

Center for Theology and the Natural Sciences

Ted's Tips

For Writing Term Papers and Publishing Scholarly Articles

Doctoral students are preparing to become university teachers and publishing scholars. How can you cultivate you long term professional goals as you research and write term papers? Here's how.

First, read well written published articles to see what is acceptable in the world of scholarship. Select high quality examples as your models. Then, set the standard you wish to live up to.

Second, follow the outline I share here. What I suggest as an outline is basic, rudimentary, minimal. But, it must be mastered before advancing to more complex academic argumentation.

Third, grasp this principle: only after you have provided a fair and balanced explication of existing scholarship are you permitted to advance your own claims. Scholarly writing is judicious, charitable, balanced. No diatribes.

Fourth, observe what your professor requires. Ask permission to write a term paper according to journal article form. More than likely, Ted's Tips here will aid in producing a robust, thoughtful, and readable product.

SUBJECT MATTER

In most seminars, your paper may take one of three foci. First, you could elect to offer a critical exposition a single work or a single author. Select either an essay or a book or a collection of writings that deal with one theoretical, moral, or pastoral issue. Complement the primary writings with secondary literature, especially critiques or alternative points of view. After you have explicated your primary author with criticisms and alternatives, then make a commitment. Take as stand. Assert your own thesis.

A good example is Sam Shonkoff, "Metanomianism and Religious Practice in Buber's Hasidic Tales" [file:///C:/Users/Ted/OneDrive/My%20Course%20Readings/Shonkoff%20Sam%202018%20Buber.pdf].

Or, second, you could compare and contrast two thinkers on a single issue. This is the easiest and best way to begin scholarly writing. State the issue as a question. Then, explicate the answer to this question given by each of the two thinkers. Compare and contrast. Then, take a stand. Assert your own thesis. Justify it with good evidence and reasoning.

Or, third, you could elect to define a theological issue or an ethical issue and then muster multiple essays and authors to serve your exposition, exploration, and proposal for dealing with this theoretical or policy concern. Clarify with whom you agree or disagree as you assert your thesis and defend it.

THE SANDWICH STRUCTURE

A well written term paper is like a sandwich. The introduction and conclusion are like slices of bread. Sandwiched between them is your exposition, critical analysis, and constructive proposal.

In your introduction please tell the reader what you will do; and in your conclusion remind the reader of what you have just done. Include a thesis, a single statement which makes the most important point in the paper. Repeat the thesis occasionally, perhaps in each transition to a new section. Use your exposition, critical analysis, and constructive proposal to illustrate or support the thesis.



You will notice that in a scholarly publication the author precedes the article with an abstract and a half dozen key terms. I recommend you write the abstract and list the terms after the first draft of your paper. Include in the abstract your paper's thesis and expect your introduction and conclusion to resemble the abstract.

Please read the attached published articles. Attempt to discern the sandwich structure implicit in these pieces.

As you write your student term paper, imagine that it might someday become a publishable article.

> Professor Ted Peters GTU / CTNS / PLTS / TedsTimelyTake.com

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Comments on David Nichols' The God of the Existentialist Philosophers

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Abstract: The paper offers a critical reflection on David Nichols' treatment of the God of Existentialists, and it takes as its starting point Jaspers' pronouncement that at the root of existentialism is a mystery of Being-the missing God-that runs deeper than our conventional categories of theism, atheism, or agnosticism. The discussion turns on Heidegger's worry whether transcendence is comprehensible without any specific reference to God? What might be meant by "transcendence" is the unfettered pursuit of the question of being and the quest for freedom and authenticity of be*ing*. And argument is developed that this exclusion still leaves room for philosophical reflection upon the religious, a notion of divinity sans Transcendental Being wholly in the experience of beings "as beings," and "propositional faith." Nichols' claim is congruent with Existentialism's attempt to find a ground from within the human being as the contextual whole through which the world appears. This claim is contrasted against Sartre's radically contrary view on the nothingness of all being.

Keywords: Jaspers, Karl; Heidegger, Martin; Nichols, David; Sartre, Jean-Paul; Being; God; transcendence; nothingness; religion; existentialism; faith.

INTRODUCTION

In the response that follows I shall be focussing on Martin Heidegger and, in passing, also on Karl Jaspers. Heidegger is both inspiring and at the same time disturbing. After the "Death of God" (the Nietzschean and Hegelian tropes) what remains? Is there room for religious existentialism of any sort? David Nichols seems rather open to this possibility, even to the impossible God, via Jaspers and Heidegger, contra Sartre.

Here I offer two opposite observations: (1) Heidegger poses a radical and controversial challenge to philosophers by calling them to do without God in an unfettered pursuit of the question of being (through his "destruction of onto-theology" and his espousal of the metaphysic of non-being¹); and, (2) this exclusion nonetheless leaves room for a form of philosophical reflection upon the religious, and the discourse concerning—not the God of philosophers as such, but—for a notion of divinity in the experience of beings as beings, i.e. in a phenomenological mode (exemplified most clearly in Heidegger's 1920/21 lectures on the phenomenology of religious life). This is congruent with Existentialism's attempt to find this ground from within the human being as the contextual whole through which a world appears.

Whether we pigeonhole Heidegger (less so Jaspers) on the side of theistic or atheistic existentialism, they share this much in common: a rejection of the God of Western metaphysics, the one we project anthropomorphically to meet our need to organize the world.

Purushottama Bilimoria, "Comments on David Nichols' The God of the Existentialist Philosophers," Existenz 7/2 (2012), 52-56 First posted 5-9-2013

¹ I discuss this in my paper "Why is there Nothing rather than Something? An Essay in the Comparative Metaphysic

of Nonbeing," for the Max Charlesworth Festschrift in *Sophia*, Vol. 51, Issue 4, December 2012, pp. 509-30.

Comments on David Nichols' The God of the Existentialist Philosophers EXPOSITION & CRITICAL ANALISIS

Heidegger's Letter on Humanism (1946) invites us to reconsider the divine in light of an ontological difference between Being and beings. Both Jaspers and Heidegger take their theological cues from the standpoint of the unknown God (Jaspers coined this cipher) where God necessarily remains hidden, a self-concealing source for all appearances. For this an ecstatic quest for the concept of "God" in the description of human existence, and more generally our experience of presence and absence, is argued for. And this is a contrast to the approach that pivots our experience on tragedy, absurdity, meaningless, Angst; though we might add: the quest may begin here but need not end here. "The poet or mythmaker supplies us with the earliest responses to wonder by describing the essences as deities." Textual history of a few non-Western traditions might underscore that better.

The other day we saw that process occurring with the myth and unsettling cipher of *Tama* in early Japanese religious history, and I cited the 10^{th} mandala of *RigVeda* (see p. 20 above). Aristotle points to – only to reject – the same, Manichean mythologies. Likewise Plato, who is more sympathetic: hence Nichols' astute remark (p. 40 above):

We must still hold Plato and Aristotle responsible for the ways in which they send the western tradition down the path of the God of metaphysics. But they deserve credit all the same for retaining a sense of self-concealment that mirrors the primordial religious experience. They recognize that beings have a way of hiding, camouflaged by their everyday appearances, until such time as their mysteriousness once again renews itself for us.

This insight is there also in Paul's sermon at the Areopagus where, Stoics in attendance, he associates the gospel with the Athenians' altar to the unknown god.² Think of the "Unknown God" in Dinonysius of Aeropagite, and apophatically hidden in the sermons of the early Church fathers, right to the Trinitarian vision and Byzantinian theology.

What I take as a highlight from the section on Jaspers is the insight that "at the root of existentialism is a mystery of Being that runs deeper than conventional categories of theism, atheism, or for that matter agnosticism" (see page 40 above), and that the tragic effort to break asunder the bonds of our current meaning structure, and thereby welcome transcendence, amounts to a yearning for deliverance (*ABA* 42). The time may come for a civilization when tragic knowledge no longer suffices as the ultimate expression of deliverance (*ABA* 37). This explains why world saviors like Jesus or the Buddha offer messages of universal salvation for humanity.

How specific is Heidegger about the divine? Nichols has a response drawing on Heidegger's apophatic-hermeneutical approach and in the notion of "clearing": Es gibt (it gives, giving). Nichols asserts that Heidegger claims that only from the grace of this opening of a world for us can we have an exceptional meeting with "God or the gods." I wish to look elsewhere in Heidegger. In early 1919, Martin Heidegger wrote to Engelbert Krebs, a Catholic priest and family friend, distancing himself from the Catholic faith of his youth. He no longer wished to be thought of as a Catholic philosopher but simply as a philosopher, free to pursue his philosophical research unfettered by "extra-philosophical allegiances." And so he did. Still, the influence of Luther in the genesis of Being and Time (1919-23) has already been well documented, especially in Otto Pöggler's biographical sketch. So he sets about destructing theism in the metaphysical mode - the piety of Greek philosophy and of Hellenized Christianityanalyzed as onto-theology.

Here I like tot cite from Russell Matheson: "Theism in its 'metaphysical' mode is, on this analysis, distinctive for being at once a religious and a philosophical stance: it gives theological form to a particular interpretation of being, and philosophical form to a particular interpretation of God."3 In fact, Heidegger eventually came to define the dominant tradition of Western metaphysics in terms of its coordination of the question of being and the question of God. For this reason, Heidegger takes the word "God," when it is used in the Western metaphysical tradition, to stand not merely for one being among others but as shorthand for a particular interpretation of being: in its various articulations the concept speaks not only of a particular being but of the nature of being as such. God, conceived as the highest being, represents the paradigm and measure of all beings; God, conceived as the first cause, represents the ground of all being, that which accounts for the totality of what is.4 Of course Heidegger is

² Herbert May and Bruce M. Metzger, eds., The Oxford Annotated Bible with Apocrypha, Revised Standard Version, New York: Oxford UP, 1973, Acts 17:18, pp. 22-3. [Henceforth cited as ABA]

³ Matheson Russell, "Phenomenology and Theology: Situating Heidegger's Philosophy of Religion," in *Sophia*, Vol. 50, Issue 4, December 2011, pp. 641-55, here p. 644.

⁴ See Martin Heidegger, Basic Problems of Phenomenology,

critical of the Western logocentric obsession with being as the ever-given presence — at the expense rather of the *complementum possibilitatis* of non-being qua Nothingness, as the condition for the possibility of being; hence the impossible.

That highest object of thought is only a dream, an illusion—not necessarily because there is no God, but because the desire to contemplate the absolute, to achieve absolute knowledge, is a chimera and an idol. More than an idol, it is what Heidegger describes, with echoes of Marx, as a "lulling narcotic."⁵

That is to say, the positing of God as the Archimedean point over against the apparent, the historical, the changing, is seen by Heidegger quite simply as a pseudo- solution and a dead end to the question of the meaning of being. Nor is it ontologically illuminating to trace that which exists back to a first cause:

If we are to understand the problem of Being, our first philosophical step consists in not $\mu \hat{U}\theta \delta v \tau v \alpha \delta \eta \gamma \epsilon \hat{I} \sigma \theta \alpha \iota$, in not 'telling a story' – that is to say, in not defining entities as entities by tracing them back in their origin to some other entities, as if Being had the character of some possible entity.⁶

God, in short, is nothing more than a Sunday School answer to the most vexing and profound question the Western philosophical tradition has even had the temerity to pose: Why is there something rather than Nothing (but never its converse). Nonetheless, because of its association with such a venerable tradition of philosophical inquiry, not to mention the half-truths that it unwittingly bears within it, it is an answer that cannot be set to one side without first subjecting it to a careful de(con)struction, in the historical narratives we have come to inherit since the Greek-Judaeo-Christian triangulation of the question of being. Heidegger's destruction of the history of ontology - as opposed to the simple narration of that history - thus ultimately rests on the supposition that the thinking of being must be freed from the concept of God if it is to be authentic, i.e. if it is

trans. Albert Hofstadter, Bloomington, IN: Indiana University Press 1982, pp. 29, 81, 148.

http://www.existenz.us

to look existence in the face without taking flight.

Heidegger then sets about constructing what might be described as a philosophy of religion, namely in his work as a phenomenologist of primitive Christian faith. This is a mode of philosophical reflection carried out within the methodological abstention that suspends any judgments concerning the existence of God. And yet, by means of this theological *epoché*, Heidegger is able to embark on a project of phenomenological interpretation that seeks to shed light on the character of Christian faith, albeit not on religious experience in general.

According to Heidegger, Nietzsche's adage "God is dead" brings to philosophical awareness a profound event that has occurred and is occurring in the history of the West; and his interpretation of this famous word of Nietzsche becomes, from the mid-1930s, a persistent reference point for his discussions of the contemporary age as well as his discussions of the task of thinking. It points the way to the properly philosophical mode of being and thinking.⁷ Yet, for all this – and in contradistinction to Nietzsche-Heidegger steadfastly refuses to tell us whether or not to believe in God. Qua philosopher, Heidegger steadfastly abstains from pronouncing on the question of God; and this means abstaining from any kind of doxastic stance, whether it be positive (God exists), negative (God does not exist) or undecided (I do not know whether God exists). Heidegger's philosophy, therefore, cannot be properly described as theistic, atheistic, or for that matter agnostic (as Jaspers poignantly pointed out); it suspends all doxastic attitudes. Its atheism is methodological. This theological epoché might even be central enough to Heidegger's view of philosophy for us to regard it as the decisive component of his philosophical method. In any case, the main point here is to appreciate that for Heidegger, from at least as early as 1921, such an abstention is understood to be a condition for the possibility of philosophical inquiry or thinking in his strict sense of the term. CONSTRUCTIVE DISCUSSION

The question arises: Is transcendence—that is characteristic of being-in-the-world—comprehensible without reference to God? Could it even be that the most profound questioning of Heidegger's own thinking is sustained by a disavowed relation to the *deus absconditus*, a divine interlocutor for whom the

⁵ Martin Heidegger, Phenomenological Interpretations of Aristotle, trans. Richard Rojcewicz, Bloomington, IN: Indiana University Press 2001, p. 124. [Henceforth cited as PIA]

⁶ Martin Heidegger, Being and Time, trans. John Macquarrie and Edward Robinson, New York and Evanston: Harper & Row 1962, p. 26.

⁷ See Martin Heidegger, "The Word of Nietzsche: 'God is Dead,'" in *The Question Concerning Technology and Other Essays*, trans. William Lovitt, New York, NY: Harper & Row 1977, pp. 53-112.

"impossible possibility" of death was only ever a weak substitution? And might not remain a radical philosophical potentiality within the standpoint of what philosophers of religion today call "propositional faith" as distinct from belief despite Heidegger's relegation of faith or was it abstract belief as the mortal enemy of philosophical thought.

But faith and transcendence on which it is pivoted does not escape the chaos and snares of contingency: how could it if its non-finiteness is not affirmed? It causes disruption, dislocation and disfiguring; the Buddhist Chandrakiti ninth CE confessed to this.

The early lectures on St Paul, and on St Augustine especially, show that in the early 1920s Heidegger had not yet lost sight of the philosophical potency of the standpoint of faith. By the time of writing *Being and Time*, however, his judgment had hardened and the matter had been settled. While he clearly maintained his regard for theology and even entertained hopes for its revival as a discipline, he had reached the decisive verdict: genuine philosophy cannot take root in the soil of faith. And yet he was opposed to its polar opposite in humanism or the humanist project of the kind that the French existentialists, especially Sartre, took to. So what is the direction contemporary philosophy must follow?

Mark C. Taylor has an interesting suggestion, which I believe supplements Nichols' lessons he offers us from Heidegger:

Perfect nothingness ... shadows ... neither light nor the absence of light ... origin of that which has no origin. The unnamable bears many names: origin of that which has no origin, groundless ground, abyss, freedom, imagination, creativity. For Nietzsche, the plenitude of this void is the nonplace of the birth of tragedy... [for Derrida *la différance* worked into the nonmetaphysical deconstructive theology of absence].⁸

The power of imagination reveals the concealment – the as-yet-unearthed – at the heart of subjectivity. It is precisely in the moments of radical temporality when the subject encounters deep within its own absence that nothingness haunts subjectivity; the *deus absonditus* of Søren Kierkegaard, Martin Luther, John Calvin, and possibly Don Scotus, becomes *subjectus absconditus*; only in the next inspired moment does self-reflexivity arise, and the "something" presenced to consciousness is given representation or expression. "Every good human being is progressively becoming God" – the radical sense of the temporality of subjectivity that is the driving force towards its self-reflexivity opens the floodgates of light towards transcendence.

After God – art; after art – life; Three-in-one – One-inthree.... God is not the ground of being that forms the foundation of all beings but the figure constructed to hide the originary abyss from which everything emerges and to which all returns. While this abyss is no thing, it is not nothing – neither being nor nonbeing [Taylor's exact replication of *Rig Veda*], it is the anticipatory wake of the unfigurable that disfigures every figure as if from within. Far from simply destructive, disfiguring [I read Kpovoç/*kronos*] is the condition of the possibility of creative emergence. Even when expected, emergence is surprising – without surprise, there is no novelty; without novelty, there is no creativity; without creativity, there is no life. [*AG* 345]

Within the historical perspective, the radical atheistic solution is but a small drop in the ocean, a slice within the history of human evolution (not in biological terms but in terms of the development of consciousness and the political). As Charles Taylor has shown in his monumental work,9 modernity (including early stages of post-modernity) and secularism-the Age of the Secular - has a great deal to do with this; the pressure of the scientific age, the suspicious marginalization of the sacred because of the excesses of the church and Christendom, forced the post-enlightened sensibilities (in the plural) to take cover under anything but the sacred heretofore. It is a particularly Western response in the coming age of technology, the culture of techno science as Heidegger also asked. Taylor, by the way, thinks that a society would be deemed secular qua secularity or not, "in virtue of the conditions of experience and search for the spiritual" (ASA 20); and as Nichols point out rightly in my view, "whether existentialists fall into 'theistic' or 'atheistic' [or 'agnostic'] camps, they share this much in common: a rejection of the God of Western metaphysics" (see page 37 above).

Neither God nor religion is the specific preserve of the West. Whole Western academic disciplines are committed to the idea that the phenomenon called "religion" has been constitutive of the cultural and philosophic frame of the West, notwithstanding the different moments through which a certain metaphysical continuity has been manifest: the Greek (*onto-*), the

⁸ Mark C. Taylor, After God, Chicago, IL: University of Chicago Press 2007, p. 121. [Henceforth cited as AG]

⁹ Charles Taylor, A Secular Age, Cambridge, MA: Belknap Press of Harvard University Press, 2007. Henceforth cited as ASA]

medieval-scholastic (*theo-*), and the modern humanist (*logos* or logic) — hence the ontotheological project.

Many cultures have struggled with the same questions and hit upon the sense of the tragic, radical tragedy if you like: we noted Mahabharata, the Indian Epics earlier; one might cite the Buddha, profoundly overcome by the pervasiveness of meaningless suffering. Confucius, the Taoists, going back further in the Indian tradition, the Rig Veda bards trying to figure out if the gods had cursed humanity to bear pain and depravation for all eternity. But why and how is it that, almost none eschewed or skipped the transcendental access or possibility even if theism, i.e. the belief in the grace and benevolence of a personal God was not available or not accepted (e.g. by the Buddha or Nagarjuna, Confucius, the Hindu Mimamsa and Samkhya, two prominent atheistic schools within Hinduism)? So these are my questions. Theism is not a universal projection not need it be the kingpin, and hence for that reason alone, need not be the bugbear either of religious existentialism. I think Jaspers comes close to this global sensibility; his insights here, not far from Heidegger's (who we might call an atheistic inclined towards the divine in beings) and Rudolf Otto in his quaint way, are closer in kind if not in intent to that we might discern from a broader historical archaeology of human existential experiences, the tragic, and the aesthetic.



Genetically Engineered Traits versus Virtuous Living

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ABSTRACT

It is fruitless to attempt to genetically engineer virtuous living. Prenatal genome modification could, in principle, establish desired traits and predispose us to certain behaviors. But, traits given at birth are not the same thing as a virtuous character that can be acquired only by self-discipline. The ethicist further fears that free market eugenics—the sale of gene modification—may become one more expression of the social sin our culture inherits. KEYWORDS Virtue; genetic engineering; Mark Walker

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INTRODUCTION

Can we genetically engineer human virtue? No. Genetic modification prior to birth cannot instantiate a virtuous life. Genetic modification, in principle, could instantiate specified traits, to be sure. But, traits are not virtues. Virtue is an achievement gained only after following a rigorous path of self-discipline. This is the case regardless of the genome with which one starts out in life.

EXPOSITION & ORITICAL ANALYSIS

Genetic Engineering for Moral Enhancement

In his article elsewhere in this issue of *Theology and Science*, "Genetic Engineering, Moral Enhancement, and Neo-Irenaean Theodicy," Mark Walker offers an intriguing invitation. He invites us humans to deliberately "take charge" of our own evolution. Specifically, he invites us to genetically engineer our lives of virtue even to the point of auto-*theosis*—that is, to enhance our moral, affective, and intellectual abilities through gene modification.

Walker reminds us correctly that not all forms of playing God are wrong. Indeed, created in the image and likeness of God, we are designed to play God, even if Eve's attempt to jumpstart that process led to trouble. I will return to that misadventure late in this essay. I will note how we already play God routinely in the contemporary world, with everything from reading glasses to vaccines, and most especially in biology and medicine. Even in the most ill-equipped medical outpost, death is routinely cheated.

And Walker is quite right to remind us of the potential for self-directed human modification, and that behavior is (at least in part) genetically influenced. As an example, consider Chloe. I met Chloe at a herding instinct test, where untrained dogs were introduced to a savvy flock of sheep under the careful control of an experienced trainer. She was a smallish Pembroke Welsh Corgi, about a year old, cute as a button. Her main "job" was to be a good companion for her owner—Chloe had never met livestock before. Once in the pen though, little Chloe took a look at those big sheep, and centuries of selective breeding kicked in. She began circling them, not under command (because she did not know any commands for herding) but just because she thought it was the thing to do. Chloe

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"knew" that those sheep better listen to her, and they would better stay in a group, or she would give them a lesson they would not forget!

So let's get some things out of the way, Could genetic modification yield human beings with a strong proclivity for certain behaviors? Sure! Look at Chloe. She did not point at those sheep like a German Shorthair might have. Chloe did what Corgis do, because of her genome. Humans are not all that different from Corgis in terms of the heritability of behaviors as well as traits. And with CRISPR/Cas9 technology for gene editing, it seems likely that intentional forms of genetic modification will become easy and cheap.

Whether virtues are subject to genetic modification, though, is a different question. There are two points I want to make with regard to Walker's presentation of engineered virtue. First, Walker seems to confuse virtue with the static state with which we are born, rather than the dynamic growth that it requires. Second, Walker seems to conflate goodness and rightness. These two are not the same. We need to get clear on our concepts before we can assess Walker's contention.

When gene modification goes on sale so that those who can pay for engineered children or expensive therapies, we must alert ourselves to the ever lurking dragon, social sin. Vested interests in the economy of genetics are not likely to value virtue. To sell gene modification to paying customers risks injustice at many levels. So, whether the path of genetic modification itself might violate justice—itself a virtue—is the third question I will take up here.

Can We Engineer Virtuous Living?

Before we ask whether we can genetically engineer virtuous living, we must ask: what is virtue? In the Aristotelian and Thomistic virtue ethics school, a virtue is a reasoned. mean between vicious extremes. A virtue is a dance in which intellect convinces appetite to act according to reason.

For example, that double-chocolate birthday cake with cream-cheese frosting is powerfully enticing. Prudence, or the practical intellect, explains to the concupiscible appetite that, yes, it looks mighty tasty. But moderation is in order. A small slice is OK, at least if I have gotten my exercise for the day. Half a cake? Clearly imprudent. No cake? But it is a birthday party! And it is a tad churlish not to have any at all. Consistently rejecting cake is fine nutritionally, but tends to take the joy out of one's culinary life. When the concupiscible appetite¹ is in line with practical reason consistently, as a kind of "second nature," then one has achieved temperance, a virtue.

This is the way it works for all acquired virtues. By reflective practice, we work toward the easy and pleasurable ordering of our appetites by practical reason. Any state shy of that is called continence,² in which one still has to exert moral effort to do the right thing. One resists too much cake, but by dint of fierce influence of will over imperfectly temperant appetite. Still, every time one does the right thing, the prudent thing, one grows toward virtue, bit by bit. While both Aristotle and Aquinas focused on describing virtue and the virtues, I suggest that most people, most of the time, for most virtues, are somewhere on the continence spectrum, trying to do the prudent thing, which does get easier with practice. We are all works in progress when it comes to virtue.

There are two ways in which virtue is a moving target, not a static state. One is this process toward virtue via growth in continence, which may be for some a lifelong task.

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The other is that virtues are always both universal and individual. Virtues are universal by definition, since all human beings share the same complement of powers perfectible by reason. A full description of the virtues of a human being is a form of moral anthropology, a description of the human person with regard to morality.³ Virtues are also individual: . they need to be set in the context of each person's particular situation.

For example, all people are called to cultivate the virtue of courage. Courage is the reasoned perfection of the irascible appetite, in Thomas' schema. Therefore, people as disparate as mixed martial arts (MMA) fighters and preschool teachers are admonished to cultivate courage, but the forms courage takes are very different in their respective lives —one hopes! Further, the relationship between courage and other virtues such as solidarity (a virtue reflecting and perfecting the emotion of compassion) and justice will differ for different people in different kinds of lives. And it will differ even in different parts of one's single life, if, for example, one retires from MMA fighting to become a preschool teacher. To be virtuous is to stay in the process of prudentially-discerned growth toward a second nature by which one easily and pleasurably does the right thing more often.

An important distinction must be made: Virtues are about character. Character is not quite the same thing as personality, the heritable traits Walker describes. According to the American Psychological Association,

Personality refers to individual differences in characteristic patterns of thinking, feeling, and behaving. The study of personality focuses on two broad areas: One is understanding individual differences in particular personality characteristics, such as sociability or irritability. The other is understanding how the various parts of a person come together as a whole.⁴

Character is a different thing.

Character ... takes far longer [than personality] to puzzle out. It includes traits that reveal themselves only in specific—and often uncommon—circumstances, traits like honesty, virtue, and kindliness. Ironically, research has shown that personality traits are determined largely by heredity and are mostly immutable. The arguably more important traits of character, on the other hand, are more malleable—though, we should note, not without great effort. Character traits, as opposed to personality traits, are based on beliefs (e.g. that honesty and treating others well is important—or not), and though beliefs can be changed, it's far harder than most realize.⁵

To a virtue ethicist, character is a product of growth toward virtue (one hopes), from wherever we start. Where we start on the path toward virtue is closer, perhaps, to the partially heritable quality called personality. The influence of beliefs and commitments on character mean that two people born with very similar personality traits might wind up very different in terms of character.

So, could we engineer virtue genetically, at the start of one's life? No, not actually. Virtue happens after we inherit our genomes. Virtue involves one's practice toward perfection. Virtue is pursued through schooling appetites by intellect (including beliefs and commitments) over time? Virtue is the fruit attained after a process of growth in character. Virtue is not a static trait or constellation of traits. We grow into virtue more than we possess it. Indeed, as we make progress in a given virtue, we tend to see more broadly the scope and ramifications that it has for our lives.

For example, consider the "mom trick." Suppose you have two kids but only one cupcake. One kid cuts the cupcake, the other picks his or her half first. The first kid

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will cut that cupcake *absolutely* evenly. In grander ethical terms, perhaps, we see here in action John Rawls's "original position" with regard to social justice:

The principles of justice are chosen behind a veil of ignorance. This ensures that no one is advantaged or disadvantaged in the choice of principles by the outcome of natural chance or the contingency of social circumstances The original position is, one might say, the appropriate initial status quo, and thus the fundamental agreements reached in it are fair.⁶

Justice does not stop there, of course—but we start our basic schooling in justice with sharing a cupcake, sharing our toys, and eventually striving for just societies overall.

In sum, genetic modification prior to birth cannot predetermine a virtuous life. Genetic modification, in principle, could instantiate specified traits, to be sure. But, traits are not virtues. Virtue is an achievement gained only after following a rigorous path of self-discipline. This is the case regardless of the genome with which one starts out in life.

Can Genetic Engineering Make Virtue Easier?

We have concluded that we cannot instill virtue in a person through gene modification. But, could we make virtue easier with such genetic engineering? No. In an intellectand-appetite understanding of virtue, we could make becoming virtuous easier in two ways: by stunting appetite or by boosting prudence. It might be possible to engineer people through gene modification with dulled or blunted appetites which yield more easily to reason. And a person with all appetites—not only the concupiscible, perfected by temperance, but also the irascible, perfected by courage, and the rational appetite perfected by justice-blunted would not be a more virtuous person overall, but merely dull. We would be trying to create people who are unmoved by injustice, who are less likely to be able to summon the courage to overcome obstacles, even if they were also less liable to temptation by double chocolate cake. Such people would make marvelously pliable henchmen and henchwomen for anyone with the verve to take over, whether or not the leader was a good person. Indeed, one of the sad lessons of government overreach, especially where government overreach stretches to horrific crimes, is the number of people who just keep their heads down and try not to get involved in fighting injustice, or who actively go along in perpetrating injustice because their personality trait of "agreeableness" has been twisted by social sin into eager in-group participation in shared crime.

Could we take the other route? Could we engineer people to be born with more prudence? No, not really. Prudence, at least as Aristotle and Thomas saw it, is gained only through education and experience. Making people "IQ-smarter"⁷ might be a fine thing, but it would not necessarily make them more inclined to do the right thing. Intelligence does not itself make a person more practically wise, especially if wisdom requires courage. Let me spell out the distinction.

St. Thomas Aquinas, following Aristotle closely, parses the virtues of the intellect into five categories. The first three are virtues of the speculative intellect: wisdom, science, and understanding. The speculative intellect considers "things which cannot be otherwise than they are"⁸: truths concerning the highest things (wisdom), or those we know about in various more specific genera (science), or those deducible from principles (understanding). What IQ seeks to measure is this quality of mind—agility in matters like math $(a^2 + b^2 = c^2)$, for example, or the intellectual agility of a talented scientist). Art is "right

reason about things to be made,"⁹ such as the skill of a craftsperson or a sculptor. The virtues of the speculative intellect and art share an important distinction from prudence: these qualities of mind make us capable of doing good, but they do not form us into a good person. Intellect alone does not transform us into the kind of person who is, in fact, virtuous, because intelligence as a mere trait does not school our appetites.¹⁰

Using the virtue of art shapes things outside ourselves, but good use of prudence —"right reason about things to be done"—shapes us as moral agents. It has long been noted that more IQ-intelligent people are not necessarily more virtuous, just as studying ethics—even virtue ethics!—does not necessarily make us more ethical, alas. Intellectual brilliance and artistic skill can sadly be twisted to evil ends as well as good ends, while true prudence guides the moral agent to *being* good as well as *knowing* the good or *making* good products.

Unlike the virtues of the speculative intellect, prudence is inherently imaginative and pluralistic. Pluralistic? Yes, because the very nature of virtuous action is pluralistic.

Aristotle and Thomas agree that as one gets closer to the ground—closer to the specific contexts in which moral decisions are made, then certainty cannot be the mark of rightness—things at the level of specific judgments of prudence *can* be other than they are. Prudence is also the intellectual space in which one's beliefs and commitments shape personality into character, where we ponder what James Keenan describes as the three basic questions of virtue ethics: "Who am I? Who ought I to become? How ought I to get there?"¹¹ The middle question, "Who ought I to become?" is approached in Aristotle and Aquinas in teleological terms of human flourishing, *eudaimonia*, the ultimate answer to why we do what we do. But there's another question: Since reason can be misused to perfect us into, e.g. excellent burglars, what differentiates the person who does the harder moral work of putting his or her moral and intellectual capacities at the service of the ultimate, genuine, human good, rather than settling for the mere moral expediency of an excellent burglar? This is the question of what makes us good.

Distinguishing Goodness from Rightness

The distinction in ethics between goodness and rightness is traced to the work of analytic philosopher G.E. Moore,¹² though James Keenan, SJ, makes the case that the roots of the distinction can be found in earlier questions in theology and philosophy.¹³ According to Keenan, "Goodness means that out of love we strive to live and act rightly. Rightness means that our ways of living and acting actually conform to rational expectations set by the ethical community."¹⁴ Rightness, then is objective, a matter of whether the act reflects right moral reasoning—a matter of the mind. Goodness, however, is subjective, a matter of the moral effort put forth in seeking the right, motivated by love—a matter of the heart.

Moore's account starts with a twofold problem¹⁵: First, he observes that whether a person deserves praise or blame for an action sometimes depends in his or her motives. On the objective side, though, whether an action is right or wrong does not. Further, people can sometimes be mistaken about what is (objectively) right. This leads Moore to a "paradox": "A man may really deserve the strongest moral condemnation for choosing an action which actually is right."¹⁶ Examples are easy to imagine: A spy for an adversarial foreign nation is given wrong information about US troop movements. Chuckling evilly,

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he delivers that information to his handlers at home. He has committed the evil act of revealing secret military information to an adversarial power. Accidentally, he in fact misled the foreign government by giving them wrong information, thus doing the "right" thing (at least as far as the US is concerned). Striving for evil, he failed by doing a right thing. The reverse dynamic can also be seen: striving to unite teen lovers in order to end their families' enmity, Friar Lawrence cooks up a baroque plot to marry them and then reveal the union to the warring clans, but alas! Romeo and Juliet wind up dead, leaving Lawrence with bitter remorse: "If aught in this miscarried by my fault, let my old life be sacrificed, some hour before his time, unto the rigour of severest law."¹⁷ Striving for good, he accidentally set up the plot that killed the hapless couple. How can we account for bad people doing (objectively) right things, or good people doing (objectively) wrong things?

Enter Karl Rahner. Informed by the phenomenology of Max Scheler and Martin Heidegger, Rahner distinguishes human freedom as operative at two levels. First is the more obvious level of categorical freedom, or freedom of choice. These are the ordinary choices that guide our day that may have greater or less moral heft. I might choose to drive a gasguzzling behemoth because I like its powerful feel as I zoom past hapless Priuses on the highway. I might choose to buy fair-trade coffee, but basically because I like this brand better, not from social justice motives. Each of these are acts of freedom, but it seems like the former is a greater moral misstep than the latter, though both are worth deeper reflection next time.

But there is another, deeper level of human freedom, the level at which we are free to say yes or say no to God. Rahner begins with an understanding of the human person as questioning and self-transcendent. Modras explains:

In reflecting upon our questioning and upon ourselves as questioning beings, we discover that we not only apprehend individual objects but in that act "preapprehend" or, better, reach out toward an infinite horizon of being, so that we are already "with being in its totality." This power to reach out (*Vorgriff*) constitutes our essential nature as spiritual or transcendent beings.¹⁸

This understanding of the human person reveals a freedom of self-disposition. Rahner writes:

This fundamental constitution that the person implicitly affirms in each cognition and in each action, we name with only one word: spirituality. The person is spirit, that is to say, he [sic] lives his life in a constant reaching out toward the Absolute, in openness to God.¹⁹

The fundamental option is the human person's unthematized, prereflexive response to the continuous—existential—invitation from God to enter into the love by and for which we were created. Fundamental option is a response to grace always offered, "since God is present un-thematically in every act of freedom as its supporting ground and ultimate orientation."²⁰ For example, think about the myriad small decisions of driving a car: left here, right there, follow the bend in the road, then merge onto the highway, etc. These are categorical decisions, aiming at a categorical end, to get to our particular destination, and not somewhere else. Fundamental option theory recognizes that we are free to choose the deeper meaning of our choices, as it were, where we will go not just on this journey, but in our overall lives. We can choose to direct ourselves in ways that are

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ultimately good—to work, to school, home to family, on pilgrimages and adventures—or we can direct ourselves in ways that reflect (and shape) a poorer basic life-direction—drive the get-away car, flee difficult situations, or fail to move at all. Fundamental option is the orientation of the whole person, the freedom underneath and conditioning all our acts of categorical freedom.

To speak of a person as "good" in Rahner's transcendental Thomist tradition is synonymous with describing him or her as having a positive fundamental option. The connection of fundamental option to categorical choice is tight: for Rahner, the intersection of these is in acts of love of neighbor, in which we both decide about ourselves and reinscribe a fundamental option for God.

This graced surrender of the whole person refers to both the essence of transcendental experience and to a simultaneous, categorical expression in concrete actions of human solidarity or neighbor love.²¹

For Rahner, ordinary (categorical) choices are connected to a more mystical encounter, a response to the love that beckons us both to God as the horizon (always a horizon, never a destination) of our self-transcendence, and to the concrete acts that we do in light of our ultimate "yes" or "no" to that beckoning.

That connection is mutual: a transcendental yes, a positive fundamental option, both shapes and is reflected in our categorical choices, and our categorical choices contribute to, reinforce, or may undermine, our fundamental option. The different "moral heft" of wrong categorical choices (which, in older terminology, would be framed in terms of seriousness of sin) which I mentioned above, in this view, is a question of the act's ability to affect one's fundamental option: how much of a derangement (or, when a negative fundamental option is "undermined" with intentional right acts, re-oriented) of the fundamental option does this action create? At the same time, our fundamental option is always more than a simple summing-up of our categorical actions, because the scope of our acts is limited by finitude, by our pasts and contexts, by corrosive influences like social sin, and by the unaccessible-to-consciousness nature of our whole selves' experience of and response to grace. No single act (with rare exceptions) changes our fundamental option, just as no single turn on the highway derails our overall life direction:

Actions themselves are ultimately determinative of the subject's relationship with God only to the degree that they engage the core or transcendental freedom of the subject. On this account, then, an action—however objectively virtuous or evil—which does not engage this fundamental freedom need not affect the subject's fundamental stance before God.²²

What does all this mean for the project of engineering virtue? What Rahner's account of fundamental option does is to remind us that, in Christian understanding, the perfection of our virtue is always a collaborative endeavor in which grace invites nature to its fulfillment at every moment of existence, (the "supernatural existential,") and that acts of love of neighbor intertwine categorical freedom with the core freedom of fundamental option. In Christian ethics, we are called to live into our nature as *imago Dei*, but we are invited to do this in relationship with God rather than in isolation from God. This was the basic flaw in Eve's strategy: created in the image of God, she sought greater likeness to God by eating the fruit of the forbidden tree. Where she got into trouble was trying to be like God without God—to "auto-theose" herself into God's company. This is not a matter of breaking an

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arbitrary rule, but rather was a refusal of relationship, which would end up harming her relationship with Adam and their harmony with the natural world as well.²³ If we see the story of the Fall as a story of rejection of relationship instead of punishment by an arbitrary deity who seemed to set his creatures up for failure; we can address the proposal of engineering virtue not as an arbitrary line that must not be crossed (as those who cry "Don't play God!" seem to be concerned with) but rather as reflecting an insufficiently God-suffused understanding of the human person in his or her existence.

Can this anthropology be taken out of an exclusively Christian or theistic frame and still have any meaning at all? I think so. Wherever one sees a devotion to neighbor, that point of contact with positive fundamental option, then the presence and action of grace is inferred. We become mystics of grace, imputing and perceiving the Spirit of God alive and at work in the world. Since we cannot engineer grace, our attempts to engineer goodness likewise cannot succeed. In part this is due to the relationship of grace to nature in a Rahnerian world, affirmable even in nontheistic contexts by recognizing that the marker of goodness is striving to realize what right we can achieve, in a world in which virtue is not a matter of objective attainment but always a dance of intellect and appetite seeking perfection.

Can We Genetically Engineer Justice? MORE CONSTRUCTION

I offer a warning. One of the external factors that can corrupt fundamental option is social sin. Social sin includes the structures that enable and promote systems in which people are unjustly treated. Social sin obstructs human flourishing by misrepresenting what flourishing entails for a certain kind of human being: a man or woman, a person of a particular race, a person of a given sexual orientation, etc. Tessman describes the oppression of social sin as operating at two levels: First, unjust social structures directly thwart the flourishing of oppressed people. The second level of damage is more insidious:

The second way ... oppression interferes with flourishing ... is by creating inclinations that conflict with liberatory principles, thus barring the possibility of full virtue.²⁴

Social sin tends to become internalized, so that the subject carries, even if unwillingly, a distorted vision of flourishing. All human communities are afflicted with different kinds of social sin.

Bryan Massingale describes this deeper dynamic of the social sin of racism in terms of culture:

Racism is a symbol system, a culture operating on a preconscious level, that constitutes and conveys personal and group identity. Racism is a learned and communal frame of reference that shapes identity, consciousness, and behavior—the way social groups understand their place and worth.²⁵

Social sin of some kinds is easily named—racism, sexism, homophobia. However, the insidious nature of social sin is that it can afflict our decision-making in ways that may be invisible. The misogyny that drives female infanticide and selective abortion of female fetuses in some parts of the world may seem simply practical to women as well as men due to internalized oppression. Likewise, whenever genetic or epigenetic determinants of sexual orientation or gender identity are posited, some members of the LGBTQ+ communities sound a warning that identifying such factors might lead some—or even many—

parents to terminate pregnancies in which the fetus is likely to be queer,²⁶ just as women are scarcer than nature intends in some parts of the world, and just as a very high percentage of pregnancies in which the fetus has Down Syndrome are terminated.

Inherited social sin provides the context within which genetic services will eventually go on sale. Customers will buy hand-crafted genomes with predetermined traits for their children if not for their own behavior modification. Our inherited history of injustice at the cultural level will unavoidably influence the set up of the transactions in which genetic engineering will be distributed and purchased. Long before a person with an engineered genome begins walking the long path toward virtuous living, his or her unavoidable starting point will have been determined by social sin.

Conclusion

CONCLUSION

In this article, I have argued that the goals of engineering virtue and goodness through genetic modification are illusory, reflecting mistaken understandings of the nature of virtue and goodness. But that does not mean that people will not try.

My concern is that pursuing even high-minded germline modification in humans will help to create genetic technologies and political advocacies for those technologies that may be used for less high-minded pursuits. In a world in which social sin still afflicts us, we should proceed with great caution before we advocate for widespread nontherapeutic genetic engineering of human beings. It was not so long ago that eugenicists, who understood that genes can influence behavior as well as physical traits, wondered whether criminals should be sterilized in the service of the common good. Certain genomes became an excuse for stigmatization. I do not want to see a return of genetic stigma.

When contemplating the possibility of moral enhancement through genetic engineering, we must acknowledge that genes influence behavior. Remember Chloe? Nevertheless, there is no absolute or total genetic determinism threatening us or saving us. Genes predispose. They do not determine. Genes influence our behavior, but they do not dictate what we do. Regardless of the genome with which we start out in life, the path toward virtue requires motivation, time, energy, discipline, and perseverance.

We can safely forecast that the traits of human beings that are likely amenable to genetic alteration will be identified and interpreted under the direction of social sin. General culture along with vested interests will influence the particular services of genetic modification that go on sale to the public. The theologian and the ethicist must sound the prophetic alarm. Our track record in breeding—or engineering—better humans is not so good. As with internalized racism, sexism, and homophobia, our social biases afflict our capacity to decide which traits of the human race should be amplified. Free market eugenics may soon infest the market place. Who will pay for genes that predispose us to pursue the disciplined life that leads to virtue?

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Notes

1. In Thomas Aquinas's schema of cardinal virtues, the concupiscible appetite, perfected by the virtue of temperance, involves things that are good in themselves (or that we believe are good in themselves). Thomas's paradigms for this are our appetites for food, drink (by which he means alcohol) and sex. As Thomas puts it: "Now temperance is about pleasures of touch,

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which are of two kinds. For some are directed to nourishment: and in these as regards meat, there is 'abstinence,' and as regards drink properly there is 'sobriety.' Other pleasures are directed to the power of procreation, and in these as regards the principal pleasure of the act itself of procreation, there is 'chastity,' and as to the pleasures incidental to the act, resulting, for instance, from kissing, touching, or fondling, we have 'purity'." (Thomas Aquinas, *Summa Theologiae*, II IIae, q. 143, a.1c) All citations of the *Summa Theologiae* (ST) are from the translation of the Fathers of the English Dominican Province, accessible at: http://www.newadvent.org/summa/index.html.

- 2. Thomas appends continence to temperance when considered with regard to sex, but recognizes Aristotle's broader definition: "Others, however, understand continence as signifying that whereby a man resists evil desires, which in him are vehement. On this sense the Philosopher takes continence (Ethic. vii, 7) Hence the Philosopher says (Ethic. iv, 9) that 'continence is not a virtue but a mixture,' inasmuch as it has something of virtue, and somewhat falls short of virtue." (ST, II IIae, q. 155, a. 1c.)
- 3. Aquinas' cardinal virtues work like this: prudence perfects the practical intellect, temperance the concupiscible appetite, fortitude the irascible appetite, and justice the will, or rational appetite. James F. Keenan, S.J. has suggested that the Aquinas' moral anthropology is outdated. He offers a new set of cardinal virtues that hinge on the relationality of human beings, with prudence still leading the dance, with other cardinal virtues of self-care, fidelity, and justice, perfecting us in our relationships with ourselves, intimate others, and society/the natural world, respectively. I find Keenan's schema to be a convincing revision of Aquinas—I use Thomas' virtue of temperance here because of the ease in describing the method, and because it' it is fun to write about cake. See James F. Keenan, S.J., "Proposing Cardinal Virtues," Theological Studies 56 (1995), 709–729.
- American Psychological Association http://www.apa.org/topics/personality/ (accessed May 3, 2018).
- Alex Lickerman, M.D., "Personality vs. Character," Psychology Today blog, April 3, 2011: https://www.psychologytoday.com/us/blog/happiness-in-world/201104/personality-vscharacter (accessed May 3, 2018).
- 6. John Rawls, A Theory of Justice, revised ed. (Cambridge, MA: Bellknap-Press, 1999), 11.
- The complications involved in assessing human intelligence are well-known. See, e.g., Stephen J. Gould, *The Mismeasure of Man*, revised and expanded ed. (New York: W.W. Norton & Co., 1996).
- 8. ST, I IIae, q. 57, a. 1, sed contra. NB: the sed contra in the ST is often simply a quotation from another source, but here Thomas offers this definition, then cites Aristotle's Nicomachean Ethics (Book 6, ch.1) in concurrence.
- 9. ST, II IIae, q. 57, a. 3c.
- 10. The virtues of the speculative intellect provide a greater realm of resources for justice, but do not in themselves make us just, which requires perfection of the intellectual appetite (the will,) which can resist just actions, choosing instead for one's own inordinate good over that of justice for all.
- 11. Keenan, S.J., "Proposing Cardinal Virtues," 711. Keenan's are a paraphrase of the salient questions in Alasdair MacIntyre's After Virtue. (Alasdair MacIntyre, After Virtue: A Study in Moral Theory, 3rd ed. (Notre Dame, Indiana: University of Notre Dame Press, 2007).)
- 12. G.E. Moore, *Principia Ethica* (Mineola, NY: Dover Philosophical Classics, 2004). First published 1903.
- 13. James F. Keenan, S.J., Goodness and Rightness in Thomas Aquinas's Summa Theologiae (Washington, DC: Georgetown Univ. Press, 1992). Keenan's argument about Aquinas specifically is not without its detractors; see, e.g., Thomas S. Hibbs, "Interpretations of Thomas Aquinas's Ethics Since Vatican II," in *The Ethics of Aquinas*, ed. Stephen J. Pope (Washington, DC: Georgetown University Press, 2002), 420.
- 14. Keenan, Goodness and Rightness, 3.
- 15. See Keenan, Goodness and Rightness, 6.
- 16. G.E. Moore, Ethics (London: Thornton Butterworth, 1912), 102.

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- 17. Romeo and Juliet, V,3,3204.
- Ronald Modras, "The Implications of Karl Rahner's Anthropology for Fundamental Moral Theology," *Horizons* 12:1 (1985), 71, citing Karl Rahner, *Spirit in the World*, trans. W. V. Dych, from the 2nd German ed. (New York: Herder and Herder, 1968).

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- 19. Karl Rahner, Horer des Wortes: Zur Grundlegung einer Relifionsphilosophie, 2nd edition ed and revised by J.B. Metz (Munich: Kosel-Verlag, 1963) 86.
- 20. Karl Rahner, *Theological Investigations* 6:180, cited in Brian Linnane, "Rahner's Fundamental Option and Virtue Ethics," Philosophy and Theology 15, 1, 229–254, at 232.
- 21. Brian Linnane, "Rahner's Fundamental Option and Virtue Ethics," 15, 1, 229-254, at 235.
- 22. Brian Linnane, "Rahner's Fundamental Option," 232.
- 23. See Charles E. Curran, The Catholic Moral Tradition Today. A Synthesis (Washington, DC: Georgetown University Press, 1999), 72 ff.
- 24. Lisa Tessman, Burdened Virtues. Virtue Ethics for Liberatory Struggles (Oxford: Oxford U. Press, 2005), 27.
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Social Apes in God's Image

with Nancy R. Howell, "Embodied Transcendence: Bonobos and Humans in Community"; and Oliver Putz, "Moral Apes, Human Uniqueness, and the Image of God"

MORAL APES, HUMAN UNIQUENESS, AND THE IMAGE OF GOD

by Oliver Putz

Abstract. Recent advances in evolutionary biology and ethology suggest that humans are not the only species capable of empathy and possibly morality. These findings are of no little consequence for theology, given that a nonhuman animal as a free moral agent would beg the question if human beings are indeed uniquely created in God's image. I argue that apes and some other mammals have moral agency and that a traditional interpretation of the *imago Dei* is incorrectly equating specialness with exclusivity. By framing the problem in terms of metaphor, following the work of Paul Ricoeur and Sallie McFague, I propose that the concept of the *imago Dei* could be extended to accommodate moral species other than our own.

Keywords: cognitive ethology; evolution; great apes; human uniqueness; image of God; moral agency; nonhuman animals

A possible rule of thumb for every biologist worth her salt could be: In case of doubt, read Darwin! If nothing else, one finds there the intellectual origins of many issues in biology still pondered by modern science and its sister disciplines, philosophy and theology. This is also true for perhaps the most exciting and controversial subject currently discussed in all three fields of inquest, the natural history of morality. Like Darwin then, thinkers today are concerned with essentially two pivotal questions: (1) whether morality could have evolved by means of natural selection (Katz 2000; de Waal 1996; 2006; Bekoff 2004) and (2) whether species other than our own also have moral agency (Cavalieri and Singer 1993; Hauser 2006).

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Answers to both questions are of enormous relevance for theology, especially for theological anthropology, but the solution to the problem of moral nonhuman animals bears far greater ramifications. If animals possess the necessary and sufficient mental conditions enabling them to make moral decisions, it means not only that they have to be considered "persons" but also that they too are created in the image of God.

In this essay I argue that great apes are indeed capable of self-reflection and thus of moral decision-making, even though the differences between ape and human cognition are both real and significant. Moreover, I submit a proposal for how the doctrine of the *imago Dei* can be broadened to accommodate moral animals by applying metaphor, following the work of Paul Ricoeur and Sallie McFague.

FXPOSITION

PHYLOGENETIC CONTINUUM AND EVOLUTIONARY PARSIMONY

I begin by laying out some essential philosophical precepts underlying my argument, in particular the importance of assuming a phylogenetic continuum and with it evolutionary parsimony.

One of the central tenets of evolutionary biology is that life on earth is a continuum extending from the earliest organisms through diverse phylogenetic branches to the great variety of species alive today. In order to be persuasive, any assessment of the ethological data relevant to animal morality has to presuppose such a phylogenetic continuum. The problem is how to negotiate the continuity throughout discrete biological categories such as species.¹ No one doubts the great similarities of ape and human social behaviors, but equally obvious are those species-specific traits that set orangutans, gorillas, humans, bonobos, and chimpanzees apart from each other. How one evaluates the mental abilities of nonhuman animals in comparison to those of humans therefore depends largely on whether one emphasizes the similarities over the differences or vice versa.

Most biologists agree that humans and great apes share many behaviors, but there is considerable controversy over whether these homologous behaviors are based on the same underlying mental systems. Assigning to animals emotions such as sympathy, shame, or love or cognitive abilities such as reason, fairness, or self-awareness constitutes for many an unnecessary and ultimately misleading anthropomorphism. Stressing the differences between species, these researchers insist on cognitive parsimony—that is, behaviors must not be explained by higher mental capacities if they can be just as easily explained by lower mental processes (Kennedy 1992, 154; Kagan 2000, 48; Povinelli and Giambrone 2000, 9ff.).²

Others favor evolutionary parsimony, which posits that the underlying mental processes of the same behaviors are the same in closely related species (Goodall 1986, 592; Flack and de Waal 2000, 71; Bekoff 2006, 3). Accordingly, it is difficult to imagine that a bonobo embracing another

who was the victim of an attack is motivated by something other than the same empathy that would motivate a human under similar circumstances.

One's preference for cognitive or evolutionary parsimony depends largely on how great one considers the difference between humans and other animals to be. This is perhaps the most critical problem in behavioral biology today. In this essay I apply both phylogenetic continuity and evolutionary parsimony.

THE PROBLEM OF ANIMAL MORALITY

Aside from parsimoniously evaluating behavioral differences and similarities, what exactly is the problem with animal morality? Empirical evidence suggests that apes are capable of cognitive achievements that for a long time were thought to be reserved exclusively for humans. Apes make and use tools (Goodall 1986, 535ff.; Boesch and Boesch-Achermann 2000, 192; Ohashi 2006, 439), have culture (Whiten et al. 1999, 682; Biro et al. 2003, 221; McGrew 2004),³ use plants for self-medication (Reynolds 2005, 41), have complex emotions (Aureli and Smucny 2000, 200), are empathic (Preston and de Waal 2002; O'Connell 1995, 408), and show altruistic behavior not only to conspecifics (Warneken et al. 2007, 0004). Perhaps most astoundingly, great apes show signs of self-cognizance and the ability to employ symbolic processes that operate on the basis of mental images rather than direct sensory-motor phenomena (Gallup 1985, 639; Menzel, Savage-Rumbaugh, and Lawson 1985).⁴ The million-dollar question is whether these capabilities in animals constitute merely evolutionary antecedents for human morality or mark the presence of moral agency in nonhumans. The answer largely depends on how one defines morality.

Briefly, morality can be understood as the ability to make a decision between "right" and "wrong," "good" and "bad." This choice is made on the background of a code of conduct that is best understood in a normative sense. Accordingly, the content of morality is a code that, given specified conditions, would be put forward by all rational persons and not only by a local majority (Gert 2005). For the discussion of whether nonhuman animals have moral agency, the origin of this code is of no great importance. Whatever the content of morality, the question is whether or not animals can freely choose how to act. The focus therefore must be on the cognitive and affective capacities that enable moral decisions.

It is important not to confuse the notion of moral decision-making with the heuristic concept of choice central to many biological theories that view all behavior as the outcome of underlying fitness trade-offs. An individual acting selflessly out of a mechanistic motivation geared to increase inclusive fitness hardly acts morally, no matter whether its behavior is the result of kin selection or scorekeeping between group members. Its "choice" is a far cry from that of a self who weighs the pros and cons of her decision.

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The psychological benchmark for animal morality is neither prosocial behavior nor fairness in a tit-for-tat reciprocity but rather the ability to reflect upon one's choices and their consequences. As such, moral agency presupposes self-consciousness and, ultimately, free will.⁵

What characterizes self-consciousness is first and foremost the fissure of the self into reflecting subject and reflected object. This division results in an internal self-symbolization in which the objective self symbolizes to the subjective self the undivided self as a whole. This internal self-symbolization is the foundation for all moral judgment because it enables free selfreflection. Without a divided yet reflective self there cannot be moral agency.

It has been argued that language is indispensable for self-reflection because it allows humans to construct meaningful worldviews based on interpretations of experiences (Gadamer [1960] 1990, 446). This seems convincing, given that only humans use one and the same system for both representing and communicating (Astington and Baird 2005, 6). But, as linguist Derek Bickerton points out, in order to represent and communicate something there first has to be comprehension of that which needs expressing. Bickerton makes the case that of the three components that make up human language-modality, symbolism, and structure-structure alone is what distinguishes human language from animal communication (2003, 80). Apes use such modalities as signs and vocalization (Pika and Mitani 2006, R191; Hopkins, Taglialatela, and Leavens 2007, 284), and they certainly have symbolic representation (Savage-Rumbaugh, Rumbaugh, and McDonalds 1985, 664; Goodall 1986, 33). However, when it comes to syntax apes reach their cognitive limits, most likely because of significant differences in the underlying neural substrates (Bickerton 2003, 82). Is syntax the threshold of self-consciousness and ultimately morality? I argue that it is not.

A definite benchmark for self-consciousness is theory of mind, that is, an individual's explicit understanding of the intentional or mental states of others (Premack and Woodruff 1978, 526; Tomasello and Call 1997, 229; Byrne and Whiten 1997, 8). Sanjida O'Connell (1995, 398) distinguishes four degrees of intentionality that correspond with particular abilities to "mindread."⁶ At zero-order intentionality an individual is unaware of any subjective thought. At first-order intentionality the individual has a representation of something. At second-order intentionality it knows that another individual has the same representation. For O'Connell this level might already be connected to self-consciousness, where the individual knows that it knows. For third-order intentionality, an individual must know that another knows that the first individual knows. For O'Connell, this ability is indispensable for theory of mind. Third-order intentionality requires neither syntax nor language but comprehension of self and representation. Empirical evidence suggests that apes possess both.

EVIDENCE FOR MORAL AGENCY IN ANIMALS

Language studies with bonobos and chimpanzees such as those using lexigrams or sign language have clearly demonstrated that apes are capable of symbolic representation. In both cases, individuals have learned a substantial vocabulary in a relatively short time and spontaneously combined words in structurally ordered sentences (Savage-Rumbaugh, Rumbaugh, and McDonalds 1985, 664). In a particularly elegant series of experiments, researchers around Tetsuro Matsuzawa of the Primate Research Institute of Kyoto University have demonstrated numerical competence in chimpanzees (Biro and Matsuzawa 2001). Animals show both cardinal and ordinal skills, including, in case of the female Ai, the concept of zero. Apparently apes are quite capable of associating arbitrary symbols with a class of episodes, objects, or actions, thus using true symbolic and not merely indexical representation.⁷

The fact that until recently displays of equal abilities were absent from field observations seemed to support the belief that apes could not develop complex symbol-based communication on their own. But this conclusion may have been too hasty. In a population of chimpanzees from Ngogo, Uganda, Simone Pika and John Mitani (2006, R191) observed referential gestural communication, where animals request grooming of specific body parts by exaggerated scratching of that area. This finding is significant not only because it suggests the use of symbols established by social convention by apes in the wild but also because it implies the ability to attribute mental states to others, as the recipient must infer the signaler's meaning.

Observational data from the field suggesting theory of mind in apes are corroborated by a slew of controlled experiments in the laboratory. Chimpanzees follow gaze direction to external targets and check back with the experimenter if they find nothing of interest there (Povinelli and Giambrone 2000, 23; Tomasello, Call, and Hare 2003, 153; Okamoto-Barth and Tomonaga 2006, 157). As Brian Hare and his colleagues have shown, chimpanzees also know what others can and cannot see. Hare placed a dominant and a subordinate male into competition over food, making one food item visible to only the subordinate individual while another was visible to both animals. In a significantly greater number of cases the subordinate would take the food not visible to the dominant competitor, thus avoiding violent conflicts (Hare et al. 2000, 780). Obviously, chimps understand psychological states; the question is which ones and to what extent.

For O'Connell the touchstone of theory of mind is third-order intenrionality, where an animal knows that another knows that the first has a representation of something (a banana, for example). In a longitudinal study of 2,237 instances of empathic behavior in chimpanzees, O'Connell identifies third-order intentionality in numerous reports from the wild as well as captivity. A case in point is an incident related by Jane Goodall that 618 Zygon

involves empathy leading to altruistic behavior. Washoe, an adult male chimpanzee, saw three-year-old female Cindy jump the fence of their enclosure and fall into a moat. Washoe, who was unrelated to Cindy, likewise jumped the fence and, despite his innate fear of water, stepped into the moat and pulled the drowning infant to safety (Goodall 1986, 378). Aside from its displaying theory of mind, this example is also interesting because it involves empathy, a cognitive trait that has been suggested to be a cornerstone of morality (Darwin [1871] 1907, 149; Hume [1740] 2000, 321). According to psychologist Lauren Wispé (1986, 318), empathy constitutes an attempt of a self-aware self to "comprehend unjudgmentally the positive and negative experiences of another self."8 Numerous cases of empathy involving third-order intentionality leading to selfless behavior have been reported in great apes. What makes them interesting for the discussion of animal morality is that they all apparently involve an individual reflecting upon the situation and acting in a way that is explainable by neither kin selection nor reciprocity.

Equally difficult as determining theory of mind in apes is demonstrating that they have self-consciousness. One experimental approach to the problem is the mirror self-recognition test, which in human infants has long been considered a reliable method to study the emergence of selfrecognition. At 12 to 24 months of age human infants understand that they see themselves in the mirror and change from responding with social behavior (reaching out, laughing) to self-directed behavior (interest in the relationship of reflection and their own movements). When asked, these children will confirm that the person they see in the mirror is themselves (Inoue-Nakamura 2001, 297).

Like human infants, most animals mistake their mirror image for a conspecific and respond with some form of social behavior. However, in a series of experiments, Gordon Gallup demonstrated that adult chimpanzees recognize themselves in the mirror. After a habituation phase, Gallup's apes displayed self-directed behaviors, such as picking their teeth or checking their behinds. To confirm that the animals were making the connection between themselves and the mirror image, Gallup anesthetized them and applied a red mark to their eyebrows and one ear. Upon recovery, the chimps were presented with a mirror, and they showed clearly mark-directed behavior (Gallup 1970; Gallup et al. 1995). Since Gallup's seminal work, mirror self-recognition has been demonstrated in all great apes, even if, as in case of gorillas, more species-specific experimental designs were required (see Shumaker and Swartz 2002, 338).

There is much controversy about whether or not mirror self-recognition indicates self-consciousness. However, I think the case can be made that the cognitive processes underlying mirror self-recognition require a notion of self that goes beyond merely perceptual consciousness. In essence, an animal recognizing itself in the mirror externalizes its internal

self-symbolization, in which the objective self symbolizes the self to the subjective self, and transfers it to its mirror image. The same externalization characterizes theory of mind, only that now the transfer occurs not on the level of self-recognition in a mirror but in the assigning of a self to another individual based on the other's appearance and behavior. What characterizes theory of mind, then, is that the body and behavior of another act as an ontological symbol that represents the self of the observed individual to the observer.9

Marc Bekoff (2004) has studied animal play and identified the relationship of fairness and expectation as the basis of what he calls "wild justice." To Bekoff, they serve prosocial functions and are the mark of animal morality. I think that prosocial behavior is not necessarily moral, but fairness can certainly be the result of moral reasoning. In his study of the San Diego bonobos, Frans de Waal describes an interesting game that suggests self-consciousness and theory of mind as well as the ability to adhere to a code of conduct (1989, 195). In the game juvenile bonobos cover their eyes with either an object or their hand and then stumble around the climbing frame some 15 feet up in the air. This play requires individuals to agree on and play by rules—not to look unless one loses one's balance—and also the understanding that the others can see and judge whether or not one is truly covering one's eyes.

To summarize, I have argued that moral agency presupposes self-consciousness, comprehension, and representation and that both observational and empirical studies suggest strongly that apes possess these mental traits. Consequently, empathic and altruistic behavior, but also fairness in games as observed in bonobo play, can result from moral decision-making. THEOLOGICAL RESPONSE TO MORAL AGENCY IN APES DISCUSSION

How is moral agency in great apes to be squared with theological traditions of the imago Dei? The answer to this question lies in a careful differentiation between specialness and exclusiveness.

Theologians have proposed numerous interpretations of what it means to be created in the image of God, virtually all of which agree on human uniqueness over and against nonhuman animals. Most interpretations can be subsumed under one of three general categories: (1) substantive interpretations, in which the imago is a trait or property of the human being, most often associated with reason; (2) functional interpretations, in which the image of God is reflected in our actions, particularly our dominion over the earth; and (3) relational interpretations, in which the divine image is found in relationship with others (Herzfeld 2002, 10ff.). Notwithstanding their differences, all three models insist that human beings are the only species created special, that is, endowed with or capable of the divine image.

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If my interpretation of the ethological data concerning mental abilities of great apes is accurate, such a narrow anthropocentric understanding of the *imago Dei* is inadequate. Apes are capable of love, of thought, and, according to Goodall, possibly even of experiences of religious dimensions.¹⁰ This warrants a more inclusive interpretation of the *imago Dei*.

I believe this is possible when framing the problem in terms of metaphor. According to Paul Ricoeur (1976, 50), what characterizes a metaphor is its intrinsic tension of two opposing interpretations. In the attempt to interpret a metaphorical utterance literally, its absurdity is revealed, from which the metaphor obtains its result. In bringing together things that do not go together, metaphors reveal a previously unnoticed relation of meaning and, ultimately, new understanding. Overemphasis of either its similarity or dissimilarity renders a metaphor impotent.

In her book *Metaphorical Theology* Sallie McFague applies the notion of metaphor to theology and draws a close connection between metaphor and theological model. Models are "sustained and systematic metaphors" (1982, 67), and religious language consists of barely anything else. Central to all theological models is the biblical root metaphor of a personal deity who is in relationship with creation as its source and sustainer. To Mc-Fague, the objective of all theology is to provide new insightful metaphors and models that express this relationship with the divine in a meaningful way (McFague 1987, 32).

The model I want to apply to the problem at hand is the parental metaphor of God as mother and father. Embedded in it is a second metaphor of humanity as the child of God that simultaneously reveals our dependence on the divine and hints at the specialness of our species. But this filial metaphor does not necessarily entail that humanity is an only child, for specialness does not inevitably equate with exclusiveness. The love of a mother or father for a child is not lessened by the arrival of a second child. Neither can the presence of a new sibling diminish the rareness of the firstborn. On the contrary, the uniqueness of either child is underlined by the peculiarities of its sibling, thus heightening the specialness of both. They are loved equally, though differently. And despite any shared inherited characteristics, both are unique in their very own way as they develop their own personalities in freedom. This diversity that is both creativity and affluence of expression ultimately also enriches the being of the parent from whom it originated. To confuse specialness with exclusiveness thus impoverishes the life of both child and parent.

I propose that it is not humanity alone that is wanted by God for its own sake, but rather the diversity of self-conscious expressions that emerge from an evolutionary process and in which the universe, to say it with Karl Rahner (1976, 193), comes to itself while God's self-communication becomes realized. To share with great apes in the *imago Dei* is neither removing human beings from our special relationship with God nor releasing us

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from our special responsibility toward the earth as a highly technological species. It is an expression of the abundant presence and richness of God's self-communication in the world.

NOTES

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1. The concept of biological species itself is currently being debated by evolutionary biologists. Some consider it the only ontological taxonomic category that defines itself; others think of it as merely an epistemic category. One particularly helpful way of thinking about biological species is to view them as an epiphenomenon of sexual reproduction. However, the issue remains unresolved.

2. Cognitive parsimony is also known as Morgan's Canon, named after nineteenth-century British psychologist C. Lloyd Morgan, who in 1894 wrote: "In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale" (Morgan 1894, 53). For a recent discussion of cognitive parsimony see de Waal 2006, 61ff.

3. Culture is notoriously difficult to define. One famous definition is William McGrew's "the way we do things" (2004, 25). Here, I employ another definition according to which a "cultural behavior is one that is transmitted repeatedly through social or observational learning to become a population-level characteristic" (Whiten et al. 1999, 682).

4. This conclusion is admittedly controversial. Numerous psychologists, biologists, and philosophers interpret the data quite differently and deny apes symbolic representation or complex cognitive capabilities enabling apes of intelligence, language, thought, or theory of mind. See for example Tomasello and Call 1997; Povinelli 2000.

5. Among philosophers the status of free will is a highly disputed and notoriously difficult issue, and advances in the neurosciences have not yet helped to resolve it. Nonetheless, I think that we can accept the existence of our volitions without resorting to such compromises as dualism or compatibilism. Most humans share the experience of consciously making up their mind to do something and then doing it. The assertion that this experience is merely an illusion that ignores the fact that every event needs an antecedent sufficient cause puts the cart before the horse. In order to argue this way one first has to freely decide that the world is deterministic in nature. But to deny the existence of free will on the basis of an intrinsically free act is paradoxical and in the end a futile argument. I therefore opt to err on the side of universal human experience and presuppose free will.

6. O'Connell takes these categories from Daniel Dennett (1988, 185).

7. A classic case for indexical representation was the ringing of a bell that for Pavlov's dogs indicated the arrival of food. The dogs connected the two events as related, but that does not mean that the bell became a symbolic representation of food that the dog could use in communication or reflection.

8. As such, it differs distinctly from sympathy, which is a "heightened awareness of another's suffering as something to be alleviated" (Wispé 1986, 318). Wispé offers an example of how to envision this difference: A therapist should be empathic with her client, but sympathy would be detrimental in the therapeutic effort (1986, 319). De Waal's example (1996, 41) is somewhat of a reversal of Wispé's. He points out that a torturer is empathic with his victim but certainly not sympathetic. David Hume actually speaks of "sympathy" in his *Treatise of Human Nature*, but, given Wispé's definition, I think it is closer to what I here call empathy. Compare particularly Book 2, Part 2 Section 12, 6 and 7 (Hume [1740] 2000, 255–56).

9. This is no less than Karl Rahner's *Realsymbol* (real symbol), where the human body is symbolizing the human being (Rahner [1959] 1961, 306).

10. Goodall describes how the chimpanzees she studied would show what she speculates to be awe as they came to a waterfall in the Kakombe valley. The chimpanzees displayed slow,

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rhythmic motions along the riverbed, picked up and threw rocks and branches, and swung out on vines over the stream. This behavior that served no apparent "biological purpose" could last for ten minutes or more. Goodall suggests that such experiences of awe could have been the origins of religions that emerged once our ancestors had language to discuss them (Goodall 1999, 188ff.).

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