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Faith, Fact, and Behaviorism

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David Hume argued that *ought* cannot be derived from *is*. That is, no set of facts, no amount of scientific knowledge, is by itself sufficient to urge us to action. Yet generations of well-meaning scientists (more and more as secular influences grow in the West) seem to have forgotten Hume's words of wisdom. All motivated action depends ultimately on beliefs that cannot be proved by the methods of science, that is, on faith.

Key words: evolution, Richard Dawkins, religion, science, E. O. Wilson

Kurt Gödel was a buddy of Albert Einstein when they were both at the Institute of Advanced Study at Princeton in the 1940s. But his fame began with his answer to David Hilbert's question in 1928: "Is it possible to prove everything in mathematics?" Gödel showed that the answer is "no." The dream of Russell and Whitehead in their ambitious three-volume *Principia Mathematica* (1912 to 1927) was that all of mathematics could be reduced to a single, complete logical system. Gödel showed their dream was doomed to fail.

So, even in mathematics, the most certain knowledge we have, there will be statements whose truth cannot be proved. It should come as no surprise, therefore, that in the field of human action, the same is true. There are rules in which we all believe that have no provable basis.

This will not shock most people. To know how to behave in the myriad situations of everyday life, we must all follow rules that we take on trust. What is good and bad? What is decent or improper, polite or impolite? A few rules are accepted by almost everyone: don't kill or steal, be honest, even love one another. But others, like praying five times a day or wearing a yarmulke, are less obviously useful. A handful of optimists may secretly think that although they don't know the details, all, or at least most, of these rules and conventions have been, or potentially could be, proved to be correct, shown to conduce to the common good in some way. But most people just accept that there are rules and don't worry much about where the rules come from or why they should follow them.

The provability of rules of conduct would not be much of an issue except that in recent years the philosophy of *scientific naturalism* has gained ground among the intelligentsia both in the US and, especially, the UK and Europe (e.g., the *New York Times* debate between Timothy Williamson and Alex Rosenberg; Rosenberg, 2011; Williamson, 2011). Scientific naturalism is the idea that science is all there is, so that if something cannot be proved by the methods of science, it has no meaning. It is a variety of logical positivism that the studious among you will recognize by its claim that there are only two kinds of true statements: tautologies, like logic and mathematics, and empirically verifiable claims of science. All else is nonsense. But if even mathematics contains unverifiable claims, as Gödel showed, is it likely that other forms of knowledge will fare any better?

Scientific naturalism is sometimes called *scientism*, but then its practitioners would naturally be *scientists.* Some possibility for confusion there! It is better labeled *scientific imperialism* (Staddon, 2004). It is imperialistic

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because it claims that there is nothing else but science. *Ought* is just the same as *is,* and *is* is the realm of empirical fact:

> If the empiricist world view is correct, ought is just shorthand for one kind of factual statement, a word that denotes what society first chose (or was coerced) to do, and then codified. … Ought is the product of a material process.

So wrote famed biologist E. O. Wilson in 1998 (p. 251). In a 2009 interview (Junod, 2009), he expanded on the same theme:

> One by one, the great questions of philosophy, including "Who are we?" and "Where did we come from?" are being answered to different degrees of solidity. So gradually, science is simply taking over the big questions created by philosophy. Philosophy consists largely of the history of failed models of the brain.

Wilson is pretty sure that science will eventually take care of all the philosophical questions that are worth asking, moral questions included. His approach leaves little room for ambiguity. After all, if morality is just a matter of facts and there is only one world, the moral universe should be as stable as the physical one.

B. F. Skinner was less forthright that Wilson. But he also betrayed no hint of doubt about what's good: "To confuse and delay the improvement of cultural practices by quibbling about the word improve is itself not a useful practice" (Skinner, 1961, p. 6). He knew what *improve* is; he knew, in other words, what is wrong. He doesn't tell us the details, perhaps because he assumes that we know too. And for the most part, he was correct—about his intended audience, at the time he wrote.

In other places, as Hocutt (2009) has pointed out, Skinner identifies the *good* and the *right* with whatever is reinforcing or whatever is reinforced by society (see also Staddon, 2001). Like Wilson, all is eventually traced to evolution; "Things are good (positively reinforcing) or bad (negatively reinforcing) presumably because of the contingencies of survival under which the species evolved" (Skinner, 1971, p. 104). More on these issues in a moment.

But undoubtedly the best known and most thoroughgoing scientific imperialist is Oxford evolutionist Richard Dawkins (1997, 2006). He is especially hard on faith, that is to say belief in something that cannot be proved by the methods of science:

> I think a case can be made that faith is one of the world's great evils, comparable to the smallpox virus but harder to eradicate. … Faith, being belief that isn't based on evidence, is the principal vice of any religion. (1997)

Come on Richard, don't sugarcoat it!

Readers attentive to logic will notice that this is a very odd statement. Dawkins is declaring his faith in the evils of *faith.* Never mind. He is in fact a pretty moral sort of chap, and he advocates science as a sort of morality. Indeed, he is often accused of being a believer in science as a kind of religion. In partial agreement, he responded in this same address: "Science is actually one of the most moral, one of the most honest disciplines around—because science would completely collapse if it weren't for a scrupulous adherence to honesty in the reporting of evidence." Most of us would agree, but let us see whether this claim refutes Hume's argument that science (facts) alone give no guide to action. Is science moral, and if so, on what is its morality based? *Is* science a sort of religion?

THE INGREDIENTS OF RELIGION AND THE ROLE OF SCIENCE

All religions have three types of ingredient, although the relative emphasis differs from one religion to another. Buddhism goes very light on the supernatural, for example.

The first category is the supernatural, a belief in invisible or hidden

beings, worlds, and processes (e.g., miracles, reincarnation, and the soul). All these are unverifiable, or unseen and unseeable, except by mystics under special and usually unrepeatable conditions. The philosopher and mathematician Bertrand Russell, an earlier model for Dawkins in many respects, somewhere parodied the supernatural thus: ''When men drink too much they see snakes, when they eat too little they see visions.'' Because absence of evidence is not, logically, evidence of absence, these features of religion, neither true nor false, but simply unprovable, are all outside science.

The second category is morality: All religions have a code, a set of moral and behavioral prescriptions, usually said to flow from God, that provide guides to action in a wide range of situations. The Ten Commandments, the principles of Sharia, the Five Precepts of Buddhism are examples. More on these in a moment.

The third category is natural: Every religion, especially in its primordial version, makes claims that are essentially scientific; assertions of fact that are potentially verifiable. These claims are of two kinds. The first we might call *timeless* (e.g., claims about physical properties; the four elementary humors, the Hindu turtle that supports the world, properties of foods, the doctrine of literal transubstantiation). The second are claims about *history* (e.g., Noah's flood, the age of the earth, the resurrection, all myths of origin).

Wilson is clearly right about timeless claims. When a religion makes always true statements that are potentially verifiable (e.g., the sun moves round the earth), it must confront the scientific account and will usually lose to the methods of science.

About historical claims, there can be more argument. Direct observation is impossible, experiments cannot be done, and the historical record is often sketchy. Was there a Noah's flood (or at least a real historical event that can be identified with the story)? Did Jesus convert water into wine at one point in time? Don't know, can't know.

On the other hand, the evidence is overwhelming that Irish Archbishop James Ussher (1581–1656) was wrong in thinking that the earth was created on the night preceding Sunday, October 23, 4004 BC of the Julian calendar. Physical, geological, and astronomical evidence all concur. The age of the earth is about 4.5 billion years and of the universe some 13 billion. Once again, science wins.

As for the first category, because supernatural claims are unverifiable by scientific means, they fall outside the realm of science. Is there no God, one God or many Gods? If one, is Mohammed or Jesus his representative? No experiment can decide these issues. It is in this respect that science and religion form *nonoverlapping magisteria*, in the late S. J. Gould's (1997) rather pompous phrase.

So Category 1 is clearly outside science and Category 3 is inside. In Category 1, there is no contest because there is no objective way to decide on the truth of a supernatural claim. In Category 3, claims about the natural world will almost always be decided by science.

What about Category 2? What is the status of morality, the rules that guide us in everyday life? Dawkins says that science is moral: What can he mean by that, and is the morality provided by science an adequate guide, or is something more needed? And if so, where should *that* come from?

Science depends on a belief in an external reality that obeys fixed laws. This fundamental assumption is indeed a matter of faith in the sense that it cannot be proved or disproved. No matter how many laws we discover, there is no way to prove that they will not spontaneously change tomorrow. Induction (it

worked yesterday and today, so it must work tomorrow) is not proof, as Hume (1740) also pointed out. But without this assumption of a stable universe, scientific activity would have no point. Perhaps this is why Dawkins exempts it from his general condemnation of faith. Dawkins also seems to have faith in the virtues of honesty, which is also essential to science as a social activity.

These two unprovable beliefs (in a stable nature and the value of honesty) rest on a third: the value of science. Unless we value science, we can be indifferent to beliefs that make it possible. But why should we care whether science is valuable or not? Science by itself provides no reason. Belief in the value of science is by no means self-evident. The historian William Dalrymple tells the story of an early 19th century Indian Mughal who received a microscope as a gift. Instead of amazement and interest at the wonders it revealed, he was appalled by so much novelty and disposed of the instrument as soon as he could. Science has been blocked or prohibited in many cultures in the past. Even today, it is unlikely that basic research on, say, psychobiology or political science, would get much support in Iran or Saudi Arabia. We ''know'' these folk are wrong and we are right, but how do we know? It is a matter of our faith versus theirs.

Hume was right. Facts (science) by themselves provide no *ought,* they urge no particular action. If science is to provide guidance, to facts must be added some values: ideas about good and bad. But where do these values come from? And why has this point been repeatedly missed, or at least evaded, by so many eminent atheists? Well, now we are in the realm of psychology. I am not sure, but I suspect that for most people, atheists included, notions of what is right and wrong are pretty automatic. No reflection is required. Dawkins, Wilson, and the rest all know what they believe, hence they see no reason to inquire further as to the sources of their beliefs.

The problem is that there is little consistency of belief from one place or culture to the next. Accepted beliefs also change with time. Here is an example, a set of beliefs that were generally accepted by the *bien pensants* less than a century ago but are now almost universally reviled:

> Its supporters included Theodore Roosevelt, Woodrow Wilson, and Winston Churchill. It was approved by Supreme Court justices Oliver Wendell Holmes and Louis Brandeis, who ruled in its favor. The famous names who supported it included Alexander Graham Bell; … activist Margaret Sanger; botanist Luther Burbank; Leland Stanford, founder of Stanford University; the novelist H. G. Wells; the playwright George Bernard Shaw; and hundreds of others. Nobel Prize winners gave support. Research was backed by the Carnegie and Rockefeller Foundations. The Cold Spring Harbor Institute was built to carry out this research, but important work was also done at Harvard, Yale, Princeton, Stanford and Johns Hopkins. Legislation to address the crisis was passed in states from New York to California. … These efforts had the support of the National Academy of Sciences, the American Medical Association, and the National Research Council. … Those who opposed the theory were shouted down and called reactionary, blind to reality, or just plain ignorant. (Crichton, 2004, pp. 723–724)

Other fans at various times were Nobelist Linus Pauling, Winston Churchill, Maynard Keynes, and vegetarian dog-lover Adolf Hitler. What was this widely accepted scientific theory? The theory was of course *eugenics*, and it wasn't just science; it also came with a moral imperative: the importance of ''improving the race.''

Like any scientific theory offered as a reason for action, eugenics has two parts. The science: Selective breeding works as well with humans as it has with dogs, cats, and goldfish. True. And the faith: The human race needs to be improved. And we know what's wrong and how to fix it. True? Maybe for some, but not for others.

Belief in the ''faith'' part of this theory impelled the state to actions

like compulsory sterilization, which are now utterly deplored by the very same class that years ago embraced them. The North Carolina Eugenics Board (one among many in several states), which oversaw enforced sterilization of criminals and the mentally ill, remained in operation until 1977. But the laws that authorized it were not repealed until 2003 (Eugenics Board of North Carolina, n.d.). We're not talking ancient history here.

Eugenics fell out of fashion after the Nazi example, and B. F. Skinner took no position on it, as far as I can tell. But its supporters were as unthinking as he appears to be in the earlier quote. They also might well have said, "To confuse and delay the improvement of [the race] … by quibbling about the word improve is … not … useful."

There are of course rational arguments for eugenic measures like sterilizing people who are not capable of looking after their own children. There are similar arguments not just for the death penalty but also for extending it to mentally incompetent murderers. After all, we do not scruple to euthanize mad dogs, even if they were once beloved pets. Why should a psychopathic killer be spared even as his "sane" counterpart is executed? Yet received opinion in America nowadays is opposed to all these ideas. Why? There is no rational or scientific answer. Again, belief for or against eugenic measures depends not only on the evidence for eugenic science, but also on which values dominate (personal responsibility and freedom vs. the supposed good of the race). These are matters not of science but of faith.

So, people, even scientists (even Richard Dawkins) have faith, beliefs that cannot be derived from science or even, in many cases, from any kind of rational argument at all. Where do these beliefs come from? How might we understand them scientifically? And what should *we* believe? Let us look at each of these questions.

From a scientific point of view, our values and beliefs must originate in our personal history and the history of our ancestors. Human archeology is coy about details of the belief systems and social arrangements of our forebears. The intermingling of nature and nurture during each human lifetime is almost equally obscure. Consequently, we can only speculate about the selective forces, individual and group, that have led to the array of human belief systems across the planet. Nevertheless, a few generalizations can be made.

Diversity

Just as human physiognomy shows quite wide variation, it is likely that human belief systems will also vary from culture to culture. More than 50 years ago, linguist Noam Chomsky (1957) proposed that a single universal grammar underlies the vast range of different human languages. The idea hasn't died, but we're still looking. I doubt, personally, whether any comparable axiomatic core of values can be found from which the astonishing variety of human moral systems can be derived. But the possibility cannot yet be ruled out.

Antagonism Between Individual and Group Selection

Group selection has long been a controversial idea, but recent debates allow it as an increasingly important process (Eldakar & Wilson, 2011). Group selection of course favors altruistic behavior such as helping others, willingness to die in fights with other groups, and so on. Individual selection favors selfishness. Campbell (e.g., 1956, 1975) pointed out this tension many years ago. Usually, people act in their own interests. But there is no doubt that people sometimes act in the interests of others, even to their own detriment.

Relatives are the usual beneficiaries of altruism, but not always: War fighters, risking their lives for their country, their tribe, or their religious group, are the most striking exception.

Utility (Cultural Fitness)

Of the many unprovable beliefs that define a culture, some aid its survival and some impair it. In hindsight, these beliefs can sometimes be identified. We may guess that relatively free speech and openness to new ideas permitted the growth of science and technology, both essential to the success of Western culture in recent centuries. (Historian Niall Ferguson, 2011, calls these ideas ''killer apps.'') The philoprogenitiveness of the Church of Latter Day Saints (the Mormons) has undoubtedly aided its growth. Conversely, the universal celibacy of the United Society of Believers in Christ's Second Appearing (the Shakers) ensured its swift demise. (The church could grow only through conversion, which was made more difficult by the commandment that made it necessary.) In these simple cases, the link between success or failure and the belief in question is pretty obvious.

But for most beliefs, their contribution to cultural survival is obscure because the future is largely unknown. Choosing beliefs on the basis of their contribution to cultural fitness implies that we can predict the future trajectory of our civilization. But the fact is that, despite Karl Marx and a few others, the future course of a civilization cannot be reliably predicted: ''Marx may be excused for holding the mistaken belief that there is a 'natural law of historical development'; for some of the best scientists of his time believed in the possibility of discovering a law of evolution. But there can be no empirical 'law of evolution.''' So wrote Marx's great critic Karl Popper (1950, p. 665). It is hard to prove a negative, but I am inclined to agree with Popper. Deciding just which beliefs favor cultural survival (even supposing that all desire such a thing) will always be problematic.

But we can try. Unfortunately, the results are not encouraging, because the most obvious culture-favoring beliefs contradict many contemporary values. For example, what about the rights of homosexuals or women? Does toleration (or even embrace) of homosexuality help or hinder the production of children? Surely subordination of women to the realm of *kinder, küche, und kirche* (or Sharia and the burka) will aid reproduction and thus enhance the growth of the civilization that supports these beliefs? After all, the rate of annual population growth of the Jewish population of Israel stood at 1.5% in 2005, while the rate of growth of the Muslim population was twice as much (Basok, 2006). But which group holds values closer to, say, those of the Harvard campus, views that many educated Westerners accept unquestioningly?

Which brings us back to eugenics, once embraced and now condemned. Or is it really condemned? Eugenics seems to be making a comeback in the form of designer babies: ''Homo sapiens, the first truly free species, is about to decommission natural selection, the force that made us. … Soon we must look deep within ourselves and decide what we wish to become.'' So said Wilson in a recent interview with media scientist Michio Kaku (2011, p. 137). We have given up the idea of messing with other people's Darwinian fitness, but Wilson gives us free rein to tinker with our own. Great idea? All on board?

Recent votes are increasingly opening the door to gay marriage. If marriage is to be liberalized, why not also legalize polygamy, the original eugenics policy? As far as we can tell, many if not most early societies were polygamous, at least far as their rulers were concerned:

> The anthropological record indicates that more than 85 per cent of human societies have permitted men to have more than one wife (polygynous marriage), and both empirical and evolutionary considerations suggest that large absolute differences in wealth should favour more polygynous marriages. (Henrich, Boyd, & Richerson, 2012, p. 000)

[1]

In a polygamous society, the evolutionarily more fit males gain more wives and hence more reproductive power. It is their genes that fill the pool, not those of the faithful monogamists. Perhaps polygamy made us what we are? Who could argue with that!

These conundrums show just how little we understand what will be good for us in the long run. Even something as obviously beneficial as our obsession with health, for example, has its potential downside. I remember some years ago in India talking to our host Hamid about the rather casual attitude to safety and hygiene common in rural Rajasthan. He was unworried. ''We raise our children to be strong,'' he said. ''We lose a few, I suppose. But when they grow up they don't show all the allergies and weaknesses of Western children.'' Tough love indeed! But perhaps effective in the long run?

Some recent scientific work seems to support Hamid. Too-strenuous efforts to protect our children from disease may contribute to autoimmune ailments in later life:

> Your great-grandparents faced infectious diseases that hardly threaten you today: tuberculosis, polio, cholera, malaria, yellow fever, measles, mumps, rubella, smallpox, typhoid, typhus, tapeworm, hookworm. … But there's also a long list of modern illnesses that your great-grandparents barely knew: asthma, eczema, hay fever, food allergies, Crohn's disease, diabetes, multiple sclerosis, rheumatoid arthritis. The coincidence of the rise in these ''inflammation'' diseases, characterized by an overactive immune system, with the decline of infection is almost certainly not a coincidence. (Ridley, 2012, p. 000)

[2]

Maybe Western nations are too hygienic, or at least too obsessed with health? The original Surgeon General's Report (http://profiles.nlm.nih.gov/ps/access/NNBBMQ.pdf) on smoking shows that heavy smokers over age 80 have a *lower* death rate than nonsmokers. This is unlikely to reflect the beneficial effects of cigarettes. More likely, it is the result of selection: Only the most resistant smokers survive to that age. On the other hand, smokers tend to die around retirement age, saving the rest of us health and pension costs with little or no loss of contribution to the GDP (Sloan, Ostermann, Conover, Picone, & Taylor, 2011; Staddon, in press). Should we therefore quit vaccinating, encourage smoking, and abolish crash helmets for toddlers on tricycles? Probably not, but who knows?

Do most of our current beliefs help or hinder our culture? The predictive problem can sometimes be solved. Occasionally, like the Shakers' belief in universal celibacy, even the dimmest of wits can see that a belief can be self-destroying. (The Shakers died out. Who could have guessed?!) But even if the predictive problem is solved (unlikely, but possible), the philosophical problem remains: To base everything on evolutionary success, you have to believe that survival (of yourself, your relatives, and your culture) is an absolute good. Not everyone does. Like any matter of faith, this also cannot be proved by reason. There is a small subset of the environmental movement, for example, that seems to think that humanity is a blight on the planet and the cosmos would be better off if we just went extinct. Facts don't prove them wrong.

Because evolution (history) is an inherently unpredictable process, we don't know which of our unprovable beliefs will turn out to be essential to cultural survival. But it seems as if several obvious guesses about the most culturally fit policies contradict a number of our most deeply held beliefs. So what's wrong: our beliefs, our guesses, or the premise that

cultural survival is the absolute good? You choose.

Reinforcement

Bertrand Russell points out that we may do as we please but may not please as we please. In behaviorist jargon, what he is referring to is the fact that the things that reinforce us are more or less fixed during ontogeny, whereas the means we can use to achieve them are quite flexible. Operant behavior is when we do as we please, but for the most part what pleases is set by human nature.

This is a great simplification, of course. Fashion (in clothing, art, and even science) provides an ever-changing set of reinforcers that are products of the social environment (see, e.g., Staddon, 2012, Chapter 3). Why have mechanical watches, which are more expensive to make and maintain and less accurate than the quartz variety, come back into to fashion to the point that some cost more than a luxury automobile? Why will the British pay thousands of pounds for an apparently undistinguished car number plate (e.g., 36KC was recently on offer for £24,000)? Why can art that is sometimes mistaken for trash by the cleaning lady be sold for thousands of dollars? Wealth awaits the savant who can figure out how fashion works! If the *good* is just ''what is reinforcing,'' as Skinner often claimed, we are faced with an embarrassment of riches!

If we accept, as I think most now do, that all adaptation, both ontogenetic and phylogenetic, is the outcome of a process of variation and selection (see Staddon, 2010, for a review), then (many? most?) reinforcers are largely the product of selection during phylogeny. But because we are a smart, social species, our reinforcers are many; not just the basics of food, water, and sex. The actions we use to attain these reinforcers are the product of selection (operant conditioning) during ontogeny. For example, we tend to accept the beliefs of our own group, even if they seem patently absurd to outsiders. Conformity is reinforced. Why? Probably because groups that cohered in this way won ancient battles.

War

Deadly conflict is relatively rare in recent times. This is a well-documented fact that will surprise most people given two world wars and the genocidal social engineering of totalitarian regimes across the world during the past century. But population increased even more than violent death in the 20th century. Both war and murder have declined as a proportion. In Europe, for example, your chance of dying a violent death is between one 10th and one 50th (depending on the country) what it would have been 500 years ago (Pinker, 2012). But internecine conflict was very common during prehistory (see Pinker's discussion of forensic archeology and ethnographic statistics for the data). Ancient times therefore offered much opportunity for the selection of behavior aiding the group. It is no accident that all cultures reward the families of fallen warriors, preserving as best they can the gene pool of self-sacrifice. Notoriously, Saddam Hussein of Iraq, when he was in a position to do so, offered a $25,000 reward to the families of Palestinian suicide bombers (''Saddam Pays 25K for Palestinian Bombers,'' 2002). It looks now as if altruism moved out beyond the family in part because of its virtues in intergroup conflict. Not ''make love, not war'' but ''war makes love''!

So much for the origin and probable scientific basis for our beliefs. But accounts at this level are profoundly unsatisfying to most people, for Hume's reason. Just because we can understand the causes of a belief does not make that belief right. It doesn't provide a reason for *us* to believe. Description is not the same

as prescription. This is where religion comes in. Religion is important because it strengthens belief in the unprovable. The syllogism runs like this:

Success of a culture depends on some beliefs that are unprovable.
A belief is more effective the more strongly it is held.
Religions strengthen the beliefs they embody.
Ergo, religious belief will sometimes aid the success of a culture.

In other words, religious belief, condemned by the likes of Russell and Dawkins, may sometimes help a culture to succeed in competition against others. But does this give us a reason to believe in the tenets of any religion? Maybe.

Why is religion so effective, at least for many people, in strengthening the beliefs it embodies? Now we are back to psychology and phylogenetic and cultural selection for group cohesiveness. Atheists will probably agree that monotheism is surely related to our long childhood and the importance of the family. Everyone needs a father, although fewer and fewer have one around these days in the U.S. (Murray, 2012); hence ''God the Father.'' There seems to be something about evolved human nature that makes a *right,* for example, more compelling and less alterable if it is said to ''come from God'' rather than from the political process. Placing the source of rules in some other place just works for a lot of people. And, as I just pointed out, a spiritual source can't be questioned or disproved, which is another advantage!

CONCLUSION

The facts and logic of science, unaided by values, provide no basis for action. There must be a motive, some notion of good and bad, some kind of faith, to urge us to act. Because action is necessary for survival, faith (belief that is unprovable by science) is essential. Hence the dogmatic atheist's condemnation of all faith amounts to a sort solipsism: logically impeccable, but senseless in practice. And as I have shown, even the most committed atheist has faith in something. What distinguishes atheists is not their lack of faith but their unwillingness to examine it.

What faith should we follow? Reason can help in resolving conflicts and in finding the best means to attain our ends. But the ends must come from somewhere else: religion (i.e., God, Allah, etc.), other people, individual eccentricity, ''conditioning,'' evolutionary success, or whatever.

Why should we believe in anything? Because belief is essential to action, and action is essential to survival. Not much guidance there, but no support for ''no faith,'' either. So, listen to arguments, examine your beliefs, but then believe!

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