Why People Believe

Human beings are equipped with superb pattern recognition software, so good that it can even find patterns that are not there. That makes sense from an evolutionary point of view. Seeing a hidden tiger that is not actually there is a much less costly mistake than failing to see one that is, so biasing the software in the direction of more of the first kind of error and fewer of the second is good design.

The figure to the right is a series of concentric circles. As I look at it I see other patterns. With only a little effort, it turns into a series of clockwise spirals. Or counter-clockwise spirals. Or … . It feels as if my pattern recognition software is thrashing around, trying out one pattern after another.
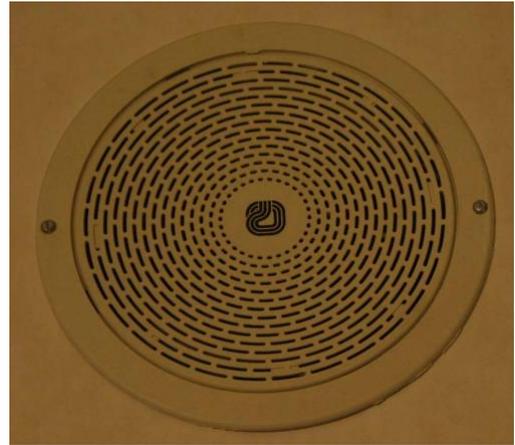
Intuitions of Immortality

On the face of it, dead is dead. Yet many people, perhaps a majority both now and in the past, do not believe it. Why?

For those of us who do not share that belief and are puzzled by all the reasonable and intelligent people who do, the obvious explanation is wishful thinking. I do not want to believe I am going to die. I do not want to believe that those dear to me are going to die. I do not want to believe that those dear to me who have died are really dead. With enough effort and help from those around me, I might be able to convince myself not to.

I have a different explanation, based in large part on introspection, most recently my feelings about my mother in the weeks after she died. She was in her late nineties. Her one serious complaint about her life was that, after more than sixty years of a happy marriage, she had not died when my father did. I miss her, and for my sake I would rather she were still alive. But not for her sake.

It is easy for me to believe that she died. It is not so easy to believe that she is dead, that a person I have known all my life no longer exists anywhere in the world, that if I knock at the back door of the apartment where she spent her last few years she will not be there to let me in. Ever. I feel much the same way about other people I have known who are no longer alive. A dream where my father's death did not happen, was somehow a mistake, feels more believable than the real world where it did happen.

The explanation of my feelings, I think, lies in an important feature of the human mind. In order to function in the world, we need a model, a picture of what surrounds us. Deducing such a picture on the basis of sensory data alone is surprisingly hard, as A.I. researchers discovered when they tried to create machines that could do it. The data coming in from my retina is a pattern of colored dots; no part of it is labelled "cup sitting on my desk," "bunch of keys," or "mouse." To get from that to a model of the world around me requires a lot of image processing and a lot of additional information.

Some of that information comes from past sensory data. But much of it, I believe, is hard wired, the product of many millions of years of evolution. The software built into my brain knows quite

a lot about the characteristics of the world I am looking at. That knowledge lets it eliminate most of the alternative explanations of what appears in my visual field, leaving, usually, the explanation that describes what I am seeing more or less correctly.

One of the things it knows is continuity, persistence. If an object is sitting on my desk, the odds are overwhelmingly high that, a second later, the same object, at least a very similar object, will be in the same place or very close. I do not need to reanalyze the visual data on every scan. That is why soap bubbles seem magical, counterintuitive. They break the rules.

Other human beings are among the most important, and distinctive, features of our world. It is easy to confuse one cup for another, one house for another, one tree for another. It is hard to imagine knowing someone well, encountering him, talking with him, and not recognizing him, or misidentifying one person you know well as another.

Things persist. People are things of a special sort; when you talk with a friend over the phone it is not his body you are aware of but the person inside. When he dies the body is still there but the person is not — which is intuitively impossible, since the knowledge of the persistence of things is hardwired into your brain. The person himself must still exist. Somewhere.

It is not an argument, still less a proof. My best guess is that dead really is dead, that the person is software running on the hardware of the brain and when the hardware stops functioning the person ceases to exists. It is, however, an explanation of why I find it hard to entirely believe in death.

And, perhaps, of why so many other people feel the same way.

Places I Cannot Go

Almost I could drive it in my sleep
Over the bridge and past the mothballed fleet
Almost two hours, left on one thirteen
Third exit right, left, left, right, left and park
Beside the swimming pool. But if I went
To the back door, not even if I brought
My daughter with me, whom she loved as well,
(As anybody would) would she be there.

Boston is farther, most of a day's flight,
A house there where, for more than half my life,
I've spent my New Years. Board games. Lots of food
And conversation. But she died last night.
The party may go on a year or two
Or three on memory, but Marian
Who crafted it, and many things besides,
Tea parties, woven baskets, and a house
Of good repute — a label she denied —
Will not be there.

M.F.

November 16, 2006

Cattle die, kindred die,
Every man is mortal:
But the good name never dies
Of one who has done well.

Religion

For religion as well, one possible explanation is wishful thinking. The quiet of the grave does not sound very attractive compared to an eternity of bliss, but compared to an eternity of torture there may be much to be said for it; why are people attracted to beliefs that offer the possibility of the former at the risk of the latter? Why does not a competitor offer the obvious improved version and end up with all the customers?

It makes more sense as an incentive system, promised reward and threatened punishment. That is a good reason why some people would want others to believe in Heaven and Hell but it does not explain why the other people would choose to believe. There is little point to producing a product that nobody will buy.

Perhaps wishful thinking is not, after all, the right explanation.

I have a different one, along the same lines as my explanation for the belief in immortality. We are able to form a picture from the limited data provided by our eyes only because evolution has provided our brains with very sophisticated pattern recognition software, incorporating a good deal of information about the nature of the world around us, hence the likely meaning of the patterns we see. An analogous process occurs when we use all of the information available to us to form a picture of the world, not merely what is where in the visual field but what the universe is like and why. We are trying to construct a pattern, a picture of reality, which makes a reasonably good fit to the available facts. The fit is unlikely to be perfect, both because we may not get the pattern quite right and because some of the facts we are fitting may not be true. The process involves nothing as simple as formal logic. Just as in seeing, we are using pattern recognition software created by evolution that led our ancestors to reproductive success.

Pattern recognition need not give an unambiguous result, as demonstrated at the beginning of this chapter. A more familiar example is the picture here, that can be seen either as a vase or as two faces.

Some people, trying to make sense of the world around them, construct a pattern that includes some sort of god. Others construct a pattern that does not. Neither is the result of rigorous deduction from the data, so it is not surprising that atheists cannot prove theists wrong, nor theists prove atheists wrong.

That does not mean that logic can tell us nothing at all about the subject. Some patterns are inconsistent with enough data to make it very unlikely that they are close to correct; one can climb
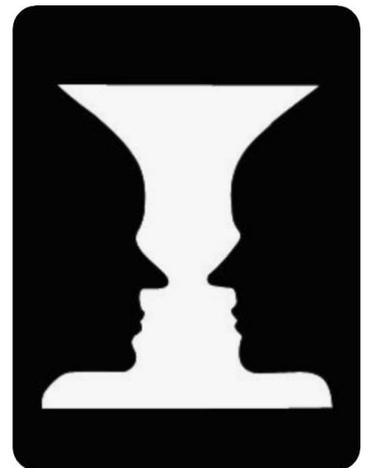
Mount Olympus and observe the absence of the Olympians. But I think it clear from a very large number of arguments conducted by many people over many centuries that one cannot, on that sort of basis, reject either all versions of a universe with a god or gods or all versions of a universe without.

There are then at least three interesting possibilities:

1. All religions are wrong; there are no gods. This is my view, as it happens, but there are other positions that reasonable people might hold.

2. One of the existing religions is correct, or very close to correct, in the form in which most believers hold it. There is a tradition of Mohamed saying that, at the day of judgment, his followers would be divided into a thousand sects of which only one would have the truth. I see no logical reason why that could not be the case. If it is, the odds of getting the right version are low.

3. There is a true religious belief and some, perhaps many, perhaps even all, religions imperfectly reflect it. This makes sense if the full account is too hard for a human to understand.

We are left with the problem of how to decide between my first and third alternatives. At one time I thought I had an answer to that, a proof that the existence of God was less likely than the non-existence of God. The argument, which I came up with when I was about nine, was based on Occam's razor, the idea that simpler hypotheses are to be preferred to more complicated hypotheses. A universe with God includes, as a subset, the universe minus God. Hence the theist picture has to be more complicated than the atheist picture, hence it is less likely.

There were two problems with this purported proof, as I eventually realized. The first is that the universe minus God might not be internally consistent; some features of the universe with God might depend on the existence of God to work. The second is that there is no good reason, at least none I can see, to think that Occam's razor applies to the nature of the universe. It is true that simpler hypotheses are, *ceteris paribus*, easier to work with, but the question here is not which picture is easier to understand but which is true. It seems plausible that simple things are more likely to come into existence than more complicated things, again *ceteris paribus*. But it is hard to see how that is relevant to the universe, with or without a God.

Since we do not have enough data to uniquely determine the pattern, the best guess someone accepts often depends, in large part, on what he is told by the people he trusts. That is true with regard to our beliefs about the nature of the physical world as well; none of us has enough first hand data to justify most of what we believe about it, so we are dependent both on second hand data and on the results of other people's analysis. I am confident not only that Australia exists but that Antarctica, which I have never visited, does. It is not surprising if, for those people who believe that there is a religious reality out there, the version they accept depends in large part on the beliefs of the people around them.

What about the larger question of alternative 1 vs alternative 3, atheism vs religion? Once one sees the alternatives as "some version of the atheist world view is true" or "some version of the theist world view is true," the arguments for atheism become less compelling, since most of them are attacks on particular versions of the theist world view. One is left with the question of which picture one finds more convincing. Different people, even different intelligent and apparently rational people, reach different conclusions.

Atheism and Religion

A commenter on one of my blog posts on religion pointed me at a lecture by Richard [Dawkins](#) and [two](#) [by](#) Sam Harris,[1] all attacking religion. I also am an atheist, but I found a number of problems with their arguments:

1. Dawkins describes religious belief as due entirely to faith and almost entirely inherited from one's parents, scientific belief as due to rational and skeptical investigation. He is implicitly comparing the average religious believer with the professional scientist, indeed with the upper end of professional scientists. The average believer in evolution or relativity or whatever is no more able to provide a convincing account of the evidence and arguments for his position than the average religious believer; both of them hold their beliefs not because of rational investigation but because people around them who they trust told them those things were true. That is the reason we believe most of the things we believe, in a world too large and complicated for us to adequately investigate at first hand. There is more rehashing of old arguments and less new argumentation in religion than in science, but then, religion is an older project, so presumably more of the relevant arguments have already been made.

If everyone got his religious beliefs from his parents, it is hard to see how multiple sects could come into existence. At some point someone, Luther or Calvin or the founder of one or another of the multiple Islamic sects, concluded that his parents' view was wrong, produced his own, and persuaded others to follow it instead of their parents' views.

Rather like the way scientific views change.

2. Dawkins complains about four year old children being labelled "Christian," "Muslim," "Hindu." What he is ignoring is that religious labels identify communities as well as systems of belief. For many people the communal identification — "I am a member of this group" — is more important than the belief; there are lots of Christians who know what their denomination is but could not adequately explain the difference in beliefs between it and others. Seen from this standpoint, it makes as much sense to describe a four year old child as "Christian" as it would to describe her as "French."

I am reminded of the story of the visitor to Northern Ireland who is asked by a local whether he is a Protestant or a Catholic. He replies that he is a Jew. To which the local responds with "Are you a Catholic Jew or a Protestant Jew?" The religious labels had become identifications of which faction you were a part of, not of what you believe.[2]

It is tempting to blame religion for past violence, but there are other explanations. There was violence between Christians and Muslims, but also between English Christians and French Christians. For more than two and a half centuries, Catholic France was allied, implicitly or explicitly, with the (Muslim) Ottoman Empire, largely against the (Catholic) Hapsburg Empire.

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[1]One of the Harris talks is webbed at https://www.youtube.com/watch?v=baAg6k4c1Jg&gl=IT. Neither the other nor the talk by Dawkins appears to be still up, but one can find lots on the subject by both of them with a brief search online.

[2] "The Northern Ireland story, although often told as a joke, is actually more true than most people think. As part of Fair Employment legislation (whereby any company employing more than 10 people has to have roughly equal Protestants and Catholics), companies have to report their staff breakdown regularly to the government. There is no option for 'neither', so for a Jewish employee, you do indeed have to decide whether they are a Protestant Jew or a Catholic Jew." (A commenter on my blog)

And the USSR, whose official doctrine on religion was atheism, was also one of the most murderous states in history.

3. Harris writes:[3]

> 500 years ago, life was difficult, there was a lot of despair, crops failed, disease spread, people suffered just instantaneous and catastrophic changes in their fortune; and the cause of all this actually was well understood: it was witchcraft. And happily, the church had produced some very energetic men who had the gumption to deal with this problem. And so, every year, some hundreds and sometimes thousands of women were burned alive or casting spells on their neighbors.

Some relevant facts:[4]

It is unlikely that there was any year about 500 years ago when a hundred women, let alone a thousand, were convicted of witchcraft and executed, since large scale persecutions did not start until about 1550.

Most executions were due to secular courts. Not only were witchcraft trials not the result of a campaign by the church, the church — most notably the Spanish inquisition —acted to suppress witchcraft crazes, not to fan them. The major witchcraft crazes tended to be in places where there was religious conflict between Catholic and Protestant, hence where the church was weak.

Harris goes on to write:

"Now, imagine what it would be like to be among the 5 or 10% of people at most who recognized that the very belief in magic, the very belief in witchcraft, the very belief in good witches and bad witches, was a malignant fantasy."

That is to say, to accept the position held in the Catholic church since considerably earlier, that to believe that the devil could give witches the power to do magic was heretical.

The reliability of Harris's view of the world as a whole — or mine — depends in part on the accuracy of the data on which it is based. If his world view includes a history in which religions have been consistently hostile to reason, that makes him more likely to construct a pattern in which religion is simply superstitious, irrational nonsense. If that history is false, as I think it is, that is a reason to distrust the pattern he has built. If the actual historical story shows religions and religious people sometimes sensible, sometimes not, sometimes attacking reason, sometimes supporting it — behaving, in other words, not all that differently from non-religious people and institutions — that weakens the grounds on which his conclusion is based.

4. Harris points out that there are lots of different religions, they disagree with each other, so they cannot all be true. That suggests that it is unlikely for any particular religion to be entirely true. But it is not a very persuasive argument against religion in general, for a reason I have already pointed out.

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[3] https://www.truthdig.com/articles/religion-politics-and-the-end-of-the-world/
[4] There's quite a good summary of the modern historical evidence on witchcraft trials at: http://www.tangledmoon.org/witchhunt.htm

One of the speakers, I think Dawkins, quotes J. B. S. Haldane's speculation that the universe may be too complicated for us to understand. Similarly, it might be that religious truth is too difficult for us to fully understand. If so, different religions might each be giving a partial and imperfect view of the truth narrowed down to what a human can make sense of, my third alternative above.

Some might object that if almost all religious believers are wrong, what reason do we have to believe there is anything to religion at all? The obvious response is to try to apply the same standard to our understanding of physical reality.

Consider the example of light. Its behavior can be understood as either a wave or a particle, two explanations which appear inconsistent to our intuition.We now know enough to write the equations for an explanation consistent with all of the evidence, but from the standpoint of someone living before the discovery of quantum mechanics, or someone living now who, whether or not he knows quantum mechanics, does not intuit it, the situation is very much what I have described for religion. There is a reality out there, we have two inconsistent pictures of it, and both are in part true.

The same holds in lots of other areas. Consider economics. Writing as an economist, I frequently treat economics as if it were the full description of human behavior, but obviously it isn't; indeed, I have one [article][5] which tries to use evolutionary psychology to explain patterns of behavior inconsistent with economics. Human beings routinely deal with complicated realities through models that have enough truth to be useful and are simple enough to be usable. There is no particular reason why, if there is a religious reality out there, if, for instance, there is something reasonably describable as a god, it should not fit the same pattern.

Part of my skepticism with regard to the efforts of my fellow atheists to demonstrate the absurdity of the opposing position is comes from knowing a fair number of intelligent, reasonable, thoughtful people who believe in God, including one I am married to. Part comes from weaknesses I can perceive in the foundations for my own view of the world.[6] At some point, each of us is using the pattern recognition software that evolution has equipped us with to see a coherent pattern in the world around us. Since the problem is a harder one than the software was designed to deal with, it is not surprising that we sometimes get different answers.

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[5] http://www.daviddfriedman.com/Academic/econ_and_evol_psych/economics_and_evol_psych.html
[6] For instance, the problem of induction first pointed out by David Hume: https://plato.stanford.edu/entries/induction-problem/. Or the problem of the nature of consciousness, the ghost in the machine — how a computer program, which is what I believe I am, can be self-aware.