

MORALITY EMERGENT, MORALITY COMMANDED:
BIOLOGY AND THEOLOGY IN THE THINKING OF
ROLSTON AND HEFNER

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INTRODUCTION

The goal of this paper is to consider the ground of ethics in light of contemporary biological science and the implications of that science for how theology might frame the emergence of ethical humanity. Can ethics be conceived as entirely biologically based? Or does any ethics require a metaphysical basis? Do new understandings of the interplay between humanity's biological origins and the emergence of values change theology's framing of ethics?

In the history of Christian theology, for various reasons ethics has at times stood a little separate, in the realm of philosophical reason, loosely attached to science on the one side and religious thought on the other. I shall try in this paper to sharpen the claims that both sides can make on ethics – to say that eventually ethics will be corralled. Perhaps science and theology will together share the ownership of the corral, but human ethics is not destined to roam free and untended on the plains of reason.

The general trajectory of this paper is a movement from naturalistic to theistic understandings, though the result is more a clearing of the decks for theological work in this area than a working-out of theological issues. I begin with an extensive review of arguments from sociobiology in favor of a “naturalized” ethics, as discussed by Holmes Rolston III in his recent book, *Genes, Genesis and God: Values and their Origins in Natural and Human History*. Rolston makes an insightful critique of these arguments but gives favorable consideration to emergent morality and intrinsic, shared values in nature. I accept Rolston's case for a wider metaphysical framework for human ethics. Then, building on his groundwork, I conclude with a consideration of Philip Hefner's treatment of myth as the gateway for humanity's moral imperatives. Hefner elaborates on the example of the Christian love command to illustrate his case.

VALUES, ETHICS, ALTRUISM, AND SELFISHNESS DEFINED

A *value* [is] a general characteristic of an object or state of affairs that a person views with favor, believes is beneficial, and is disposed to act to promote....Subscription to a value includes beliefs about benefits or moral obligations that can be used to justify or defend it or recommend it.¹

Ethics is about optimizing and distributing moral and other values, about what sorts of values count morally, and what the moral agent ought to do to promote

these values.² Principles of right and wrong in human actions, and good and evil in the consequence of actions, constitute the domain of ethics.³

Altruism in the ethical sense applies where a moral agent consciously and optionally benefits a morally considerable other, without necessary reciprocation, motivated by a sense of love, justice, or other appropriate respect of value.

Selfishness applies where a moral agent exceeds the bounds of legitimate self-interest [i.e., self-defense and self-actualizing] and is so concerned with self that the appropriate motivation in love, justice, and respect for the interests of others fails.⁴

ARGUMENTS FOR A “NATURALIZED” ETHICS

Holmes Rolston III provides a clearheaded analysis of current theories which position human ethics as a genetic entailment. He rejects these strict sociobiological theories and advocates the view that ethics emerges as a genuinely new property in human beings. He does this by proceeding through a series of “emergentist” explanations from nature to ethics. As the series progresses, reductionist claims become ever more difficult to sustain, in Rolston’s view.

Emergent ethics. The beginnings of *emergent ethics* come to light in a view of human beings developing their social existence out of precursor animal roots, but somehow arriving at an entirely “new kind,” with properties previously unknown and explainable only on their own terms. This is a portrait of evolving humanity which includes both evolutionary continuity and the emergence of genuine novelty. To begin to see under what conditions such emergence could occur, Rolston refers to game theory, in particular to a collection of rule-bound games known as TIT FOR TAT and its variants. These are computer simulations of communities of agents which act in cooperation with unrelated others. The agents require memory, the capacity to discriminate between individuals, and an elemental set of rules for interactions. For example, in TIT FOR TAT, each agent in a community cooperates initially; does not fail to cooperate subsequently unless to other does; and restores broken cooperation if the other does. Although these simple interactions are not yet moral systems, the point is that they generate cooperation widely. The game generates win-win situations. Individuals are “webworked”; values are distributed. For Rolston, such interactions could be the “pivot point” for an emerging social contract between increasingly reflective beings – i.e., evolving human beings – as they interact in an ambience of common values. Early human beings, undertaking these interactions increasingly informed by emotions and feelings of care, concern, and commitment to those with whom they were regularly reciprocating, entered into the realm of ethics, even if authentic moral altruism has not yet appeared.⁵

Inclusive fitness. Copious research has shown that animals do cooperate, for causes that are generally interpreted as being caused entirely by their biological and ecological imperatives. Animals will at times act to increase the welfare (chance of survival) of others at the expense of their own, as when a baboon acts as a sentry for others who are feeding, placing himself in a riskier position. Such behavior might at first be seen as a stab at “altruism,” but a more sophisticated view explains these actions in terms of “inclusive fitness”: the drive to perpetuate and maximize one’s own genes among later generations by appropriating a wider circle of genetic interest which includes the individual’s close genetic relatives. The sentry is distributing benefits to his relatives and progeny, benefits which are disproportionately greater than his own

risk. By benefiting his genetically close kin in this way, he is defending an enlarged sense of his own reproductive self (rather than his narrowly conceived individual fitness). But, whereas some sociobiologists see “selfishness” in this action, Rolston points to the fact that in such a social milieu, the self can no longer be isolated: selfhood is conceived of only within a web of relations, and even the valued elements of the self are recognized as existing in others (in the shared genes of close relatives).⁶

Reciprocal altruism. Some tasks that are difficult for one individual to do are easy for another individual to do on behalf of the first (such as backscratching). The regular exchange of such favors is known as reciprocal altruism, which is basically like TIT FOR TAT. This is not *moral* altruism – because the reward of reciprocation is expected. A society that cooperates in this way can lower its risks: when one animal calls out to others to warn of an approaching predator, it expects other to later return the favor. No one sacrifices too much, and while there are occasional short-term losers, on balance, everyone wins over the long-term. Rolston says, though, that it would also be inaccurate to call this behavior “selfish”: rather, by his reckoning, it is more meaningful to see the self once again as enlarged, coupled, and distributed. The values that count are only conserved to the extent that they are shared. Thus these interactions can just as successfully be described by a communitarian paradigm.⁷

Human reciprocal altruism. The reductive argument for ethics from biology asserts that cooperative strategies occur only when they assist in the enlightened self-interest of the agents involved. And this self-interest is constrained entirely in terms of maximizing inclusive fitness. Rolston considers the immense scale of cooperation evidenced by humans, for example in national and international networks of trade, and concludes that a theory of self-interest grounded entirely in inclusive fitness is greatly exceeded by the manifestations of such networks. Here, too, though, although the mutually beneficial transactions are not with kin, the reciprocation is not self-giving. They are not “altruism” in either the genetic or the moral sense.⁸

Indirect, social altruism. Some rewards are generated by society at large: greater safety resulting from child car seat laws, for example. The effort of some biologists to include such rewards in the calculus of “selfishness” is misguided, in Rolston’s view. Since everyone gains with about the same probability, no one gains competitive advantage, so why call it selfish? Why not call these shared values in a social milieu?⁹

Naturalized, socialized ethics. Some theorists argue for a more “indirect” mechanism for human moral propensities. For Gibbard, normative *discussion*, which coordinates acts toward consensus, carries the capacity for moral influence. In the ubiquitous enacting of conversations, the Darwinian genetic perspective is stretched into a generic utilitarianism: a shared ethics is good for people because it produces the greatest good for the greatest number – and, as these groups of conversing individuals flourish, they gain adaptive advantage through this cultural transmission. At this point, Rolston broadens his inquiry to the question of origins: how do we gain these better reasons? Where do the standards under discussion come from? He argues that *new information* is needed beyond that which the genes can deliver. Ethics demands novel powers of both analysis and feeling.¹⁰

Universal altruism. Universal altruism refers to the ability to entertain both a generalized, universal obligation to others and a particular respect for individuals, whether or not one’s self-benefit or cost has been figured in the transaction. Compassion and sympathy are operative here. One can identify values in others. In fact, the determinant for action here is an *idea*: for example, actions are undertaken because they are *just*. This is the realm of the Good Samaritan, and of the Golden Rule and its many cultural variants.¹¹

LIES AND ILLUSIONS: DARWINIZED MORALITY

As these progressively expanding emergentist claims move ever further away from the genetic imperative, the leading proponents of sociobiology seek to regain the upper hand with a theory of “illusory, Darwinized morality,” built on the reductionist assumption that the biological level is the highest level of explanation. Natural selection is the unavoidable mechanism for maximizing short-sighted selfishness. Morality, as with all human behavior, has no other function than to keep the individual’s genetic material intact. There is no actual altruism; there is only quasi altruism – disguised forms of selfishness. Belief in morality is a reproductive adaptation, an illusion that our genes foist on us to get us to cooperate.¹²

Self-deceived altruism. Jesus tells the story of the Good Samaritan, who saves the life of a man who is of no relation to him. The other man is in fact a Judean, a cultural enemy. The Samaritan, as Jesus tells it, acts out of generosity and consideration of the intrinsic value of the injured Judean. But Jesus got it wrong. By the sociobiological account, although the Samaritan really did feel compassion for the Judean victim on the roadside, in these feelings he was deceiving himself: what actually happened was that he followed the dictates of his selfish genes. The Good Samaritan was really acting in a way that was reproductively profitable: his act of generosity bestows upon him the reward of an enhanced reputation, by which he would in time reap reproductive advantages. What do we make of his “genuine” feelings? These feelings actually serve a deeper purpose: his deception of his fellow creatures – presenting an image of altruistic motives and conduct – achieves its purpose more effectively if he himself actually *believes* he is acting morally. It is *apparent* sincerity that guarantees reciprocity, assuring that others will do likewise unto him. As with the Good Samaritan, all of our conscious motivations are merely a masquerade; our deep genetic motivations are unknown to us.

Rolston caricatures the tenuous logic of this argument in this way: selfish people outreproduce unselfish ones; but those who deceive themselves into believing in their own benevolence outreproduce those who are wised-up enough to be aware of their own insatiable selfishness.

Against this rendering of selflessness-as-selfishness, Rolston argues that there is no evidence that the differences in reproductive results posited by the theory actually do occur in the human population. How could such evidence be found? In addition, the theory is diabolically self-reinforcing because all verbal reports which contradict it must, on its terms, be dismissed as unreliable: all self-reporting of genuine altruism is merely generated by the subjects’ own unconscious self-deception.¹³

Induced and inflated altruism. There is, in such a regime of deception, a danger that the self-deceiving moral agent might go too far and begin to behave in a manner that is authentically altruistic. In this case, so the argument goes, the agent naively serves the interests of others at the expense of his own fitness. Rolston comments that such a picture of double-deception (the agent deceives others as well as himself) demands that apparently genuine acts of altruism be torturously characterized as a deception that actually hurts the liar.¹⁴

Epiphenomenal altruism. An alternative account of ethical behavior, given by Herber Simon, is that it is an anomaly associated with rationality. Those individuals who are more “docile,” or teachable, are better at gaining the skills which enable them to raise children more successfully. Such docile individuals passively accept a limited amount of teaching about altruism (not enough to make them genuine altruists), and this learning accounts for both their reproductive success and the successful spread of their brand of ethics throughout society.¹⁵ A

similar account by Robert Boyd and Peter Richerson is called the conformist effect: those people who are easily persuaded to act for the good of their group will find their own groups outperforming others.¹⁶

Rolston's next move is to appraise what the prominent scientists of sociobiology actually recommend with respect to moral conduct – and how they themselves behave. Ruse has taken the most stark position: that “the good” is simply what evolution has led us to regard as good.¹⁷ Alexander says that evolution tells us nothing at all about what we *ought* to do, but that we have the capacity to break away from our genetic imperatives and that we should use science to escape from our biology. Thus love of neighbor is an “admirable goal” that ought to be pursued.¹⁸ Dawkins exhorts his fellow humans to teach generosity, because “we are born selfish.”¹⁹ Similarly, Wilson puts forward an impressive set of positive shared values, and advocates “biophilia,” an environmental ethic based on love of nature. Wilson believes that we can employ these ideals to overcome our genetic biases.²⁰

Rolston counters that these authors are preaching a philosophical ideal for which their theory does not account. Where are they getting these resources for genuine altruism? There are no resources within the theory, handicapped as it is by a thoroughgoing reductionism, to urge any principles beyond maximizing offspring. Do we then discount the ideal or the theory?

The problem, as Rolston sees it, is that these biologists are, by their own accounts, “extremely unlikely creatures....The more they are able to reason about either the science or the ethics of human behavior, the less likely their theory is to be true.” Furthermore, if they are recommending their scientific account because it serves their own reproductive interest to do so, one should distrust it. Even if they are recommending a normative account, one should distrust it for the same reason. And if they deny that these matters are being influenced by their own reproductive interests, one should distrust such verbal reports, for these individuals must be deceiving themselves.²¹

ETHICS “SUPERPOSED” ON NATURE

Much of the conversation concerning ethics in biology revolves around the dynamics of “inclusive fitness.” But Rolston points out that moral value is not, in the main, about calculating wins and losses. It is about love, justice, and respect for the value in others; and authentic moral altruism is practiced because it is *right*. Rolston consistently argues that the biological drive underdetermines the events of human ethical interaction. Nonetheless, ethics is about fitness too. Ethical agency emerges to protect human life and cultural values, and we generally expect groups with functioning ethical systems to do well. The process begins with rational self-interest: it makes sense to reciprocate with others in mutually beneficial interactions. Yet, in recognizing this fact, we can see that one's own (“selfish”) advantage has already been expanded into a sphere of shared, mutual value. A functioning ethics requires inclusion and dispersion of the values of the individual self. So far, though, nothing that has been said necessitates a view that self-interest is equivalent to an interest in maximizing offspring.

Rolston produces an alternative, non-reductionist account of “values defended and shared,” positing a “genesis of ethics” which: requires both that values be naturalized and that ethics be humanized; entails appropriate respect for value in both human and non-human life; and recognizes “human destiny entwined with valuable nature,” by testifying both to human uniqueness and to the “primal source of spontaneous genetics.”

What do such “moral, valuable, evaluating persons” look like? Such a human self can: defend values as a moral agent; recognize intrinsic value outside of her own local self; defend values beyond self-love and love others as herself; and ennoble and enlarge herself through her interests. By this account, the human is not *at odds with* nature; nor is the moral norm *in* nature; rather, culture and ethics are “superposed” on nature. The cultural self comes to transcend, even to replace in part, the biological self. The self has entwined with others and blended its own self-defense with that of others. In this way, Rolston hopes to abandon the epistemic crisis of the “selfishness” paradigm. “The self becomes an altruist, more or less, because this optimizes the sharing of values.”²²

HEFNER ON MYTH AND MORALITY

Rolston goes on to consider sociobiology’s explication of the phenomenon of religion and finds the explanation wanting, for similar reasons. In its place, he emphasizes the unexplained appearance of information in a world of matter-energy, and of value abounding in nature. In the irreducible origin of supervening information and value, Rolston finds the hints of God. But I would like to conclude this paper by considering a more detailed proposal for the actual emergence of morality in humans, an account which also gives room for theological understanding. For this purpose, I turn now to the work of Philip Hefner in exploring the role of myth and ritual as a vector for emergent morality. In *The Human Factor*, Hefner explains the emergence of morality in the “created co-creator” by the proposition that primordial humanity required altruism in order to survive in its evolving state of community, and *myth* is what enabled this to occur. Only myth can match the effectiveness of genetic mandates in guiding human behavior, because myth presents an all-encompassing vision of *the way the world is*. The power of myth makes possible a compelling vision of the world itself as a basically benevolent place, in which loving relations with other beings are appropriate. Hefner explicates his case with an examination of the Judeo-Christian love command. That which, in biocultural evolutionary science, is called “altruism” is equivalent to the behavior which, in the religious tradition, is dictated by the Great Commandment.

We have already seen that altruism is a great puzzle to the sciences. In practice, scientists are not prepared to abandon cultural information even when it defies the explanation from evolution. The general view is that altruism cannot, in the end, be accounted for by genetic evolution alone, and the typical stance of researchers in this area has been to appeal to a cultural overriding of genetic programs. Hefner considers three complementary modes of study to be therefore appropriate in examining human morality:

1. Biocultural evolutionary science – concerning the natural history of life.
2. Study of myth and ritual – concerning the functioning of human culture.
3. Theology – concerning basic cosmological and ontological principles.

Among these, theology suggests the need to understand altruism as an *intrinsic* value, rooted in the fundamental character of reality. But Hefner cleverly approaches this evidently intrinsic condition from the direction of evolutionary needs.²³

Early humans faced a distinctive evolutionary challenge: in conditions of high social complexity, cooperative communities would have contained many “genetic competitors” (i.e., non-kin). The complex level of cooperation required, and the ubiquity of unrelated others within cooperative networks, presumably combined to stretch humanity’s methods of survival. Hefner

believes that the human species had reached a point at which it “could not survive on its physico-biogenetic evolutionary information system alone.” If the early human community was to emerge and succeed, it needed “cultural supplements” that could somehow manipulate the genetic inheritance and enhance survival. Culture became the carrier of cooperation and reciprocity.²⁴

This dynamic emerged not only because of increasing social complexity, but also within the development of the central nervous system: new capacities were required to process complex information in way that had been “previously unavailable to life.” The challenge to the cultural information system was that it had to operate with motivational power comparable to that of the genetic mandate. Ambiguity with respect to its truth value would make it ineffective. This need would have been especially acute with respect to non-kin altruism. Myth, then, emerged “very close to the primordial ground of scanning/judgement systems that supplemented genetic motivators.” Mythological knowing had to be relevant at the level at which genetic motivators were relevant. Religious myth and ritual are among the “cultural supplements” which arrived when humans “needed more information,” and which survived the process of natural selection by being as compelling as the somatic and genetic information with which they were partnered.²⁵

Myth operates as a picture of *the way things really are*. Myth concerns things about which we cannot speak with certainty, making statements about the whole of reality, because this information is *necessary*. Wilson, in fact, concurs, terming these functions “mythopoeic requirements.” Wilson argues that myth operated at the same level as genetic motivators and, indeed, was *required* by the central nervous system. That is because humans cannot exist without “operative understandings of the reality that surrounds them,” and this requires “symbolic frameworks that can conceptualize beyond the actual data of the experience...humans require concepts that are underdetermined by the data.”²⁶

Grasping that myth is a statement of *how things really are* is the key to understanding how myth and morality are related: the mythic archetype provides imperatives because it presents a harmony with the fundamental character of reality. The myth is “the final ground for the power of ritual and moral action”: it generates the ritual (symbolic action), and this in turn informs the praxis of everyday life. For Hefner, then, “the all-encompassing character of the symbolic universe is what gives myth its moral power.” “All values receive their validity from being rooted in and being in harmony with the way things really are.” The picture of the “is” that grounds the moral injunction does not present itself as a tentative proposal. The basis of the “is” is a conviction about the meaningfulness of the symbolic universe.²⁷

In the evolutionary context, Hefner holds that, despite their blatant underdetermination, myth-driven programs for trans-kin altruism have proven themselves: they have carried information which has served human survival.

THE CHRISTIAN LOVE COMMAND

The essential Christian myth, as Hefner describes it, is of a God who made the world, including the humans within it; of humans coming to be alienated from both God and each other; of Jesus of Nazareth coming to convey the grace of God and its moral consequences – unqualified love for what God created – thereby embodying both the revelation and redeeming action of God; and of Jesus’ resurrection overcoming death and pointing to our own raising in the context of God’s consummation of the created order.²⁸

‘You shall love the Lord your God with all your heart, and with all your soul, and with all your mind.’ This is the great and first commandment. And a second is like it: ‘You shall love your neighbor as yourself.’ On these two commandments hang all the law and the prophets. (Matt. 22:37-40)

The basic *moral value* contained in the Christian myth is conveyed by the Great Commandment: *love God* – a value which connects us to the “central reality” – and *love neighbor as self* – a value which generates our solidarity with, potentially, all created beings. Variations on the Great Commandment abound in the religions of the world. Other myths are told, but through them an idea essentially like the love command is generated. The command exists within a symbolic universe: the grounding invoked is the being and will of God, or of ultimate reality. For Christians, the command makes the assertion that love is an intrinsic value. It does so in the context of fellowship with God, the original source of love who imbues all of created nature with love.²⁹

What is essential to the value conveyed in the command is the presupposition of God’s prior love for us. That is, the moral-myth tells us that the reality system of nature is basically an ambience in which we truly belong; it is positively disposed towards us. It is notable that, given how often we seem to find the idea that Earth’s species are loved contradicted, the structure of myth is necessary in order to make such an outlandish idea compelling!

Consequent to the love command in the context of the Christian myth, altruism is the “paramount quality of any behavior that aims to be in accord with the way things really are.” This way of conceiving altruism sees it not as instrumental, but as rewarded only by itself. Thus, an act of altruism is not defeated even if its outcome is unsuccessful or if no reward ensues. Freedom, in the God-created milieu, can be freedom to give of oneself on the basis of this intrinsic value, not for reward, not from coercion.

Hefner proposes that, when the functioning Christian theology is seen in this light, the question posed by science that really matters is not, “Is there evidence for a God?” but “Is altruistic love rooted in the fundamental nature of reality, and in nature itself?” Now science has turned its gaze to the secrets of altruism. Considering this turn in light of the question Hefner poses, we see the profundity of the place we have reached. The fact that current theories fail to nail down the answer is an encouraging sign for the basic intuition of religions. Hefner suggests his own view of the answer: “It is difficult to justify the morality and counter-hedonic behavior that scientists endorse if the reality in which we live is not in some way a friendly ambience.”³⁰

LESSONS FOR THEOLOGICAL ETHICS

Rolston’s and Hefner’s spirited and effective jousts with those who would constrain ethics entirely within biological nature have at least two useful effects from the point of view of theology. First, they offer a positive prognosis for accounts of morality which squeeze their juice from higher levels in the epistemological hierarchy, that is, from the realm of culture, unchained by genes. Here, a striking relationship comes to the fore: that between a new species of conscious beings – human beings – and information which signals a benevolent order. And this is the second point: a portrait has been painted of human beings discovering intrinsic values in ever-widening circles of human and non-human nature. This portrait gives impetus to deep investigations of nature, for nature itself is a vale of values. This points the theologian towards conceptualizations of the God-creation relationship which emphasize immanence and profound

relationality. From here, future research directions for theology can hew ever closer to lessons learned in the entanglement of ethics with nature.

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- ¹ Ian Barbour, *Technology, Environment, and Human Values* (New York: Praeger, 1980), 26-27.
² Holmes Rolston, III, *Genes, Genesis and God: Values and their Origins in Natural and Human History* (Cambridge: Cambridge University Press, 1999) 217.
³ Barbour, 26-27.
⁴ Rolston, 217.
⁵ Ibid, 227-232.
⁶ Ibid, 232-234.
⁷ Ibid, 234-236.
⁸ Ibid, 236-241.
⁹ Ibid, 241-243.
¹⁰ Ibid, 243-247.
¹¹ Ibid, 247-249.
¹² Ibid, 249-251.
¹³ Ibid, 252-256.
¹⁴ Ibid, 256-260.
¹⁵ Herbert Simon, "A Mechanism for Social Selection and Successful Altruism," *Science* (250:1665-1668, 1990). From Rolston, 260-261.
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¹⁸ Richard Alexander, *Darwinism and Human Affairs* (Seattle: University of Washington Press, 1979), 276. From Rolston, 263-264.
¹⁹ Richard Dawkins, *The Selfish Gene*, new edition (New York: Oxford University Press, 1989), 3. From Rolston, 265.
²⁰ Edward O. Wilson, *On Human Nature* (Cambridge, MA: Harvard University Press, 1978), 197-199. From Rolston, 265-267.
²¹ Rolston, 269-270.

²² Ibid, 280-283.

²³ Philip Hefner, *The Human Factor: Evolution, Culture and Religion* (Minneapolis: Fortress Press, 1993),196-197.

²⁴ Ibid, 184.

²⁵ Ibid, 184-185, 200-203.

²⁶ Ibid, 185-186, 203-204.

²⁷ Ibid, 188, 201-202.

²⁸ Ibid, 189.

²⁹ Ibid, 189, 206-207.

³⁰ Ibid, 190, 209-210.