

EDITORIAL

HOW TO WRITE AN UNPUBLISHABLE PAPER

Origins addresses ideas at the center of a debate concerning substantial issues in both science and theology. Most of our authors and editors are scientists and are thus best equipped to evaluate the weight and structure of scientific arguments. Unfortunately, good scientific arguments are in short supply on both sides of the creation-versus-evolution debate. The purpose of *Origins* is to provide a forum for publication of those good scientific arguments that are made within the paradigm of creation.

Differentiating between good arguments and weak arguments requires a level of discrimination that is not always appreciated when poorly argued papers are rejected. What elements typify a poorly argued paper? Several characteristics are commonly present and difficult to hide behind elegant prose. These include:

1. Defining terms in such a way that a certain conclusion is inevitable — winning by definition.
2. Equivocating between definitions to advance an argument.
3. Ignoring opposing arguments while presenting patronizing non-explanations and question-begging answers.
4. Failing to clearly state presuppositions necessary to the logic of an argument.
5. Extrapolating excessively beyond the data.
6. Mischaracterization of individuals who make opposing arguments — the *ad hominem* fallacy.
7. Misstatement of opposing positions so that the misstated position is easy to knock down — the straw-man fallacy.
8. Supporting an argument with already discredited claims.

Not all poorly argued papers exhibit all of these traits, but almost all will involve one, and most frequently several, of the eight listed.

Self-serving definitions are generally easy to spot. For example, a Darwinist might define vestigial organs as Douglas Futuyma did: “**vestigial** — Occurring in a rudimentary condition, as a result of evolutionary reduction from a more elaborated, functional character state in an

ancestor.”¹ Such a definition is not neutral or even useful when discussing the meaning of rudimentary organs. Rather, it forces by definition the conclusion that rudimentary structures found in one species result from common ancestry with other species employing the same structure in some more elaborate form. Depending on the circumstances, this may or may not be a reasonable and logical conclusion, but a definition like this automatically wins the evolution argument by forcing acquiescence to unstated presuppositions.

In general, arguments about vestigial organs represent a kind of question-begging approach to the larger question of the reality of Darwinism. Most who doubt Darwinism are not concerned about the uncontroversial claim that functions can be lost because of random mutations. The contentious claim of the neo-Darwinian synthesis is that random mutations coupled with selection can make functional organs in the first place. Thus, talking about vestigial organs in the context of evolution is a red-herring argument that ignores opposing arguments by providing a question-begging answer; and does so by equivocating between defining evolution in the neo-Darwinian mechanistic sense versus the related but different question of common ancestry. Further, this definition requires certain unstated presuppositions about the nature of life and reality of common ancestry.

But *Origins* exists to do more than simply expose incoherent Darwinian arguments. In fact, while an honest analysis of alternative positions is necessary, positive and well-constructed arguments discussing evidence of the Creator’s hand in nature are of greater interest. However, this does not mean that fallacious creationist arguments are worthy of being printed. What might serve as examples of faulty creationist reasoning? Jumping from such structures as turbidites, which form quickly, to claiming that the entire geologic column formed rapidly and is thus easily accommodated with a short chronology illustrates excessive extrapolation. Yes, turbidites do allow accommodation of some of the data, but not all, or even a majority, of it.

Good science generally makes modest claims and does not over-extrapolate. In fact, extrapolating from turbidites to the entire geologic column requires not just overstating what the data say, but also ignoring opposing claims about such things as stromatolites in the column and the time they take to grow. Any scientific theory about formation of the geologic column must take into account all of what is known. This does not mean that everything that is thought to be true must be shoehorned into every

theory, but when there are major elements that do not fit, this needs to be, at a minimum, acknowledged. A good theory may have a domino effect in other areas and suggest reexamination of ideas that were thought to be true, but it cannot do this if tensions are glossed over.

Perhaps the most shameful attempts at misleading that commonly appear in discussions of the origin of life involve the *ad hominem* fallacy. Blackening the reputation and character of opponents in a debate does nothing to advance an argument logically; but it is an invaluable weapon employed in the art of sophistry, especially when presented before a friendly audience. Thus when Richard Dawkins, commenting on the PhDs of those who believe in creation, writes: “often they are earned not at real universities, but at little-known Bible colleges deep in Bush country.”² He receives a big cheer from fellow secular humanists and reassures the faithful that they are the smart ones facing the most stupid of opponents. But logically it makes no difference whether it is only the unwashed masses who believe something. If it is true, it is true. If it is false, then that should be exposed on the basis of rational logic and empirical data. In any case, the very assertion Dawkins makes in this statement reveals his own prejudice and ignorance in a way that should make reasonable people wonder about his other claims.³

A fallacy related to the *ad hominem* fallacy is the straw-man fallacy in which the position one is opposed to is misstated in such a way that it can be dismissed easily. This is commonly done when the neo-Darwinian mechanism is equated with chance alone. While chance mutations do play a central role in neo-Darwinism, they do not act alone, but in concert with the “law” of natural selection. Substantial arguments against neo-Darwinism do not invoke chance alone or natural selection alone, but consider carefully the potential of these two components working together. When this is done, neo-Darwinism may still fail to account for what is observed in nature; careful thinking and good logic do not need to employ straw men to prevail.

One frustration all who are interested in open and honest dialogue face when discussing the relative merits of creation and Darwinian evolution is the realization that some false claims, no matter how discredited, never seem to die. Charles Darwin pointed out how destructive this is: “False facts are highly injurious to the progress of science, for they often endure long.”⁴ Examples of “false facts” that are still commonly raised include, “human” and dinosaur footprints in the Paluxy River of Texas and the deathbed conversion of Charles Darwin. On the Darwinian side, Ernst

Haeckel's long-discredited claim that the development of organisms replays their evolutionary history (ontogeny recapitulates phylogeny) is recycled with tiresome regularity.⁵ Use of known falsehoods to win at all costs is an inexcusable tactic that exploits the ignorance of one's audience and leaves them more ignorant than they were before being misled.

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ENDNOTES

1. Futuyma DJ. 1998. *Evolutionary Biology*. 3rd edition. Sunderland, MA: Sinauer Associates. Glossary. This quote is cited with approval at: <http://www.talkorigins.org/faqs/quotes/scadding.html>.
2. Dawkins RC. Sadly an honest creationist. *Free Inquiry* 21(4). http://www.secularhumanism.org/library/fi/dawkins_21_4.html.
3. Dawkins makes this comment in reference to a publication: Ashton JF, editor. 1999. *In Six Days: Why Fifty Scientists Choose to Believe in Creation* (Sydney: New Holland Publishers. 360 pages). Of the 53 PhD degrees earned by the 50 authors, 47 came from state-run universities. The remaining 6 are Harvard, Columbia, Clark, Loma Linda (2) and Columbia Pacific (a diploma mill, but this author also has a real PhD from Wayne State University). Of the 28 PhDs from US Universities, only 7 came from states won by George W. Bush in the 2000 presidential election.
4. Darwin CD. 2004. *Descent of Man and Selection in Relation to Sex*. Chapter XXI: General Summary and Conclusion. NY: Barnes & Noble Books, p 550.
5. For example, see Quammen D. 2004. Was Darwin Wrong? (also entitled "Darwin's Big Idea" in the Contents). *National Geographic* (November), p 2-35. For an excellent discussion of Haeckel's embryos, see Chapter 5 in: Wells J. 2002. *Icons of Evolution: Science or Myth? Why Much of What We Teach about Evolution is Wrong*. Washington DC: Regnery Publishing. For a Darwinist perspective see: Gould SJ. 2000. Abscheulich! [Atrocious!]. *Natural History* 109(2):42-49.