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## 'Darwinian Fundamentalism': An Exchange

To the Editors:

Stephen Jay Gould complains that in Darwin's Dangerous Idea I attack his views via "hint, innuendo, false attribution," and "caricature" [NYR, June 26]. That is false. On the contrary, I went to extraordinary lengths to ensure that my account of his views was fair and accurate. One does not lightly embark on the course of demonstrating that a figure as famous and as honored as Stephen Jay Gould—"America's evolutionist laureate"—has misled his huge public about the theories in his field. I knew he was going to hate my book, and given the effectiveness of his past public attacks on sociobiology, IQ testing, and other targets of his disfavor, prudence alone would dictate that I should secure my criticisms against easy rebuttal and condemnation.

So I did my usual homework, and checked it all out with experts in the field, including experts sympathetic to Gould, urging them to correct any errors they spotted. I sent drafts of my critical chapters to Gould himself more than a year before I sent the final manuscript to the publisher, inviting him to meet with me at his convenience, or to respond in whatever way he chose. I invited him to participate in my seminar that was reviewing the penultimate draft. Gould kindly met with me in the summer of 1994, and we spent several hours going over his objections to the penultimate draft. He raised a variety of objections, and supported some of them with texts, and wherever he convinced me I had misinterpreted him. I revised my draft accordingly. On some points, however, he failed to persuade me, and one is particularly instructive, since now he accuses me of deliberately misrepresenting him.

I claimed that for a while he had presented punctuated equilibrium as a revolutionary "saltationist" alternative to standard neo-Darwinism, and he implored me to check this claim by reviewing all his work that dealt with the issue. It started well: he provided me with his complete curriculum vitae and photocopies of every piece therein that I requested. When I reviewed them, however, I found quotations—in addition to those that appear in my book on pp. 286-290—that clearly supported my claim. I wrote back to him citing these. (Instead of quoting the quotations from my long letter to Gould, I refer readers to his notorious 1980 paper in Paleobiology, entitled "Is a new and general theory of evolution emerging?") I ended my letter: "I want to be fair. When you begged me to see for myself that your opponents were foisting a caricature on you, you struck a nerve....But now I need some more help from you if I am going to say that your critics are wrong in claiming that you tried on saltationism and then abandoned it." He never responded to my letter, or made any further attempt to correct my claims, and now he describes my interpretation of his views as "a farrago of false charges." On the contrary, my interpretation is standard fare, widely accepted in the field. For instance, two eminent evolutionary biologists, Jerry A. Coyne and Brian Charlesworth of the Department of Ecology and Evolution, University of Chicago, wrote recently in response to a similar complaint of Gould's in a letter in Science (April 18, 1997, pp. 338-341): "In the past 25 years. Eldredge and Gould have proposed so many different versions of their theory that it is difficult to describe it with any accuracy.... Punctuated equilibrium originally attracted great attention because it invoked distinctly non-Darwinian mechanisms for stasis and change... leading to Gould's pronouncement that 'if Mayr's characterization of the synthetic theory [of evolution] is accurate, then that theory, as a general proposition, is effectively dead, despite its persistence as textbook orthodoxy.'" Neo-Darwinism—the synthetic theory of evolution that Gould propagandistically elides into "Darwinian fundamentalism"—is alive and well, in the textbooks and the laboratories. When Gould suggests otherwise, he is misleading the public.

Let me say a word about "Darwinian fundamentalism." Nonsense. I do not espouse the preposterous views Gould attributes to this mythic creed. Gould labors to create a caricature of the "strict" adaptationist, a type that occurs nowhere in nature and is explicitly disavowed, at length, by me (Darwin's Dangerous Idea, pp. 55, 231-261, 302-305, 326-328, and elsewhere). In fact, the passage from my book which Gould uses to anchor his fantasy is misquoted by him. It is adaptationist thinking, not "adaptation, natural selection's main consequence," that I say plays a crucial and ubiquitous role in analysis, and so it does, even though, as I stress again and again, there are plenty of other factors (comets, and other catastrophes, for instance) that may well play the predominant causal role in particular cases. What is amazing is that Gould wrests this quotation from the very section (pp. 238-261) in which I attempt to undo the travesty of Gould's previous efforts over the years to caricature adaptationist thinking.

When Gould complains further of my "red-baiting" and "gratuitous speculation" about his religious views, this hits a new low. As he knows full well, his scientific critics have often attributed his curious biases to his politics or his views on religion, and I was pointedly disassociating myself from those claims. My criticisms are of his science and his logic, not his political or religious views. But Gould wants to have it both ways; he lards his own writing with political and religious motifs and then howls about red-baiting when anybody takes him up on it—even to dismiss it as beside the point, which is what I did. Besides, if his politics and religion are to be off limits to criticism, then he should clean up his own act. It is he, not I, who has repeatedly failed to live up to the fine principle that he himself has so eloquently expressed:

Scientists have power by virtue of the respect commanded by the discipline. We may therefore be sorely tempted to misuse that power in furthering a personal prejudice or social goal—why not provide that extra oomph by extending the umbrella of science over a personal preference in ethics or politics? But we cannot, lest we lose the very respect that tempted us in the first place. (Bully for Brontosaurus, 1991, pp. 429-430)

I am sorry it has come to this. In my discussions with Gould over the years, I have tried hard to get him to stop misrepresenting the works that he disapproved of, to clarify his position, and to disavow the misconstruals of evolutionary theory that are so often expressed by non-biologists citing him as their authority. In my book I carefully left open a graceful avenue for him to take: if he wished, he could claim that his eager public had been misreading him and then take responsibility for correcting their readings. He chose instead to turn up the volume of his vituperation.

There are quite a few minor mistakes in my book, including three he cites, but they do not substantially affect any of my criticisms of his views. I have put a list of these errors on the website of the Center for Cognitive Studies (<http://www.tufts.edu/as/cogstud/mainpg.htm>). I will not respond further to Gould's charges, trusting that readers will take him up on his challenge: "If you think I am being simplistic or unfair to Dennett in this characterization, read his book...." Do, please; see for yourself: that's the scientific way. John Maynard Smith praises my book; Stephen Jay Gould attacks it. They are both authorities, but they can't both be right, can they?

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