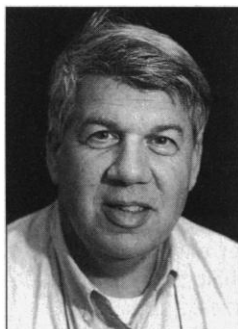


AAAS NEWS AND NOTES

edited by TIFFANY AYERS

PROFILE

Stephen Jay Gould: A Communicator of Science



Gould assumes the AAAS presidency in January 1999.

"People, particularly young children, love science in their bones and hearts," said Stephen Jay Gould. It's that sentiment that he plans to capitalize on when he assumes the AAAS presidency at the annual meeting in Anaheim, California, in January 1999.

According to Gould, people are born with an innate fascination for science, but that interest is too often turned off as a person grows to fear and distrust science. "It's a shame that this great institution of science, which is so intrinsically embedded in our lives, is so widely underappreciated by the public," Gould said. "Science needs to be understood by everyone, not only for reasons of public well-being, but because it is so thrilling, exciting, and inspiring." Gould said that as president of AAAS he will work to resolve the paradox by improving the public opinion of science.

Gould, who is well known as a communicator of science, has all the qualifications for the task. An evolution scholar, he has written 15 books on science for the general public, many of which have received awards. With Niles Eldredge of the American Museum of Natural History, Gould developed the theory of punctuated equilibrium, concluding that evolution occurs by fits and starts, rather than by the slow, gradual process proposed by the traditional view of evolution. He is a professor of zoology and of geology at Harvard and is curator of invertebrate paleontology at that university's Museum of Comparative Zoology.

Like many, Gould believes improving the public opinion of science would have a positive effect on the shape of the institution of science, as the next millennium approaches. Gould believes that once the fear and distrust of science is dispelled, then the issues of too few jobs, lack of funding, and inadequate public education can be more easily solved.

Gould points to two ways to improve the public opinion of science. Education reform and making science accessible to all people is important, he said. "But what people haven't done enough up to now is to focus on science as part of the social enterprise, as part of all of us," Gould said. He said he will stress the humanity of science, including its history, role in society, its failures, and its successes.

One audience Gould will focus on is children. He believes that sustaining their innate fascination for science is crucial for the future of science. "If we could quantify and harvest the mental power involved in the knowledge and correct spelling of complex dinosaur names among the nation's 5-year-olds, we could move Everest and cure AIDS," Gould said.

When Gould delivered his Founders Day Lecture in September 1998 at the Smithsonian Museum of Natural History to celebrate the 150th anniversary of AAAS, he first spent the day talking with high school students in the AAAS auditorium, on topics ranging from baseball to evolution. In addition to face-to-face interaction, he sees the importance of various mediums to reach kids, which is why he appeared as a character on *The Simpsons* in 1997.

One major project that Gould hopes to oversee as AAAS president will be "Celebrate Science on the Mall," a project being planned by AAAS and the Smithsonian for September 1999 in Washington, D.C. During the celebration, scientists from every discipline would show the public what they do and educational activities would involve the public in science.

"It's a new, original, and powerful way to get science appreciated," Gould said. "The mall in Washington is symbolically and physically the preeminent public space for the United States. To use it to promote the public understanding of science could be inspiring."

Gould feels that as AAAS president he will be effective in helping to increase the public understanding of science, because that's where his own skills lie. Gould's many books have been praised for explaining complex ideas in innovative ways that get the point across without "dumbing down"

the content. Also, Gould has long served as a columnist for *Natural History* magazine; since 1974, he has never missed writing an essay for each issue.

Yet Gould never had any formal training as a writer. "I just stumbled into it, and eventually developed a reputation for writing in an oddly literary manner (which doesn't necessarily mean good)," Gould said.

Gould's most recent book, *Questioning the Millennium: A Rationalist's Guide to a Precisely Arbitrary Countdown*, released in October 1997, explores the historical, scientific, and cultural aspects of the current fascination in looking at the year 2000 as a great milestone. Gould covers a wide range of phenomena, from the unpredictability of nature to the vagaries of pop culture, to reflect our millennial obsession.

In *Full House*, which came out in paperback in 1997, Gould describes our species, far from being the pinnacle of some inevitable trend in nature toward greater complexity, as simply a tiny accident occurring on a minor side-branch of the evolutionary tree. He studies the nature of statistics—from the disappearance of the .400 batting average to the likelihood of his own survival from an episode of cancer—and develops a critique of the progressive view of evolution.

Gould grew up in New York City. He graduated from Antioch College and received his Ph.D. from Columbia University in 1967. Gould is the recipient of various international awards, including a Gold Medal from the Linnaean Society of London and a Silver Medal from the Zoological Society of London. He has also received more than 40 honorary doctorates. He is a member of the National Academy of Sciences and has served as president of the American Society of Naturalists from 1977–1980, the Paleontological Society in 1985, and the Society for the Study of Evolution in 1990.

The task of improving public understanding of science is not a new one. Upon reviewing the history of AAAS, Gould noted that in 1848 scientists were also calling for better communication of science.

"There are certain struggles in every generation. We will have inherent difficulties. American anti-intellectualism will never go away," Gould said. "But I'm not pessimistic. We're starting with an advantage in that kids are naturally interested in science. Science is not worse off but better off, because science is more and more a part of children's lives."