## Stephen Jay Gould: In Memoriam

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Stephen Jay Gould's death on 20 May 2002 produced an impressive global outpouring of tributes and reactions. These commentaries cover the waterfront of sentiment about the man and his work. All point to a fascinating, complex character, both brilliant and flawed. Gould was a study in contrasts, inspiring love, hate, joy, envy, and respect (Palevitz 2002). Gilbert (2002) points out that he was a "remarkable composite," adding that "everyone has his or her own Gould."

Obituaries in the mainstream press (e.g., Yoon 2002; Barnard and Smith 2002) highlighted Gould's key contributions to evolutionary theory and debate, including the concept of punctuated equilibrium (Eldridge and Gould 1972), the famous critique of adaptationism (Gould and Lewontin 1979), and the assault on biological determinism (Gould 1981). Gould's defense of the role of chance and contingency in evolution—a central element in his argument against progress in the history of life (Gould 1989)—and his front-line battles against creationism in the public schools were also featured. Most prominently, mainstream accounts celebrated his hugely successful effort to popularize evolutionary science via a beguiling literary style and without dumbing down his subject matter. Many obituaries mentioned Gould's guest appearance on *The Simpsons* as the surest sign of his popular success.

Scientific response was more measured and critical (Fortey 2002). Gould is generally credited with being a pioneer in the field of evolution and development—"evo-devo"—studies (David 2002; Newman, this issue). The notion of punctuated equilibrium, as a purported revolutionary theory of evolution's tempo and mode, has been greeted with much more ambivalence (Carroll 2002; Mackler 2002; Shermer, this issue). Gould's critiques of biological determinism have inspired especially heated response and debate (Segerstråle 2002). Some have questioned whether Gould made any major original contribution to science at all (Bonner 2002), while others charge him with negativism, obscurantism, and worse (Birx 2002; Gross 2002; Sailer 2002).

Cross-cutting this sizeable obituary is the question of the relationship between Gould's science and his politics. These latter have been variously described as "leftist," "radical," and "Marxist." Caroline Herzenberg's (2002) letter to the editor of *Science* (Fortey 2002) takes that most elite of scientific journals to task for its soft-pedaling of this aspect of Gould's life. Gaspar (2002a) does the same for obituaries in the mainstream press. Articles in *International Socialist Review* (Gaspar

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2002b) and Against the Current (Fayyazuddin 2002) redress the deficiency by noting Gould's involvement in and/or endorsement of various leftist political causes, as well as his essays invoking the thought of Marx and, especially, Engels (see also various contributors to this issue). Jeff Mackler, a high school and college friend, writes in Socialist Action that although Gould was serious about his political commitments, "he was not a joiner" (see also Segerstråle, this issue). Mackler suspects that Gould's active participation in leftist causes may have been limited as a tactical move encouraged by science's inherent conservativism. An especially important reflection in Monthly Review by Gould's longtime collaborators Richard Lewontin and Richard Levins defines Gould's radicalism primarily as a dedicated effort to subject the claims and root assumptions of all received wisdom to systematic and thorough critique.

To the extent that several of these leftist testimonials noted Gould's relationship with *Rethinking Marxism*—he was an original member of this journal's Advisory Board—it is only fitting that we provide our own retrospective and evaluation of his work and legacy. The following collection of papers by colleagues and admirers provides a thoughtful and balanced analysis of the relationship between Gould's politics and science.

Michael Shermer argues that Gould's Marxist sympathies are apparent in his work but, based on his *Skeptic* interviews with Gould and other colleagues, one perhaps shouldn't put too fine a point on it. Val Dusek stresses the continuity of Gould's ideas with strains in Marxist and structural Marxist thought, especially the nonessentialist, nondeterminist versions familiar to the readers of this journal (see also Lewontin and Levins 2002).

Ruth Hubbard, in Gouldian fashion, explores the complex social and scientific constitution of the gene concept and the limitations of a genetic determinist view. While Gould struggled against determinism, Stuart Newman argues that he could have gone much farther in his critique of genetic technologies, and identifies several places where a more substantive engagement with Marxist dialectics might have produced a more nuanced evolutionary theory.

Daniel White shows the productivity of Gould's thought for connecting with the classic ideas of Nietzsche and Marx and the resulting possibilities for new views of social life. Ullica Segerstråle shows how Gould also *transformed* Marxist ideas into a world-view that fit his own particular vision of science and society.

I do not have the history with Gould that some of our contributors do, though I've used his work in numerous courses on science, religion, and human evolution over twenty years. I met him just once, at a lecture in downtown Denver's Center for the Performing Arts. We exchanged pleasantries around one of Gould's well-known obsessions: baseball. Although we shared an eternal love for our hometown team, the New York Yankees, my comment that night was directed toward another late-season swoon by the Boston Red Sox. We also shared some common heroes: our respective "Papa Joes" (his Grandfather and my Father), Joe DiMaggio (my toddler son's first name honors both the Yankee Clipper and my Dad, who in 1926 batted a league-leading .624 with the semi-pro Brooklyn Seminoles), Charles Darwin and, I like to think, Karl Marx.

I am thankful to have had my moment with the man, and his lecture that night

in Denver addressed the themes that have always drawn me, as a Marxist anthropologist, to his work. Ideas presented in full historical context. The influence of hope, desire, and cultural prejudice on scientific work. The biogenetic unity of humankind. The contingency of human existence. The virtues of theoretical pluralism over grand narratives. And, of course, his widely celebrated humanism and moralism. All these themes dovetail, as Dusek notes, with a nonessentialist, "overdeterminist" Marxism. And yes, also on display was Gould's famous impatience with flash photographers and other lecture hall distractions.

All things considered, it strikes me that Gould's contribution to intellectual life is secure, on grounds established by others who have memorialized him. This centers on his unique ability to question received wisdom, identify neglected issues, and make connections across disciplines and the great domains of human knowledge (Homberger 2002; Vermeij 2002). Or, as Shermer puts it, to "revise, refine, reinforce, and reconstruct" evolutionary science. Segerstråle and others (Lewontin and Levins 2002) note that even if Gould didn't say anything new, it was the way he said it that mattered: without condescension, without oversimplification, and with a style that invited an audience to engage emotionally with the subject matter.

Moreover, if Segerstråle is also right that Gould went beyond his leftist colleagues to invoke biological facts or purposely develop theories that would generate desirable political and moral consequences, then he was a philosophical pragmatist in the best sense of that term (Menand 1997). That is, he moved scientific discourse away from the traditional concern with how we know to how we want to live; in other words, from a model of science as objectivity to science as solidarity (Rorty 1989). There is no necessary contradiction here with Gould's parallel belief that factual realities exist and that we can learn about them, albeit erratically (see Segerstråle, this issue). Allen Orr finishes an insightful tribute in The New Yorker with a proper framing of the legacy issue that, I think, acknowledges Gould's pragmatist vision: "In the end, Gould's career may force us to separate two questions that are usually conflated: was he right, and was he good for science? It may not, after all, be a law of nature that the two have the same answer" (Orr 2002).

I'd like to finish with one of my favorite bits of Gouldian prose because I think it captures in one fell swoop his secular humanism, social consciousness, and continuing relevance for discussions about science in the service of human solidarity. It is the last paragraph of the epilogue of *Mismeasure of Man*. Although *Mismeasure* is controversial for what some see as its heavy-handed indictment of an entire tradition of research on human cognitive ability, it nonetheless raises the question of on what grounds, and with what confidence, we should accept today's scientific claims, given that earlier state-of-the-art theorizing has often turned out to be wrong (Segerstråle 2002, this issue). And, of course, it raises the broader question of the relationship between science and the public good. Here Gould is commenting on Doris Buck's sterilization for alleged mental deficiency in 1928 under Virginia's eugenic, forced sterilization laws.

One might invoke an unfeeling calculus and say that Doris Buck's disappointment [at being unable to conceive children] ranks as nothing compared with millions dead in wars to support the designs of madmen or the conceits of

rulers. But can one measure the pain of a single dream unfulfilled, the hope of a defenseless woman snatched by public power in the name of an ideology advanced to purify a race? May Doris Buck's simple and eloquent testimony stand for millions of deaths and disappointments and help us to remember that the Sabbath was made for man, not man for the Sabbath: "I broke down and cried. My husband and me wanted children desperately. We were crazy about them. I never knew what they'd done to me." (Gould 1981, 336)

In today's world of global terrorism meets Pax Americana the designs of madmen, conceits of rulers, and threats to individual human rights by government power can take a variety of forms. In this context it is not always easy to distinguish madman from liberator, self-serving elitism from enlightened public policy, "bad" from "good" science. More than ever we need eloquent public intellectuals capable of demystifying the intersections and larger dynamics of science, history, politics, and ideology. Gould's death has taken one of our best, and left a huge vacuum. I hope it is one that won't go unfilled for long.

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