

Is there an Evolutionary foundation for Human Morality?

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I am going to talk about the question of whether we can find an evolutionary basis for human morality. I am not a scientist, but a philosopher. So I am not going to try to pass judgment on the theory of evolution itself, as it applies to human beings. I do not regard philosophers as professionally competent either to pass a positive or negative judgment on the theory, except insofar as there are philosophical commitments embodied in it. However, I do regard myself as having made some progress in understanding human morality. In particular, I have been interested in and have written about the gap between the demands of morality on us and our natural capacities to meet those demands. This gap presents the problem of how we can be held accountable or responsible for a standard we are not equipped to meet either by innate capacity or natural development. So I want to ask the conditional question: *if* we assume that the theory of evolution as it applies to human beings is correct, does this help us answer the questions of whether we *can* be morally good and why we *should* be morally good? The first question, whether we *can* be morally good, is the question raised by the moral gap between the demands of morality and our natural capacities. It is only after answering this first question, “yes, we can be morally good,” that the second question arises of why we *should* be morally good, for we can only be held accountable or responsible for standards that we are able to reach. The burden of my presentation will be that we do *not* get an answer to these two questions from the theory of evolution. I am not arguing here that the theory is false, but that *even if* it is true, it doesn’t give us an answer. I will be looking at a number of recent attempts to provide such an answer from the theory, but I will claim that all of them fail.

The Nature of Human Morality

In order to answer my conditional question, I need to lay out first what I take the nature of human morality to be. There are many different philosophical accounts here to choose from. I am going to give you mine, without trying to prove its superiority to its major rivals. That would be a different project. The account I am going to give takes its inspiration from John Duns Scotus, a Franciscan theologian and philosopher of the late Middle Ages. He formulated what he had already found in Anselm of Canterbury and, before Anselm, in Augustine. It may seem odd to bring a fourteenth-century theologian and philosopher into contact in this way with twenty-first century evolutionary theory, but in order to understand an idea philosophically, one has to look at its genealogy and its material embodiments in culture. Ideas arise in a conversation across the generations, and we cannot see any particular idea clearly until we see the conversational context in which it emerges.

Take the idea of right and wrong. Duns Scotus had the idea that what makes something right is that God commands it, and that we have access to this righteousness or justice by a special affection of the will, which Scotus calls “the affection for justice.” This is a technical phrase, and I am not going to use technical philosophical terms in this lecture except for this one and its contrast phrase, “the affection for advantage.” An affection, in Scotus’ sense, is an inclination or movement in the will towards something. And justice is, in the classical conception, not a narrowly defined idea of distributing to people what they have a right to, but righteousness in general, or moral goodness itself. The Good Samaritan in Jesus’ parable (Luke 10:30-37) showed the affection for justice in being moved by the plight of the man wounded by the side of the road, even though that man was a traditional enemy of his race. The affection for

justice is drawn towards the good in itself and thus to God, without reference to any advantage to the self. Loving an enemy is the paradigm case because it so clearly leaves behind the self and its extensions to others in one's community and tribe. On the other hand, the affection for advantage is an inclination or movement in the will towards one's own happiness.

There is nothing wrong with wanting to be happy, or with being concerned about oneself, but what counts morally is the ranking of the two affections. Take, for example, my giving this lecture. I might have two different kinds of motives as I lecture. I might be giving my attention to the subject matter for its own sake, and to you, my audience, trying to communicate to you as well as I know how. Or I might be psychologically focused on myself delivering the lecture and trying to make you like or admire *me*. This example illustrates that our motivational and affective state is usually a mixture, and this is what Duns Scotus says. I have both affections as I lecture here, both the affection for advantage and the affection for justice, and they operate in me simultaneously. The key moral question, however, is how I *rank* the two. There is nothing wrong with a concern for my own happiness. Scotus says that we were created with it, and we will have it even in heaven. God wants our happiness, even more than we want it. After telling us to love our enemies, Jesus goes on to talk about reward. But if the affection for advantage is ranked first, it will become an *improper* regard for the self. The proper ranking is that we are to seek *first* the kingdom of God and his righteousness, and then the other things will be added to us. An extreme form of this thought is the expression by Jonathan Edwards in Religious Affections, (part III, chap. X) 'to be even willing to be damned for the glory of God'. He was echoing words of Moses and also of Paul (Romans 9:3; Exodus 32:32; see also Matthew 27:45). He was not saying that God in fact requires such a sacrifice, but that he would choose this ranking if God did require it. Our problem after the Fall is not, Scotus says, that we are born with the affection for

advantage, but that we are born with a wrongful ranking of the two affections. And we are not able, by ourselves, to reverse this ranking, since the preference for the self already underlies all our choices. Changing this ranking requires God's assistance.

Duns Scotus was the most influential philosopher in Europe for about two hundred years after his death; both Luther and Calvin learned their philosophy in this context. I do not want to exaggerate here. As far as we know, Calvin and Luther did not read Scotus himself, but they were both educated in institutions where Scotus was taught. And the basic framework of Scotus can be seen in their work – in particular in their versions of the divine command theory of ethics and in their distrust of self-love. Thus Calvin says, “God's will is so much the highest rule of righteousness that whatever he wills, by the very fact that he wills it, must be considered righteous”; and he locates in our self-love the principal obstacle to our obedience to God's will.¹

From Luther, the German pietists learned the same theory, and we find the same basic framework in the most important philosopher of modern times, Immanuel Kant, who himself grew up in a pietist Lutheran home. Kant says that we should recognize our duties as God's commands, and that our respect for this duty has the power to overcome the love of the dear self.² The great twentieth-century ethicists in both Continental and Anglo-American philosophy have defined themselves in terms of supporting or opposing Kant. But they have mostly tried to do this without the theistic framework that Kant felt he had to appeal to in order to make sense of morality. By unmooring or untying morality from theism, they have given their systems a highly characteristic kind of nervousness or hesitancy. This is what Nietzsche foretold at the end of the nineteenth century as a period of “convalescence” after, what he called, the death of God.

I do not want to go further into the details of this history. I hope I have said enough to make it plausible that the ideas we now have about right and wrong both have a long lineage or pedigree, and cannot be understood without going back into this history.

Going back to Scotus, then, we can see how he connects morality and freedom, and the same basic connection can be found in Kant. Freedom is implied in the ability to rank the two affections of justice and advantage. Scotus says that we only have freedom because we have both of them, the affection for justice in addition to the affection for advantage. If we had merely the affection for advantage, like non-human animals, we would not be free, because we would pursue our own advantage by necessity. Here Scotus departs from another tradition in Western philosophy, which we can find in its purest form amongst the ancient Greeks, in Plato and Aristotle, for example. The understanding of happiness in Greek philosophy is complex, but for both these thinkers, every motivation that we have is in the end to be understood as a motivation towards our own happiness. Scotus expresses a different thought, though it is not original with Scotus. As I said earlier, he found it in Anselm of Canterbury, and there is a strain of it in Augustine (where Anselm learned it). It is Augustine who first introduces the idea of this kind of will into philosophy, but he is articulating what he finds in the scriptures as repentance, the idea of a fundamental reorientation of the heart away from the old man and towards the kingdom of God. Augustine is here, I believe, being faithful to the New Testament and to the Hebrew scriptures. But Scotus' thought, though not original, *is* different from the Greeks. Unlike Plato and Aristotle, Scotus sees that we have within us the possibility of choosing to rank something else above our own happiness. What gives us this possibility is hearing the call of God, whose goodness so far transcends us that it has the power to reduce our self-love, our affection for advantage, to submission. It is this call, therefore, and our ability to hear it, which lies behind our

freedom. In the Greeks, there is no freedom in this sense, and there is no will in the sense that a part of us does this fundamental ranking. The title of my presentation, “Christian Scholarship and Human Responsibility,” takes off from this thought of Scotus, for it is only beings who are free who have responsibility. There can be causal responsibility without freedom, as when we say an enormous meteor is responsible for wiping out the dinosaurs, but without freedom there cannot be moral responsibility or accountability.

The Problem of the Gaps

If this picture of human morality is right, it leaves us with two kinds of gaps. First, there is what I will call the “affection gap” between those animals who have only the affection for advantage and humans who have also the affection for justice. Second, there is the “performance gap” within our own lives between the demand to be moral and our actual performance. Being moral demands a revolution of the will. Before the revolution we have a set of priorities: we will only do what we see to be good if we can see that it will make us happy. But morality demands a kind of revolution or reversal of those priorities: that we do only what we think will make us happy if we can see that it is in itself good. In other words, the moral demand is to rank the affection for justice over the affection for advantage. A consequence of this is that we are not allowed morally to give ourselves any greater moral weight or importance than we give any other human being. For my goodness or worth is not in itself any greater than anyone else’s. We *do* have, as human beings ourselves, the same moral weight as any other, so that we are also not allowed morally to make ourselves doormats for other people to walk on. We also have a greater responsibility for ourselves than we do for others, because we control our own lives more directly. But morally we all count the same.

Now, if this is the moral demand, there is a performance gap between it and the natural capacities with which we are born. We are born, Scotus and Kant agree, with the wrongful ranking of the two affections, and we cannot without assistance change this. So, it looks as though there is a kind of incoherence in the moral life, the incoherence of holding ourselves to a standard that we are unable to reach. Christianity, however, gives us an additional element in this picture. God is seen as the source of the moral demand on us. Moreover, as Augustine says, “God commands some things which we cannot do, in order that we may know what we ought to ask of Him. For this is faith itself, which obtains by prayer what the law commands.”³ Upon first hearing this sounds odd, as though God is holding us accountable to a standard we are unable to reach. But Augustine is not saying we cannot reach the standard; he is saying we cannot reach it on our own, or by our own devices. Luther uses the illustration of a parent who tells his young child to walk to him. The child takes a few steps and totters, and then reaches out for the help of the parent’s hand, which is offered to bring him the rest of the way.⁴ Moreover, God intervenes in our lives to change us so that we can live by the demand. God does this by revealing something of the divine nature to us, as Paul says in Romans, and this revelation has the power to subordinate our love of the self and our affection for advantage, and so to change the ranking of the two affections in us (Romans 1:20). Then the apparent incoherence I mentioned of holding us to an impossible standard disappears.

Before leaving this account of human morality, I want to point to one curious feature of contemporary moral philosophy in the Kantian tradition. In much of this philosophy we still find the idea of an imaginary being who is the source of the moral demand and whose prescriptions are authoritative for us. This notion has survived even amongst theorists (and this is the large majority) who no longer believe in God. They call this imaginary being various names, such as

“the impartial spectator” or “the archangel,” and they insist that talking in this way is merely a heuristic device, useful for conceptual clarity.⁵ They do not suppose that there is in fact such a being, or that such a being gives us the kind of assistance that the Christian tradition proclaims. These theorists are therefore left with the kind of incoherence I have been talking about, namely the incoherence of holding us accountable to a standard we are unable to meet. This is one source of the nervousness or hesitancy I mentioned earlier.

Contemporary moral philosophy uses at least three strategies to get over the problem of the performance gap without invoking God’s assistance. I mention these three strategies here because we will see examples of all three of them in the literature on evolutionary ethics. The first strategy is to hold our natural capacities where they are on the traditional picture and reduce the moral demand in order to fit them. The second strategy is to keep the moral demand where it is on the traditional picture and exaggerate or puff up our natural capacity to meet this demand. The third strategy is to hold both the demand and our capacities constant, and then find some naturalistic substitute to do God’s work in bridging the resultant gap. This picture of the moral gap is a very familiar picture of how we tend to think about morality in the Western world; it is familiar even amongst those who no longer believe in God. But there are problems internal to this picture about *how* we can live morally and *why* we should live morally; and the theory of evolution cannot significantly help us with these problems.

The Affection Gap

Having given briefly an account of what human morality is like, we can now return to sociobiology and evolutionary ethics. I want to deal separately with the two gaps I talked about. First, the affection gap. Nowhere in the literature about non-human animals have I found an

example of what Scotus calls the affection for justice, but only complicated forms of the affection for advantage. Scotus himself suggested there was this kind of difference between us and non-human animals: they do not have the affection for justice. This means that they do not have freedom of the Scotist kind either, since, if Scotus is right, it is only beings who have the affection for justice that have this kind of freedom. In the next part of this lecture I will discuss what I called the performance gap. I will claim that evolutionary ethics does not resolve the problem of the gap between our aspirations to meet the moral demand and our actual performance, the gap (to put it colloquially) between our talk and our walk.

In dealing with these two gaps separately, I am responding to two different arguments that can be found in evolutionary ethics. The first argument is that we can understand how humans can be morally good by looking at the source of this goodness in capacities that non-human animals already have. This makes human goodness non-mysterious and forestalls the need to appeal to anything spooky, like the assistance of God. By claiming that there is an affection gap, I am saying that there is something crucial about human morality that is not found in non-human animals. Evolutionary ethics also makes a second argument, which concerns the performance gap. Even if they cannot appeal to common origin to explain human moral capacity, they can appeal to evolutionary pressure during early periods of human history. On this view, human morality is just like every other part of human life, or the life of any species for that matter: the fundamental explanation is in terms of natural selection or adaptation, and hence reproductive advantage. I am going to claim that there is something crucial about human morality that cannot be explained by locating its source in natural selection.

Let us consider the affection gap, then. What do I mean by saying that non-human animals have only complicated forms of the affection for advantage, and do not have the affection for

justice? I will give three examples: from the social insects, from vampire bats, and from chimpanzees. The first example is of kin selection, the second of so-called reciprocal altruism, and the third of social control. These are all forms of self-benefit. Darwin says, in one of his moods, “Natural selection will never produce in a being anything injurious to itself, for natural selection acts solely by and for the good of each.”⁶ But according to Scotus, the affection for justice leads to a radical willingness to sacrifice the self. I already quoted the phrase from Jonathan Edwards about being willing to be damned for the glory of God.

The social insects have been a model of morality from the time of Homer and Virgil. Isaac Watts exclaims,

How doth the little busy bee
Improve each shining hour,
And gather honey all the day,
From ev’ry opening flow’r!⁷

For a Darwinist, what is especially confounding is the abstinence from sexual reproduction of whole groups of bees and ants. Darwin himself declared that the insects posed a “special difficulty, which at first appeared to me insuperable, and actually fatal to my whole theory.”⁸ The problem is that the most basic feature of his theory is that those variations within a species that leave more offspring will tend to be preserved and gradually become the norm. How could a variation that produced celibacy be successful from an evolutionary point of view? While he speculated that the abstinence might be explained by some kind of group selection, he was never satisfied that he had found the solution.

A solution has been found, however, and its discovery is what gave the impetus to the first great wave of sociobiology in the early 1970’s, culminating in the publication of E. O. Wilson’s

Sociobiology in 1975.⁹ In 1977 I went to a six-week conference called “Biological and Sociological Perspectives on Human Nature,” and the furious reaction to Wilson was in full swing, with the main speakers being Stephen Jay Gould and Dick Levin, an ant specialist from Harvard. I remember a whole afternoon on hands and knees in the Garden of the Gods in Colorado in the middle of July looking at ant battles in the sand.

The solution to the problem of the sterile casts among social insects was kin selection. It turns out that many of the social insects (ants, wasps and bees) have a reproductive structure, which results in the workers being more closely related genetically to their sisters from the same queen than to any offspring they might have themselves. We can think of the sterility of the workers, therefore, as promoting a greater dispersion of their genes in the next generation by working for the survival of the rest of the colony than by their own reproduction. Here is a solution to the problem of apparent altruism amongst the social insects, which brings it in line with the survival of the fittest. But note that we have nothing here that takes us beyond the affection for advantage into the affection for justice. Compare kin selection with the parable of the Good Samaritan, who was not related by blood or tribe and was, in fact, a traditional enemy of the man who was wounded by the side of the road, whom he loaded onto his donkey and whose expenses at the inn he paid himself. The affection for justice requires my action on behalf of someone without regard to that person’s relation to myself, merely because I see he or she is in need.

My second example is so-called “reciprocal altruism” amongst vampire bats who live on blood. They go out at night on hunting expeditions; sometimes they are successful and sometimes not. After two or three days without blood, they starve. But to deal with this problem, they have evolved a buddy system according to which the successful hunters will regurgitate

some of the blood into the mouths of their unsuccessful buddies.¹⁰ It is not altogether clear whether this kind of reciprocity can be detached from kin selection because the association into bat-clusters may be a marker for kinship. In any case, suppose here we do have something like reciprocity between unrelated members of the same species.

We can now model these interactions using game theory, which works out which strategies between two or more players of a game might be stable, if repeated a very large number of times. In the present context, stability means that the strategy could be fitness maximizing, and it turns out that co-operation can be a fitness-maximizing strategy under certain conditions. For example, one such strategy that has been modeled is what is called “tit-for-tat,” where benefits and harms are both reciprocated. It turns out that this is only stable, however, if there is massive reliability in the reception of signals from the other players. In the real world, where there are so many incentives to disguise real intentions, this kind of reliability is unlikely. Maybe there are other strategies that can be shown to work. It is not my concern to argue this one way or the other. My point is just that we are still within the range of the affection for advantage. One way to illustrate this is to compare tit-for-tat with the reply Socrates first gets in the *Republic*, when he asks what justice is. The reply is: Justice is to do good to your friends and harm to your enemies,¹¹ and most Greeks of Socrates’ time would have said the same thing. I suspect that common sense still holds much the same opinion. For Socrates, by contrast, it is always wrong to do harm, even in retaliation against your enemies.¹² In the same way, Jesus says in the Sermon on the Mount, “You have heard that it was said, ‘You shall love your neighbor and hate your enemy.’ But I say to you, Love your enemies and pray for those who persecute you” (Matthew 5:43-44 Revised Standard Version).

My third example is about social control amongst chimpanzees, from an anecdote told by Frans DeWaal in his delightful book *Good Natured*.

Jimoh, the current alpha male of the Yerkes Field Station group, once detected a secret mating between Socko, an adolescent male, and one of Jimoh's favorite females. Socko and the female had wisely disappeared from view, but Jimoh had gone looking for them. Normally, the old male would merely chase off the culprit, but for some reason – perhaps because the female had repeatedly refused to mate with Jimoh himself that day – he this time went full speed after Socko and did not give up. He chased him all around the enclosure – Socko screaming and defecating in fear, Jimoh intent on catching him.

Before he could accomplish his aim, several females close to the scene began to “woaow” bark. This indignant sound is used in protest against aggressors and intruders. At first the callers looked around to see how the rest of the group was reacting; but when others joined in, particularly the top-ranking female, the intensity of their calls quickly increased until literally everyone's voice was part of a deafening chorus. The scattered beginning almost gave the impression that the group was taking a vote. Once the protest had swelled to a chorus, Jimoh broke off his attack with a nervous grin on his face: he got the message. Had he failed to respond, there would no doubt have been concerted female action to end the disturbance.¹³

Now, some caution is necessary here. Frans De Waal is famous for imputing human-like intentions to apes. In this narrative, he uses terms like “indignant,” “taking a vote,” “nervous grin,” “got the message.” All of this is tendentious, in the sense (as he admits) that it begs the very questions about intentionality that he is trying to answer. But suppose we grant him the description. What the anecdote gives us is an example of chimpanzees following something like

a prescriptive rule for challenging behavior (in this case by the alpha male) that seriously endangers the cohesion of the group. There is something almost moral here, what De Waal calls a “precursor” to morality. In terms of the distinction from Scotus, there is not yet the affection for justice. This protest by the female chimps is indeed directed at the welfare of a vulnerable member of their group, but it is still their group. What seems to be going on here is a form of social control in which rules that are beneficial to the group are enforced by a kind of communal sanction.

So we do not get, in any of these three cases, any example that requires us to bring in the affection for justice. We do not know, to be sure, that there is no affection for justice, since we could not see into these animals’ hearts, even if they did have hearts in the relevant sense. Perhaps the bees or the vampire bats or the chimps do have the same two affections we do, and merely have a performance gap just like us. But in the absence of compelling evidence, it seems better to stick with the language of “precursors” of morality. I think what we get here are various complex forms of the affection for advantage. But still, the analysis of kin selection and reciprocal altruism and social control are interesting for the moral philosopher. According to the moral theory I started with, we are born with a mixture of two affections. By describing in other species one part of this mixture, the affection for advantage, these analyses give us fresh detail about the moral gap. The kind of evolutionary psychology I have been describing could give us an understanding of just how close the affection gap comes to being bridged naturally, and yet what differences between humans and non-human animals still remain.

The Performance Gap

In the rest of this lecture I will reply to three kinds of attempts in the recent literature on evolutionary ethics to provide an answer to the problem of the *performance* gap, the gap between our talk and our walk. These are attempts to bridge the gap without bringing in God's assistance. This section of the talk will be the hardest to follow because I will be referring to several different authors and the details of their arguments. In order to organize these references, I will use the framework of the three strategies I mentioned earlier for dealing with the problem of the moral gap, namely the strategies of reducing the moral demand, puffing up the human capacity, and finding a substitute for God's assistance. These three strategies are used in the contemporary world outside evolutionary ethics, but for the purposes of this talk I want to focus on the examples inside evolutionary ethics, and especially examples of the first strategy. I will mention the other two very briefly at the end.

The First Strategy

The first of these strategies starts by conceding that we naturally rank the self first and motivate all action by our own happiness; and then the strategy re-conceptualizes our situation by reducing the moral demand to fit our natural capacities so described. In that way, there is no longer any moral gap. I am going to discuss two ways of carrying out this strategy, one way in the work of Larry Arnhart, a political theorist, and one way in the work of two very different biologists, Richard Alexander and David Sloan Wilson.

Larry Arnhart starts from two identifications. He says that the good is the desirable, and the desirable is the generally desired.¹⁴ By "generally desired" he means what humans have desired throughout their evolutionary history.¹⁵ This gives especial weight to the great length of the Pleistocene period, when humans were hunter-gatherers and when natural selection presumably

exercised most of its effects on variation within human populations. Arnhart accordingly draws up a list of twenty desires that are “generally desired” in this sense. The list includes such items as: high social status, political rule (though this is, he says, a natural male desire not a natural female desire), for war (again a male desire), for wealth (that is, enough property to equip one for a good life and to display social status), and for justice as reciprocity.¹⁶ I will return to this last item in a moment. Many of the items on this list are competitive goods, in the sense that one person can only have them if other people do not. One person can only have high social status if others have lower status, and so on. I want to repeat, though, that for Arnhart the satisfaction of these desires is good, because they are all, in his sense, generally desired.

There is not an affection for justice in Duns Scotus’ sense anywhere on the list, though there is a desire for justice as reciprocity. In the language I discussed earlier, there is so-called reciprocal altruism. But Arnhart wants to deny that there is an ethical demand to love our enemies, and he denies that any valid principle of ethics requires impartial benevolence. Neither of these items appears in his evolutionary list of what is generally desired. He recognizes that he is departing here even from Darwin in one of Darwin’s moods. For Darwin thought, at least sometimes, that female sympathy – as rooted in maternal care – could expand into a disinterested universal sentiment of humanity.¹⁷ But Arnhart points out that “[a]fter all, even maternal care manifests itself as a love of one’s own offspring and a willingness to defend them against strangers. And although sympathy can be expanded to embrace ever-larger groups based on some sense of shared interests, this will always rest on loving one’s own group as opposed to other groups. Darwin’s appeal to universal humanitarianism can only be explained,” Arnhart thinks, “as a utopian yearning for an ideal moral realm that transcends nature, which contradicts Darwin’s general claim that human beings are fully contained within the natural order.”¹⁸

Arnhart concludes that since humans are *not* “bound together by a universal sentiment of disinterested humanitarianism, then deep conflicts of interest between individuals or between groups can create moral tragedies in which there is no universal moral principle or sentiment to resolve the conflict.”¹⁹ He says, “When individuals or groups compete with one another, we must either find some common ground of shared interests, or we must allow for an appeal to force or fraud to settle the dispute. The only alternative, which I do not regard as a realistic alternative, is to invoke some transcendental norm of impartial justice (such as Christian charity) that is beyond the order of nature.”²⁰

To see the effect of Arnhart’s view, consider the case of slavery. Arnhart is not entitled to condemn it morally, since it results from the satisfaction of natural desires for dominance, and he thinks the satisfaction of natural desires is good. The most he is entitled to say is that slavery is tragic, since it results from the conflict of natural desires between the masters and the slaves. Since he thinks there is no universal principle or norm to appeal to, unless there is a common interest, we must allow for an appeal to force or fraud to settle the dispute. Arnhart thinks he can appeal here to reciprocal justice. But reciprocal justice as he defines it requires an expectation of benefit on both sides, or tit-for-tat. Suppose we lived in a society in which those whom we exploited could not harm us because of their relative weakness. Suppose we knew that. We would not be moved by justice as reciprocity to end the exploitation even in the face of our victims’ suffering and hatred of us. The restraints of this kind of reciprocal justice would be totally useless. But alas, this has been the situation with slavery for most of its history. The effect of ruling out Scotus’ kind of affection for justice as “utopian” is to lower the moral demand to fit our “natural” capacities, or to fit the unconstrained affection for advantage. We will say, for example, that we do not have obligations to starving children in Africa because we do not even

know who they are.²¹ They are not part of our group. If that is the way our society in fact goes, we will be regressing to tribalism.

The second way to carry out the strategy of reducing the demand does not start out, as does Arnhart, to put normative limits on the moral demand, but it changes the source of the demand, and this has the same effect as reducing its normative force. It locates the origin or source of the moral demand not in God (as Duns Scotus does) but in natural selection or adaptation, and thus in a version of the affection for advantage, either at the level of the genes or at the level of the group. Evolutionary biologists differ in terms of which of these two levels they stress. I will talk about one of each. Twenty-five years after I went to the conference in Colorado, I went to a second conference in 2001 here at Calvin College called “Biology and Purpose: Altruism, Morality and Human Nature in Evolutionary Theory.” I wanted to see if the new form of the theory was liable to the same objections as the old one. Arnhart’s book is a good example of the objectionable features of the early sociobiology. But sociobiology has been reborn with the new label “evolutionary psychology,” and I wanted to study the similarities and differences between the two movements. Two of the main speakers, both of them biologists, were especially relevant to this project. Richard Alexander was one of the founding figures of sociobiology, especially with his book *Darwinism and Human Affairs*, in 1979.²² He emphasizes the level of the gene. David Sloan Wilson is one of the new leaders in the field and emphasizes the level of the group. But both biologists locate the source of the affection for justice in the affection for advantage, and I will claim that this ends in reducing or undercutting the moral demand.

Alexander finds in the theory of evolution the fundamental explanation of everything about life, including human life. If there were some part of life that the theory could not explain, the theory would be, he said, a “piddling” theory. The fundamental explanation of all the

behaviors of all the various life forms is the final bottom-line pay-off of differential gene replication. Thus religion is to be explained in terms of “one group besting another” and so promoting the survival and reproduction of its members, and moral behavior is to be explained in terms “of enlightened genetic self-interest.”²³ Alexander thinks we should base models of the concept of God and of right and wrong on the “reproductive interests of individuals, either as such or as achieved via success of their group,” and then we could test those models by measuring differential reproductive rates.²⁴

But why should the theory of evolution be seen this way? If we find a part of human life like mathematics that cannot as far as we know be itself explained by evolutionary theory, why should that be construed as a failure in the theory of evolution? This is a telling example because in the early stages of mathematics we find the same kind of hypertrophy of theory. I say “hypertrophy” because it is like the excessive growth of an earlobe or nostril. Pythagoras discovered that some parts of human life, like music, could be explained in terms of ratios of the simple numbers. He went on to urge that “everything is number,” and included in the scope of his theory ethics and religion. The logos or harmony of the cosmos is, he said, a triangle, and justice is geometrical equality (or, if I remember this right, the number four). It was this kind of thinking that took over the Academy when Plato died and caused Aristotle to leave it, complaining that we should not confuse ethics and geometry, and that it is the mark of the educated person to seek only that degree of precision that the subject matter allows. Why should we think that because evolution explains some important features of life, it therefore has to explain all of them? Half-humorously, in the spirit of evolutionary ethics, let me suggest that perhaps there is a discrete cognitive module in our brains, which leads us to expand theories globally when they are only locally appropriate.

Alexander's view is that humans invented mathematics, and therefore mathematics has to be understood fundamentally in terms of genetic self-promotion, just like religion or any other feature of life. But then this claim is no longer a part of the theory of evolution, but it is a metaphysical view added onto it: that every domain above the physical and the chemical which human life encounters is to be explained ultimately by natural selection at the genetic level. It is important to see that this metaphysical view cannot itself be justified biologically; it is, I believe, an article of faith for Alexander, though it is not recognized as such. If we deny this metaphysical view, we can say that human life brings us into contact with all sorts of domains, like mathematics or ethics or religion, which are not themselves subject to evolutionary explanation, although evolution may have illuminating things to say about how it is that we have the equipment to access those domains. In saying this, we might still be after a single explanatory theory, but it will be a single theory in a quite different sense. It will be the coherent conjunction of all the different theories that make sense of all our experience, without any expectation that one of these theories has to be the ultimate cash value or bottom line for all the others. Or perhaps "theory" is the wrong word for what we would be after; some less rigorous word like "understanding" is more adequate, since some parts of our experience do not seem to be amenable to theory at all in any rigorous sense.

In contrast to Alexander is David Sloan Wilson, who emphasizes (like Darwin in one of his moods) the role of morality and religion in group selection. Altruistic groups can prosper compared to non-altruistic groups. At the same time selfish individuals within an altruistic group can prosper compared to the altruistic individuals within that same group. This means that the two levels of selection (individual and group) can be in tension, and an adequate explanatory theory has to take account of both. Wilson is more inclined to take seriously the mechanisms of

social cohesion within altruistic groups, including their religious and ethical codes, as having themselves selective advantage. He also allows that cultural systems which have adaptive advantage can produce as by-products elements which are themselves adaptively neutral, or even to a limited degree counter-adaptive. But Wilson is no more inclined than Alexander to suppose that the claims internal to the domains of religion and ethics as divine command are *true*. Take, for example, his case study of Calvin's Geneva. Wilson sees Calvin's claims about God's adoption of the elect and the unworthiness of, for example, unduly quarrelsome elders to receive communion as mechanisms of social control, as useful *fictions*. Wilson's analysis is that Geneva was on the verge of dissolution as a viable community before Calvin arrived, and was enabled by Calvinism to prosper in the face of severe external and internal pressure; so its citizens were assisted in their evolutionary role of surviving and reproducing.²⁵ Although Wilson allows more autonomy to the level of group selection than Alexander, there is still a reduction of the affection for justice to the affection for advantage at the fundamental level of explanation. Adaptation is still, as Wilson says, the gold standard in explanation. Wilson's account is less reductionist than Alexander's, but both biologists have the same metaphysical commitment to a naturalistic explanation for all the phenomena of human life in terms of the theory of evolution.

The Publicity Standard

We can now face both biologists with the problem of what I will call the publicity standard. The publicity standard is that a normative theory should be able to make public what it claims as the source or origin of the normative demand, without thereby undercutting the demand. Here is where we get back to the strategy of reducing the demand. Let me give an example. Suppose we thought that ethical demands and religious authority were both invented by the powerful political

elite in order to maintain their power. Some of the sophists suggested this in ancient Greece. The idea was that the powerful wanted to control the weak even in their thoughts, and so they invented the idea of gods who could look at the heart and would punish disobedience and disloyalty. Suppose we discovered that this was the origin of our ethical striving and our religious belief: we had been programmed that way by a culture that was basically under the control of a powerful elite. This discovery would tend to undercut our ethical commitment, which is hard enough to sustain even without such discoveries. If I found that my efforts to be impartially benevolent were programmed into me by BIG BROTHER, I would start to think of myself as Macbeth, a poor player who struts and frets his hour upon the stage, my life full of sound and fury but signifying nothing. Why would these discoveries be undercutting? Because BIG BROTHER is concerned not with right but with his own power.

The discovery that adaptation through group selection was the source or origin of the normative demand would have much the same effect. I would regard myself as programmed by something that was itself at odds with morality. For adaptation is aligned with the affection for advantage. The proposed evolutionary explanation is that it is good for my group in competition with other groups that I feel the demand of the affection for justice. But the affection for justice is required by its nature to be blind to my relationship to one group rather than another, as the Good Samaritan was blind. The proposed explanation therefore undercuts the demand, and therefore fails the publicity standard.

This point is valid also against the views of Michael Ruse, a philosopher who is conspicuous in this field. Ruse holds that the objectivity of the normative demand is an illusion, produced in us by our genes, for our own (and their) benefit.²⁶ But this view fails to meet the publicity standard just as Alexander and Wilson's views fail. If the source of the moral demand

is an illusion produced by selective advantage, like an optical illusion produced in our visual apparatus, then this undercuts the force of the demand for advantage-blind choices or for justice in Scotus' sense.

There is some evidence of this effect in psychological literature. When people believe that psychological egoism is true, they are less inclined to be helpful to others. A before-and-after study was done on students enrolled in two introductory economics courses and an introductory astronomy course. The students were asked at the beginning and at the end of each course what they would do if they found an addressed envelope with \$100 in it. I do not at all mean to insult my distinguished colleagues in economics, but while the students scored the same in the economics and astronomy courses at the beginning of the semester, the economics students were more willing to keep the money at the end. The difference probably resulted from exposure to the theory found pervasively in economics that motivation is fundamentally egoistic.²⁷ I speculate that the same would be true after a semester of Professor Ruse's philosophy course.

The Second and Third Strategies

I will mention the second and third strategies for dealing with the problem of the Performance gap because I want to give you an idea of the scope of the analysis, but I will not try to discuss the details of these views. The second strategy is to keep the demand where it is, including the affection for justice, and then pretend that we are able by our own natural capacities to meet this demand. There are examples of this outside evolutionary ethics. For example, there is the view that it is only ignorance and lack of education that hold us back from being morally good, not some fundamental failure of the will. The Humanist Manifesto, published in 1933, stated that "[m]an is at last becoming aware that he alone is responsible for

the realization of the world of his dreams, that he has within himself the power for its achievement.”²⁸ This was just before the Second World War in which the people who carried out the massacres and holocaust were the most educated people in the world’s history to that point. The Jews in the concentration camps had to perform Bach for their oppressors before they were put into the gas chambers. We have to ask whether the Humanist Manifesto was right, and whether it was supported by our experience of the world run by the people who believed it. There are also examples of this strategy, which I call “puffing up our capacities,” within evolutionary ethics. Both Anthony O’Hear and Janet Richards propose that the affection for advantage is enough to take us to morality when it is added to our natural capacities for language and reason. Their idea is that reflection in itself carries with it a kind of distancing from our desires, and since we are by nature reflective beings, expressing our thoughts in universal concepts through language, we are led despite ourselves into an impartial moral perspective, adopting the aspiration to look at the world from the viewpoint of an ideal observer.²⁹ The trouble with this view is that reason and language are *not* sufficient, when added to the affection for advantage, to get us to the right ranking of the two affections for advantage and for justice. It is quite possible to be reflectively and rationally self-interested. The meticulous lists of holocaust victims kept by the Nazis suggest an exaggeration of reason, not a defect in it. The question here turns on what is meant by “reason.” If we build the notion of morality into the notion of reason, then indeed reason will take us to morality. But this is a hollow victory, produced merely by re-definition. For then living by reason, or rationally, will no longer be merely a natural capacity, and there will be the same gap I have been describing all along but now labeled differently as the gap between our natural capacities and reason in this exalted sense.

The third strategy for dealing with the problem of the moral gap without bringing in God is to find a naturalistic substitute for God's assistance. An example outside evolutionary ethics is the Marxist view that our capacities for a good life will be changed if the proletariats take ownership of the means of production. Here is a substitute for God's assistance, something that will change our capacities so that they become adequate to the moral demand. Within evolutionary ethics, there are thinkers who want to make evolution itself the substitute for God's assistance. Some of the thinkers I have in mind would resist this description of what they are doing, because they are themselves theologians. They do not think of themselves as making evolution a *substitute* for God, but that is because they have made evolution God. They talk, like Philip Hefner, of God as the way things really are, and since they think the way things really are evolves, they talk about the evolution of God.³⁰ They think of God's transcendence as omnipresence, so that God transcends any part of the universe and any particular time in the universe, but not the universe in its spatial and temporal wholeness. Within this universe there is a direction of emergence, which produces its own ascent into higher and higher levels of life and consciousness. With this strategy we retain the traditional view of both the moral demand, which Hefner says is self-emptying love, and also of our natural biological tendency to prefer the self, which Hefner says is our sin of origin. So a moral gap remains, but defined now as a gap between morality and biology.

Then we postulate that there is this direction of emergence within the universe, what the Romantics in the nineteenth century called a life force, which is making possible first life itself, then higher forms of life, then finally culture and freedom. This view gives us a gradual synchronized rise of the moral demand and our cultural capacities linked together, to produce a kind of bio-social optimum. My problem with this view is that it does not take seriously enough

the distinction between creature and creator. Scotus puts this in terms of God's existence being necessary and the universe being dependent, and so, possibly, non-existent. I think the resources for our salvation are located not within our freedom and culture, and not indeed within some internal force of evolution even if it is called "the evolution of God," but in the transcendent goodness of a God whose existence does not depend on the existence of anything else. But I am just stating my opinion at this point and not giving anything like a complete response, for that is beyond the scope of this presentation.

Conclusion

Let me try to tie some of the thoughts of this lecture together. The theory of evolution, I am claiming, cannot solve for us the problem of the moral gap. There are two gaps here: the affection gap between us and other animals, and the performance gap between our aspirations and the actual living of our lives. Human responsibility is located in this performance gap. We are responsible to live by the moral demand, but we do not seem to be able to do so by our own resources. Because of the affection gap between us and other animals, there is one answer to the problem of the moral gap we cannot give. We cannot explain our moral capacities by finding them already in non-human animals from which, according to the theory of evolution, we evolved. But would we learn anything useful about human morality *if* the theory of evolution were true in its application to human beings? We would learn something about the raw material, so to speak, on which God's assistance works. We would learn more detail about what our natural capacities are, or, in Scotus' term, we would learn more about the affection for advantage.

But if evolution were proposed as a substitute source of the moral demand, we would be in danger of losing both morality and responsibility. Why is this? Because we would end up reducing the demand in one of the ways I have described, and if we lower the demand we also lower our accountability or moral responsibility along with it. Christian moral philosophy can help us in one way by contributing to an understanding of the moral gap. If I have been right, we need an account of how the moral gap might be bridged which does not either lower the demand or exaggerate our natural capacities, and we need a theory of the source of the moral demand which passes the publicity standard. Christianity has some resources here and this is not surprising, for Western morality has its roots deep in Christian doctrine, though not only there. If we try to detach or un-moor or uproot ourselves from this doctrine, we should expect certain kinds of incoherence to result. For example, we will lose the traditional answers to the two questions, “Can we be morally good?” and “Why should we be morally good?” and it will be hard to find a substitute. Christian moral philosophy has as one of its tasks to uncover this kind of incoherence, and point us to a retrieval of the resources for overcoming it.

¹ John Calvin, *Institutes of the Christian Religion*, trans. Henry Beveridge (Grand Rapids: Eerdmans, 1989), 3.23.2

² Immanuel Kant, *Critique of Practical Reason*, trans. Mary Gregor (Cambridge: Cambridge University Press, 1997), 5.158.

³ Augustine, *Grace and Free Will*, chapter 32, in *Basic Writings of Saint Augustine*, ed. Whitney J. Oates, vol. 1, A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church, ed. Philip Schaff (New York: Random House, 1948), 759.

⁴ Martin Luther, *The Bondage of the Will*, trans. J.I. Packer and O.R. Johnston (London: James Clarke & Co. Ltd., 1957), 152.

⁵ See Richard B. Brandt, *Ethical Theory: The Problems of Normative and Critical Ethics* (Englewood Cliffs, NJ: Prentice-Hall, 1959) and R.M. Hare, *Moral Thinking: Its Levels, Method, and Point* (Oxford: Clarendon Press, 1981).

⁶ Charles Darwin, *The Origin of Species By Means of Natural Selection or The Preservation of Favoured Races in the Struggle for Life* (1859; reprint, New York: Bantam Books, 1999), 167.

⁷ Isaac Watts, "Song XX: Against Idleness and Mischief," in *Divine Songs for the Use of Children* (New Haven: Sidney's Press, 1817), 37.

⁸ Darwin, *Origin*, 195.

⁹ Edward O. Wilson, *Sociobiology: The New Synthesis* (Cambridge, MA: The Belknap Press of Harvard University Press, 1975).

¹⁰ See John Cartwright, *Evolution and Human Behavior: Darwinian Perspectives on Human Nature* (Cambridge, MA: The MIT Press, 2000), 87-88.

¹¹ Plato, *Republic*, 334b.

¹² Plato, *Crito*, 49a-e; Plato, *Gorgias*, 508b-509c.

¹³ Frans de Waal, *Good Natured: The Origins of Right and Wrong in Humans and Other Animals* (Cambridge, MA: Harvard University Press, 1996), 91-92.

¹⁴ Larry Arnhart, *Darwinian Natural Right: The Biological Ethics of Human Nature* (Albany, NY: State University of New York Press, 1998), 17, 30.

¹⁵ Arnhart, 36.

¹⁶ Arnhart, 29-36.

¹⁷ Charles Darwin, *The Descent of Man* (London: John Murray, 1871), 1: 101, quoted in Arnhart, 144.

¹⁸ Arnhart, 146-147.

¹⁹ Arnhart, 149.

²⁰ Arnhart, 149.

²¹ See Nel Noddings, *Caring: A Feminine Approach to Ethics and Moral Education* (Berkeley and Los Angeles: University of California Press, 1984), 86.

²² Richard D. Alexander, *Darwinism and Human Affairs* (Seattle: University of Washington Press, 1979).

²³ Richard D. Alexander and Andrew F. Richards, "Group-Living, Conflicts of Interest, and the Concept of God" (photocopy), chap. 24, pp. 12, 15.

²⁴ Alexander and Richards, chap. 24, p. 5.

²⁵ David Sloan Wilson, "Church as Organism" (photocopy), chap. 3.

²⁶ Michael Ruse, *Can a Darwinian be a Christian? The Relationship between Science and Religion* (Cambridge: Cambridge University Press, 2001).

²⁷ Robert H. Frank, Thomas Gilovich, and Dennis T. Regan, "Does Studying Economics Inhibit Cooperation?" *Journal of Economic Perspectives* 7, no. 2 (1993): 168-170.

²⁸ J. A. C. Fagginer Auer, et al., *Humanist Manifesto I* (Buffalo, NY: Prometheus Books, 1973), 10. First published in *The New Humanist* 6, no. 3 (1933).

²⁹ See Anthony O'Hear, *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation* (Oxford: Clarendon Press, 1997) and Janet Radcliffe Richards, *Human Nature after Darwin: A Philosophical Introduction* (London: Routledge, 2000).

³⁰ Philip Hefner, *The Human Factor: Evolution, Culture, and Religion* (Minneapolis: Fortress Press, 1993).