Bridging the Is-Ought Divide.

Life *is*. Life *ought* to act to remain so.

**Answering Common Objections**

Previous attempts at evolutionary ethics have been met with a well-known line of questioning. Readers may be able to deduce answers to those questions on their own, but for the sake of clarity I will try to ask and answer them here explicitly.

**Q.** Isn’t all this talk about evolution just going to lead us back to Nazis and eugenics?

**A.** This has been answered already, and well, by other authors. Here is Steven Pinker, for example, in an interview with Steve Sailer while talking about his book *The Blank Slate*:

“Your question, of course, alludes to a conventional wisdom among left-leaning academics that genes imply genocide. But the 20th century suffered *two* ideologies that led to genocides. The other one, Marxism, had no use for race, didn't believe in genes, and denied that human nature was a meaningful concept. Clearly, it's not an emphasis on genes or evolution that is dangerous. It's the desire to remake humanity by coercive means (eugenics or social engineering) and the belief that humanity advances through a struggle in which superior groups (race or classes) triumph over inferior ones.”[[1]](#endnote--1)

**Q.** Rape has survived in nature for a very long time. Are you saying that rape is therefore permissible in morality? Or, to use a less controversial behavior, is infidelity permissible?

**A.** While I am arguing that all moral behaviors can be derived from nature, this does NOT logically imply that all natural behaviors are moral, and that’s certainly not what I am saying. For humans, rape clearly diminishes some individuals’ flourishing and it reduces the likelihood of cooperating together to work and progress towards existential goals. Rape is a selfish behavior that devastates other individuals and groups, which puts it clearly in the category of morally wrong behaviors. Infidelity is a trickier area as one can imagine examples where the fidelity to one partner has become meaningless so the opportunity to create a different bond of cooperation will lead to a better outcome for all. Whether or not that is actually an infidelity anymore though leads to the conclusion that infidelity as it is usually defined is a morally wrong behavior since it damages long-term reputations and cooperation in groups for the sake of short-term pleasures. These are short examples of the type of moral reasoning that becomes possible using the framework in my paper.

**Q.** Ok, those were cheap shots to see if you were a loony, but Nazis and rapists weren’t the only ones to try this line of reasoning before. What about the other evolutionary ethicists that have tried to find morals in nature? Why is this any different?

**A.** Let’s take a look this history. In *The Temptations of Evolutionary Ethics*, Paul Farber “describes three upsurges of enthusiasm for evolutionary ethics. The first came in the early years of mid-nineteenth century evolutionary theories [Darwinists]; the second in the 1920s and '30s, in the years after the cultural catastrophe of World War I [Social-Darwinists]; and the third arrived with the recent grand claims of sociobiology to offer a sound biological basis for a theory of human culture [Sociobiologists].”[[2]](#endnote-0) To show how my effort has differed from these past ones, I will have to examine this history in a bit of detail. Let’s start with the main Darwinists—Charles Darwin and Herbert Spencer.

In the IEP entry for *Evolutionary Ethics*, we see that “the biologization of ethics started with the publication of *The Descent of Man* by Charles Darwin in 1871. In this follow-up to *On the Origin of Species*, Darwin applied his ideas about evolutionary development to human beings. Darwin devoted a large chapter of the book to evolutionary explanations of the moral sense.”[[3]](#endnote-1) Darwin explained this evolution as a two step process—first, developing social instincts to distinguish between ‘them’ and ‘us’, and then second, developing reason to reflect on past actions and motivations by the self or others, which enabled a judgment to be passed on those actions as right or wrong. Influenced by the utilitarianism of his time, however, Darwin believed the standard for right or wrong behavior would inevitably be judged according to the ‘greatest-happiness principle’. This, like all forms of utilitarianism, left open the question of what exactly makes a person or a group happy.

Herbert Spencer jumped into this breach and used facts about evolution to define what was right and wrong. While Spencer did believe that “mutual cooperation between humans is required to coordinate self- and other-regarding impulses”[[4]](#endnote-2), he did not value this as highly as other “biological facts (struggle for existence, natural selection, survival of the fittest)…[in his] prescriptions for moral conduct. For instance, he suggested that life is a struggle for human beings and that, in order for the best to survive, it is necessary to pursue a policy of non-aid for the weak: ‘to aid the bad in multiplying, is, in effect, the same as maliciously providing for our descendants a multitude of enemies.’”[[5]](#endnote-3) Spencer had latched onto the new mechanism of natural selection as the key to understanding the theory of evolution, and he tried heavy-handedly to use this to unlock the problem of morality when an emphasis on the balance required between competition and cooperation would have served him much better.

Unfortunately, this one-sided Spencerian view of the world as harshly competitive where the “survival of the fittest” governed all outcomes had a strong influence on society and it provided a ready justification for the next set of evolutionary ethicists—the Social Darwinists and eugenicists—who used this as an intellectual excuse for their version of class warfare. Social Darwinism is a modern name, but it is applied historically to those who sought to apply biological concepts from evolution to sociology and politics. There’s nothing inherently wrong with this idea, but when the applications are used selectively and ignorantly, the consequences can be dire. The early proponents of these ideas argued “the strong should see their wealth and power increase while the weak should see their wealth and power decrease. Different Social Darwinists have different views about which groups of people are *the strong* and *the weak*, and they also hold different opinions about the precise mechanism that should be used to promote strength and punish weakness”[[6]](#endnote-4), but eugenicists in many countries enacted “policies and programs including: genetic screening, birth control, promoting differential birth rates, marriage restrictions, segregation (both racial segregation and segregation of the mentally ill from the rest of the population), compulsory sterilization, forced abortions or forced pregnancies, and genocide.”[[7]](#endnote-5) Eugenicists’ attempts to improve the genetic traits of mankind completely ignored several aspects of what actually improves the survival of our species: diversity within a species, cooperation among all members of society, the psychological need all individuals have to flourish, the reduction of harm that comes from competitive conflicts, and the role that culture plays as it interacts with our genes. For these and many other reasons, eugenics and other Social Darwinist movements failed and failed miserably. As the horrors of Nazism and fascism revealed these failures and were gradually beaten back, any well-meaning natural philosophers recoiled from a tainted field. Evolutionary ethics “ground to a complete stop. It promoted a grotesque distortion of true morality and could do so only because its true foundations were rotten.”[[8]](#endnote-6) And so the field remained fallow for half a century until sociobiologists started to uncover the kinder side of human nature that people felt comfortable promoting.

This new area of science was first described at a conference in New York in 1948 when scientists “decided to initiate new interdisciplinary research between zoologists and sociologists. ‘Sociobiology’ was the name given to this new discipline aiming to find universally valid regularities in the social behavior of animals and humans. Emphasis was put on the study of biological, i.e. non-cultural, behavior.”[[9]](#endnote-7) This approach didn’t really take hold though until 1975 when E.O. Wilson published *Sociobiology: The New Synthesis.* Contained within this scientific work, Wilson expressed his belief that “scientists and humanists should consider together the possibility that the time has come for ethics to be removed temporarily from the hands of the philosophers and biologicized.”[[10]](#endnote-8) Michael Ruse has described the ethical system these sociobiologists have come to espouse. Calling them evolutionists, Ruse said they are “no longer attempting to derive morality from factual foundations. His/her claim now is that there are no foundations of any sort from which to derive morality—be these foundations evolution, God’s will, or whatever. Since, clearly, ethics is not nonexistent, the evolutionist locates our moral feelings simply in the subjective nature of human psychology.”[[11]](#endnote-9) “In a sense, therefore, the evolutionist’s case is that ethics is a collective illusion of the human race, fashioned and maintained by natural selection in order to promote individual reproduction.”[[12]](#endnote-10) “The whole point about the evolutionary approach to ethics is that morality does not work unless we are all in the game.”[[13]](#endnote-11) This is true, as Hume and Moore said, that morality is a *perception in the mind*, an *object of thought*, but the goal of the game we are all playing is not merely to promote individual reproduction. The sociobiologists have thought too small. As Singer said in a smaller way, and I concluded in my article, the goal is to promote the survival of a much wider circle—the widest circle of all in fact—the circle of life in general over evolutionary timespans.

**Q.** I see why those previous efforts all failed, but what specifically would make Evolutionary Ethics successful? What are some other major challenges to this effort and how have you met them?

**A.** Let’s tackle some of these one at a time. I’ll give the questions in bold, and the answers in regular typeface.

**In an Internet Encyclopedia of Philosophy essay, Doris Schroeder lists six lingering challenges for evolutionary ethics:[[14]](#endnote-12)**

**1. “How can a trait that was developed under the pressure of natural selection explain moral actions that go far beyond reciprocal altruism or enlightened self-interest? How can, for instance, the action of Maximilian Kolbe be explained from a biological point of view? (Kolbe was a Polish priest who starved himself to death in a concentration camp to rescue a fellow prisoner.)”** It can’t be explained from a merely biological point of view, but we are not governed by mere biology. Our genes and our culture interact to influence our behavior and both of those items have gone through the evolutionary process of blind variation and selective retention. Our biology has been selected to give us the flexibility to handle situations in our culture where either competition or cooperation is required. Our cultures have been shaped to produce many different norms of behavior in response to different environments. Our faculties of reason allow us to choose between strategies based on more than just immediate biological benefits. In the case of Kolbe, as he weighed up his choices for action, he placed a higher value on the future of society than the present value of his individual self. Nothing in the universe stops him from doing that, and in some cases, this may even be the choice that ought to be made.

**2. “Could not human beings have moved beyond their biological roots and transcended their evolutionary origins, in which case they would be able to formulate goals in the pursuit of goodness, beauty, and truth that have nothing to do directly with survival, and which may at times militate against survival?”** They could. But those choices will not survive over the long term if they do in fact militate against survival. We ought to formulate goals that solve the primary problem of existence—the continuation of existence. After that, we can strengthen the will to live by cultivating beauty, truth, and other forms of individual flourishing.

**3. “Morality is universal, whereas biologically useful altruism is particular, favoring the family or the group over others. ‘Do not kill’ does not only refer to one’s own son, but also to the son of strangers. How can evolutionary ethics cope with universality?”** This question has not defined “biologically useful” broadly enough. If we share 99% of our DNA with a chimpanzee, is it not “biologically useful” to act to promote the chimp’s survival? Do we not share biological building blocks with all of life? The universal tie that binds all life together—that fact that we are all alive—is the universal tie that binds our morality. It must also be noted that there is a difference between the universal goal of morality and the particular actions that may lead to that goal. Even the injunction “do not kill” is not universally moral because we can find particular instances where killing must be done.

**4. “Normative ethics aims to be action-guiding. How could humans ever judge an action to be ensuring long-term survival? (This is a practical rather than conceptual problem for evolutionary ethics.)”** Humans can judge this the same way we attempt to predict the future consequences of all of our behavior—by examining the past, developing theories, and testing predictions. Sure, it’s a tough job to predict what will lead to the long-term survival of a species, or life in general, and we will never be 100% certain of our predictions, but that doesn’t mean we shouldn’t try or can’t get better at it.

**5. “Hume’s ‘is-ought’ problem still remains a challenge for evolutionary ethics. How can one move from ‘is’ (findings from the natural sciences, including biology and sociobiology) to ‘ought’?”** By using the bridge that Hume gave us—the passions of a *want,* which in the case of morality is the fundamental and universal *want* of life desiring to remain alive.

**6. “Similarly, despite the length of time that has passed since the publication of *Principia Ethica*, the challenge of the “naturalistic fallacy” remains.”** Which naturalistic fallacy are you referring to? If you read my paper carefully, you will see that I’ve committed none of the eight documented naturalistic fallacies that others have committed.

**What about Moore’s *open-question* argument? If the definition of "good" is "whatever furthers human survival," then it should be nonsensical to ask "Is human survival itself good?", but it seems a perfectly meaningful question.** That is a meaningful question, but only because you haven’t expanded the circle broadly enough. I state that “good” is “that which leads to the long-term survival of life,” so to answer Moore here, it must be nonsensical to ask “Is the survival of life itself good?” And sure enough, this is nonsensical. Without life, there is no judgment of good or bad. Anything that happened in the universe before life arose is just a question of physics and chemistry. Only in the sense that interactions in these realms led to biology could any of them be said to be “good” or “bad” interactions. If life were to be extinguished from the universe, there would be nothing left to which the labels of good or bad could be applied.

**William James wrote about natural selection: "The entire modern deification of survival per se, survival returning into itself, survival naked and abstract, with the denial of any substantive excellence in what survives, except for more survival still, is surely the strangest intellectual stopping-place ever proposed by one man to another".[[15]](#endnote-13)** And yet, this is the final stopping place when using reason to conduct a root-cause analysis. Without survival, there is nothing. It’s only once we attain survival that we can begin to speak about other hierarchies of needs. In that sense, survival is just the starting point, but it is the one that cannot be ignored, which is exactly what makes it the universal basis for morality.

**Thomas Huxley wrote about those that put forth an ethics of evolution: “The ‘evolution of ethics’ would usually better express the object of their speculations…I have little doubt, for my part, that they are on the right track; but as the immoral sentiments have no less been evolved, there is, so far, as much natural sanction for the one as the other. The thief and the murderer follow nature just as much as the philanthropist. Cosmic evolution may teach us how the good and the evil tendencies of man may have come about; but, in itself, it is incompetent to furnish any better reason why what we call good is preferable to what we call evil than we had before.”[[16]](#endnote-14)** Huxley wrote this in 1897, so we should cut him some slack, but I would say the fact that good, moral actions lead to the survival of life while evil, immoral ones lead to its extinction is a pretty competent reason why we prefer one to the other. The explanation that comes from the study of evolution and biology, which states immoral actions are generally caused by incorrectly weighting one circle of biology over another, is also a satisfying explanation of why we have evolved to act in both moral and immoral ways since we are often required to value one circle of biology over another and act accordingly. The fact that we sometimes get this judgment wrong is either excusable or blameworthy depending on the difficulty of the decision and the ability and intention of the moral actor.

**Q.** So much for the previous efforts of evolutionary ethicists. What about the study of morality in general? How does this answer the major questions from that field?

**A.** To me, that’s a three-part question to be separated into (i) the two essential questions of morality, which have been answered in (ii) three specific ways, and studied in (iii) three separate areas. Let’s look at each of those parts in turn.

**The two essential questions in ethics are: How can we distinguish between good and evil? And why should we be good? How do you answer those questions?** As stated above, good, moral actions lead to the survival of life while evil, immoral ones lead to its extinction. Why should we be good? Because we want life to continue and, luckily, we have evolved to feel pleasure when we contribute to that cause.

**The three main camps that past philosophers of morality have fallen into are deontologists, consequentialists, and virtue ethicists. Is there a way to unite these camps?** To me, the deontological rule that forms the basis of morality is “do that which leads to the long term survival of life.” Where the consequences of our actions are reasonably clear, we can follow this rule reasonably well and optimize our actions. Where the consequences are opaque, we must be cautious, and do our best to discover the right path through limited trials (and, inevitably, errors), which are conducted by stepping in virtuous directions, where our lists of virtues have already been fairly well selected for their abilities to increase individual and community flourishing.

**The subject of ethics is usually divided into three areas of study: “metaethics, normative ethical theory, and applied ethics. Metaethics looks for possible foundations of ethics. Are there any moral facts out there from which we can deduce our moral theories? Normative ethical theories suggest principles or sets of principles to distinguish morally good from morally bad actions. Applied ethics looks at particular moral issues, such as euthanasia or bribery.”[[17]](#endnote-15) What would your evolutionary ethics look like under the lenses of these fields of study?** As described in my paper, I believe we can now deduce the foundations of ethics from evolutionary facts. The survival of life over evolutionary timespans is the most basic hurdle and universal goal, so this is the metaethical fact from which all our moral theories can be deduced. Normative rules that lead toward this goal over the long term must be morally good, as it makes no sense to speak of good without the existence of life to judge this fact. Normative rules that do not lead in this direction will eventually go extinct, and are therefore morally bad. The determination of whether particular actions are morally good or morally bad when they are applied to a specific situation may still be difficult to judge, but this will be made easier by finally knowing the objective goal we are shooting for. We can use some of the broad principles of biology, sociobiology, ecology, and evolutionary biology that have helped life survive and thrive thus far to empirically discover morally good and bad actions.

**Q.** That’s a pretty vague answer for the application of these ethics. Can you give some more specific examples of how this form of evolutionary ethics would address some practical problems?

**A.** Sure. Let’s outline the scope of the problem in general, look at the current vocabulary used to address these problems and translate them into evolutionary ethical language, and then use that language to analyze a few individual items that will hopefully give a representative sense of this new approach.

Applied ethics is a huge and diverse field. Imagine all the difficult questions of behavior that exist in the world. “Under what conditions is an abortion morally permissible? Does a citizen have a moral obligation to actively participate (perhaps by voting) in the democratic process of one’s nation (assuming one is living in a democracy)? What obligations, if any, does one have to the global poor? Under what conditions is female genital excision morally permissible? If there are conditions under which it is morally wrong, what measures, if any, should be taken against the practice? These are just some of the thousands of questions that applied ethicists consider.”[[18]](#endnote-16) These questions have been lumped into groups as diverse as those relating to corporate social responsibility, beginning of life issues (including abortion and genetic engineering), the moral status of non-human animals, distributive justice, famine relief, engineering ethics, bioethical research, and many others.

Just as E.O. Wilson lamented in *Consilience* about the gaps in communication that result from the lack of unity of knowledge in the sciences, this diversity of specializations in applied ethics has led to similar barriers in communication arising naturally. “Since the content of what is studied by applied ethicists is so varied, and since working knowledge of the field requires considerable empirical knowledge, and since historically the pursuit of applied ethics has been done by looking at different kinds of human practices, it only makes sense that there will be many different kinds of applied ethical research, such that an expert working in one kind will not have much to say in another.”[[19]](#endnote-17) I won’t disrespect the vast and specialized empirical knowledge that experts in these fields have developed and say these barriers should not exist, but I will say that the facts and situational nuances they use for consideration could now be considered within a system of evolutionary ethics that can be made universal through the common language of biologicized morality.

For example, let’s take the six foundations of morality distilled by Jonathan Haidt[[20]](#endnote-18) from ethical systems used around the world and translate them into the evolutionary ethics formulated above as the concern of life for its survival over the long term throughout the entire consilient biological framework. After this translation, it will then be easier to see how typical moral discussions are translated into conversations using this new moral framework. Using the scale of biological concern, and going in the direction of smallest to largest considerations, we can look at Haidt’s six foundations in the following way. 1) Sanctity/Degradation describes moral urges that value the health of an individual organism. 2) Liberty/Oppression describes moral urges that balance individual flourishing within the context of a group’s norms. The next three moral foundations—3) Fairness/Cheating, 4) Loyalty/Betrayal, and 5) Authority/Subversion—all describe moral urges that enforce cooperation within a group. And the final foundation, 6) Care/Harm, describes moral urges that benefit others. Care/Harm can be expressed towards other forms of life in your family, group, species, ecosystem, or entire known universe of life, either now or out into the foreseeable future.

Now, let’s finally take on three specific examples and consider some applied ethical issues surrounding 1) the moral status of non-human animals, 2) affirmative action, and 3) abortion.

1) Let’s look at some theories of what constitutes moral standing for a being. In other words, what is required for something to be able to be morally wronged? A very narrow definition for moral standing would be the idea that only a human being has the qualities necessary and sufficient to achieve this status. A very broad definition would be the idea that any living thing, even plants and viruses, can be morally wronged. According to some, if “a virus has to be considered in our moral deliberations in considering whether or not to treat a disease…because the viral entities have moral standing; well, this is counterintuitive, and indicates that with this theory, there is a problem of being too inclusive.”[[21]](#endnote-19) In the face of this counterintuitive feeling, philosophers have moved to the theory that an animal must have rationality to have moral standing, although the definition of rationality can be hotly debated. To avoid fighting over this criterion, the sentience theory of moral standing arose, which says we must consider “something that has experiences, and more specifically has experiences of pain and pleasure.”[[22]](#endnote-20) The further hair-splitting of which entities do and do not need to be considered has gone on and on to consider those with souls, caring, consciousness, and other arguable criteria, but I would go back to the broadest definition and reexamine the case where all living things can be morally wronged even if that seems counterintuitive to a Homo sapiens sapiens. If we discovered a virus that was important to keep a particular ecology in balance, we would endeavor to keep it safe. When we find a virus that attacks another creature, that virus has entered the realm of competition in our natural universe and it may be defeated—to the death if necessary to keep the remaining living beings free from harm and progressing towards survival. Either way, we do consider the virus and all other living things within the tapestry of life, which is our fundamental overriding concern. When questions arise other than competitive life and death ones regarding one living creature vs. another, and we must consider things such as the use of one living creature for the sake of another, as in the cases of farming or medical experimentation, I think the ethical dilemmas that arise in these conversations can be framed around discussions of what is good for the cooperative benefit of life over the long term and what truly harms that. Feeding into those discussions, it is helpful to consider the question, ‘What is the use of one solitary individual in this universe?’ The answer is, ‘none.’ We are nothing without the cooperation of billions of other life forms. What difference can one individual make in this universe? Very much, if you are a human taking part in our gene-culture co-evolution. A lot less of a difference, but still quite a bit, if you are a cooperative member of a family or troop of non-human animals. Very little difference, if you are an uncaring individual from a prolific species of uncaring individuals. One’s moral standing is proportional to one’s possibility of promoting the survival of life over the long term. Individual debates about the relative weights of these moral standings in various circumstances will assuredly be lengthy and difficult, if not impossible, to quantify.

2) The debate over affirmative action is comparatively much simpler, even if a precise solution is still difficult to find. The purpose of such laws is twofold, to promote diversity in the selected group, and to redress past actions that led to a persistent unequal distribution of resources where there was no just reason for those past actions. Slavery, for example, or discrimination against women are two prominent examples of such unjust past actions. Although current members of society who played no role in those previous actions may be harmed or helped by affirmative action, the goal of acting so as to increase the likelihood of survival of life over the long term morally obligates citizens to find ways to increase diversity and cooperation between elements of society that should not remain separate in friction and conflict. The lack of cooperative feelings may come from past actions that one has played no part in, but the benefits of present and future cooperation will be reaped by all. Where affirmative action policies are struck down or do too little to bring diversity to groups or to bring disadvantaged segments of society back into the fold of cooperation, these actions are morally wrong. Where they go too far and cause backlash from the majority or advantaged groups that are hurt by affirmative action, such that they are then unlikely to cooperate in attempting to build a just society that everyone can contribute to, then those polices are also morally bad. Finding the balance between the two, where affirmative action policies bring disadvantaged and advantaged segments of society back toward just and equitable feelings of cooperation, will take a tremendous amount of discussion, education, and fine-tuning to reach the desired outcome, but these are the morally good actions we all ought to seek out.

3) Although the question of the morality of abortion is often framed within religious arguments, let’s prove that this issue is also, in the end, a question about the survival of life. The easiest way to hem in this debate is to look at the two extremes of rampant abortions and no abortions. If it were suddenly considered a moral imperative for everyone to have abortions, the continuation of the species would come to a crashing halt. Abortions for all cannot possibly be the moral rule. If no one ever had abortions, or practiced any form of birth control, overcrowding, social inequality, and resource constraints could eventually lead to a dystopia that hinders the cooperative progress of mankind—another way for our species to eventually grind to an extinct halt. At some point in the future, if the planet was completely full and we knew that adding any more children to the mix could crash the system, then having abortions would become the moral thing to do. So once again, at base, survival is the ultimate arbiter of what is or is not moral. Religious proclamations do not enter into it. Now, in the case of our current world, we are clearly somewhere in between these two extreme cases. Abortions neither threaten nor ensure our survival as a species. In this world, it is unclear what the right actions are, and so, quite understandably, we argue and fight over the choices. There are competing values at work here and it is very difficult to choose between these values. One is the general value of life. By permitting abortions, do we cheapen our value for life and does that leak into other debates about war, capital punishment, health care, poverty, etc.? (The varied arguments between the political Left and Right on the value of life in each of these matters would suggest the leak in values is not very high.) Other values to consider are the ones we give to self-determination, correcting mistakes, and seeking to control our biological impulses. If no abortions are permitted, are we saying that entire lifetimes of obligation must be the penalty for momentary lapses? And surely the penalty's disproportionate cost on one gender of the species (and weighing more heavily on some social strata than others) based on rule-making decisions that generally come from the other gender of the species (and generally from another social strata as well) is incredibly costly in terms of sacrificing the cooperative spirit in society. In these moral gray areas, as in others like them, judgment, wisdom, individual consideration, and options are needed. The place that the majority of society has come to is probably the right one: fewer abortions are better; prevention by education, contraception, and abstinence is best (about 40% of pregnancies in the US are unplanned[[23]](#endnote-21)); adoptions should be viable options; early abortions, if chosen, must be made safe; exceptions for late-term abortions should be allowed for medical reasons. This seems about the right mix of moral choices, but a rational debate about each point can still be had. What is hurting much of humanity is the belief that there is a black and white answer to this question. Recognizing that morals aren't handed down in stone from a god, but instead are just rules we are trying to discover about how to survive, would go a long way towards calming this overheated debate and many others like it.

**Q.** Ok, ok. You may have something here with your evolutionary ethics. But do we really need to care about “life” and not just humans when we are talking about morality?

**A.** We cannot live alone without any other organisms providing the oxygen, food, water, digestion, etc. that we need (outside of the farthest reaches of science fiction where nanotechnology might give us the ability to manufacture all the building blocks of life from any matter we can find). For now, we cannot hold our own survival over the survival of life because without the rest we would not exist in the long term either. If, on the other hand, we threatened the existence of all other life via one technological threat or another (e.g. a Death Star to use an extreme example that makes the point clear), then if it absolutely came down to a choice between “life continues without us” or “there will be no life if we go on”, then we would be obliged to sacrifice our existence for the sake of other life forms carrying on. Could we ever realistically be put in such a position where we were certain it was an “us or them” situation? Probably not (especially considering our knowledge is as highly probabilistic as it is), but theoretically we can imagine this position and logically deduce that the ultimate backstop for moral action is not “just” the long term survival of humans, but the long term survival of life.

**Q.** Does this concern for all of life mean we can’t enjoy many of the things that make us human? Singer already tells us we should morally give all our spare money to other poor people across the globe. Do we have to do the same for birds and flies and plants and bacteria now too?

**A.** Singer stated that we should have “equal concern for all human beings” but that lead him to conclusions about charity and largesse that were out of touch with our actual moral urges. While all human beings originally have equal *standing* for claims, especially from the point of view of the veil of ignorance[[24]](#endnote-22), the actual *force* of their claims on us is variable depending on many things such as our ability to satisfy their claims, their reputation from prior actions, or their possibility of reciprocating aid over repeated interactions in the future. Moral concerns are a force that behaves somewhat like gravity with stronger pulls by larger bodies at close distances often overshadowing the background tugs of fainter objects far away. As long as we remain sensitive to the possibility that the collection of those tugs from fainter objects may occasionally outweigh those from more obvious sources, then there is no reason we can’t enjoy many of the localized concerns that make us human.

**Q.** Moral emotions that benefit the individual may have been selected for since that is the level that is affected by natural selection. Group selection may or may not exist though, so how can our morals ever expand to improve the fitness of groups, let alone the entire species or other species?

**A.** First, regarding the question of group or multilevel selection, the tide of opinion in that debate has shifted decisively in favor of multilevel selection.[[25]](#endnote-23) Moreover, even if selection mainly works on the level of the individual, if all individuals in a group follow the same patterns, then individual selection can quickly wipe out an entire species that is faced with competition. Unfortunately, we see humans doing this to other species all the time. We can imagine scenarios where we are doing it to ourselves as well.

Secondly, regarding group selection, there may be a confusion of terms happening here. If a member of a group has a propensity to cheat and is eventually punished for it with ostracism, that individual’s genes can fail to reproduce due to natural selection (he dies alone) or sexual selection (he lives, but alone), and this may be thought of as group selection since a group did the selecting. This isn’t technically correct according to currently accepted definitions since the groups aren’t being selected one against another, but they are being shaped one against another by the culling of individuals who do not conform to each group’s norms.

Finally, there is the question of what determines a group. Groups can be defined in many different ways, physically, or psychologically: by location, by familial relationships, by age cohorts, gender cohorts, racial cohorts, eye color cohorts, ice cream preference cohorts, religious belief cohorts, death penalty opinion cohorts, etc. What defines the beginning and end of a group is not necessarily the life or death of the group, but in the case of behavioral groupings, the beginning or end of a belief that drives that group’s behavior. In a species whose evolution is driven by the *genes x culture* interface as ours is, this “psychological selection” of group behavior is just as important an evolutionary process to consider as the natural selection of our physical genes. Sometimes, through the mechanism of ostracism, these group selections can turn into natural selections. Sometimes, through the mechanisms of war between groups or the isolation and extinction of individual groups, group selections can result from natural selection. But much more common is the psychological selection of behaviors that eliminates certain cultural groups. The cultural groups that believed the world is flat have gone extinct. The cultural group that believes slavery is permitted is an endangered group. The group that believes in plate tectonics is flourishing. Our beliefs are independent of our genes, and since morals change when beliefs change, our morals can evolve through the process of blind variation and selective retention without needing a genetic mechanism to do so. As shown above, that genetic mechanism may theoretically occur on occasion, but this psychological selection is the faster and more common way that our morals are selected by groups, and this is why they are able to widen to take into account the survival of the largest circles of life.

**Q.** You say you’ve come up with a universal rule for morality that drives fitness for the survival of life, but doesn’t that mean we’d need a universal fitness bearer to carry these norms into the far flung future? How can this be so given the diversity of peoples and environments and needs on this planet now and into the future?

**A.** In a species whose evolution is governed by the *genes x culture* interaction, the universal fitness bearer could actually be our culture. However, it must be pointed out that the universal basis for morality—that which drives the long-term survival of life—does not imply that all moral decisions will be universally the same, regardless of the situation. The variations you mentioned are exactly why our morals need to be flexible at the joints where tradeoffs must be made between biological spheres. One tribe’s actions that secure its environment may cause another nation to destroy their environment using the same individual actions. Although we have a universal outcome that we are driving towards, the way ahead will not always be the same for every person in every situation. This doesn’t send us back to moral relativism though, since there are some objective and universal facts that all living things (all the genetic fitness bearers) do share, which create wants they ought to obey if they are to contribute to the survival of life over the long term.

**Q.** You say that moral questions can be understood as conflicts between the spheres of biology, but how can one speak for society in sociobiology? Or the ecosystem in ecology? Individuals are always the ones doing the thinking and speaking, so how do you get from one to many to others with this morality? And even if you got there, who would then ensure that these theoretical oughts get taken up and accepted by a population of individuals at large?

**A.** When I speak about what is right and wrong and good and bad etc., I am speaking from the so-called “view from nowhere”—from an objective viewpoint outside of any individual’s concerns. This is a theoretical construct that we humans with reason and imagination are able to take to quite a far extent, even if there are some limits to what we can think about. (See Thomas Nagel’s *What Is It Like to Be a Bat?*[[26]](#endnote-24) for some thoughts about our epistemological roadblocks when thinking about other species.) When speaking for these various spheres though, it’s important to point out that they aren’t monolithic. Within sociobiology for example, social groups can be as small as me and my wife, or they can extend through clans, races, special interest groups, and nations, all the way up to the society of human beings. The needs of each of these spheres within the general sphere of sociobiology may need to be considered when faced with a moral problem. My main argument is that you cannot stop in any one sphere and overweight it at the expense of the entirety of the sphere of life in general. Now that our knowledge of life (of biology) extends out to the end of all of life over evolutionary timelines, our moral rules about how to live must also extend out to that end as well. I’d have to read up on sociological theories to say rigorously how these moral rules pass on to a society, but I think it is safe to say “cultural influencers in general” do this—people such as politicians, artists, journalists, professors, community organizers,…anyone who broadcasts to large groups really. These individuals persuade others and spread the ideas of what is right and what is wrong to other individuals until it can be said (with some imprecision) that society in general follows a particular norm.

**Q.** Ok, survival is a useful thing, it has its utility, but is survival a good thing on its own? Survival may *explain* why moral rules are the way they are, but does that *justify* moral choices or rules? Wouldn’t it still be best to simply pick a fundamental value like flourishing or happiness and build the rest on that? Perhaps it would be better to die as a human with dignity than to live as a human without it. As John Stuart Mill said, "it is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied."[[27]](#endnote-25)

**A.** Give me your definitions for flourishing, happiness, and dignity and I would hope that they lead to survival. I know mine do. Would it be dignified to lead a life of indolence and gluttony that led to the extinction of a species? Would future observers ever say, “yes, they figured out how to really live,” when they looked back on such a lost race? Survival is the primary problem that must be solved first. We would suffer many dissatisfactions to ensure our survival. We already do. That, to me, is dignity. Confidence in the future makes us happy. How can there be flourishing without something surviving to flourish?

**Q.** So what? Let’s just ignore this anyway and have a good time. Even Peter Singer said, no “facts about our evolutionary history, our biology or the origins of altruism…can compel me to accept any value, or any conclusion about what I ought to do."[[28]](#endnote-26)

**A.** Go ahead. Go extinct. Either as a psychological group, as an ostracized individual, or as an extinct group or species. The universe won’t care. But as long as others want to remain, they will act to do so. And based upon your threat or insignificance to them reaching their universal want, they will treat you accordingly. That is, after all, what they ought to do.

1. <http://www.isteve.com/2002_QA_Steven_Pinker.htm> [↑](#endnote-ref--1)
2. Farber, P. (1994) *The Temptations of Evolutionary Ethics*, University of California Press, book description. [↑](#endnote-ref-0)
3. Schroeder, D., *Evolutionary Ethics*, Internet Encyclopedia of Philosophy, <http://www.iep.utm.edu/evol-eth/>. [↑](#endnote-ref-1)
4. Schroeder, D., *ibid*. [↑](#endnote-ref-2)
5. Schroeder, D., *ibid*. [↑](#endnote-ref-3)
6. <http://en.wikipedia.org/wiki/Social_Darwinism> [↑](#endnote-ref-4)
7. Ridley, M. (1999) *Genome: The Autobiography of a Species in 23 Chapters*, HarperCollins. pp. 290-291. [↑](#endnote-ref-5)
8. Ruse, M. (1986) *Evolutionary Ethics: A Phoenix Arisen*, Zygon 21, Reprinted in Issues in Evolutionary Ethics, 1995, State University of New York Press, p. 228. [↑](#endnote-ref-6)
9. Schroeder, D., *Evolutionary Ethics*, Internet Encyclopedia of Philosophy, <http://www.iep.utm.edu/evol-eth/>. [↑](#endnote-ref-7)
10. Wilson, E.O. (1975) *Sociobiology: The New Synthesis,* p. 27. [↑](#endnote-ref-8)
11. Ruse, M. (1986) *Evolutionary Ethics: A Phoenix Arisen*, Zygon 21, Reprinted in Issues in Evolutionary Ethics, 1995, State University of New York Press, p. 234. [↑](#endnote-ref-9)
12. Ruse, M. (1986) p. 235. [↑](#endnote-ref-10)
13. Ruse, M. (1986) p. 236. [↑](#endnote-ref-11)
14. Schroeder, D., *Evolutionary Ethics*, Internet Encyclopedia of Philosophy, <http://www.iep.utm.edu/evol-eth/>. [↑](#endnote-ref-12)
15. Farber, P. (1994) *The Temptations of Evolutionary Ethics*, p. 112. [↑](#endnote-ref-13)
16. Huxley, T. (1893) *Evolution and Ethics,* p. 66. [↑](#endnote-ref-14)
17. Schroeder, D., *Evolutionary Ethics*, Internet Encyclopedia of Philosophy, <http://www.iep.utm.edu/evol-eth/>. [↑](#endnote-ref-15)
18. Dittmer, J., Applied Ethics, Internet Encyclopedia of Ethics, <http://www.iep.utm.edu/ap-ethic/>. [↑](#endnote-ref-16)
19. Dittmer, J., *ibid*. [↑](#endnote-ref-17)
20. Haidt, J. (2012) *The Righteous Mind*, Pantheon Books. [↑](#endnote-ref-18)
21. Dittmer, J., Applied Ethics, Internet Encyclopedia of Ethics, <http://www.iep.utm.edu/ap-ethic/>. [↑](#endnote-ref-19)
22. Dittmer, J., *ibid*. [↑](#endnote-ref-20)
23. <http://phys.org/news/2011-05-unplanned-pregnancies-percent.html> [↑](#endnote-ref-21)
24. <http://en.wikipedia.org/wiki/Veil_of_ignorance> [↑](#endnote-ref-22)
25. Wilson, D.S. <https://evolution-institute.org/blog/the-tide-of-opinion-on-group-selection-has-turned/> [↑](#endnote-ref-23)
26. http://en.wikipedia.org/wiki/What\_Is\_it\_Like\_to\_Be\_a\_Bat%3F [↑](#endnote-ref-24)
27. Mill, J.S. (1906) *Utilitarianism*, University of Chicago Press, p 260. [↑](#endnote-ref-25)
28. Singer, P. (1981) p. 75. [↑](#endnote-ref-26)