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Creationism For Liberals

by Jerry A. Coyne

The Evolution of God

By Robert Wright

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I.

Over its history, science has delivered two crippling blows to humanity's self-image. The first was Galileo's announcement, in 1632, that our Earth was just another planet and not, as Scripture implied, the center of the universe. The second--and more severe--landed in 1859, when Charles Darwin published *On the Origin of Species*, demolishing, in 545 pages of closely reasoned prose, the comforting notion that we are unique among all species--the supreme object of God's creation, and the only creature whose earthly travails could be cashed in for a comfortable afterlife.

But there are some for whom the true evolutionary tale of human life is not sufficiently inspiring or flattering. After all, the tale seems to hold no moral other than this: like all species, we are the result of a purely natural and material process. While many religious people have been persuaded by Darwin's overwhelming evidence, there still remains a need to find greater meaning behind it all--to see our world as part of an unfolding and divinely scripted plan. As the theologian John Haught notes, "For the universe to transform our hearts as well as our minds it must allow itself to be read--in one way or another--as having a purpose. To say that the universe has a purpose means quite simply that it is in the process of realizing something that is undeniably good, and that this good is also in some sense imperishable."

And so the faithful--the ones who care about science at all--have tweaked the theory of evolution to bring it into line with their needs, to make it more congenial. Although life may indeed have evolved, they say, the process was really masterminded by God, whose ultimate goal was to evolve a species, our species, that is able to apprehend and therefore to admire its creator. This progressivist and purpose-driven view of evolution, rejected by most scientists, has been embraced by Haught and other theologians, by religious biologists such as Francis Collins, and, unsurprisingly, by the Catholic church itself.

Yet the notion of guided evolution leaves a problem. What good is a God-evolved species if it must inhabit a world as messy, contingent, and stricken with unpredictable horrors as the process of evolution itself? Is there any way that we can affirm, however dimly, that the world is getting better? And if so, might this, too, have something to do with God? The journalist Robert Wright has devoted much of his career to speculating about these questions, seeking divine purpose behind what he sees as social and biological "laws." His thesis, in *The Evolution of God*, is that theologies have changed over time to accommodate the increased interactions among cultures that come with a more complex world, and that this theological change has made the world a more

moral place. This is a historical claim about morality's progress. But atop this claim Wright makes a really remarkable claim, a metaphysical one, that this whole process is driven by God, who is pulling society toward moral perfection. What's more, he says that this conclusion is not religious but scientific--that it is based on "facts on the ground" that should be obvious to any observer. In what he sees as the relentlessly progressive evolution of religion, Wright seems to find an argument for the existence of God.

What does the evolution of religion have to do with the evolution of life? In an earlier book, *The Moral Animal*, Wright described modern work on the evolutionary roots of human behavior, using Darwin's own behavior as a specimen. A lively introduction to evolutionary psychology, that book touched briefly and inconclusively on how human morality might have evolved from the social dynamics of small bands of hunter-gatherers. Wright expanded his Micawber-like reading of human existence in his next book, *Nonzero: The Logic of Human Destiny*, in which he used a concept from game theory to explain what he saw as a directional change in human history. According to this theory, a "zero-sum" game is one in which a victory requires a loss for the opponent. (All sports are zero-sum games.) A "non-zero-sum" game, by contrast, can lead to win-win, or lose-lose, situations. (Bargaining for a car is one example.) According to Wright, non-zero-sum dynamics promote the increasing complexity of human societies. As the human species spread over the world, its creativity led to inventions such as writing, printing presses, railways, and computers. These technologies allowed societies to share each other's advances, and so the world became more complex. And the grand climax of this historical process, in Wright's view of history, is the Internet. By knitting together all humanity into one e-network, it forms "a social, political, and even moral culmination of sorts." Wright even suggests that the Internet might possess some sort of consciousness.

The second part of *Nonzero* was an analysis of biological evolution, which Wright also saw as progressive. Life, he maintained, was inexorably driven toward complexity by the "non-zero-sum" interests of genes within a body, all of which must cooperate to produce future generations. And he proposed that the increasing complexity of both nature and human society reflects a divine plan:

I'm not saying there is proof that biological evolution has a purpose and is the product of design. I'm just saying that it's not crazy to believe this. Biological evolution has a set of properties that is found in such purposive things as animals and robots and is not found in such evidently purposeless things as rocks and rivers. This isn't proof of teleology, but it's evidence of it.

...Like those biological developments, this cultural development [of increasing complexity] is closer to being evidence of divinity than its opposite would be.

Evidence, but not proof; plausibility, but not certainty: these soothing non-committals permitted Wright's readers to accept a philosophical conclusion without doing any philosophical work. As an intellectual advance, *Nonzero* was trounced by critics. Historians went after Wright for his tendentious tone and his ad-hocism, in which he construed every conceivable observation, supportive or not, as evidence for his theory: Wright dismissed the lack of technological advance

in ancient Chinese and Ottoman societies, for example, as a "caprice of history," insisting expediently that the unit of advance was not a single society but the entire geographical region of Eurasia. Critics from biology noted the lack of evidence for teleological forces driving the evolution of complexity: in parasites such as tapeworms, for example, natural selection has favored increasing simplicity.

Moreover, Wright's proposed mechanism for increasing biological complexity, "arms races" resulting from competition between species, was clearly at odds with his theory, because such races have a manifestly zero-sum character. Every evolutionary advance in cheetahs is a loss for gazelles. Indeed, natural selection actually *requires* zero-sumness, since it involves direct competition between genes and individuals, with the winners displacing the losers. And finally, as Wright has admitted, an increase in complexity is not the same thing as progress. But it is progress, not complexity, that gives him that sunny sense of direction, the assurance of a teleological purpose.

In *The Evolution of God*, Wright sets out to fix this last problem by throwing religion into *Nonzero's* mix of evolution and technology. His thesis is that there is indeed a progressive direction in the evolution of society: an arrow of increasing morality. As societies interact and become more complex, their religions interact too. These interactions are either zero-sum (when people of different faith are in social conflict) or non-zero-sum (when different faiths feel they have something to gain by cooperating). And so, says Wright, cooperation breeds tolerance: "When a religious group senses an auspicious non-zero-sum relationship with another group, it is more likely to create tolerant scriptures, or to find tolerance in existing scriptures; and when it senses no prospect of a win-win outcome, it is more likely to summon intolerance and belligerence."

Over time, Wright sees non-zero-sum relationships predominating, and so theology becomes more tolerant. This is what he means by "the evolution of God": God does not evolve but doctrine does, and in a direction that makes God seem nicer. In other words, societies--at least those societies embracing the Abrahamic faiths of Judaism, Christianity, and Islam--keep getting better, more ethical. Although Wright does not document his claim--and it is not intuitively obvious--that humanity has indeed become more moral, it is hard to quarrel with his notion that religious doctrine responds to political and economic circumstances. But of course he has a much bigger idea in mind.

And so he ventures into stranger territory. It turns out that, although God himself does not evolve, Wright sees him as having engineered the advance of theology and morality as part of his plan for humanity. This required divine effort on several fronts. First, God directed the process of evolution so that it produced rational and moral creatures with the capacity to love: "Maybe natural selection is an algorithm that is in some sense *designed* to get life to a point where it can do *something*--fulfill its goal, its purpose." And then there was some social engineering: "God was so wise that he set up a world in which the rational pursuit of self-interest leads people to wisdom." Ergo the purpose behind human history:

What might qualify as evidence of a larger purpose at work in the world? For one thing, a moral direction in history. If history naturally carries human consciousness toward moral enlightenment, however slowly and fitfully, that would be evidence that there's some point to it all.

...The possibility persists that this growing non-zero-sumness was itself set in motion by something else--conceivably an old-fashioned god, as traditionalists might hope, and conceivably something more abstract, more philosophically modern; but in any event, something deeper.

"The possibility persists": this type of hedging is characteristic of Wright's intellectual style. Possibility, for Wright, is certainty enough, since his aim is to imbue his religious readers with the notion that there is a cosmic hand on the tiller of life.

II.

With *Nonzero* and *The Evolution of God*, Wright has helped to pioneer a new genre: the intellectual feel-good book--chicken soup for the brain. In this season of the "new atheism," believers are looking for ways to remain faithful but still feel smart. Wright's elaborate argument can do the trick. One reviewer declared that *The Evolution of God* gave him hope by showing that the evolving doctrines of theology might point to "humankind's slow education into the real nature of the divine," and another exulted that Wright "gives relief and intellectual ballast to those believers weary of the punching-bag tone of the recent faith-and-reason debates."

But does Wright's argument hang together intellectually? He declares that his ideas are more than just philosophical musings--that they actually constitute a scientific hypothesis that can be tested with empirical evidence. "An appraisal of the state of things from a scientific standpoint," he asserts, "yields more evidence of divinity than you might expect." And so, as a scientist and an evolutionary biologist, I will take Wright at his word. Let us have a look at the data.

Has religion become more ethical over time? Has morality increased within societies dominated by the Abrahamic faiths? If so, did this increase come from faith rather than other sources, and did it involve non-zero-sum logic? And if all of these questions are answered in the affirmative, is this evidence for God? Unfortunately Wright's arguments fail to hold water from the outset. Under serious scrutiny, his grandiose project collapses. And even if his data were correct, they would not bring us any closer to the divine.

How good is his theology? Wright has done extensive homework, and recounts the history of the Abrahamic faiths in detail, beginning with the animism of early hunter-gatherers and moving through polytheism and monolatry (the worship of several gods with one dominating) to Christianity, Judaism, and Islam, ancient and modern. (What about other faiths? In his zeal to pull societies toward moral perfection, did the Lord of the Universe forget the Hindus, aboriginals, Sikhs, Buddhists, and Scientologists?) The problem is that Wright has a tendency, already demonstrated in *Nonzero*, to dwell on data that support his theory and to ignore those that do not support it. The clearest examples here involve the supposedly increasing amity between groups adhering to the evolving theologies of Christianity and Islam.

Wright claims that if you survey the four main Christian gospels in the order of their composition--from Mark to Matthew and Luke to John--you will see a directional change toward a more loving and inclusive theology. This change was driven, he says, by the desire of the apostles to extend the "mandate of love" to ever more people, taking it "beyond the bounds of Israel." Clearly, he speculates, a new religion surrounded by enemies would fare better by being inclusive rather than obstreperous. The apotheosis of this trend, says Wright, is found in Paul's epistles: "*more* than Jesus, apparently, Paul was responsible for injecting [Christianity] with the notion of interethnic brotherly love."

This is a dubious and tendentious interpretation. Though austere, the early Gospel of Mark, written between 65 and 70 C.E., is famous for its double commandment of love: "Love the Lord thy God with all thy heart" and "Thou shalt love thy neighbor as thyself. There is no other commandment greater than these." (Wright dismisses the "love thy neighbor" phrase as mandating only restricted love for other Israelites.) Matthew and Luke, written slightly later, in 80-85 C.E., include famous episodes of amity, notably the Sermon on the Mount and the parable of the Good Samaritan, which Wright sees as a major advance because "it explicitly carries love across ethnic bounds." While these stories are not found in the earlier Mark, they are missing also from the later Gospel of John, written between 90 and 110 C.E.

As we move from Mark to John, what is most obvious is a progression not toward amity, but toward "Christology": the view of Jesus as a divine being, a man at once mortal and godly, incarnated, resurrected, and a worker of miracles. If John's emphasis is on love, it is the love of Christ--*that* is the love that brings salvation. There is nothing humanist about it. Increased Christology was of course useful for the growing faith, since a doctrine that salvation is gained only through Jesus is a splendid way to win converts and keep the faithful in line. I suppose one could call this a non-zero-sum strategy, but it has nothing to do with Wright's theory of interfaith amity, or with his notion of the Gospels as the scriptures of multiculturalism.

Wright is much taken with the Epistles of Paul, whom he calls "the apostle of love," as the culmination of Christian morality; and Paul does indeed show more emphasis on the virtue of charity than do John and the others. But what stands out more strongly is Paul's obsession with "moral" matters such as circumcision, idolatry, uncleanness, and fornication--that is, with purity and impurity, and all the behaviors he regards as "sinful." Biblical scholars tell us that Paul used this tactic not only to unify the diverse Christian communities around the Mediterranean, but also to purge them of their adherence to Jewish law and to Gnostic views that doubted Christ's divinity.

For someone who finds progress in complexity, Wright prefers to make his hay from a single verse from Paul's Epistle to the Galatians: "There is no longer Jew or Greek, there is no longer slave or free, there is no longer male and female; for all of you are one in Christ Jesus." This, Wright says, marks a momentous change in Christian theology: an extension of love to non-Christian foreigners. But this sunny view of the progress of theology is not so clear when you consider the verse in context. For it is preceded by these verses: "For ye are all the children of God by faith in Christ Jesus. For as many of you have been baptized into Christ have put on

Christ." And it is followed by this verse: "If ye *be* Christ's, then are ye Abraham's seed, and heirs according to the promise." So Paul is not promoting love among those of different faiths, but telling the non-Jewish Galatians ("Gentiles") that they can become spiritual descendants of Abraham only by converting to Christianity. This message, so common in Paul's Epistles, marks no theological or moral advance over the Gospel of Mark. There are no non-zero-sum dynamics here. There is only Paul's use of Jesus as a bar of admission to the holy community, as a sort of spiritual glue.

And is Paul really the epitome of Christian tolerance? Consider what else he says: non-believers, backbiters, and fornicators, among others, are "worthy of death" (Romans 1:31-32); women should be submissive to their husbands and should not speak in church (1 Corinthians 11:3, 14:34-36); and everyone's fate is predestined by God, so that it cannot be changed by one's earthly actions (Romans 7-11). The paragon of interethnic amity also advises Christians not to form fellowships with unbelievers (II Corinthians 6:14-17). And how on earth could Paul's Epistles be the culmination of a directional change in theology, when these letters were written *before* the Matthew, Mark, Luke, and John? The Epistles, it turns out, were composed between 50 and 56 C.E., several decades earlier than these Gospels. Obviously Paul could have had no knowledge of the theology that succeeded him, whatever its morality.

Besides this selective and convoluted interpretation, Wright includes an entire chapter of what-ifs, designed to prove that the arrow of theological morality is not deflected by the quirks of history. The Roman emperor Constantine, for example, converted to Christianity after winning a battle in 312 C.E., an event critical in assuring the spread of that faith. But what if he had lost the battle, or decided not to convert? Wright ponders the unsavory implications for his theory: "If Paul's doctrine of interethnic amity might have perished but for a single military victory, then how powerful could that engine really be? If the Logos is real, shouldn't moral enlightenment be driven by something ultimately stronger than the vagaries of history?"

Wright's version of theism is too clever to assert that God could simply have manipulated human history. Instead he feels compelled to argue that the spread of morality through faith--the unstoppable progress that is his plot--was impervious to particular events on the ground. And so he suggests that had Constantine not existed, the minor Christian sect of Marcionism--which rejected the Old Testament and all of the New Testament save Paul's epistles--would have taken over, for "the creation of the Roman Empire had made interethnic amity a more valuable commodity than it was before." And if Paul had not existed, or even Jesus himself? No problem--some other religion would surely have stepped in to do the job. "Even if Jesus had never been born, or had died in obscurity, some other vehicle for the meme of transethnic amity might well have surfaced."

This kind of special pleading does Wright's argument no good, except to render it impossible to refute. One can always argue backward and invent some reason why things must have happened the way they did. "Historical inevitability" is an ancient trick in the business of justification. These "inevitability" arguments resemble the claim made by religious scientists that even if evolution were to start all over again, God would still have ensured the appearance of a creature

"made" in his image. The scientific response to all such speculations is, of course, just this: we don't know.

III.

Wright's Panglossism faces a bigger problem when confronting Islam. It is, briefly, that neither the Qur'an nor many of its authoritative interpretations are particularly pacific. Open the Qur'an at random and you will find passages riddled with hatred and fear: calls for the conversion of infidels, and exquisite descriptions of the tortures that unbelievers face in hell. Adherents to other faiths are repeatedly denigrated; Jews are several times called "apes" and "pigs." Whatever else it is, this is not a theology aspiring to amity.

Moreover, there is no evidence for an increase in morality in the Qur'an over the years of its composition between 610 and 632 C.E. On the contrary: as Islamic scholars recognize, the later chapters, written after Muhammad's famous flight from Mecca to Medina, display decidedly less tolerance than the earlier ones. And according to Islamic tradition, theological disparities between early and late verses--which occur many times in the Qur'an--are resolved by giving precedence to the later ones.

And yet, despite all odds, Wright manages to find "growing salvific inclusiveness" in Islamic doctrine. He first described his way out of the problem in *Nonzero*: "The growth of Islam more than a millennium ago not only created a network of Muslim traders who could trust one another; by preaching tolerance of Christians and Jews--'people of the Book'--Islamic scripture smoothed the path of commerce all the more." In *The Evolution of God*, Wright has this to say:

The Koran says more than once that ... Jews and Christians are eligible for salvation so long as they believe in God and in Judgment Day and live a life worthy of favorable judgment.

....But, regardless of whether these verses [those permitting salvation for people of other faiths] come from Muhammad's time or later, the best explanation for them is an expanded scope of non-zero-sumness. Whether by allying with non-Abrahamics or governing them, Islamic leadership seems to have acquired an incentive to stay on cooperative terms with them.

Hold on. Non-zero-sumness cannot be the proof, because it is itself what needs to be proved. This circular quality of Wright's reasoning stems from his knowing from the outset what he wants to demonstrate. Moreover, finding the "tolerance of Christians and Jews" in the Qur'an requires a needle-in-the-haystack approach--and there are not many needles. Instead, one finds admonitions such as these:

O you who believe! Do not take the Jews and the Christians for friends; they are friends of each other; and whoever amongst you takes them for a friend, then surely he is one of them; surely Allah does not guide the unjust people.

Say: Shall I inform you of (him who is) worse than this in retribution from Allah? (Worse is he)

whom Allah has cursed and brought His wrath upon, and of whom He made apes and swine, and he who served the Shaitan; these are worse in place and more erring from the straight path.

Christians do not experience much "interethnic amity" in the Qur'an, either: "They surely disbelieve who say: Lo! Allah is the Messiah, son of Mary.... Lo! whoso ascribeth partners unto Allah, for him Allah hath forbidden Paradise. His abode is the Fire. For evil-doers there will be no helpers."

It is nice of Wright to remark that Jews and Christians will gain salvation so long as they believe in God, but he fails to mention that this saving God is the Islamic god, Allah. The Qur'an is quite explicit that salvation is gained only through adherence to Islam:

Those who are Jews, and Christians, and Sabaeans--whoever believeth in Allah and the Last Day and doeth right--surely their reward is with their Lord, and there shall no fear come upon them neither shall they grieve.

Perhaps the biggest obstacle to finding a beautiful inclusiveness in Islam is its doctrine of jihad, or holy war--the call for religious conquest and conversion. This was a call for historical action, even if it was also sometimes interpreted allegorically as a purification of the individual soul. Historically, on the Arabian peninsula and elsewhere, Christians and Jews suffered a grievous fate under Islamic rule. When they were not killed outright, they were treated as second-class citizens, taxed heavily and deprived of rights. Wright's breezy distinction between "allying with" the other and "governing" the other was usually not experienced by the other as ethical or progressive.

Here is how Wright dismisses the melancholy history of Jews under Islamic rule: "Over the centuries, Islamic tolerance of Christians and Jews (rather like Christian tolerance of Muslims and Jews) would fluctuate." Fluctuate, indeed--between murder on the one hand and mere debasement on the other. To support his thesis, Wright downplays the belligerent side of Islam. He says that "there is no 'doctrine' of jihad in the Koran," ascribing that doctrine to the *hadith*--the posthumously collected sayings of Muhammad that Muslims consider nearly as sacred as the Qur'an. He also makes the genuinely disturbing observation that "Muhammad's exhortations to kill infidels en masse were short-term motivational devices."

The problem is that scholars of Islam do indeed locate jihad in the Qur'an, in verses such as these (there are at least fifteen others):

Fight against such of those who have been given the Scripture as believe not in Allah nor the Last Day, and forbid not that which Allah hath forbidden by His messenger, and follow not the Religion of Truth, until they pay the tribute readily, being brought low.

Let those fight in the way of Allah who sell the life of this world for the other. Whoso fighteth in the way of Allah, be he slain or be he victorious, on him We shall bestow a vast reward.

And why exclude the hadith, assembled after the Qur'an, as part of evolving Islamic theology?

Isn't evolution usually progressive? The reason, as Wright well knows, is that they are inconveniently filled with exhortations such as this:

The Prophet said, "Nobody who dies and finds good from Allah (in the Hereafter) would wish to come back to this world even if he were given the whole world and whatever is in it, except the martyr who, on seeing the superiority of martyrdom, would like to come back to the world and get killed again (in Allah's Cause)."

Modern Islam, many of whose adherents clearly accept jihad, is an even bigger problem for Wright's theory. He recognizes that "the 'Muslim world' and the 'West' are playing a non-zero-sum game; their fortunes are positively correlated." He is right: they have the oil, we have the technology. So why is Islam still in conflict with other faiths? Doesn't the emergence in late modernity of exceedingly exclusive and violent currents in Islam count against Wright's idyll of progress?

Again he resorts to special pleading. First, he argues that biological evolution has not caught up with social evolution: "Our mental equipment for dealing with game-theoretical dynamics was designed for a hunter-gatherer environment, not for the modern world." His second excuse is that "technology is warping our perception of the other player in this non-zero-sum game." In other words, our Orientalist media are blinding us by showing us only radical Muslims who hate the West. We mistakenly think this is true of all Muslims, and "our moral imagination contracts accordingly." The same goes, Wright adds, for the Muslims who have a selective view of Western societies. According to Wright, then, it's not that the advantage of cooperating is not there, it's that we do not see that it is there.

His solution is more chicken soup: we should try to "figure out what things make lots of Muslims view relations with the west as zero-sum, decide which of those things can be changed at acceptable cost, and thus make those relations more conspicuously non-zero sum." This is very edifying, but it misses an important point: for many Muslims, economic welfare is not the main issue. If it were, we long ago would have resolved the conflicts with Iran and in Palestine, and Islamic societies would have allowed women full participation in economic and political life--a strategy that is clearly non-zero-sum. We know from experience that as women advance, they lift up society with them.

It would appear that Islamic theology has not evolved for material gain. The real problem is not that the Muslim world has failed to perceive the West accurately, or that the West has failed to perceive the Muslim world accurately, though all these failures abound. It is that classical Muslim theology is implacably opposed to the religious pluralism and social secularism of the West. Indeed, Islamic theology explicitly requires its adherents to conquer, convert, or kill infidels. And that is non-zero-sum hell.

This theological polarization is not confined to a small group of Islamic radicals, either. You might expect that young Muslims in the West would present the most liberal face of Islam. But a survey in Britain last year found that almost one-third of Muslim students feel that it can be

acceptable to kill in the name of religion. Forty percent want *sharia*, or Islamic law, introduced into the United Kingdom, and one-third favor the creation of a world Islamic government based on that law. Blinkered by his view that theology is a tool for promoting the material welfare of believers, Wright fails to grasp that many Muslims actually believe what the Qur'an says.

IV.

Despite his insistence that changes in theology have promoted morality and amity, Wright shows surprisingly little curiosity about whether societies really have become more moral and more amicable. It is clear that what he means by "morality" is more than just theological doctrine, for he sees social change as an increased "belief in moral truth and closer adherence to it"--that is, changes in how people feel and act. But are we really more moral than our polytheistic forebears? This is not a new question, or a simple one. It is tempting, from our vantage point in a liberal democratic society, to answer smugly in the affirmative. But we are not the world. And even in our own enlightened societies, many critics, most of them conservatives but some of them liberals, and certainly many religious people, would argue just the opposite, citing the breakdown of family values and increases in divorce, homosexuality, abortion, pornography, and drug use. And is it really necessary to remind ourselves yet again that the worst slaughters in human history happened very late in human evolution, that is, in the twentieth century?

To address the question of moral progress, it helps to divide morality into "ethics," which the philosopher A.C. Grayling calls "thinking and theorizing about what is good and bad, and how people should live," and "moral presupposition," or "what, either consciously or unconsciously, governs what people do, or aspire to do, in the conduct of life." Ethics involves values and principles codified in law, religion, or philosophy, while morality is the way people actually behave. These are obviously connected: people take their guidance from moral codes, and those codes change in response to people's feelings. Still, it is possible for ethics to improve while individual behavior changes little. India outlaws discrimination by caste, for example, but in much of the country this has little or no impact on how people treat each other. Even the most cursory survey of human history suggests that while ethics has improved somewhat, morality may have barely budged.

Ethical improvements are most obvious to us when they involve Western society. The clearest advance has probably been the increasing legal protection of women and ethnic minorities based on their recognition as moral equals. Moreover, democracy has replaced dictatorship in most of the West, and many of the harsher punishments are gone--we no longer throw people to the lions, and when we torture, we do so secretly. Education and health care are widely accepted as rights, and even the idea of animal rights has surfaced. (We biologists must now meet stringent government requirements for keeping and experimenting on vertebrates.) So it is undeniable that ethics have improved in some places at some times. But the change is neither ubiquitous nor unidirectional, even over the long term.

One can in fact make a good case that, contrary to Wright's claim, ethics went downhill as religion evolved--specifically, that it declined in the transition from polytheism to monotheism.

Hume insisted upon this, expounding admiringly on "the tolerating spirit of idolaters." He maintained that a plurality of gods led to social and intellectual pluralism, whereas the belief in a single god led to exclusiveness and intolerance. "The intolerance of almost all religions, which have maintained the unity of God, is as remarkable as the contrary principle of polytheism," he wrote in *The Natural History of Religion*. And he added pungently that "if, among Christians, the English and Dutch have embraced the principles of toleration, this singularity has proceeded from the steady resolution of the civil magistrate, in opposition to the continued efforts of priests and bigots." This is sound intellectual and religious history, belying Wright's view of theology's linear march toward goodness and light.

There have been two periods in Western history when large groups of people made serious and concerted attempts to improve ethics--and *contra* Wright, those changes involved not religion, but secular reason. The first period began in Athens in the fifth century B.C.E. and continued to first-century Rome. This was the time of Socrates and Aristotle, Cicero and Marcus Aurelius, the Stoics and the Epicureans, when philosophers and citizens hashed out and codified their moral responsibility toward each other and society. The medieval era of religion certainly included sophisticated discussions of moral philosophy, but it was not until fifteen hundred years later, when the grip of the church was broken, that the second period began, as the thinkers of the Enlightenment introduced the strong idea of human liberty, and chose to ground authority on rationality rather than dogma. It is not at all clear that the intervening period, with its feudalism, sacred despotism, and religious persecution, was in any way an improvement over the earlier societies of classical Greece and Athens. As for tolerance in our own progressive time: there is the Holocaust, Stalin's purges and slaughters, Mao's bloody reign of terror, the massacres in Darfur, Rwanda, and Cambodia, and the ethnic and religious savagery in Northern Ireland and Bosnia and Sri Lanka to remind us that spectacular intolerance is still with us. I do not see how a progressivist view of human moral development can survive all this terrible knowledge.

As for individual morality: is the average inhabitant of New York, Tehran, or Tel Aviv less likely to steal, cheat, or be unpleasant to his fellows than were his counterparts in ancient Greece or medieval France? Has human nature changed so much in just a few centuries? Well, we in the West may appear to be more law-abiding, but that may merely reflect the greater ability of modern societies to detect and to punish crime. Wright preaches that faith has lifted individuals to higher and higher levels of tolerance and morality, as if this good news were so obvious that we need not even consider the evidence.

Wright seems to think--and his argument requires him to think--that religion is an important source, perhaps the most important source, of morality. This is one of the most widely held views in religious America. Without the moral bedrock of God, so the argument goes, what reason do we have to be good? Conservative commentators hammer this point relentlessly. Ann Coulter asserts that those who accept Darwinian evolution feel that it "lets them off the hook morally. Do whatever you feel like doing--screw your secretary, kill Grandma, abort your defective child--Darwin says it will benefit humanity!" Two months ago an American atheist organization was loudly criticized for putting posters on Chicago buses with the slogan "You can be good without

God," despite the obvious truth of this message. Surely some atheists are decent people!

Wright sees faith as a moral lever: "Certainly there has been a kind of net moral progress in human history.... And certainly religion has played a role in this progress." But how much of a role? And if not a decisive role, then what is left of Wright's belief in the beneficent power of religion? And what role did religion play in the history of human immorality? A little reflection shows that the career of religion in the history of morality is mixed, or worse. There are certainly fine ethical teachings in all the faiths. But since the fourth century B.C.E., philosophers have shown convincingly that our considerations of what is moral or immoral cannot be derived from religion. In Plato's *Euthyphro*, Socrates argues that the statement "God is good" has meaning only if we have a standard of good that is independent of God. If it were otherwise, anything that God sanctioned would be good by definition. This would include, in the case of Abraham, the readiness to murder, and in the case of Jephthah the actual murder of, one's children. The distinction between religion and morality was recognized by rational theologians in all the monotheistic faiths, even if their views did not always carry the day. Aquinas wrote that "right is not right because God wills it, but God wills it because it is right. " If this is true, then we need to look elsewhere to determine what is right--and religion may be viewed not as the origin of morality, but a vehicle for conveying moral values or feelings that arise elsewhere.

Certainly the moral standards of the West in our time cannot have derived from Scripture, for neither Jews nor Christians sanction slavery, pillage, mass murder, or the death penalty for adultery, homosexuality, and working on the Sabbath--cruelties that are justified in the Old Testament as having God's approval. Instead, contemporary Christian believers cherry-pick their morals from the Bible, discarding much of the Old Testament but keeping the Sermon on the Mount. The faithful accept only those religious "ethics" in tune with a prior morality. This is certainly moral progress, but it does not support a view of religion as the warrant for morality.

If religion promotes morality, moreover, we can confidently predict that atheists will be less moral than believers. But the prediction fails. Consider a statistic: atheists constitute roughly 10 percent of the American population, but only 0.2 percent of our prison population. Now there are confounding factors, such as socio-economic status, at work here, but these data are clearly in the wrong direction. And consider that atheistic Europe, rather than being a hotbed of barbarism and immorality, is at least as moral as America. In his book *Society Without God*, the sociologist Phillip Zuckerman shows that Sweden and Denmark, two of the most atheistic countries in the world, are also two of the most moral, at least in terms of their lack of crime, high levels of government aid for the disadvantaged, and large amounts of per capita aid to other countries. There is certainly no evidence that many atheists have a qualitatively different type of morality than many believers. A survey by the biologist Marc Hauser and the philosopher Peter Singer showed that believers of many faiths did not differ from one another, or from atheists, in how they resolved hypothetical moral dilemmas.

Finally, consider what most of us agree are real improvements in ethics over the last several centuries: the idea of democracy; the elimination of more horrible punishments; the adoption of equal rights for racial and ethnic minorities, homosexuals, and women; the disappearance of slavery; the improved treatment of animals; and the increasing view that adult sexuality is a private matter. In each case, the impetus for change came overwhelmingly from secular views.

Religion either played no role, or it played a small role, or it opposed the moral innovations, or it came aboard only when change was underway. (It is true that the American civil rights movement was supported by many churches, but we should also recall that in earlier times the faithful cited the Bible as support for slavery.) If a part of the world has improved morally, this change may have occurred not because of religion, but in spite of it.

V.

If Wright is wrong about the source of moral progress, where did it come from? This is a hard question with no shortage of answers, but some are more believable than Wright's. Peter Singer has proposed, for example, that a rudimentary form of altruistic morality evolved--as it could only have evolved--in small ancestral groups of hunter-gatherers. (Since altruism involves self-sacrifice, genes for the behavior can be favored only if they arise in groups of people who interact with their relatives--and hence carry similar genes--or in groups of people who repeatedly encounter the same nonrelatives, and hence have the chance for their sacrifices to be repaid.) As human populations grew and interacted, people began to realize that it was unacceptable to claim that anyone was morally entitled to better treatment than anyone else. And so, inspired by reason, a form of the golden rule developed and spread throughout the world. The Finnish philosopher Edvard Westermarck floated a similar idea, but claimed that the growth of morality was due not to reason but to a natural expansion of altruism that originated in small communities. (Neither of these theories demands that altruism be a genetically evolved phenomenon.)

Singer's and Westermarck's ideas may be wrong, but at least they require only a few reasonable assumptions: population growth, altruism, rationality. In floating the idea not only of a deity, but of one who uses arcane ways to perfect his creatures, Wright's theory is far less parsimonious, riddled as it is with unproven and occult assumptions. The deity enters into Wright's elaborate confection in several ways. Wright suggests that the moral sentiments themselves may have come from an evolutionary process guided by God. He also suggests that God may have created that whole process from scratch:

It is this moral order that, to the believer, is grounds for suspecting that the system of evolution by natural selection itself demands a special creative explanation.... And if the believer, having concluded that the moral order suggests the existence of some as-yet-unknown source of creativity that set natural selection in motion, decides to call that source "God," well, that's the believer's business. After all, physicists got to choose the word "electron."

In statements such as this, Wright, for all his reverence for Darwin, does nothing less than reject the modern scientific view of evolution, according to which it is a purely naturalistic process without a specified direction. How else can you explain the fact that more than 99 percent of all species that ever lived became extinct without leaving descendants, or that species can become either simpler or more complex when it is adaptive for them to change? Whatever view of progress one maintains, there are some evolutionary lineages that grossly violate it.

Wright rejects, or rather ignores, the copious evidence that natural selection is simply the

inevitable result of random mutations that cause some individuals to be better adapted than others. Instead he propounds a genial form of intelligent design. This is creationism for liberals. While biblical literalists discern the hand of God in features such as eyes or wings, Wright finds it in the process of evolution itself--and in human history. Darwin strongly disavowed such attempts to envision God directing evolution. As he wrote to the geologist Charles Lyell,

I entirely reject, as in my judgment quite unnecessary, any subsequent addition "of new powers and attributes and forces," or of any "principle of improvement" except in so far as every character which is naturally selected or preserved is in some way an advantage or improvement, otherwise it would not have been selected. If I were convinced that I required such additions to the theory of natural selection, I would reject it as rubbish ... I would give absolutely nothing for the theory of Natural Selection, if it requires miraculous additions at any one stage of descent.

One of Wright's most surprising claims is that science does not differ significantly from religion:

Yet what exactly is the difference between [physicists'] belief in electrons and the logic of belief in God? They perceive patterns in the physical world--such as the behavior of electricity--and posit a source of these patterns and call that source the "electron." A believer in God perceives patterns in the moral world (or, at least, moral patterns in the physical world) and posits a source of these patterns and calls that source "God."

This is bizarre--another version of the mischievous postmodern view of science as merely an expression of desire or need. Does Wright really not grasp that science, unlike religion, posits testable explanations for the world, explanations that are discarded if they fail to comport with the facts? Is he unaware that, unlike religious explanations, scientific explanations are validated by public agreement among people from every faith and culture? On one hand we have Islam, Christianity, Judaism, Hinduism, and the whole panoply of faiths with their irresolvably conflicting claims, and on the other hand we have science, and only one brand of science. Independent scientific observers can decide whether electrons are real, but there is no way to decide whether Jesus was the Son of God or Muhammad was the Prophet.

By this point Wright has left all intellectual seriousness behind. In his book's peroration, he rhapsodizes that everything points to the divine: God designed natural selection, which inevitably produced love and altruism in humans, and then God tweaked human societies so that their technologies interacted in a non-zero-sum-way, leading in turn to the continual refinement of theology in favor of greater brotherly love. And that increase in love, says Wright, constitutes nothing less than a kind of evidence for the existence of God:

The god I've been describing is a god in quotation marks, a god that exists in people's heads.... To the extent that "god" grows, that is evidence--maybe not massive evidence but some evidence--of higher purpose. Which raises this question: If "God" indeed grows, and grows with stubborn persistence, does this mean that we can start thinking about taking the quotation marks off? That is: If the human conception of god features moral growth, and if this reflects corresponding moral growth on the part of humanity itself, and if humanity's moral growth flows from basic dynamics

underlying history, and if we conclude that this growth is therefore evidence of "higher purpose," does this amount to evidence of an actual god?

....Maybe the growth of "God" signifies the existence of God. That is: if history naturally pushes people toward moral improvement, toward moral truth, and their God, as they conceive their God, grows accordingly, becoming morally richer, than maybe this growth is evidence of some higher purpose, and maybe--conceivably--the source of that purpose is worthy of the name divinity.

Maybe, maybe, maybe. It is remarkable that a book called *The Evolution of God* can be so pusillanimous, so dodgy, about the question of whether or not there is a God. Surely the question of God's existence is the fulcrum upon which any discussion of God must rest. If the entity in his book's title does not exist, then his book is much, much less than it purports to be. But Wright is content with waffling, and with guarded speculation. When he finally comes to the big question--is there in fact a God who is pulling humanity toward morality?--he suddenly becomes humble and retiring. The existence of God, he plaintively concludes, is "a question that I'm unqualified to answer." What? With all this possible and purported evidence of divinity tugging at his sleeve, he still will not decide? Why doesn't Wright accept the thrust of his own arguments? Is he peddling a reassurance to others that does not work for himself? The whole enterprise begins to look a bit cynical.

Except for his claim that theology is malleable to social forces, which is hardly novel but never mind, there is nothing in Wright's argument that withstands close inspection--nothing in his understanding of theology, of morality and its history, of evolution, of science. There is absolutely no evidence, beyond wishful thinking, that God, if there is a God, had anything to do with setting up biological evolution or directing its operation, much less driving history toward goodness. If Wright's hypothesis were indeed a scientific one, we could say that it has been falsified: scientists, unless they want to be ridiculed, cannot afford to disregard a mountain of counterevidence. And insofar as Wright's book is an affair not of science but of edification, it is no less a failure. This long and eccentric sermon will not prepare anybody for the harshness of history, past or present. It is as wanting in a sense of tragedy as in a sense of evidence.

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