

Intelligent Design and the Story of Evolution:
No Need for Drawing Lines in the Sand

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Your assignment (for extra credit): READ the following document. Then, on a sheet of paper, summarize your thoughts in response to the article. Please work individually. You are welcome to offer your own ideas and opinions; I'm interested in how this article makes you react.

"Evolution in the sense of common ancestry might be true, but evolution in the neo-Darwinian sense -- an unguided, unplanned process of random variation and natural selection -- is not. Any system of thought that denies or seeks to explain away the overwhelming evidence for design in biology is ideology, not science" ... Christopher Schönborn, [New York Times](#), 2005

"Belief in the supernatural, especially belief in God, is not only incompatible with good science, Dr. Hauptman declared, 'this kind of belief is damaging to the well-being of the human race.'" ... [New York Times](#), 2005

"Those who ask from science a final argument, an ultimate proof, an unassailable position from which the issue of God may be decided will always be disappointed. As a scientist I claim no new proofs, no revolutionary data, no stunning insight into nature that can tip the balance in one direction or another. But I do claim that to a believer, even in the most traditional sense, evolutionary biology is not at all the obstacle we often believe it to be. In many respects, evolution is the key to understanding our relationship with God" ... Kenneth Miller, [Finding Darwin's God: A Scientist's Search for Common Ground Between God and Evolution](#), in press.

"Evolution is only a theory. So is God - only a theory. There is no certainty ... There are only guesses to guide us. But that is the way it is. Our faith is not that God has beamed us up to a higher plane of knowing. There is no higher plane of knowing. Our faith is a fragile hope that God lives with us in the reality of our darkness, in our search for truth, in the bold guesses we try to live by. It's all only a theory. The question is whether it leads anywhere." ... Lindon Eaves, [Advent Sermon](#), 2005

"... scientific statements are not either claims or approximations to 'Truth,' but provisional stories, reflecting human perspectives, that get progressively less wrong. Whatever practical usefulness the stories have derives from and needs always to be understood in light of their provisional character ... Scientific stories are written not to be believed but to be understood, made use of as appropriate, and revised ... The resulting assailability, conflicts, and resolutions, concerning both observations and stories told about them, are as much a part of the successes of science as any other feature of the scientific method." ... Paul Grobstein, [Science As Story Telling and Story Revision](#), 2005

"All people should be encouraged to think of their ideas/perspectives as "in progress": to make them available as potential contributions to the thinking of others, and to make use of the thoughts of others as of potential significance to their own thinking" ... [Serendip](#), 2001

Is it too late to prevent drawing lines in the sand on this one? I hope not. You too, maybe? How about if we all (or at least many of us) avoid name-calling and demonizing and rabble-rousing and instead share some of our own personal thoughts about science and religion and evolution? With a belief in each others' integrity and in the potential to learn from and with each other? Let's try. I'll start ... and trust that others will join in. I've always been curious about the world, about myself and other people and the things we find around ourselves. I still am. About little things, like what makes the sun shine, and big things, like how it all fits together and what it all means. And I expect I always will be curious, because one of the things I've discovered over the years is that there are indeed some useful answers to little questions, but every time someone comes up with one that answer itself creates new questions. And while there are lots of different answers to the big questions, they all have problems with them and none of them are convincing to everyone. Maybe you've noticed that too? Maybe you too have the sense that being curious is more useful and fun if one thinks of it as a process, a way of life, instead of as a task to be completed? And so doesn't get too committed to particular answers to big questions?

Anyhow, that's how I think about science. And about what I do as a scientist. What interests me is not finding "Truth", the final answers to big questions. In fact, I'm not at all sure there ARE final answers to big questions and I am, in any case, quite sure neither I nor anyone else yet knows how to find them if there are. What I enjoy, what motivates me, is wondering about things and the stories I hear about them, and seeing new things because I wondered, and making up new stories that take into account the new things I've seen. Which in turn always (so far) creates new things to wonder about, new observations to be made, and new stories to be tried out. THAT's useful ... and fun. And that's science, at least as I understand it (see [Science as Story Telling and Story Revising](#) and [Getting It Less Wrong, the Brain's Way](#)).

Given who I am, how I grew up, and the experiences I've had, I know more about science than I do about religion. It strikes me though that at least some people involved with religion (maybe more than a few?) see what they're doing as being pretty much the same thing as what I'm doing, trying to make the best sense one can at any given time of a world not fully understood ("There is no certainty ... There are only guesses to guide us"). They may use different words and stories to say what they have understood at any given time, but that's a good thing, not a bad one if one has come to feel, as I do, that one can learn not only by having new experiences but also by hearing new stories.

The important point, in the present context, is that I see no need to set science and religion against one another in the case of evolution (or any other). There may be some people involved with religion who see science as opposed to religion, and some people involved with science who see religion as opposed to science, but that's no reason for the

rest of us to draw lines in the sand that we neither want nor need, and that would prevent us from contributing in our distinctive ways to each other's getting on with the business of making sense of the world.

Maybe that's too easy? What is it about evolution in particular that sets off red flags? And what about people who DO see science and religion as oppositional? Let's talk a little bit about that and them, and maybe we can together find a better way to think about these things.

Some people, within both the scientific and the religious communities ARE interested in "Truth". And that, I suspect, is part of the problem. For some people, there can't be more than one "Truth" about something nor more than one right way to pursue "Truth", and so people with one set of understandings or methods feel threatened by people with another set. They assert their own version and attack any other to defend their own.

Fights about "Truth" have been going on for thousands of years, and we're probably not going to entirely fix that problem in the immediate future. We can, though, agree that since science is about ongoing exploration and not about "Truth", it doesn't belong in such confrontations. Evolution is not "Truth" and can't be. Like any scientific story, it is no more and no less than a way to make sense of observations, and is significant only insofar as it does that well and, in so doing, motivates new observations that would in turn lead on to new stories and further new observations.

In these terms, evolution is not only a good scientific story, it is a VERY good one. It accounts for an extraordinary number of observations that are difficult to account for in other ways, and raises a large number of approachable new questions. Moreover, it is a demonstrably useful story in a wide range of contexts.

As Cardinal Schönborn noticed, evolution is not only about "common descent" but also, and perhaps even more importantly, about "an unguided, unplanned process of random variation and natural selection". "Common descent" bothered people for a while but proved useful enough (in the development of medical therapies, among other things) to become over the years a comfortable part of most peoples' own stories.

"Random variation and natural selection" is the idea that seems to be most bothering some people now. But that too makes sense of a lot of observations, raises lots of new interesting questions, and is demonstrably useful. Without that idea, it would be very difficult to make sense, for example, of the development of antibiotic resistance, and of many other features of epidemic disease. There is a reason why it's important not to overuse antibiotics. Antibiotic resistant bacteria are produced randomly during reproduction. They are selected for and become more prevalent when antibiotics are improperly used. Random variation and natural selection is also an idea that underlies a lot of the programming in many contemporary computer applications. So perhaps we can trust that this idea too is useful enough that it will become over time a comfortable part of most peoples' stories?

In fairness, though, it's probably not the idea itself but its potential breadth of application that is most troublesome to some people. Could it be that EVERYTHING we wonder about, ourselves and everything we find around ourselves, derives, at least initially, from nothing more (and nothing less) than "an unguided, unplanned process of random variation and natural selection"? Now THAT is an interesting question, exactly the sort of new question that good scientific stories are supposed to create.

The question is troublesome for some people and exciting for others, for all sorts of reasons. The important point though is that it is just that: a good question. If SOME things (like antibiotic resistance) can usefully be made sense of by "random variation and natural selection", is it possible that other things can also? Let's gather some more observations and see ... That's science. Being curious. Exploring.

The story of evolution is not something that "denies or seeks to explain away" anything ... and is certainly not "ideology". It is a scientific story, one that usefully summarizes a very large number of observations and creates questions that motivate new observations.

It is not "Truth" nor a candidate/competitor for the status of "Truth". It is a product of curiosity, and a stimulus for ongoing curiosity, about small questions and big ones. It is not an answer to any big questions but rather a continuation of the process of asking them and exploring possible answers.

There IS no final answer to the question of whether what gave rise to ourselves and what we find around us is "random variation and natural selection". Maybe there was and/or is a "designer". Or maybe intention, meaning, and purpose didn't exist until organisms that themselves resulted from random variation and natural selection, ourselves included, were able to add them. And there never will be a final answer to that question, at least from a scientific perspective, since science is not about "Truth" but rather about making sense of observations made up to the present. Its stories are always subject to change based on future observations.

If evolution isn't a final answer to a big question, then there isn't much point in drawing lines in the sand about it, for us or anyone else. And if it's a good scientific story, it should of course be made available to others, by teaching it in science classes and writing and talking about it. Some people might find it useful, in one way or another, and they might say things that would in turn help the further evolution of the story.

Should people hear other proposed answers to big questions? Of course. In fact, I can't imagine teaching evolution in my own classroom without mentioning "intelligent design" or some version of it. "Intelligent design" is an idea that's been around for thousands of years; it's the way that people usually try and make sense of what's around them. A large part of the excitement of the idea of "random variation and natural selection" is that it provides a different way of thinking about things, and there is no way to convey that other than by setting it in the context of other ways of thinking.

Should people hear about things that the current story of evolution has trouble explaining? Of course. That, after all, is the point of a scientific story ... to raise new questions. That there are questions doesn't make it a bad scientific story; it is part of what makes it a good one. And there are lots of questions about the story of evolution, small ones and big ones. That too is part of what makes it useful. The story encourages further thinking and exploring.

And that's what science is really about, no? Helping people make sense of the world by encouraging and supporting the development of their own skills at doing so? Maybe "evolution is the key to understanding our relationship with God" and maybe it's not; maybe it's something else entirely. No one knows. But it's certainly not something to fight about. Maybe ideology should be left to the ideologists ("scientific", "religious", and otherwise; cf ["I Believe ...": Its Significance and Limitations](#)), and the rest of us should get on with the business of exploring and sharing useful stories about those explorations. In [educational contexts](#) and elsewhere ...

That's what I think. Evolution is a story. So too is intelligent design. What's worth paying attention to is what observations the stories help to make sense of, what things they are useful (and not useful) for, what new questions they raise. You? [What do you think? Join in](#), and let's see whether we can together keep people from unnecessarily drawing lines in the sand.