

On Rejecting The Theory of Common Ancestry: A Reply to Hasker

Alvin Plantinga

Department of Philosophy
University of Notre Dame
Notre Dame, Indiana 46556

From *Perspectives on Science and Christian Faith* 44 (December 1992): 258-263.

I wish to respond to William Hasker's "Evolution and Alvin Plantinga" (*Perspectives on Science and Christian Faith*, Sept. 1992, pp. 150 ff.).¹ Hasker takes issue with several things I said; I am tempted to engage in lengthy point-by-point self-exculpation, but I shall resist, confining myself to a couple of points of general interest. Some of the issues involved seem to me to be extremely important with respect to the health and welfare of the Christian intellectual community.

First, however, just a bit of stage setting. My original article ("When Faith and Reason Clash: Evolution and the Bible"² was devoted to this question: what should Christians do when there is an apparent conflict between faith and reason? I took as an example the apparent conflict between the teachings of Christianity and the teachings of current evolutionary theory; and I noted that many of the experts (Ayala, Dawkins, Gould, Ruse, Simpson, Spieth, e.g.) claim that evolution is certain, as certain as that the earth revolves around the sun. (By "evolution" they apparently mean at least TCA: the theory of common ancestry, the theory according to which all contemporary living things are genetically related.) I disputed these claims of certainty and suggested that they should be explained in terms of the fact that evolution is the only naturalistic explanation available, the only game in town. I went on to argue that the probability - or acceptability - of TCA is much lower with respect to Christian theism and the empirical evidence than with respect to philosophical naturalism and the empirical evidence. Indeed, I claimed that TCA is improbable, less probable than its denial, with respect to theism and the empirical evidence. And I did this without saying exactly how I think God *did* create all the varying forms of life, without specifying and endorsing some hypothesis of the same logical level or the same logical strength as TCA.

Now both Ernan McMullin³ and Hasker apparently think there is something improper with this procedure. Both apparently believe that if you reject a theory or explanation as unlikely on the evidence, you have to be prepared to propose some other theory in its place. They don't say what you must propose this theory as, or claim for it: must you think it is true? Or (less stringently) more likely than not? Or (still less stringently) more probable than the one you reject? All three of these alternatives, I believe, are importantly mistaken; and because this is such an important point, I want to look into it more carefully.

Hasker first suggests that "Plantinga is gaining an unfair advantage by pointing out the weaknesses of a hypothesis he opposes, while leaving his own view in the dark and thus safe from criticism" (p. 154), and in a footnote he adds that even if I didn't intend to gain an unfair advantage in this way, the fact is I *did* gain an unfair advantage for my view by not putting it out for criticism. Of course this presupposes that I *have* a view here. And I *do* have a view: that the probability of TCA with respect to Christian theism and the empirical evidence is low, lower than that of its denial. But Hasker apparently believes that if I reject TCA as improbable, then (if I am proceeding properly) I must be prepared to suggest and endorse some other view of the same specificity or same logical strength as TCA. Now at first glance, anyway, that seems wrong. I think Cardinal X will be the next Pope; you think that is unlikely, but don't have a candidate of your own; there is no one such that you think it is more likely than not that he will be the next pope. Is there something wrong with your procedure? I think not.

A fuller example: you are at the race track. There are 8 horses in the first race. These horses are fairly evenly matched, but there is a favorite, Black Beauty, who you think has a 1/3 chance of winning. You leave just before the end of the first race; as you leave you hear a roar go up from the crowd. The most probable explanation, as you see it, is that the crowd is cheering Black Beauty, who has just won the race. Will you *believe* that explanation? I hope not; although there is a 1/3 chance that Black Beauty is the winner, there is a 2/3 chance that she isn't. Do you instead believe of some *other* horse that *it* is the winner? No: each of them, as you see it, has a smaller chance of winning than Black Beauty. Is there anything irrational or methodologically unsound in this structure of belief? Again, I should think not.⁴

But doesn't the same structure hold for explanations more generally, including scientific explanations? If you think a given explanation or theory **T** is less likely than its denial, or even if you think it is only somewhat more likely than its denial, you quite properly won't believe it. This is so even if you can't think of another theory or explanation of the phenomena that you believe more probable than not, or even more probable than **T**. (I take it the denial of a theory isn't automatically another theory.) In the horse race example, I reject (do not believe) the proposition that Black Beauty won (although of course I also reject the belief that she lost); I know of several other theories of the same level of generality as that Black Beauty won: but I don't believe any of them; and, in fact, each of them is less probable, as I see it, than the hypothesis that Black Beauty won. So it is sometimes perfectly sensible to reject the best (or most probable) explanation. This might be when you don't know of any other possible explanations at all; but the same thing is also perfectly rational when you do, if all of them including the one in question are too unlikely.⁵

This is how things look on the face of it; but Hasker believes these appearances are misleading. He claims that I can't justifiably think or say that TCA is unlikely on the evidence unless I am prepared to come up with an alternative to it; and he has an argument for that conclusion. I want to look at his reasoning here, and I beg the reader's indulgence for descent into the sort of line by line analysis that analytic philosophy is

infamous for. But let me first briefly recap the discussion. In the original article I said that the similarity in the biochemistry of the various forms of life is reasonably probable on the hypothesis of special creation and hence not much by way of evidence against it. Now the hypothesis of special creation I had in mind was just the hypothesis that

SC: God created at least some forms of life specially, in a way that did not involve common descent.

I thought (and still think) that the given biochemical similarity between the various forms of life is not improbable on SC: we have no reason to think that if God created some forms of life specially, he would do so in a way excluding this similarity. But if that is so, then it is easy to see (via an application of Bayes' Theorem that I won't trouble you with) that biochemical similarity isn't strong evidence against SC; and if *that* is so, then it is not strong evidence *for* any view incompatible with SC, such as TCA.

SC, of course, isn't really an alternative to TCA; it says just that God has created life in some way incompatible with TCA, but it doesn't venture a guess as to what way that might be. (SC is equivalent to the conjunction of the negation of TCA with the proposition that God has created the various forms of life (in some way or other).) And Hasker believes that I must have or endorse a proposition more specific than that, something of the same logical strength as TCA, if I am justifiably to reject TCA as less likely than its denial on the relevant evidence? Why so?

The place where the need for an alternative shows itself is when Plantinga undertakes to assess the empirical evidence adduced in support of TCA. He says of one strand of evidence, "[It is] reasonably probable on the hypothesis of special creation, hence not much by way of evidence against it, hence not much by way of evidence for evolution" The burning question here is the one already posed by McMullin: "*Which thesis is more probable than TCA?*"

What particular hypothesis does Plantinga have in view, so as to be able to say that the evidence is "reasonably probable" on *that* hypothesis? Here it clearly will *not* do to say that the hypothesis in question is simply the denial of TCA. For TCA is a fairly *strong* hypothesis, and its denial is correspondingly weak in its logical force" that is to say, it is compatible with an enormous range of alternatives, and the alleged evidence for evolution may be extremely probable with respect to some of these alternatives and extremely improbable with respect to others" (p. 155).

Why can't I rightly use SC in arguing that TCA is improbable? I think Hasker's answer is given in what he says about the denial of TCA: it will not do, Hasker thinks, to say that the hypothesis in question is just the denial of TCA. Why not? Because TCA is a strong hypothesis, and its denial is correspondingly weak. Why is that a reason for saying that the denial of TCA 'won't do, i.e., can't properly be used in an assessment of TCA of the sort I was proposing? It won't do, says Hasker, because "it is compatible with an enormous range of alternatives, and the alleged evidence for evolution may be extremely probable with respect to some of these alternatives and extremely improbable with respect to others." And I think Hasker would say the very same thing about SC; it too won't do in that context; it too is such that I can't properly argue that the biochemical similarity is reasonably probable on it, so that the biochemical similarity is not strong

evidence against it, and is hence not strong evidence for any proposition incompatible with it. As in the case of the denial of TCA, the reason SC can't be used in such an argument is that there are a large number of more specific alternatives compatible with SC - there are many ways in which God might have created life, compatible with SC - and on some of these alternatives the biochemical similarity will be probable, while on others improbable. That seems right; but how exactly is it relevant? Hasker doesn't say; but what he says suggests that perhaps he thinks that as a result, either the biological similarity won't *have* a probability, on that evidence, or at any rate if it *does*, we can't make a decent stab at estimating it.

But this seems to me mistaken. SC is compatible with an enormous range of alternatives, on some of which the alleged evidence (the biochemical similarity) is very probable and on some of which it is very improbable: true enough. Indeed, some of those alternatives *logically entail* that evidence, and others logically entail the denial of that evidence. But why think this means either that the evidence doesn't have any probability on SC or that we can't make a reasonable estimate of what it is? After all, *any* pair of propositions **A** and **B** such that **A** doesn't logically entail **B** are related in that way, and in many of those cases we can make a very good estimate of the probability of **B** on **A**.

Consider, for example,

(1) Nine-tenths of all Mormons live in Utah and Brigham is a Mormon;

and

(2) Brigham lives in Utah.

I suppose most of us would agree that (2) has a probability on (1) and that we can at least make a sensible estimate of that probability. But (1) is compatible with a large number of alternatives; it is probable with respect to some of these and very improbable with respect to others. For example, (2) is very improbable with respect to

(3) Brigham is a policeman in Tucson, and hardly any policemen in Tucson live in Utah;

which is compatible with (1), or even

(4) Brigham is an Oxford don and lives in North Oxford;

which is compatible with (1) and entails the denial of (2). On the other hand, (2) is very probable with respect to

(5) Brigham is an insurance adjuster in Salt Lake City and nearly all insurance adjusters in Salt Lake City live in Utah;

which is compatible with (1), or even

(6) Brigham is an insurance adjuster who lives in Salt Lake City;

which is compatible with (1) and entails (2).

I therefore do not see the force of Hasker's argument for the conclusion that I can't properly use SC in my argument for the conclusion that the biochemical similarity of life is not strong evidence for TCA.

Hasker is reasoning as follows. I say that biochemical similarity is reasonably probable on SC and hence isn't strong evidence for any proposition incompatible with SC, that TCA is incompatible with SC, and that therefore biochemical similarity is not strong evidence for TCA. So I am choosing a certain proposition (SC) and using it to argue that biochemical similarity isn't strong evidence for TCA by pointing out that SC is incompatible with TCA and that the similarity in question is reasonably probable on SC. Now I think Hasker believes that the only sort of proposition that can properly play the role of SC in an argument like that is one that is as *detailed and specific* (or maybe nearly as detailed and specific) as is TCA itself. (Or perhaps the idea is that such a proposition must have as much content as TCA itself.) And this is why he thinks that if I can properly reject TCA (in the sense of holding that it is less probable than its denial) then I must be prepared to produce some proposition that is as specific as TCA or has as much content as it does, and which I think is more probable, on the relevant evidence, than TCA is. But this is incorrect, for the reasons given. I am of course committed to thinking there is some other hypothesis of equal strength that is *true*; but it doesn't follow that there is some other hypothesis of equal strength that is *more probable on my evidence*. (And even if such a hypothesis is more probable on my evidence, it doesn't follow that I know of it.) If you claim that evolution is improbable, on the evidence (and as a consequence do not accept (believe) it), people often ask you what your alternative is, the idea being that you should be embarrassed if you don't have a good alternative. As we have seen, the question is really illegitimate; one perfectly sensible stance is agnosticism. But isn't there a common sense truth lurking somewhere in the neighborhood of that request? Perhaps so, and perhaps it goes something like this. In the context of a scientific investigation, you need *some* hypothesis, perhaps only a working hypothesis, to guide your inquiry, to enable you to decide what to do next, where to invest your limited resources of time and energy and perhaps money. TCA seems to be a fertile source of such guidance. If you reject it and someone asks what the alternative is, they may be asking what hypothesis you propose to perform that function. And if all you can say is "Well, God somehow did it in a way incompatible with TCA" then you don't have much by way of a substitute. So SC doesn't perform that function at all well. But of course it doesn't follow that if you can't think of a hypothesis inconsistent with TCA that has as much content and is more probable on the relevant evidence, then you can't properly think that TCA is improbable on that evidence. Hasker says

...when Plantinga says that the evidence of evolution is reasonably probable on some alternative to the evolutionary hypothesis, we have no way of knowing, in sufficient detail, what that alternative is; thus we are unable even to *formulate the proposition* which we would need to evaluate in order to determine whether Plantinga's claims are warranted (p. 156).

Just here is where we disagree: it seems to me that I can know perfectly well that evolution is unlikely with respect to the evidence even if I don't formulate and endorse any propositions at all that are at the same level of strength or specificity as TCA.

By way of conclusion, four quick comments on other matters. First, McMullin objects to my proposal that Christians should practice science from a Christian perspective; he says that such science will not be *universal*. I replied that science, "if practiced in such a way as to honor the methodological naturalism that McMullin urges is by no means always universal" (p. 98), and I offered as an example Herbert Simon's conclusion that the explanation of the altruism of Mother Teresa, and others, is to be seen in "bounded rationality" and docility. Here Hasker says I missed the point:

Sociobiology *is* universal, not in the sense that its *conclusions* are acceptable to everyone, but in that its *methods* are open to all: anyone, be he Hindu, agnostic or Calvinist, can pursue the empirical and conceptual inquiries which will validate or refute sociobiology's claims (pp. 158-159).

The suggestion seems to be that anyone can practice or work at sociobiology, even if they do not accept its conclusions, i.e., the explanations it gives of, say, Mother Teresa's altruism. That seems right; but in *that* sense, theistic science, as I was thinking of it, is *also* universal. Its aim is to see how best to explain the phenomena from a theistic perspective; anyone (Hindu, agnostic, or Calvinist) can take part in this enterprise. The conclusions of theistic science may not be *accepted* by non-theists, but the method - trying to see how best to explain the relevant phenomena from a theistic perspective - is indeed open to all.

Second, I say that so far as I can tell (and I am surely no expert) TCA is less likely than its denial on the empirical evidence together with theism, specifically leaving out of account what the Lord intends to teach us in early Genesis. Hasker points out (p. 154) that I may be wrong here, and in particular may be subconsciously importing my beliefs about these matters into my evaluation of the probabilities. Well, yes, of course that's possible; in spite of our best efforts we can't be sure that we aren't influenced, in forming a given belief, by extraneous considerations. I suppose Hasker would concede that he too, in evaluating my arguments, could be subtly and unhappily influenced by his acceptance of the main lines of evolution. All we can do is the best we can do.

But the real question isn't how *I* evaluate that probability: I instead invite *you* to evaluate it. Consider the fossil record and the pattern of sudden appearance and stasis it presents (and the absence of intermediates between the really large groups, such as unicellular life and the Cambrian explosion, between fish and amphibia, reptiles and mammals, reptiles and birds, and the like); consider such vexed questions as whether it is even biologically possible that whales, say, could have developed from some early form of terrestrial mammal, or that eyes or brains could have developed by way of any mechanism so far suggested; consider the fact that our only direct evidence is limited to such things as the directed production of new species of fruit flies from old; consider the fact that God could perfectly well have created various kinds of creatures without recourse to universal common ancestry; and then ask yourself whether TCA is more likely than not on all this. (Of course the question is not whether at least some evolution, even very extensive evolution has occurred; the question whether *all* creatures are related by common descent.) It seems to me that the answer is reasonably obvious. But of course what I hope is that Christian biologists, people who know a great deal more than I do about the evidence, will evaluate TCA from this perspective, unbuffaloed by all those claims of

certainly trumpeted by the scientific establishment, and undaunted by the opprobrium visited upon those who dare to dissent.⁶

Third, Hasker reminds us of Barr's claim that the author(s) of Genesis intended to teach a literal six day creation, a young age for the earth, and a worldwide flood. Says Hasker:

...Barr's view is absolutely devastating for those who, like Plantinga, hold that the creation story is relevant for deciding on scientific views to be accepted by contemporary Christians. If Barr is right, Plantinga's choices would seem to be stark: Either accept an uncompromising version of Creation Science, or admit the Genesis account is *not* relevant to our acceptance of scientific views about origins (p. 159-160).

Now first, I should have made it clear that I am not convinced that Barr is right in thinking the authors of Genesis did indeed mean to teach a literal six day creation and a young earth. Barr says so, and of course what he says is not to be taken lightly; but other experts disagree, claiming that the form of discourse involved is more like that of (say) a parable, rather than one whose aim is the sober, literal truth. I'm not sure who's right. If Barr *is* right, however, my response, as Hasker notes, would be that the ultimate author of Scripture is God, and it isn't necessarily the case that what God intends to teach is the very same thing as what the human author had in mind; he then points out that this introduces a gap between what the human authors of Scripture had in mind and what God intends to teach, and adds I haven't given any general directions for crossing that gap. Of course I haven't; I doubt that there *are* any general directions for crossing it. But the principle that God is the ultimate author of Scripture and that what the human author(s) have in mind may not be identical with what the Lord intends to teach us (of course he may intend to teach people at different historical epochs somewhat different things) was accepted both by Thomas Aquinas and John Calvin (as well as a thousand other Christian thinkers); and anything accepted by both Aquinas and Calvin must be taken very seriously! Indeed, wouldn't *anyone* who accepts anything at all like a traditional view of God's revelation in Scripture agree that the ultimate author of Scripture is the Lord? And that in at least some cases (Old Testament prefigurations of Christ, e.g.) what the Lord intends to teach is not the same thing as what the human author(s) had in mind? True, that can make for difficulties in some cases; we won't always be sure just what it is that the Lord *is* intending to teach in, say, a given passage of the Bible. But that is scarcely news. And is it any easier (consider the prodigious vagaries of contemporary Scripture scholarship) to discover what the human authors *did* have in mind. All we can do is the best we can do; the difficulties Hasker points to are indeed genuine, but they are difficulties for everyone. It isn't as if we know of some course here not subject to difficulty.

Finally, Hasker points out that my suggestion (that Christians should assess and practice science from a theistic or Christian perspective) has its dangers, among them being that "the theological disciplines will assert hegemony and, supported by the ecclesiastical authorities, will attempt to 'call the shots' for the 'lesser' secular disciples" (p. 159). Hasker is right, of course: this course (like any serious enterprise) has its dangers. But again, so does the alternative; and I believe that *those* danger - failing to discern the patterns and currents of spiritual and intellectual allegiances of contemporary culture, intellectual compartmentalization, failing to lead all of life captive to Christ, being conformed to this world - are even worse.

Hasker concludes by claiming that those who attempt to construct a Christian or theistic alternative to contemporary science - psychology and sociology, presumably, as well as physics and chemistry - will

at best, . . . discover fifty years too late, that the Bible does not "clearly teach" about science what their grandfathers said it did, and that the scientific knowledge their grandfathers rejected should indeed, albeit tardily, be welcomed as true insight into the structure of God's creation. Those who forget history are doomed to repeat it (p. 160).

That is of course a possibility, and another danger lurks here (although I very much doubt that our grandchildren will conclude that, for example, sociobiological explanations *a la* Simon of love and humor and altruism are to be welcomed as true insights into the structure of God's creation). We always run the risk of being wrong, even whoppingly wrong, and in fact often *are* wrong. Of course, it isn't only Christian thought about science that runs this risk; the same goes, obviously, for science itself. Consider 19th century physics: the centerpiece of science, the pride of the Enlightenment, widely considered the apotheosis of human intellectual achievement. At the end of the nineteenth century it was thought that we human beings had pretty much figured out the basic structure and lineaments of the universe; perhaps there were a few loose ends here and there to tie up, but the job was fundamentally done. From our present perspective this is deeply mistaken, and it can also seem to display a sort of touching ingenuousness. Life (including the life of the mind) is a pretty tough proposition.

So we run a risk; but of course the right conclusion is neither that we should ignore these Augustinian questions, nor that we should automatically assume that if the experts say it, we can't properly object to it from a Christian perspective. Nor can we just assume that Christian theism is irrelevant to the sciences. Clearly, for example, TCA *is* much more probable from a naturalistic than a theistic perspective, and I don't think Hasker means to deny that. Clearly much of contemporary science, in particular contemporary human science such as psychology, economics, and sociology, is deeply inimical to Christian theism. Christian scholars must recognize these things; we should try to see exactly how this antagonism goes, what its limits are, where the antagonism is sharpest, where it is most subtle and dangerous, and so on; and the resulting insight must be made available to the Christian community. And suppose there are serious shortcomings, from a Christian perspective, in the way in which one or another discipline (or parts of one or another discipline) is currently practiced and pursued: then Christians should try to do it better.

NOTES

¹ Hasker's paper is a comment on a discussion in the September, 1991 issue of the *Christian Scholar's Review*. This discussion begins with my "When Faith and Reason Clash: Evolution and the Bible," continues with responses to that piece by Howard Van Till ("When Faith and Reason Cooperate"), Pattle Pun ("Response to Professor Plantinga") and Ernan McMullin ("Plantinga's Defense of Special Creation") and concludes with my "Evolution, Neutrality, and Antecedent Probability: a Reply to Van Till and McMullin."

² See note 1.

³ "Plantinga's Defense of Special Creation," p. 72. McMullin also criticizes Michael Denton (*Evolution: a Theory in Crisis*, Bethesda, MD: Adler and Adler, 1986) for rejecting TCA but failing to suggest an alternative: "But he assumes that he has also refuted TCA, while providing no hint himself as to how the correspondences he finds so remarkable might be explained by something *other* than common ancestry." (p. 68, footnote).

⁴ I filched this example from Bas Van Fraassen: see his *Laws and Symmetry* (Oxford: Oxford University Press, 1989) p. 149).

⁵ Hasker cites some contemporary philosophers of science, who point out that one should sometimes accept a theory even if it "fails to conform to all the known data in the field under study." But surely these philosophers do not mean to say that we should *believe* a theory that is logically inconsistent with known data; that would be peculiar counsel indeed. Nor are they suggesting that we should evaluate such a theory as *probably true*, even if it is incompatible with what we know. Rather, their counsel, I take it, is that such a theory can nonetheless quite properly be *accepted*, in a sense that does not entail belief. (Thus we might think the theory is in the *neighborhood* of the truth, even if as it stands it is clearly false; or we might think it promising enough to be taken as a basis for further work, as a source of illuminating and worthwhile questions.)

Here Hasker says he thinks it is possible to detect the influence of Bas Van Fraassen's anti-realism. Although I greatly admire Van Fraassen and his work, I do not accept his anti-realism, which in any event is limited to the realm of the unobservable (the world of quark and gluon, etc.) and does not carry over to theories like TCA.

⁶ According to Hasker (p. 155 bottom second column),

...it simply is not true that Plantinga is committed only to the negation of TCA. It is quite clear from God did something □ various things he says, that his view is at least that special in creating initial forms of life, then something special in creating some other forms of life, then something special in creating human beings."

Here Hasker and I aren't quite communicating. Just for the record, I am *not* committed to the negation of TCA; all I say is that I think TCA is *less likely* than its negation. But of course that doesn't mean that I *believe* or am committed to its negation. In the Black Beauty case, I believe it unlikely that Black Beauty won; but I am not committed to the proposition that she didn't. (Failing to believe a proposition is of course not the same as believing its denial.) Second, I am also not committed to the proposition that "God did something special in creating initial forms of life, then something special in creating some other forms of life, then something special in creating human beings" (though I do think it more probable than not). What I said in the passage Hasker quotes is that I

thought this proposition *more probable*, on theism and the empirical evidence, than TCA.
But again, that doesn't mean that I am *committed* to it.