enrichment and refinement, Ricoeur identifies a hermeneutical trajectory which, among other things, relativizes the role of violence in the divine acts of creating something from nothing, order from chaos, and liberation from oppression. Acting as prologue to the Judeo-Christian scriptures, Genesis 1 confers a vocation to humankind to act creatively and responsibly "in the image" and "according to the likeness" of *this* creator, indicating the ethical import of the passage's ideological trajectory.

Although the idea of creation through struggle against primordial forces of chaos (i.e., *Chaoskampf*) is not fully excised from the cosmology of Genesis, Yahweh Elohim's lack of personified rivals in Genesis 1 may be interpreted as disclosing an antiviolent ideological trajectory reframing ancient Near Eastern conceptions of creation and the divine image. Continuing along this antiviolent hermeneutical trajectory into the present and future may be ethically fruitful for people of Judeo-Christian faith.

Most biblical scholars agree that around or during the time of the Babylonian captivity (587 BCE), the priestly editor(s) of Genesis 1:1–2:4a brought this text together with that of the older Yahwistic creation tradition of the Garden Narrative, in order to form a new redacted whole at the beginning of the emerging canon of sacred literature that would become the Hebrew Bible. From this historical insight, and beginning in the late 1950s, biblical scholars and historians of the Ancient Near East began to draw close conceptual ties between ancient Mesopotamian cosmology and the Genesis cosmology.

Lacking the space required to trace this long interpretive history from the seminal works of Alexander Heidel (1963) and Gerhard Hasel (1972, 1975) to today, I will rely here on Middleton's distillation and continuation of these research efforts in recent years. He has provided a compelling systematic description and analysis of the original range of meaning of the *image of God*, the social context in which that meaning emerged, and the ethics of living out that meaning (2005). In the following three points, I summarize the historical and exegetical findings of Middleton and the body of scholarship to which he is indebted:

1. The cosmology of Genesis 1, along with its mention of the image of God, is very likely a polemical ideological critique of the Babylonian cosmology depicted in EE, in which the god Marduk ascends to power through military and political conquest (cf. Heidel 1963; Middleton 2005, 160–67).[3] After becoming chief among the gods, Marduk creates the heavens and earth by killing and mutilating the body of Tiamat, the goddess representing the chaos of the deep salt seas. He and his ally Ea create human beings from the blood of Tiamat's consort, Qingu, as a means of punishing this rival and for the purpose of conscripting creatures who toil in order to provide the gods with sustenance and occasion to rest.
2. The order and means of creation and the purposes of created entities are similar in Genesis and EE. Both Marduk and Elohim create through fiat[4] and separating—light from dark, waters from waters, heavens from the Earth, and water from land. Heavenly luminaries also bear similar functions in each account. Both cosmologies define the role of the sun, moon, and stars in marking the passage of days

and seasons. However, since the ancient Israelites do not involve heavenly bodies in worship, the luminaries are given a lower status—they "serve" not as divine sources of light but as carriers of light to govern the day and night (Hasel 1972, 14). Further, Elohim does not create by separating the body parts of dead deities. The forces of chaos, Marduk must overcome in order to create, are utterly depersonified in the Genesis cosmology. The goddess Tiamat is almost unrecognizable as the *tehom*—the deep sea—over which the breath (*ruach*) of God so effortlessly hovers. By contrast, Marduk must breathe or otherwise conjure a great wind to disturb the insides of Tiamat, affording him the opportunity to kill her, and only then to create. Yahweh Elohim is not a mere replacement of Marduk. The Israelites' God has no personal rivals, and whatever semblance of primordial chaos can be found in Genesis 1, it is brushed aside by the constitutive utterance, "Let there be . . . " (see cf. Callaway 1999; Middleton 2005, 261, 264–65). In Genesis created reality and its purposes come about through acts of divine freedom and generosity, rather than retribution and necessity. Yahweh Elohim empowers the creation to "bring forth" what it will and sees "that it was good." Creation in the Hebrew Bible is an act of liberation rather than subjugation.

3. Finally, both cosmologies call for political and ethical mimesis (Middleton 2005, 177). With EE the move from myth to ritual and politics is more straightforward than with the Genesis cosmology. Imperial conquest, such as that of the Southern Kingdom of Judah ca. 587–538 BCE, is a reenactment Marduk's rise to power over the forces of chaos. Captive peoples then provide the labor force on which Babylonian society and its elite depended. In the drama surrounding the annual New Year's festival (*Akitu*), the Babylonian king stood in as Marduk, a representation or "image" of this god on earth, set there to implement divine purposes (cf. Sarna 1989, 12; Middleton 2005, 161, 181–84).

Against this conceptual backdrop, it would appear that in the Genesis cosmology the royal *image* concept is democratized. It still bears a functional purpose, but in very different ways. In the midst of being "subdued" and "ruled over" in captivity, the Israelites are called in hope against hope to bear the image and likeness of God, as they "fill the earth, and subdue it; and rule over" its creatures, while deriving sustenance from its plant life (Genesis 1:26–30). Yahweh Elohim is able to rest after creating humankind, but not due to the fruits of human labor (Genesis 2:3). Rather, this creator calls humankind to take part in this Sabbath rest, as Exodus 20:8–11 records. More than a despotic ruler, royal statue, or a mute idol,

all humankind bears an "image" of God that is a "likeness" unto divine agency.

As biblical scholar David J. A. Clines concludes in his classic scholarship on these concepts, the image of God is representational, not merely representative (1968, 90–92). Or, as Hefner suggests, "humans are, in some manner, created to be an explicit representation and presence of God's will in the creation. Humans have the created calling to articulate within the natural world what God's intentionality might be" (1997, 203). Over against EE the Genesis cosmology intimates a theological anthropology in which all persons are called to emulate—bear the image and likeness of—a creative deity who shares power with the least and lowest and does not create through violence.

Speaking to the limits of humankind's ability to bear the image of the creator's beneficence, the editors of Genesis 1 and the remainder of the primeval history (i.e., Genesis 1–11) place it "in the beginning" of what Ricoeur calls "the 'Adamic' myth and the 'eschatological' vision of history," found in the Hebrew Bible and New Testament (1967, 232–78). The opening chapters of the Judeo-Christian scriptures introduce a narrative about the nature and destiny of the world and human beings, as well as the roles they and their creator play in the beginning and end of evil. On these topics, Ricoeur relates the Adamic myth to three others. These other myths include "the drama of creation and the 'ritual' vision of the world" (as in EE), "the wicked god and the 'tragic' vision of existence," and "the myth of the exiled soul and salvation through knowledge" (1967, 175–31, 279–305).

According to Ricoeur, while the Adamic myth appropriates aspects of all the others in his fourfold comparison, he finds the Bible's symbolic worldview to be unique in that its eschatological vision of history offers an ultimate solution to what he calls "the concept of the servile will" (1967, 151–57). This potentially vicious limitation of human agency amounts to the condition of always having to act out of a freedom emerging out of a natural and cultural history catalyzed and colored by the presence of that which a certain kind of observer is able to call "evil" (see Roberts 2011). Such a creature will have evolved a conscientious capacity to perceive, conceive, and cause various forms of positivity and negativity, wholesomeness and harm. In a second naïveté interpretation of the Garden Narrative (Genesis 2–3), today's scientifically informed reader could say that the ancient biblical writers mythologized this ambiguous development in hominin agency as the "moment" in which human creatures gained the knowledge of good and bad/evil.

Ricoeur argues persuasively that for all their relative advantages, the Adamic tradition and its symbols have better stood the test of time in Western religious thought than the others, even if contemporary modes of

thinking provide and require new ways of interpreting and applying their meanings.

The Command to "Fill and Subdue"

One particularly difficult passage requiring careful reinterpretation appears at first glance to confer unfettered dominion of the earth and its creatures to human beings—the kind of violent rule Marduk exercised over other gods and the kings and priests of Babylon held over the captive Israelites. Can this be what it means to "fill," "subdue," and "rule over"?

For grammatical, narrative, and historical-critical reasons, many contemporary exegetes construe the *knowledge of good and evil* described in the Garden Narrative as an integral aspect of the *image and likeness of God* mentioned in Genesis 1:26–28. This interpretation makes sense of the parallel use of the divine first person plural ("us") in Genesis 1:26, 27, and 3:22 and the harsh verbs associated with enacting the image of God in an earthly environment. Humankind grows to find that it must struggle to "fill the earth"; that flourishing means having to "subdue" (*kavash*) the natural environment and "rule over" (*radah*) its creatures; that relating to creation, one another, and God in distinctive ways means being aware of the original and ever-present possibility of fulfillment and frustration, cooperation and conflict, "good and evil."

The so called "curses" of Genesis 3 suggest that there is a creature who has come to a conscientious awareness like the creator's that maintaining and producing life can be fraught with frustration and peril, that conflict and power disparities can arise in the most intimate of relationships (see especially Baker 1981; Bird 1981; Sawyer 1992; Schüle 2005; cf. Clark 1969; Sarna 1989; Wilder 2006). Yet it is only by gaining this ambivalent form of wisdom and leaving the relative protection of the garden that human creatures are able to accomplish the godlike tasks highlighted in Genesis 1–2—naming realities, pronouncing things "good" or "not" (see 2:18) and filling the earth.

On the one hand, today's ecological, technological, and social world presents a very different context than that of the original audience of Genesis. To "fill the earth and subdue it" were not the immanent possibilities and problems they are today. On the other hand, the creaturely environment in and through which humanity has emerged to bear the image of God continues to present limits and challenges to promoting wholesomeness. Bearing the image and likeness of the creator depicted in Genesis means striving to meet each new challenge with creativity and compassion. In Ancient Near Eastern contexts these challenges arose in part from a frustrating inability for humankind to influence and control its natural and social environments. In contemporary contexts, especially

in developed nations, these challenges arise from an apparent inability for humanity to curb its detrimental influence and control over its natural and social environments.

Hefner voices a similar concern over the content of Genesis 1:28–31, suggesting that "[a]t the very least, such packets of traditional wisdom must be reinterpreted, and in some cases they must be revised or replaced" (1993b, 9; cf. 38, 98, 196, 239). Although the royal language of Genesis 1:28—"subdue" and "rule over"—offers the most exegetically sound clue as to the meaning of the *image of God* in Genesis, Old Testament scholar Gunnlaugur A. Jonsson has identified environmental exploitation and degradation as likely side effects of the functional-royal interpretation of the image of God. He also makes a compelling case that these negative ideological and ethical consequences of the functional interpretation have strengthened the appeal of the less coherent relational interpretation of the *image of God* among theologians in the latter half of the twentieth century (1988, 221–23).

Theology and science scholar J. Wentzel van Huyssteen another is among contemporary theologians wary of functional interpretations of the divine *image*. He contends that in response to ecological and feminist critiques, functional-royal interpretations have "been eclipsed" in theological exegesis by relational and existential readings inspired by Barth (2006, 136; cf. 150–58). Jonsson does not disagree, in that he notes many holdouts for the relational interpretation in theological circles, despite recent archeological and textual evidence sparking a resurgence of the functional-royal interpretation among biblical scholars (223–25; cf. Middleton 2005). These associations between environmental degradation and the commands to "fill," "subdue," and "rule over" bear a noticeable resemblance to Lynne White's iconic piece briefly tracing "the historical roots of our ecologic crisis" (1967).

Although Hefner finds White's argument to be "simplistic and even mistaken at points," he also entertains revising or replacing Genesis 1:28 (1993b, 9, 238). Yet because this verse is so integral to the meaning of the *image of God* in Genesis, I propose that crafting a hermeneutical lens through which to gain a second naïveté allows for a revisioning of the reader more fruitful than a revision of the text. The aim of this revisioning, as Hefner has already pointed out, is to help "provide genuine knowledge of reality, for the sake of our wholesome living" (1993a, 99–100).

In view of the historical-critical scholarship outlined above, an implicit but essential assertion of the Genesis cosmology over against its contemporaries is that Yahweh Elohim does not create through violence. This doctrine is therefore an integral aspect of bearing this creator's image and must color any lens through which people of Judeo-Christian faith read the imperatives to "fill the earth, and subdue it; and rule over" its creatures and climes.

As a message originally addressed to an exiled and oppressed people, these commands are more a message of hope that the meek will inherit the earth than a warrant to treat and mistreat it as a cache of resources designed for human consumption. According to Genesis 1, human personhood may represent a distinctive avenue of response-ability to the divine, but it is certainly not the only one God pronounces "good" for its own sake. Reaching into our human future by shaping our cultural and ecological environments in ways that cause undue and avoidable bodily harm, legal and socioeconomic injustice, impoverishment, anthropogenic climate change, destruction of natural habitat, loss of biodiversity, and other forms of environmental stress *is creation through violence*, unbecoming of created co-creators.

"Created Co-Creator" and Constructing a Second Naïveté

For Hefner, "what is at the core of this analogy [of the image of God] today is the character of *Homo sapiens* as a free creator of meanings, one who takes action based on those meanings and is also responsible for those meanings and actions" (1993b, 239). This insight is the central tenet behind his conception of the *created co-creator*. For two reasons c*reated co-creator* serves as an appropriate basis for a second naïveté retrieval of the *image of God* and, I would argue, the *knowledge of good and evil* (see Roberts 2011, 2013).

First, the historical-critical conclusions concerning the original significance of the *image of God* concept outlined above are commensurable with the concept of the *created co-creator*, as Hefner has developed it. Thus, these concepts are not mere equivocations; one can trace an organic continuity between them as the latter emerges from the former. Part of this continuity resides in the role that creation through constitutive utterance takes in both Genesis 1 and created co-creator theory.

As biblical scholar Graeme Auld observes, 40% of the verb forms in the priestly creation account are speaking verbs, and many of the other creation verbs in this passage are accomplished by means of speech (2005, 261). Additionally, the grammar of Genesis 1 implies that one creature's ability and freedom to fulfill its created role is qualitatively distinct. Until verse 26, Yahweh Elohim speaks to no one in particular, manifesting and empowering created realities through jussive fiat. Then there is a shift. The participle of verse 22 becomes a direct address in verse 28: "God blessed them, *saying*, 'Be fruitful [. . .]'" becomes "God blessed them; and God *said to them*, 'Be fruitful [. . .]'" (emphasis mine). As Auld highlights, the formula, "'And God said' is used without an indirect object nine times in Genesis 1. Only once do we read 'and God said *to* [someone]'" (Auld 2005, 260). In Genesis 1:28–30 human beings are given a say in the future of

the creation, including their own. For better and worse, they are the only earthly creature so fully defined by this particular kind of response-ability.

As free and responsible creators of meanings, human persons are able to discern, construe, and enact what they perceive to be the purposes of God for the continued goodness of creation. Yet they must acknowledge that this free and responsible creativity is neither absolute nor autonomous, but conditioned by an original and ambivalent knowledge of fulfillment and frustration, cooperation and conflict, good and bad/evil.

Second, the concept of *created co-creator* is able to ground a second naïveté reappropriation of biblical anthropology by making constructive use of contemporary modes of human self-understanding not available more than two and a half millennia ago. In particular, created co-creator theory is informed by nonreductive interpretations of natural scientific data, which describe the emergence, through evolutionary processes, of the biocultural beings able to call themselves *Homo sapiens*.

Theological self-descriptions like *image of God* and *created co-creator* are only possible because behaviorally modern humans are culturally constituted creatures—a biocultural species. Emerging via qualitatively distinguishable kinds of information, the biological and cultural aspects of human existence are mutually informative and inextricably intertwined in our species' ongoing evolution. Defined most succinctly by Hefner:

> *Biocultural evolution* refers to (1) the emergence, within the physical realm, of biological processes of evolution that themselves generate the phenomenon of culture; and (2) to the distinctive, non-Darwinian, dynamic processes by which culture proceeds, while at the same time existing in a relationship of symbiosis with the physical-biological processes in which it emerged and in which it continues to operate. (1997, 197)

Many cultural processes have Darwinian aims, in that they pertain, directly or indirectly, to assuring the survival of oneself and kin, thereby securing the passage of genetic material to subsequent generations. In addition, cultural information, much like genetic information, is subject to principles of selection which test its ability to foster skills and behaviors suited to present ecological and social contexts. Socially and ecologically appropriate behaviors are more likely to propagate pedagogically across generations.

At the same time, Hefner's definition of culture implies the ways in which cultural processes are non-Darwinian. For him, "Culture is defined as learned and taught patterns of behavior, together with the symbol systems that contextualize and interpret the behavior" (1997, 197; cf. 1993b, 147; van Huyssteen 2006, 222). These behaviors and symbolic systems of contextualization are non-Darwinian because, although human biology and culture are co-adaptive, co-emergent, and co-conditioning, they are not codetermined. As an integral aspect of the human phenotype in

its phylogenetic (species-wide) and ontogenetic (individual) development, culture is an expression of the human genotype. Every human being's genetic inheritance confers all the biological information needed to produce a culturally embedded person, but not the cultural information that makes personhood possible.

Moving with and slightly beyond Hefner's biocultural model, the theological anthropology constructed here presupposes that other animal species must be included in what it means to have become and continue to evolve as *Homo sapiens*. Integral to human evolution are the contributions of interspecies relationships to our ecological and cultural niche construction. According to plant physiologist and theologian Celia Deane-Drummond and biological anthropologist Agustin Fuentes, the threads of our species' genetic, cultural, and ecological forms of inheritance were (and continue to be) spun and woven together in complex relationships with other species, including nonhuman primates, dogs, large predators, and other wild and domesticated animals (2014). In Hefner's terms, therefore, the shared evolutionary history of all living species makes them all created co-creators to some extent and makes interspecies relationships constitutive of the image of God. While the divine image may be borne by human beings in distinct ways, it is shared with the rest of creation in at least this sense.

As these scientifically informed modes of understanding aid in reformulating theological anthropology, they open up new conceptual horizons for human being and agency as bearers of the divine image in/to the creation. Reframing the ancient myth-symbols of the *image of God* and the *knowledge of good and evil* though a biocultural perspective is no more or less hermeneutically complicated than hearing the God of Genesis "speak" through the natural processes that have resulted in the emergence of *Homo sapiens* and the conceptions of a "very good" world we are coresponsible for envisioning and establishing cooperatively as culturally constituted creatures.

By envisioning and effecting that which we want ourselves and our world to become, and in light of the theological understanding that God creates things that create themselves through the ever-emerging complexity of the cosmos, one must conclude that the image of God itself undergoes free and responsible created co-creation. The act of created co-creation is showcased heuristically through the development of a second naïveté understanding of biblical anthropology couched in these terms. This mode of interpretation embodies for Ricoeur the "essentially Anselmian schema" of lived faith seeking understanding (1967, 357; cf. 308, 352–57). Within the hermeneutical circle of theology and its various subdisciplines, the critical function of exegesis gives rise and gives way to the appropriative function of interpretation.

This task is accomplished through reframing the original significance of myth-symbol (as best can be determined) via a reconceptualization that is both contiguous and commensurable with ancient meanings, while demanding and allowing "a qualitative transformation of reflexive consciousness" (Ricoeur 1967, 356). The creation of a second naïveté understanding must involve the emergence of a new kind of meaning and activity that would not be available apart from the continued use of the myth-symbol. To live out of the continual, critical reappropriation of sacred symbols such as the *image of God* and the *knowledge of good and evil* is to open up novel modes of human being, knowing, and doing. Through the avenue of culture, and as our species navigates the biological and ecological exigencies of creaturely existence, we may find ourselves called, through a postcritical remythologization of Genesis 1–3, to utter and implement ever-new visions of ourselves and our future, in order to depict and promote the fullest possible wholesomeness of humankind, all other life, and the environments that sustains us.

This ethical element is crucial. For the hermeneutical circle on which biblical symbols necessarily lie to be virtuous and not vicious, these sacred symbols—as the raw data of faith seeking understanding—must gain verification or justification in the conceptual and moral fruit they bear. Hefner's twofold call to glean from Genesis "genuine knowledge for the sake of our wholesome living" repeats and raises stakes of Ricoeur's "wager" that interpretation will allow the myth-symbol gain irreplaceable, and irreducible "intelligibility," "power of reflection," "coherent discourse," and "power to raise up, to illuminate, to give order to [a] region of human experience" (1967, 355).

One can hear echoes of Hefner's intellectual and ethical "challenge" to the theologian in the work of theological ethicist James Gustafson, as he issues the following hermeneutical and meta-ethical claim in his monograph exploring the "intersections" of science, theology, and ethics (cf. Hefner 1993b, xv). While Gustafson argues that the natural sciences and theology share criteria for truthfulness that "are basically coherent in [their] internal structures," theological anthropology and ethics bear an additional burden of truthfulness beyond the coherence and comprehensiveness provided by empirical consistency, predictability, and theoretical adequacy (1996, 29).

Comparing the relative perspectives and procedures of theologian Reinhold Niebuhr with those of anthropologist Melvin Konner, Gustafson concludes that the "bottom-up" insights of the sciences can point to and inform—but not produce or reduce—the "top-down" explanations of ethics and theology—of ought-ness and of an ultimate reality to which human agency may be accountable (1996, 17–29; cf. 86–109, 126–47). Thus, beyond the requirement of explanatory power, Gustafson appeals to a second criterion for the truthfulness of a scientifically informed theological ethics that draws its explanatory power from a rejuvenation of

myth-symbols.[5] Hefner calls this second criterion "wholesomeness," while Gustafson employs the phrase "moral outcome" in like manner:

> [Niebuhr's] main resources for truth-bearing ideas and insights are the Bible and selected figures in Christian theology. Those on which he draws are used often for their mythic qualities, that is, their capacities to disclose fundamentally real and presumably universal aspects of human life and action. Thus, in a sense, they heuristically disclose the realities of experience. We get to the circularity I indicated earlier, namely that faith illumines experience and is in turn validated by experience. Thus "experience" also becomes "data" disclosed by Christian myths and concepts, and the data validate their use. The Bible makes no hard claims for special supernatural revelation, nor for what we might call "empirical studies" of experience. The objective seems to be clear; the persuasiveness of the account is confirmed by its disclosive power as it issues in a deeper understanding of the human and guides human action. *A further test is the moral outcome*—in political, economic, and other effects—of the actions that it guides. (1996, 28–29; emphasis mine)

While creating another avenue for intellectual honesty through critical reflection, this second criterion for truthfulness produces a second potentially vicious hermeneutical circle. The test of moral outcome begs several questions. What counts as a positive moral outcome? And for whom? What is "our wholesome living"? And who is included in the "we" of "our wholesome living"?

Following the hermeneutical trajectory of the primeval history in Genesis over against EE implies that positive moral outcomes are those which uphold the (co-)creative potential of all persons, cultures, and the biologically diverse environments that sustain them; that wholesome living involves sharing power cooperatively among persons and species and liberating from violence and subjugation; that "we" who should expect to take a conscientious role in the ongoing process of creation are not just the social elite but all human beings, especially those currently being "subdued" and "ruled over" through impoverishment, violence, and/or environmental degradation. Bearing the image and likeness of the creator though a conscientious knowledge of good and bad/evil, human social and ecological interactions ought to echo Yahweh Elohim's empowering and evocative "Let there be . . . " Environmental degradation and socioeconomic injustice diminish the capacity of the creation and other created co-creators to hear and respond to God's call to see what new "good" they might "bring forth" in the present and future.

These considerations serve as reminders that the *image of God* was and is a meta-ethical symbol of theological anthropology. As a meta-ethical symbol, the *image* pertains to the conditions of possibility for human morality, the ability and responsibility to discern and promote the purposes of God in conditioned but creative ways. Further, the primary context for *image* talk is the priestly creation account Genesis 1:1–2:4a. Yet beyond its

anthropological and ethical import, the *image of God* also bears eschatological significance.

As an ethical symbol that is also eschatological, the *image of God* culminates for people of Christian faith in the incarnation of the Word of God as Jesus Christ, who lives out, in a particular context, God's intentions for creation in general and inaugurates the creation of a kingdom or reign of God that does not come about through violence, but through the new creation evidenced in the Easter experience of the Apostles. The eschatological interpretation of the image of God, based on the New Testament portrayal of Jesus Christ as the quintessential image or icon of divinity, can be read as an extension of the functional-royal interpretation of the *image* in Genesis, since "image" passages in the New Testament characterize Jesus the Christ as the redeeming "Lord" who reveals and inaugurates God's righteous reign on earth as in heaven (see 2 Corinthians 4:4–5; Colossians 1:13–16; Hebrews 1:1–3; cf. van Huyssteen 2006, 141–45). In both the Torah and New Testament, imaging God as royal representative involves conscientious human participation. In its eschatologically orientation, the image of God and its created co-creation reaches toward a transhistorical future that humanity cannot hope to reach through its biocultural capacities and efforts alone.

The Opportunities and Challenges of Transhumanism

While an eschatological vision of history intimates the kind of world human beings ought to imagine and make manifest, created co-creation is of necessity an ambiguous vocation. Hefner reminds us that our morally ambivalent creativity pervades the biocultural process by which "we are becoming human and our sense of technology's part in that process" (2003, 4). As an avenue of human creativity, technological ingenuity is a potent expression of the image of the creator God. Gazing through the hermeneutical lens ground and polished through this essay, it would appear that human creativity images God's where its aims and results are seen as "good," especially by the least and lowest—the voiceless of the human and nonhuman world.

In addition, a "very good" world is only possible when the voiceless are themselves seen to be good by those with the most power to share in co-creating our common future on earth and possibly beyond. Arguably, as creator and creation of an ever-more rapidly globalizing societal and ecological context, technology and its ambivalent effects now touch every person and species on earth. Where the beneficent will and imagination exist, technology confers the ability to distribute, feed, heal, house, educate, empower, construct, conserve, preserve, protect, and restore. And, where these possibilities are out of focus or out of fashion, technology confers the

ability to impoverish, deprive, sicken, ignore, weaken, demolish, degrade, destroy, injure, and annihilate.

The positive and negative uses of agricultural, medical, industrial, transportation, military, information, and communications technologies are well-known and widely discussed. Among these, one realm of technological advancement looks to have a singularly direct impact on the created co-creation of the human species as such. These technologies, in turn, call for religious responses.

In a word, from a Christian theological perspective which understands human creatures as co-creators of the world in which they have coevolved with other species, the technologies and activities involved in what Hefner and other thinkers term *transhumanism*, can be neither excluded categorically nor accepted uncritically (2009, 164–73; cf. 2003). Humanity's biocultural "nature" is an inherently dynamic and diverse reality for which human beings themselves are largely responsible to develop. Thus, the chemical, surgical, reproductive, genetic, prosthetic, robotic, nanotechnological, and cybernetic alterations and interventions which humankind is now able to integrate into its biological and cultural distinctiveness are all potentially humanizing aspects of our created co-creation.

At the same time, many scholars straddling the boundaries of religious and scientific disciplines voice legitimate concerns about the desire to transition our evolved species beyond its current condition toward a posthuman future in which technological advances so fully constitute personhood that those for whom this is the case must be viewed as members of another species. Most of these technologies are aimed somewhere between amending and eliminating the biological exigencies of humanness, especially where embodiment is perceived to be overly limiting.

As theologian Ronald Cole-Turner astutely points out, the most important questions posed to these possibilities from the side of religion and ethics do not concern the blurry line between "therapy" and "enhancement" and which is more or less ethically permissible, but how precisely to construct and articulate a critical theological stance toward transhumanizing technologies and goals (2011a, 1–17). Many of these questions focus on a recurring theme brought to the fore by the apparent quasi-religious nature of transhumanism and its proverbial myth of progress toward an actual, though not fully knowable, future marked by positive, radical, and perhaps qualitative shifts in human embodiment, health, longevity, and mentality (see Mercer and Trothen 2015). Thus, for Hefner (2003, 2009), Cole-Turner (2011b, 196–202), theologian Ted Peters (2011, 74, 78–82), sociologist and bioethicist James J. Hughes (2012, 765), communication and theology scholar Heidi Campbell (2006, 70), and Judaism scholar Hava Tirosh-Samuelson (2012, 724–31), transhumanism offers a secularist eschatology, which is missing the lynchpin of Ricoeur's Adamic

myth and the eschatological vision of history—a fulfillment brought about directly by divine grace.

As Peters suggests, the difference between transhumanism and eschatology is that between "*futurum*" and "*adventus*," "*becoming*," and "*coming*" (2011, 74), the cosmos transformed and the cosmos transfigured, the *emergence* of a posthuman future and the *irruption* of the new creation. Ironically, in their renunciation of religious visions of the future, many proponents of transhumanism may currently espouse a first or primitive naïveté with respect to the transhumanistic mythos and ethos. Peters proposes that "the antidote to transhumanist naïveté" requires "a transcendent judgment against human history," made readily available in the theological concept of *sin* (81; cf. 64, 79–82). In this sense religious sources may provide transhumanists and posthumanists with the critical distance needed to demythologize optimistic conceptions of progress and move toward something of a more sober second naïveté understanding of what our nature and future might become.

Given these and other social and ecological concerns mentioned above, a theological anthropology of the type I have described intimates a number of hermeneutical and ethical principles for co-creating our human future. Listed below in thesis form, these principles stem from an interpretation of the image of God and the knowledge of good and evil which characterizes behaviorally modern *Homo sapiens* as having emerged evolutionarily as conscientious creators of meanings who bear the vocation to represent the intentionality of a God who shares power and does not create through violence.

Guiding Principles for Future Created Co-Creation

1. Christian projections of our human future must distinguish between ethical and eschatological visions of the future, between the biocultural and transhistorical horizons toward which the image of God is oriented.

The futures envisioned by humanism, transhumanism, posthumanism, and eschatology may indeed overlap, but not fully. The transformations to environment, embodiment, and consciousness proposed by each are different, but not necessarily opposed. The ethos and achievements of transhumanism, for example, are compatible with Christian projections of our human future where they are compatible with the assumption that history ought to reach toward the asymptotic goal of the new creation and nonviolent reign of God embodied in the ministry and resurrection of Jesus Christ.

While humanity's biocultural and eschatological futures ought not to be conflated, the effort we exert toward our biocultural future may matter in "the end." Moral theologian Patricia McAuliffe, relying on the works of

Dorothee Soelle, Juan Luis Segundo, and Edward Schillebeeckx, suggests that while humankind's historical and eschatological futures are distinct and irreducible to one another, human beings "are co-creators with God of a better world, and [. . .] they help to shape the eschaton" (1993, 195; cf. 203–16). Christian love emerges out of faith that the resurrection of the unjustly crucified Christ offers hope that grace will step in to complete or even undo human endeavors to better the future, because our efforts often miss the mark.

By extension, according to Christian eschatology, the biocultural embodiment of a human person is contiguous with his or her eschatological embodiment (see especially Romans 8:18–23; 1 Corinthians 15; 2 Corinthians 5:2, 4). This notion raises the question of the possible eschatological ripples caused by the radical alteration or replacement of biological embodiment through genetic interventions, the creation of self-conscious artificial intelligence, cybernetic implantation, or the cybertronic emulation or "uploading" of the personality from the brain-body to a machine or network. Is Data of *Star Trek the Next Generation* an object of divine grace? In the film *Transcendence*, is Dr. Will Caster's digitized self a continuation of his embodied self or a new subject? Will Skynet of the *Terminator* series be judged for its genocidal actions? The twenty-first century theologian with an eye to the future must be able to engage these kinds of questions.

2. "Image of God" and "created co-creator" make up a set of symbols that refers to a natural reality, whose emergence, activity, and "placement is fully within nature" (Hefner 1997, 201; emphasis original; cf. 202; 1993b, 42–45).

In this theological interpretation informed by the natural sciences, human freedom and responsibility have emerged within nature, through natural processes, to bear the vocation of discerning and extending God's beneficent purposes for nature as the creation. Cooperation with divine intentionality, whether known or not, confers a kind of sacramentality to human behaviors which result in positive moral outcomes. That is, where it produces any genuine or novel good, human creativity, including that which shines through technological ingenuity, may constitute both a sign and means of grace. Therefore, to say that human creatures and the good they produce are wholly natural realities is not to exclude the understanding that they are also mediators of grace. This grace is the divine contribution to created co-creation.

3. Having distinguished between historical and transhistorical visions of the future, one ought to resist looking to transhumanistic technologies for solutions to the ultimate and totalizing given of created life, which is death.

A second naïveté understanding of the image of God and the Tree of Knowledge brings with it this second naïveté understanding of the Tree of Life and why it is "very good" not to have access to it. This admonition is not to say that lengthening the human healthspan is not a worthwhile endeavor. However, in Ricoeur's terms death within the Adamic myth and eschatological vision of history can be a good, because it is the only avenue through which to transcend fully the problem of the servile will. There is no other way to forfeit the condition of always having to act out of a freedom emerging from and situated in a biocultural heritage marked by suffering and sin (see 1967, 155–57).

As an aside or subthesis, this theological issue as yet speaks nothing to the more practical problem of quite literally filling the Earth. With an understanding of the finite carrying capacity of our planet, the current ecological sustainability of our global environment is part and parcel of the ethical context situating the issues of human reproduction and longevity. Currently, the increasing population of longer-lived humans is as much a recipe for death as life. Unsustainable consumption of natural resources has already led to scarcity, competition, climate change, and other forms of environmental degradation. Globally, these problems are increasing at accelerated rates and cause mass extinctions, ecosystemic instability, and economic downturn for many whose livelihoods are tied to the land and sea. In all this, the most vulnerable persons, groups, and species are suffering first and foremost. This kind of dominion is certainly not commensurable with that described in Genesis 1:28.

On the related topic of expanding the human environment beyond earth, extraterrestrial exploration and colonization is a relatively distant prospect with respect to projections concerning current ecological crises. Moreover, any future environments that might house *Homo sapiens* (or their descendents) will present their own limits and challenges to future cultures. These and other factors already discussed lend themselves the following principle.

4. Christian visions of humanity's biocultural future must articulate with as much explanatory power as possible an awareness that human freedom is conditioned on a number of fronts. These constraints on human agency ought to factor into any assessment of our potential to co-create a future devoted to the wholesome living of all creatures, and not just a few human beings or a few species.

Human freedom and responsibility are finite, fallible, and ambivalent. We cannot have complete knowledge of our actions' potential effects, a comprehensive understanding of that which is beneficial or harmful, or unfettered command over the choice to do good and avoid evil. There is

little evidence and no assurance that human, transhuman, or posthuman agency will be markedly different at any point in the future.

This condition warrants humility in any predictions about human, transhuman, or posthuman beneficence toward the self, other persons, other species, and their environments. As far as we know, all healthy and mature persons are primed to perceive and produce singular forms of cooperation *and* conflict, fulfillment *and* frustration, "good" *and* "evil."

According to Ricoeur, "it is in hermeneutics that the symbol's gift of meaning and the endeavor to understand by deciphering are knotted together" (1967, 351). In second naïveté interpretation, the myth-symbol of the *knowledge of good and evil* in the garden narrative may be fused with the concept that human agency emerges evolutionarily via a natural history which in hindsight is replete with "good" and "evil."[6] The good and bad our evolutionary ancestors encountered and caused is part and parcel of the biocultural heritage which has produced the scope of freedom available to *Homo sapiens* today (see Roberts 2011).

If bearing the image of God means exercising creativity in ways that share power and produce good, the development and use of technologies that systematically exclude individuals or groups from access to them and their benefits will surely entail the added cost of further marginalizing and oppressing those unable to embody (or flourish alongside) novel versions of humanity that become *de facto* normative. Additionally, the collateral damage of "progress" in the forms of environmental degradation, the negative ecological and socioeconomic effects of anthropogenic climate change, and the irreversible loss of biodiversity are incompatible with the conceptions of creator and created co-creation constructed above. These affronts to human dignity and ecological integrity are creation through violence. Therefore, these antitheses to wholesomeness cannot reside within the semantic range or hermeneutical trajectory of the command to "be fruitful and multiply; fill the earth, and subdue it; and rule over" its creatures.

As created co-creators with an eye to the future, *Homo sapiens* have come to realize that in part, the human condition means not having to settle for its givenness. Theologian and biochemist Arthur Peacocke observes that "we are capable of forms of happiness and misery quite unknown to other creatures, thereby evidencing a 'dis-ease' with our evolved state, a lack of fit which calls for explanation and, if possible, cure" (2001, 172–73). As products of *Homo sapiens'* ethically ambivalent biocultural nature, whatever "cures" we create are true *pharmakoi*—potentially both poison and remedy. My hope is that these four principles will help direct our human future toward the latter.

Notes

1. All biblical quotations are taken from the New American Standard Bible (NASB) unless otherwise noted.

2. Ricoeur places confidence in von Rad's thesis in *The Problem of the Hexateuch and Other Essays* and *Old Testament Theology*, vol. 1 that the "proliferation of originary events" that make up earlier and contemporary traditions of Israelite salvation history sets up a number of stages in a theology of redemption that culminates in the theology of creation visible in Gen. 1:1–2:4a (see Ricoeur 1995, 129–34; cf. LaCocque and Ricoeur 1998, 31–34). That (Yahweh) Elohim has no celestial rivals and is the creator of the universe and humankind in general is a theological inference based on the conviction that Yahweh is the God of Abraham and Moses, of the promises of place, people, and provision. Beginning in the Patriarchal sagas, the continuum of biblical *Heilsgeschichte* shifts thematic focus from redemption to creation "in a concentric fashion," proceeding through hymnic passages such Psalm 136 and 148; Isa. 40:27–28; 44:24–28, then through passages about the act of creation as types or precursors to acts of redemption (Isa. 44:5; Psalm 89 and 74), to the notion that creation as a whole bears witness to divine wisdom (Psalm 8, 19, and 104; cf. Prov. 3:19; 8:22; 14:31; 20:12; Job 38) (Ricoeur, 1995, 130–32). For von Rad and Ricoeur, Israel infers that (Yahweh) Elohim is the one who separates the primordial waters because "[t]he One who opened a way in the Red Sea is the same One who cut Rahab in pieces (Isa. 51:9f.)" (Ibid., 131).

3. Heidel provides a detailed summary of *Enuma Elish* (1963, 3–10). He notes that the oldest fragments of this very popular work were found in Ashur and date back to ca. 1000 BCE. However, Heidel finds reason to push the date of the initial composition of the poem to the first Babylonian Dynasty (1894–1595), and particularly to the reign of Hammurabi (1792–1750), during which Marduk became Babylon's national god (1963, 13–14). EE has been pieced together by way of several discoveries made between 1848 and 1929. It is written on seven clay tablets and is a little more than a thousand lines in length.

4. After accepting the challenge to defeat Tiamat on the condition he is declared chief among the rebel gods, Marduk's allies test his potency by placing a constellation before him, which he destroys then recreates by speaking to it (see Middleton 2005, 66).

5. Hefner and Gustafson share the conviction that the truth value of normative claims in theological ethics are subject to the twofold criteria of explanatory power and positive moral effects. They refer to one another's work in making this point, perhaps implying mutual influence in addition to agreement (see Gustafson 1996, 7, 102–03, 105, 108, 137–38; cf. Hefner 1993b, xvi, xv, 217, 294–95.

6. This image of knotting together or fusing meanings from disparate conceptual frames or symbolic worldviews suggests that the conceptual integration theory of cognitive linguists Gilles Fauconnier and Mark Turner may present a fruitful, high-definition way to model second naïveté interpretation. Though lacking the space here to analyze this hermeneutical connection in depth, I have argued at length elsewhere that Fauconnier and Turner's concept of *double-scope conceptual integration*, or *blending*, provides a plausible explanation for the evolved cognitive capacity from which language and other cultural singularities emerge and the meaning-making mental process which generates second naïveté understanding (Roberts 2013, 25–43, 66–73, 138–227; cf. Fauconnier and Turner 1998; 2002; 2008a; 2008b).

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