

# When “Is” Meets “Ought”

Marcus Moretti

The fifth anniversary of the Afghanistan War loomed when Sgt. 1st Class Jared Monti and his troops were fatally exposed to the enemy. The roaring blades of an American helicopter, sent to resupply Sgt. Monti’s unit near the Afghan-Pakistan border, roused lurking Taliban forces nearby. The ensuing storm of AK-47 rounds sent the unit scurrying behind the largest boulders within sight. After Sgt. Monti secured himself, he spotted one of his men downed and vulnerable. On his first two attempts to ditch his cover and rescue the downed comrade, he was thwarted by incoming fire. His third go was stopped by a grenade that exploded just close enough to kill him instantly.

At Sgt. Monti’s Medal of Honor ceremony three years later, President Obama, presenting the award for the first time, asked in his panegyric, “Do we really grasp the meaning of these values? Do we truly understand the nature of

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these virtues, to serve and to sacrifice?” [1]. For millennia, philosophers have wrestled with questions like these, which seek explanations for why acts like Sgt. Monti’s so imbrue the soul. But the discipline arguably making the most strides



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toward such explanations at present is not philosophy, but biology.

Evolutionary scientists are looking for evidence in favor of a Darwinian account for the repulsion we feel at perceiving human suffering. Some call this search the “science of morality” because it may ultimately usurp philosophy’s dominion over ethics. As you read this, experiments that will accelerate this transfer of power are nearing completion all over the globe.

The most common participants in these types of experiments are rhesus monkeys and chimpanzees, primates with whom we share up to 98% of our DNA, and our closest animal relatives. Their behavior defies the old anthropocentric claim that other apes, unlike us, are incapable of ignoring their own interests in order to protect those of another ape. Our language manifests this presumed hierarchy of creatures: when we call people “animalistic,” “reptilian,” or “Neanderthals,” we mean that they are stupid and self-centered.

Believers of said anthropocentric claim may be said to be, as the writer Douglas Foster put it, in “anthropodenial.” Their hierarchy has been discredited, and a new spate of experiments hammers what may be the final nails into its coffin. In one experiment (Palagi et al., 2009), gelada baboons were shown images of conspecifics—members of the same species—yawning in hopes of finding a tendency for lower primates to identify with conspecifics [2]. As the experimenters predicted, when these animals observed yawns, they yawned back.

This mimicry evinces a tendency to self-identify with conspecifics, which is the precondition for empathetic relations. Empathetic behavior in apes has indeed been well documented. In one study (Carter, J.D., 2008), a society of chimps was shown to be especially accommodating toward one of its members afflicted with cerebral palsy [3]. Not one of the disabled chimp’s neighbors exploited his deficiencies, which would be expected from truly solipsistic organisms. In fact, the group’s alpha male paid special attention to the needs of the disabled chimp and groomed him more gently than he did the others.

These studies revive the evolutionary theory of altruism that is known as the “group-selection” theory. Its guiding rule is that animal communities in which members are cooperators will win out over communities of selfish creatures. The theory was discredited in the 1970s by biologist Richard Dawkins who posed a problem that he termed that of “subversion from within.” The problem is that some members may enjoy the spoils of others’ sacrifices without sacrificing anything themselves. These free-riders have a fitness advantage over the cooperators because they would enjoy, for instance, the protection afforded by those who stand guard, but never risk injury or death to fend off predators themselves. It appears that the free-riders would then win out over cooperators under group-selection theory, and cooperation would not be selected for.

What may allow group-selection theory to overcome this worry is the observed tendency of primates to reciprocate negatively, that is, to take retributive action against free-riders. Primates may construct revenge systems, as they have been called in recent studies [4]. Premier primatologist Frans de Waal identifies partner selection as the chief method of enforcing the revenge system. If a partnered male

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ape reveals himself to be selfish and uncaring, his lady will promptly dump him. This also happens at the group level: if a member of the community is discovered to be free-riding, then the others may be unwilling to share their food with him.

De Waal, in a recent paper that surveys developments in intra-group cooperation among primates, distinguishes between two types of evolutionary causes for action that are essential to group-selection theory: proximate and ultimate causes [5]. Proximate causes proliferate when the actions they entail immediately benefit the actor. An example of a proximate cause would be thirst. Quenching thirst requires the beast to hydrate itself, a biological necessity. Ultimate causes arise when an action helps the survival of the species, not just the organism, and may not provide any immediate benefits to the actor itself.

Sex drive is a potent example of an ultimate cause. Humans mostly go at it in pursuit of the sensation of stimulation and (hopefully) orgasm. Sensual pleasure may be a proximate cause, but one’s body could go on without having sex. The broader survival of the species is what is at stake. Our sex drives are ultimate causes because they make sex something we all feel compelled to do, thereby ensuring homo sapiens’ perpetuation. A lustful population is more likely to thrive and persist than a more subdued one, hence the often gratuitous human sex drive.

Evolutionary biologists have used this distinction between proximate and ultimate causes to explain altruistic acts. The selfless act—the donation of food or the forfeiture of one’s life to save another’s—can be explained by ultimate causes. The tendency for communities with intra-altruism to outcompete less selfless groups, *ceteris paribus*, allows the altruistic gene to proliferate. The short-term, proximal causes for such sacrifice, if they do exist, are often insufficient to overwhelm the grand loss. The larger force that keeps the population afloat explains the preponderance of behaviors whose personal costs are significantly higher than their personal benefits.

In light of biology’s growing encroachments onto moral territory, a large swath of philosophy may face redundancies. If we are programmed to feel certain ethical obligations and not others, and those obligations have contributed to our species’ success, then what is the use in trying to propose an alternate set of ethical principles? Of course cultures are free to decide on their own positive values (honor, intelligence, etc.), but if there are at base some discoverable, proscriptive maxims, why busy over another set?

Proponents of science’s annexation of moral territory cite the failure on the part of philosophers to reach

a consensus on ethics after millennia of deliberation. But this debate is not one-sided. In a 2009 issue of *Newsweek*, science editor Sharon Begley launched a two-tiered attack against evolutionary psychology. She claimed first that the science was reprehensible in itself because it vindicates the “evolution made me do it” excuse [6]. Case in point: a 2000 book called *A Natural History of Rape: Biological Bases of Sexual Coercion* argued that rape is a naturally selected sexual strategy because it improves gene survival. Begley also attacked the field’s premise. Humans, she argued, never stayed in one environment long enough for psychological traits to compete in the epochal contest of natural selection, so what arose instead was a versatile mind that could adapt to inconstant circumstances.

The first of these attacks is not well-grounded. As Begley herself seems to admit in her article, an attempt to discredit a science because its findings depress us is simply bad science. A condition of genuine scientific inquiry is the willingness to accept hard facts if valid experiments uncover them. If evolutionary psychology finds that troubling beliefs and desires come inbuilt, so be it. Even so, that evolutionary psychology produces repugnant findings is less of a concern than Begley made it out to be. That book that gave rape an evolutionary defense was later disproven by other studies, which pointed out the overwhelming odds against the survival of genes that bestow proclivities toward sexual coercion. Just as one would not expect a community to look fondly on free-riders, one would not expect community members to help a known rapist find food.

The field’s most recent embarrassment was Harvard biologist Marc Hauser’s conviction on eight counts of scientific misconduct in his studies of primate morality. Hauser designed his experiments with the hope of identifying more human characteristics in primates, as several of his valid studies did before. His data-fudging was taken by some religious figures, philosophers, and even other scientists as an invalidation of the entire project.

Many scientists, however, have come to the field’s defense. De Waal has pointed out that many areas of scientific study have had their fair shares of frauds, including chemistry and physics, but those anomalies did not shutter entire disciplines. Hauser’s misconduct was one unfortunate instance of malpractice and should not be taken to debunk the connection between evolution and morality. De Waal and other primatologists like Jane Goodall should not go unemployed because of one colleague’s misdoings.

Setting these procedural complaints aside, evolution can still only go so far to answer the biggest questions of human existence. As Harvard professor of linguistics Steven Pinker argues, if evolution were the only source of life’s purpose, a man would be wholly fulfilled spending his afternoons at the sperm bank. But this is not so. Even if one believes that sex drive is at root the motive behind all action—whether it’s reading philosophy or playing the violin—a human needs

more than science to find his interests and purpose. We search for more than just reproductive success in life, so evolution could only illuminate our biological proclivities, not our particular hobbies and tastes.

To quarrel with this constraint on science, which holds it to providing knowledge about what is the case and not about what ought to be the case, would be to commit the notorious naturalistic fallacy. The fallacy holds that any statement about how things are cannot be used in an argument that concludes with a statement on how things should be. It highlights a salient gap between facts and obligations, and has been a trump card in moral philosophy since its 1903 articulation by the English philosopher G.E. Moore.

Yet even this hitherto axiomatic principle is under attack. Neuroscientist Sam Harris seeks to refute the naturalistic fallacy in his new book *The Moral Landscape*, in which he proposes a moral system founded on scientific understandings of well-being. Morality, he argued, is the study of how to improve well-being, so why not use experimentally verified links between behavior and well-being to write social rules? While Harris acknowledges that science has the bulk of its work in this area ahead of it, he insists that science must be what guides ethical discussions in the 21st century.

The viability of arguments like this and of the greater science of morality remains to be seen, but there are some present indicators of the direction of its course. If the innateness of our basic moral intuitions receives more and more evidentiary support—and if the present trend continues, it will—then the ancient conflict between evolutionary theory and religion may become more acute. Internationally renowned preacher Ravi Zacharias spoke at Yale recently and proselytized on behalf of Christ, citing him as the needle in Western civilization’s moral compass. Harris, a public atheist, takes this argument head-on and asks, why bother to pore through Christ’s teachings when moral standards are inbuilt? It is yet unclear how a complete set of morals could derive from evolutionary theory, but many scientists and philosophers nonetheless pray—or, hope—that a universal set of maxims will one day be found.

As the minds of our fellow apes are shown to have more and more in common with our own, the traditionally clear-cut distinction between man and ape will blur. Since Copernicus, science has consistently reduced the importance of human beings’ role in the universe. Progress will likely devalue our race further, but that could do us some good. Man may be the most sophisticated around, and he has a long way to go before he figures himself out. Conveying pithily this critical truth, the 19th century philosopher Friedrich Nietzsche was prescient to let his Zarathustra muse, “Man is more ape than many of the apes.” ■

*Marcus Moretti is a sophomore studying Humanities and Political Science at Yale University.*

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