

CAN A DARWINIAN BE A CHRISTIAN? SOCIOBIOLOGICAL ISSUES

by Michael Ruse

Abstract. This essay looks at the Darwinian sociobiological account of morality, arguing that in major respects this philosophy should prove congenial to the Christian. It is shown how modern-day Darwinism, starting from a “selfish gene” perspective, nevertheless argues that a genuine moral sense is part of our evolutionary heritage. This moral sense yields directives much in tune with Christian prescriptions. It is argued also that Darwinian sociobiology can itself offer no metaethical foundations for morality, but the Christian wanting to appeal to God’s will can nicely and smoothly mesh the religious intent with the scientific and philosophical implications of Darwinian moral inquiry.

Keywords: Christian ethics; Darwinism; metaethics; morality; selfish genes; sociobiology; Edward O. Wilson.

For Edward O. Wilson, as for Herbert Spencer and Julian Huxley before him, Darwinism is a substitute for Christianity: a secular religion for a new age. Of course, you do not have to read Darwinism in this way—most professional evolutionists today cringe rather at this kind of activity—and even if you do, you are probably singing the same good old songs that have sustained Christians down through the ages. Indeed, you probably first learned the songs at Sunday school. No one could doubt the authenticity of Wilson’s deeply religious nature or the power of his burning moral vision, but his arguments purportedly showing Darwinism and Christianity to be mutually exclusive are simply not well taken. Indeed, if

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you insist on making a religion of your science, then your best strategy might be to join forces with Christianity rather than trying to set up your own church.

Is this then the end of matters? If you would prefer not to make a religion of your science, has Darwinism nothing more to say? Can modern evolutionary theory tell us nothing about morality, at either the substantive or metaethical level? A totally negative answer to these questions would be surprising, if only because the past thirty years have seen major advances in the Darwinian understanding of the evolution of social behavior. That area where morality most comes into play, the interactions between individuals in a cooperative or social manner, has been the subject of intense scrutiny by Darwinians, who think that they have completely transformed our thinking on the question. The development of the science and the implications to be drawn are the subjects of the discussion here.

THE EVOLUTION OF SOCIAL BEHAVIOR

Charles Darwin himself always recognized that behavior is important. It is no good being strong and handsome if you do not have the desire and ability. He recognized also that, while all behaviors are significant, some are more difficult to explain than others. If a sheep flees a wolf, this is behavior by both predator and prey, and nothing very surprising. If an organism does something for some other organism, this calls for special attention. If indeed life is a bloody struggle for survival and reproduction, why would an organism behave altruistically rather than selfishly? Epitomizing the puzzle, why do the social insects evolve as they do, with sterile workers devoting their whole lives to the good of the nests within which they live? Why not look after number one exclusively?

There is a simple answer to the evolution of altruism in general and of the social insects in particular. It is a question of selection favoring the group—the ant nest, for instance—rather than the individual. This simple answer is, however, inadequate. Darwin realized that any adaptations favoring the group at the expense of the individual will prove highly unstable. They will always be at risk of crumbling under an individual-favoring alternative. Over the long run an adaptation might revert to individual benefit via the group; unfortunately, in the short term the individual who takes advantage of the efforts of others while not returning in kind will be at the greatest advantage (Ruse 1980).

It was the 1960s before evolutionists found ways to tackle Darwin's problems about sociality. A major breakthrough came thanks to then-graduate student William Hamilton (1964a; 1964b), who pointed out that the best-known social insects, the hymenoptera (ants, bees, and wasps), have a haploid-diploid reproductive system. Males have only mothers and only a half set of chromosomes, whereas females have both mothers and

fathers and a complete set of chromosomes. Hamilton was able to show how workers nevertheless serve their own biological interests: it is more profitable from an evolutionary perspective to raise fertile sisters than fertile daughters (fig. 1). He was able to show also that his model, which is now covered by the generic term *kin selection*, can be extended to other organisms. And indeed, his work is still today considered the paradigm of an explanation of biological altruism: features and behavior involving aid to others that also serve an individual's own reproductive ends.

Following Hamilton, other models were proposed for biological altruism, notably one called *reciprocal altruism*, which takes place between nonrelatives and depends on a kind of mutual back scratching (Trivers 1971). More generally, using ideas and concepts of game theory, workers in the field were able to set these and other models in an overall Darwinian context, showing when certain reproductive strategies were likely to succeed and to lead to the evolution of physical and behavioral traits that enable organisms to survive and reproduce among their fellows, and when they were not. Particularly significant was the idea of a "reproductively stable" strategy, a course taken by an organism because none other will benefit the organism more in the social situation within which it finds itself (Maynard Smith 1982). Biological altruism was now seen as part of a more comprehensive Darwinian picture.

Together with the theoretical ideas, the workers of the 1960s and early 1970s turned increasingly to detailed and long-term empirical studies, both in the wild and in experimental situations, showing how the new models

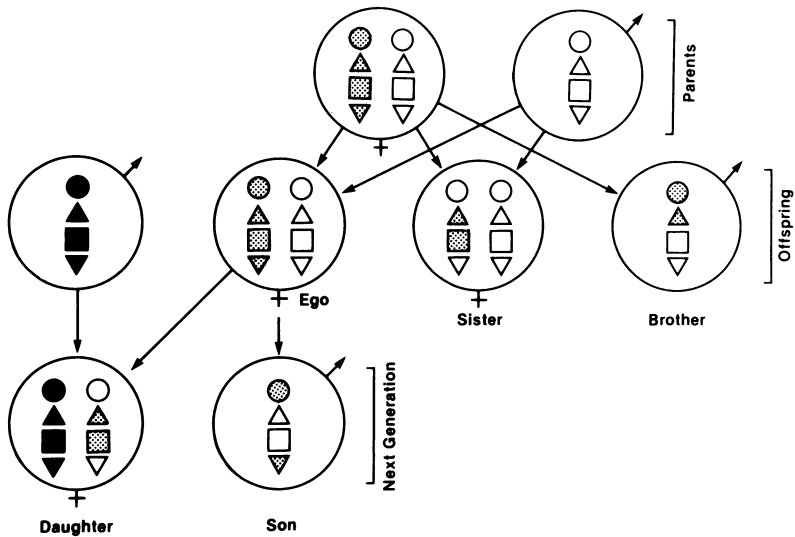


Fig. 1. Genetic relationships in hymenoptera.

function, where adjustments are needed, and how new directions are to be sought (see Ruse 1999). For all that he himself was marching to the beat of a (somewhat) different drummer than most of his fellows, a major figure was Wilson, even then with fair claim to be the world's leading expert on the social insects. A man for whom interconnections and synthesis are the very lifeblood of intellectual advance, he took readily to the task of creating a coordinated integrated subject or discipline. Giving this vibrant new field—the study of social behavior from a Darwinian perspective—its official name, Wilson authored the magisterial *Sociobiology: The New Synthesis* (1975). Going right through the animal kingdom, this work surveyed the theoretical models and ideas and showed how they were finding confirmation in the real world.

It is fair to say that, in the two decades subsequent to *Sociobiology: The New Synthesis*—and to *The Selfish Gene*, a sparkling popularization by Richard Dawkins (1976)—sociobiology has come into its own as a full member of the Darwinian areas of scientific inquiry. New models, new hypotheses, new techniques, new findings, and new studies all have helped sociobiology to take its place alongside such fields as paleontology, biogeography, and systematics.

HUMANKIND

What has made sociobiology controversial has been its extension to our own species, *Homo sapiens*. In this century, the study of humankind from a biological perspective has been muted and often under a cloud for several reasons: the territorial ambitions of the social scientists and the dreadful distortions of human genetics by the Nazis (Degler 1991). But nothing has deterred the sociobiologists, who have rushed in to claim that kin selection, reciprocal altruism, and related models are the keys to understanding human behavior, particularly as it occurs in group or social situations. Marriage relationships, family structures, parent-children interactions, social customs, religious beliefs, and power structures have been subjected to sociobiological analysis (Betzig, Borgerhoff Mulder, and Turke 1987).

Controversial though it may be, let there be no mistake that human sociobiology—something today often hidden under innocuous-sounding names like “evolutionary psychology”—is part of the general Darwinian picture: selection working on features powered by the genes. By illustration, take the oft-praised work on homicide by the Canadian researchers Martin Daly and Margo Wilson (1988). They argued that homicide should follow sociobiological patterns and were gratified to find that this generally seems to be the case. One would expect that persons with the most to gain and least to lose from violence would be those most likely to commit homicide, and Daly and Wilson argued that the people who best fit this pattern are young males with little or no stake in society. Figures collected

by police and other agencies confirm this hypothesis, a finding made the more striking by the fact that the comparative figures hold across societies with very different murder rates (American cities as opposed to Canadian cities, for example).

Particularly significant is the fact that the greatest apparent anomaly turns out to be the most triumphant confirmation. Homicide figures within families show that there is a persistent and steady number of murders by fathers of their children (rarely by mothers, except the infanticide of the newborn, which is a special case calling for its own explanation). Surely this male violence is a direct violation of Darwinian principles, for parents should not eliminate precisely those who carry on their genetic heritage. Daly and Wilson hypothesized that perhaps the homicides are by stepfathers killing stepchildren. This would make sociobiological sense (the mothers are thereby freed to attend to the needs of the stepfathers' own biological children) and in fact is a common finding in the animal world (Hausfater and Hrdy 1984). Male lions and lemmings, to take two examples, kill off all of the young when they take over a female. This hypothesis about the involvement of stepfathers proved to be precisely true. A man is *one hundred times* more likely to kill a stepchild than he is to kill a biological child (fig. 2). Showing how this was no explanation after the fact, it was not until Daly and Wilson started asking their questions that police forces began distinguishing in cases of homicide between biological and social parents. Previously, the distinction had not been thought relevant.

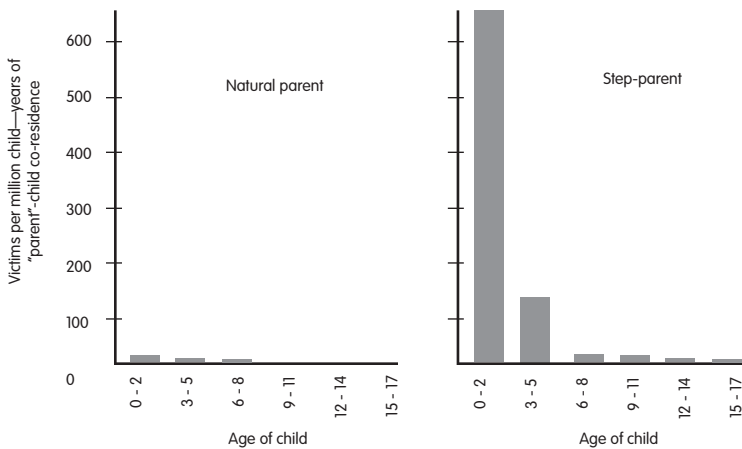


Fig. 2. The risk of being killed by a stepparent versus a natural parent in relation to the child's age. Canada 1974–1983.

THE EVOLUTION OF MORALITY

For our purposes, without prejudice, let us now assume not only that sociobiology is a viable and trustworthy branch of science, but that this applies also to human sociobiology, however named. Pertinent to our inquiry is the fact that sociobiologists—myself prominently included—have argued that we are in a position to make plausible suggestions about the evolution of human morality (Ruse 1986b). We start with the idea of altruism and with the division one must make between two senses in which this notion is used.

The key component in ethics, especially ethics at the substantive level, is the fact that we feel the obligation to promote (through our actions) the good, meaning that we feel the need to act kindly toward others simply because it is the right thing to do. This is altruism in the literal sense, and no one would deny, especially not the sociobiologist, that we have these moral sentiments and that they are genuine. Mother Teresa truly wanted to succor the poor of India because it was the right thing to do. The rest of us may not always be so good, but each one of us knows the tug of moral obligation. The other sense of altruism is what has been introduced as the biologists' sense, referring to the actions performed by an organism toward others because there is expectation (not necessarily conscious) of return from an evolutionary perspective. This kind of altruism is metaphorical. It is not Mother Teresa-type altruism. It is ant altruism, and it is this that has been the focus of sociobiological attention. I will refer to it, in quotation marks, as "altruism." One should not confuse altruism (good done for its own sake) with "altruism" (help given for biological returns), but neither should one belittle either notion. A metaphorical understanding is not an incorrect or inadequate understanding. It is just not a literal understanding.

Now it is an empirical fact that humans have evolved in such a way as to be highly "altruistic," and moreover to be greatly dependent on such "altruism." These are not disconnected points, for there has obviously been evolutionary feedback. Human beings are (compared to other mammals) not particularly strong or agile or fast or many other physical things. We need to cooperate to survive. Our Pleistocene ancestors, unlike the lion or the cheetah, could do little by way of hunting alone. On the other hand, we are good at cooperating, and we have built-in biological devices against spoiling things through intragroup violence and strife. We do not have weapons of destruction such as fangs or claws. And our hormonal balance keeps us relatively calm. Hard though it may be to imagine, the murder rate among human beings—even if you take into account the mass killings of this century—is less than that among many mammals.

The point is that human persons are social and need social adaptations, such as language and the ability to resist disease. Remember the sad tales

of the isolated indigenous peoples who were killed by the viruses of those more used to living in large groups. Most particularly, we need to be “altruists,” and we obviously are. But now the question comes of proximate causes. How in particular do human beings put their “altruism” into effect? There are at least three possibilities, and in some respects we have gone down all three routes.

Hardwired “Altruism.” The first possibility is that we might be hardwired, as one might say, by the genes to act in cooperative ways. We do what we do without any choice because this is the way of our biology. This is the cause of the “altruism” among the social insects. They are not thinking beings. They do not heed the call of the categorical imperative. They simply do what they do as automata, because their biology tells them to. And in some respects this accounts for human “altruism.” Parent-child relationships are frequently of this kind. One responds instinctively to the needs of one’s own offspring, especially in the case of mothers, for whom (like other animals) a kind of imprinting takes place, bonding them to their children. Out of instinct, one loves one’s own children more than the children of others.

Hardwiring is important, but there are very good reasons why such hardwiring—innately motivated feelings and actions, if you like—cannot account for the whole of human “altruism.” Hardwiring is fine if nothing goes wrong, but if something does go wrong—the unexpected occurs—then you are in trouble. Take the ants. When foraging, they follow pheromone (chemical) trails. If it rains, they can be lost forever. But it hardly matters to the queen (or to her sterile daughters, for that matter), for she produces literally millions of offspring. There are many more to fill the gap. Human beings have gone the other route of producing just a few offspring; but the cost is that we cannot afford to lose them carelessly. It would be a disaster if it were fatal every time a child got caught in a rain shower. There have to be more sophisticated mechanisms motivating and controlling human persons, so that our actions, including our “altruistic” actions, can respond to change and challenges.

Super-brain “Altruism.” This suggests a second proximate mechanism, the very opposite of hardwiring. Perhaps to produce “altruism” human beings have evolved as super-brains, calculating carefully the costs of any social interaction and acting positively only if it is in our self-interest. This would be selfish in the sense of looking to and only to our own needs and desires but not necessarily selfish in the sense of grabbing more than our share. It is often thought that super-brains would be forces for evil—Darth Vader types—but this is not necessarily so, especially if everyone else is a super-brain. I want to take everything for myself, but I know that you want to take everything for yourself, so we have to compromise.

Again, human beings have clearly gone down this route to some extent. When you purchase something from a store, you and the storekeeper are interacting socially, being “altruists” in the sense of doing things for the other for your own ends. You do not love L. L. Bean, nor does he love you, but you get on perfectly well together doing things for him (giving him money) as he does things for you (giving you goods). And if you do not like his goods, you can take your business elsewhere, and if he does not want your money, he can stop offering the goods you want. But obviously we are not complete super-brains; this is not true even of professional philosophers. Perhaps part of the reason for this is physiological or a lack of evolutionary time. Super-brains might not be that easy to produce biologically. But there are other, good, selective reasons. Even super-brains are going to need time to calculate their self-interest. However, in life, time is money. One does not often have the luxury of infinite time to make decisions. A tiger approaches. You and a fellow human being are in danger. Should you warn him? What will be the benefits? Will he give you something? Should you demand first? Are his promises reliable? By the time you have made your decision, both of you are in the tiger’s stomach.

Super-brains are a bit like those early chess-playing machines. They thought of all the options and were useless precisely because they thought of all the options! After a move or two, they were paralyzed because there was so much to consider. An approach was needed that incorporated quick-and-dirty solutions—strategies that would generally win, based on past experience, but that could certainly be beaten, since they were not perfect. Now, of course, with Deep Blue, the machines have been improved to such a point that even the very best chess players can be beaten. This analogy takes us to our third option for achieving biological “altruism.”

From Altruism to “Altruism.” We want a pragmatic solution, one that will generate the right moves most of the time, even though there will be mistakes and breakdowns and some actions will misfire. In the case of the machines, we have (as it were) certain strategies hardwired in, so that the moves will be made in a certain way given the initial conditions. The sociobiological claim is that in the case of human beings we are genetically predetermined to think in certain ways, so that in specific situations we will incline to act in certain ways. And the genetic predetermination manifests itself as a moral sense: an awareness of certain rules or guides which are binding upon us—the prescriptions of normative ethics.

In other words, the claim is that, in order to make us good biological “altruists,” natural selection has made us moral altruists. And note that the claim is that this is a genuine morality. By nature, we are going to be selfish, or at least self-serving. If selection did not make us this way, we would die out immediately. The person who has no concern for food and drink and no interest in sex (or who willingly steps aside in favor of a rival)

may be a saint, but he or she is going to be a Darwinian flop. Yet, because we are social animals, we need something to break through this barrier, to make us interact with our fellow human beings, to make us biological “altruists.” And this something is going to be the moral urge, the feeling that we ought to do certain things even though our nature is against it. Not that any sociobiologist wants to claim that biology does it all. It is always a function of biology in the environment: in the case of human beings, of biology in culture. So one expects to find that there will be cultural differences across societies in time and place. If nothing else, different technologies and different challenges call for different solutions. But underlying it all is a shared moral base: the morality needed to make social animals biological “altruists.”

BIOLOGICAL NORMATIVE ETHICS

What of Christianity in the light of all of this? We are assuming that what has just been presented is well taken. It is a Darwinian empirical argument and in this context is not to be questioned. Our first question or set of questions must be about normative ethics. What has the sociobiologist to say about the details, and how do these compare to Christianity? In a reasonably straightforward sense, the mesh is going to be good. The sociobiologist is committed absolutely and completely to the genuine nature of human altruism. The causal process might make use of “selfish genes,” to use Richard Dawkins’s felicitous metaphor, but this does not imply selfish people. Indeed, the very crux of the sociobiological case is that we need real altruism to make us break through our usual selfishness. We need something as powerful as this, or “altruism” will not be achieved. For this reason, the sociobiologist endorses completely the Humean distinction between “is” and “ought” and considers the naturalistic fallacy to be a genuine fallacy. Morality is different. “I love my children” and “I ought to love my children” are two quite different claims.

This confluence of Darwinism and Christianity continues as one gets into specific moral issues. Take sexuality. One is sadly mistaken if one assumes that, because selection promotes adaptations for reproduction and breeding, Darwinism is going to be pro-sex in a way that Christianity is often taken to be anti-sex. I doubt that one can readily mount a Darwinian argument for celibacy, but certainly one can mount a Darwinian argument for restraint. I want to sleep with every pretty woman that I meet. That is my biological nature. But if I did, or tried to, chaos would soon erupt as every other male tried to do the same. Society would collapse. Like a stag with a harem, I would be so busy guarding my mates, making sure that no one else encroached on my sexual property, that I would do nothing else, until, like the stag, I dropped from exhaustion and starvation. But I do control my sexual impulses, more or less, partly out of

prudence. If I started to crawl all over the president's wife at a formal university dinner, I would soon be out of a job. But partly, and chiefly, I do it because I have the sense that it is right to exercise personal sexual restraint. I do not try to sleep with every pretty woman I encounter because that would be wrong. This is not to say that I never do wrong, that I have never slept with someone else's wife. Sociobiology (and Christianity, for that matter) is not denying imperfection; it is rather trying to explain why we are not totally imperfect.

The Darwinian approach will not parallel everything that every Christian wants to claim in the name of morality. There is no ready sociobiological argument for or against abortion. No Darwinian wants every fetus aborted, but one can think of scenarios where abortion might make Darwinian sense: for instance, if a mother were to die and leave many young unattended children. Some Christians would find this conclusion unacceptable, although of course other Christians would probably argue in a way very close to that of the Darwinian. In the light of these differences, not so much between Darwinian and Christian but more between Christian and Christian, it is worth noticing something about the general nature of moral arguments. Rarely if ever is a conclusion drawn or a decision made purely on ethical grounds. Almost inevitably it is ethics in conjunction with something else, usually beliefs or claims about the empirical world. Should I plunge a knife into this person's chest? Yes, if I have reason to believe that I can then clean out or remove blocked arteries. But not otherwise, and likewise with abortion. Much of the debate is about the status of the fetus, the mother's happiness now and in the future, and so forth. Both Darwinian and Christian think that needless killing is a moral wrong. The weasel word here is *needless*, and much of the abortion debate is about matters of empirical fact around our understanding of this term.

What of the Catholic concern with natural law? The Darwinian no less than the Christian will be concerned about judging what is natural, and sympathetic to the claim that what is natural is what we value. The Darwinian is a naturalist, as was that good biologist Aristotle, to whom so much Catholic thought is indebted. This does not preclude genuine differences about what is natural. Consider the issue of birth control, with the Darwinian suggesting that intercourse maintains pair bonding and the conservative Catholic arguing that its only function is reproduction. Nor does it deny that, at a deeper level, disagreement may come over the precise connection between the natural and the morally correct. The Darwinian may find the biologically unnatural aesthetically displeasing, but moral judgments will probably require more. Suppose one thinks homosexual activity unnatural. The natural-law theorist will at once judge it immoral—it is a violation of God's eternal law. But even though the Darwinian may find it unsettling at a personal level, this is not to say that it is wrong. In order to make the moral judgment, one needs something more (Ruse 1988).

And this something more will involve reference to the basic moral standards to which one subscribes. One cannot simply equate the natural with the good. (If, as a Christian, Catholic or Protestant, one insists that the natural must be equated with the good, then in order to bring one's thinking in line with biology, one can argue that even though one might find something unsettling, this does not in itself affirm that it is unnatural. Providing that extra element, showing that the personally unsettling may not be the objectively unnatural, is the motive for those appeals to homosexual activity in other cultures and among other animals.)

SUPREME PRINCIPLES

Let us turn to the basic or supreme moral principles of substantive ethics. What kind of "altruism"-promoting altruism is one going to get from natural selection? There will be hardly any surprises, I suspect, although it is probably wrong to seek one and only one principle of morality binding on all people. Because one is taking a naturalistic approach, one may expect a range of emotions and obligations, within certain limits. One expects a kind of common-sense morality, with an underlying base of reciprocity—reciprocity because it is right, not because I have done something for you. "Be kind to people." "Help children and the less fortunate, and try to do so in proportion to need." "Give priority to mothers." "Don't rape and/or use gratuitous violence towards women." "Keep your word." "Do not take what is not yours." "Try to moderate habits like boastfulness which are going to irritate others." "Stick up for your country or your group." And so forth (Mackie 1977; 1978).

Philosophers like to isolate one or a few unique all-encompassing moral principles—like the categorical imperative—and then defend their choices against those of others, devising strange examples that favor one side or the other. There is no real harm in doing this sort of thing. After all, it is our job. But it should not blind us to the fact that although most people are not moral philosophers with a clearly articulated system, they do fairly well nevertheless, and that all moralities which have stood the test of time (thus excluding perversions like Nazi morality) concur on the basics. If you insist on having a system, then the social-contract scheme of John Rawls (1971), the most famous American moral philosopher since the Second World War, seems to fit fairly well into the sociobiological picture, as Rawls himself admits.

Rawls would have us be just. This does not mean giving everyone exactly the same. It means rather giving according to people's needs and wants in such a way as to maximize the benefits for all. Inviting us to put ourselves behind a hypothetical veil of ignorance about the position we will have in society—born of rich or born of poor, born talented or born stupid, born healthy or born sick—Rawls suggests that the just society is

the fair society. This is a society where your gains are the best possible consistent with everyone else getting their best possible. If you are talented, then you might want to get more than the stupid; but, behind the veil, you have no way of knowing where you will be on the talented/stupid scale. Hence, it is hardly in your interests to give more to the talented just because they were born lucky. You might be born untalented. But good doctors, for example, are beneficial to everyone, so if the only way to get the talented to take up the onerous burden of medicine is by paying them more than we pay philosophers or garbage men, then we all benefit, talented or stupid. Such inequality is consistent with justice.

This is a kind of social contract in which society is seen as an agreement to cooperate in order to obtain the benefits we get out of cooperation. The nice thing is that, if you introduce sociobiology into the picture, instead of pretending that a group of ancestral elders got together to set up the rules—which did not happen anyway and would not account for the sense of obligation we have about morality—the burden of starting everything off is put on the very real genes as worked on by very real natural selection (Ruse 1986a). I hardly need say how all of this—whether you remain with common-sense maxims or opt for a system like that of Rawls—fits well with Christian prescriptive morality. The morality of the Ten Commandments is right in line with common-sense morality, and the love commandment lays the way for direct reciprocation. Love your neighbor as yourself, but although you must forgive your neighbor for not loving you, you have the right—many would say you have the Christian duty—to see that your neighbor reciprocates, to you and to others, and not because you and they have given, but because it is “right.”

Historically, you would expect the Christian to feel comfortable with Rawls, for he acknowledges explicitly his debt to Kant, and Kant was deeply influenced by the pietism of his parents. It will not have escaped the reader how very Kantian-sounding was my discussion of why the sociobiologist would never think that unbridled sexual promiscuity is supported by Darwinism. If everyone attempted it, then we would soon have a full-blown societal Kantian contradiction.

MORALITY'S RANGE

Sociobiological ethics meshes with Christian ethics. But is this not all a little bit too smooth and optimistic? Does not Christianity try to push you out and beyond the common-sense maxims embraced by Darwinism? Jesus was not addressing your average well-fed member of the Rotary, who does his bit for handicapped children and who then goes home well satisfied to enjoy the fruits of his business. Or rather, he *was* addressing such a person and saying that this is not enough. “Turn the other cheek.” “Give all you have to the poor and follow me.” “Think not for what you will put

on . . .” and much more. A naturalistic account of morality like that of the sociobiologist may go so far, but ultimately it cannot go as far as the Christian demands in the name of the Lord.

This is a serious objection, and it should not be minimized. It is indeed true that the sociobiological substantive ethic is going to be limited. Reciprocation only works between those who can reciprocate. Self-benefit does not demand that every recipient give something immediately in return. Your contribution may be like an insurance policy payment, that is, something never returned because you never need to draw from the common pot. And it may be that you or a relative may never be able to contribute, because of illness or whatever. Hence, you are (if able) willing to give to those in your group who can never reciprocate. “There but for the grace of God go I.” But self-benefit does mean that your social fellows have to be in the same pool as yourself. People beyond the pale, people with a different insurance company, cannot expect to draw from you, from your policy. In less metaphorical language: you expect to find that morality falls away as one leaves first the family group, and then the immediate social group, and so on out, to the country as a whole. David Hume, an enthusiast for a naturalistic ethics, spotted this point 250 years ago. “A man naturally loves his children better than his nephews, his nephews better than his cousins, his cousins better than strangers, where everything else is equal. Hence arise our common measures of duty, in preferring one to the other. Our sense of duty always follows the common and natural course of our passions” (Hume 1978, 483–84).

In this day and age particularly, this does not mean that you can and should be indifferent to the starving poor of Africa. Apart from anything else, there may be expediency reasons for worrying about them. Social diseases, for instance, have a nasty way of becoming worldwide. More pertinently for morality, in the age of television and jet travel and e-mail, one’s group stretches out to the whole world, in some sense. But it does mean that you have a bigger obligation to your own children and those in your local group than you have to the children of Africa. It also means that your sense of obligation to animals will be truncated. They cannot reciprocate in the way of other humans, and so one rather downgrades the sense of obligation felt towards them. One does have an obligation, but a limited one. Cruelty is wrong. Meat eating is an option.

Many Christians would recoil at this point, finding these sentiments quite unacceptable. Loving your neighbor as yourself means loving everyone, everywhere, at every time (Singer 1981). No one pretends that we always or perhaps ever do this, but the Christian is only too aware of sin. We ought to do this, and inasmuch as we do not, we fail God. Jesus himself is positively brutal on the question of the family. He brushes off his mother and his brothers, he is contemptuous of a man who wants time to bury his father, and he drags his disciples away from their families. “I

have come to set a man against his father, and a daughter against her mother, and a daughter-in-law against her mother-in-law; and a man's foes will be those of his own household" (Matthew 10:35 RSV).

We may have an insoluble problem here, although it must be noted that we have a difference dividing Christians among themselves, rather than all Darwinians from all Christians. While some Christians insist that one should interpret the love commandment in the fully universal fashion, this is far from a general sentiment (Wallwork 1982). There is a tradition which states that charity begins at home and that we truly do have differential obligations—and that to pretend otherwise is itself immoral. How many of you would think me a saint if you learned that while I give three-quarters of my income to Oxfam, my family lives in a two-room shack and rummages for clothes at the local Salvation Army thrift store? Remember *Bleak House*. Dickens rounds savagely on Mrs. Jellyby, concerned as she is for the benighted heathen of Borrioboola-Gha, because she neglects her own family and the desperate plight of Jo the crossing-sweeper.

There is biblical warrant for those who argue for a restrained interpretation of the love commandment. One must remember always that Jesus thinks and speaks and acts in an apocalyptic fashion, concerned for the immediate present rather than for the long haul. Notwithstanding other comments, Jesus is supportive of monogamous marriage, setting strict limits on when it might be dissolved; he shows concern for his mother when he is on the cross; and his followers certainly imply that one has family obligations that should be taken seriously. "If anyone does not provide for his relatives, and especially for his own family, he has disowned the faith and is worse than an unbeliever" (1 Timothy 5:8 RSV; this is written under the name of Paul but probably was composed by another writer after Paul's death).

What is really important is that Christ was a preacher, not a philosopher. Whereas sociobiology tells us how we feel about morality, Christianity is trying to pull us out of our moral complacency toward better things. You are never going to effect much change if you simply compliment people on what they are doing. Jesus was dragging us to and beyond the limit. The sociobiologist is trying to do more than explain feeling. I did not need sociobiology to tell me that I love my children more than I love the children of others. Sociobiology, rather, is trying to explain moral obligation: I feel an obligation to my children that I do not have toward others. The Christian, through Jesus, is trying to enforce and extend these obligations. We forget that the obligations do extend beyond self and family. We slide readily into selfishness. Christ's message is intended to lift us up and beyond ourselves. It is easy to do right to our own children. It is a lot less easy to do right to the children of others. This is why Christ spoke as he did.

METAETHICS

What of foundations? As with social Darwinism, the question of biological progress is important. Refer now, as before, to natural forces based on selection, without implying the need for either nonnatural elements or significantly non-Darwinian mechanisms. If you think that humankind came about through progressive forces for change, then since (substantive) morality is so essential a part of our nature, for the Christian there is no real difficulty at the metaethical level. One is not committing the fallacy of getting *ought* from *is*. One simply believes that morality is underpinned by God's will, and that evolution is the way in which it came into effect. The fact that the moral sense is an adaptation is neither here nor there. Eyes are adaptations, but the train I see bearing down on me is real; likewise the moral sense is an adaptation, but this does not preclude its appreciation of the genuine nature of God's will.

In fact, as with social Darwinism, evolutionism rather clarifies and justifies the Christian position than detracts from it. God wants us to love each other, but none of this is simply a question of God's unbridled whim. God is concerned that we express our humanity—which reverts ultimately to having been made in God's image—in the fullest and most fruitful possible way. Because God has made us as social animals, this means above all else being in loving friendship relationships (*agape*) with others: it also means, if we are fortunate, being in loving sexual relation (*eros*) with another (qualifying clauses about the virtues of celibacy for the priesthood and so forth being taken into account). Love is not just an arbitrary notion of God. Although we can all be hateful, for God to insist that we should all hate each other (and think we should hate each other) is just not plausible. Even (especially) the most intimate of sexual relationships and actions, giving completely to another and being totally exposed (emotionally and intellectually, as well as physically), contribute to our wholeness and health as functioning moral and social beings. People who have never risked making fools of themselves in love are people who have a truncated relationship with all fellow human beings.

We seem to have circled back to a natural-law type position, and this is surely true. What God has produced through evolution is good—better than what was before—and it is our obligation, either on a case-by-case basis or through our general principles, to cherish and enjoy and respect it. Sexuality in itself is a good thing, and inasmuch as we use it properly we are participating in the eternal law. The Darwinian who is a Christian justifies his or her position here by referring to the way in which God has made things of positive value through the natural, progressive system. Doing things that are natural is not right simply because these things are natural, but because the natural is good as intended by God. This does not mean that we are frozen into a conservative morality, as many Thomists think. If

you can show that modern biology demands rethinking empirical claims (say, about birth control), then one's moral position might likewise be rethought. Or one might show that human beings, thanks to their biology (big brains and so forth), escape the strict confines of biology and move into culture. Hence, judgments of naturalness should no longer be based purely on morphology. (Is it immoral to get into an airplane and fly, despite the fact that we have no wings ourselves?) But it does mean that one's morality is being constrained and defined by what one takes to be the process and product of evolution.

What if you deny that evolution is progressive? What if (since you are now *ex hypothesi* a Christian and think that human beings are special) you have interpreted your science in an Augustinian fashion, arguing that God's intentions come through (Darwinian) processes, even though there was no progressionism as such? One thing you have to accept is that evolution could have produced beings very different from us—and, if you accept the plurality of worlds, possibly *has* produced beings very different from us. You might have rational beings who did not at all have the same social structures as we or the same moral sense. Suppose women (or “women”) came into heat in some coordinated way, and there was something like Oktoberfest in Munich, with unrestrained copulation for a limited time. Such beings would certainly not have the same sexual mores as our own. Would promiscuity be immoral under such a situation? I am not sure that the answer is yes.

Even the deep fabric of morality might be changed. Such beings might be social and yet not recognize the love commandment or anything comparable. Certain formal structures might have to be obeyed: I give you something, you give me something in return; I give you something, you fail to give in return, I give you one and only one chance to redeem yourself—that sort of thing (Skyrms 1996). And how we are motivated might be quite different. Think of what I will call the “John Foster Dulles system of morality,” named after Eisenhower's secretary of state at the height of the cold war. He hated the Russians; he thought it was right to hate the Russians; but he knew also that they hated him—so there was balance and compromise. Why should we not have a general system of morality that works this way, with cooperation fueled on fear and hatred—fear and hatred of a moral kind—rather than love? What price God's will now?

For the Christian moralist, relativism is anathema. One can certainly accept that different societies may well have different customs, but there has to be an underlying universality to morality. We are all made in God's image, and there cannot be one rule for one set of people and another rule for another set. There are “judgements of moral conscience, which Sacred Scripture considers capable of being objectively true” (John Paul II 1998, 82). Suttee (the widow joining her husband on the funeral pyre) is wrong,

whether it be in Britain or in India, in this century or the last. The socio-biological account of morality is in agreement about relativity here on Earth with respect to our species. Morality has to be something shared or it will not function, and inasmuch as it is biologically based, since we are all the same species there probably is not much variation. But we do now seem to be faced with an intergalactic relativism.

Probably the Christian will think that if this is the greatest threat that Darwinism can pose to Christian ethics, there is not much need for worry. Let us wait until we meet rational aliens. Or the Christian might point out that, even under Dulles's morality, there may still be place for shared virtues: sticking to one's convictions, for instance, whatever these convictions may be. In this respect, God lays the same mandates on us all. All I say is that if one rejects progressivism, then one has an added task in trying to harmonize Darwinism and Christianity. It is not necessarily impossible, but it is a task that will need to be performed. The Darwinian can be a Christian, but both sides have to think about their absolutely bottom-line commitments and about where and how they might be prepared to compromise or show flexibility to achieve harmony.

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