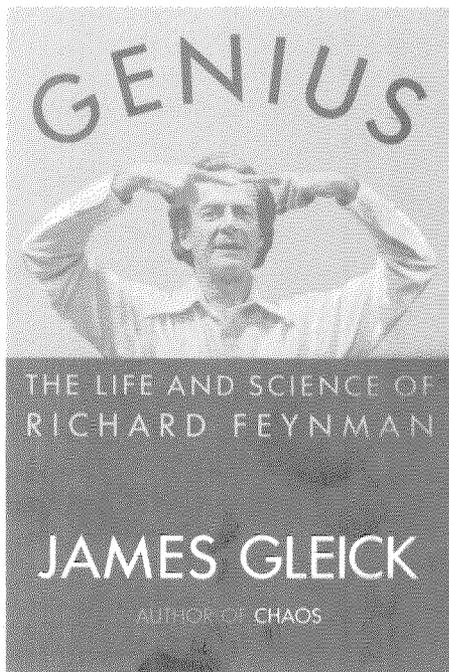


Books



Pantheon Books, 1992
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531 pages

A certain former president of Caltech with white, wavy hair told me he was invited to review this book for a prestigious journal, but turned them down. He doesn't like to write book reviews, he said, because there are only two kinds. Either you summarize the book, or you write about yourself. Well, I've been asked to review this book by an even more prestigious journal (*E&S*), and I've decided not to summarize the book. This will be a very personal review.

To start with, I have a confession to make. When this book arrived (Gleick sent an inscribed copy to my wife, Judy, and me) the first thing I did was look

myself up in the index and read the parts where I was quoted.

Then I read the rest of the book.

For me, reading this book has been a most peculiar experience. Feynman was my friend and colleague for 20 years. Gleick never met him. So here is this interloper, this stranger, learning about my friend by sitting in dusty archives (the Caltech archives aren't dusty, but who knows what goes on at MIT?) reading dry letters and other people's oral interviews, trying to reconstruct, not merely the life and character of an unseen human being, but one of the most complex and important human beings of this century. How well does he do?

There is at least one mystery he doesn't solve. I can remember sitting at my desk during one of my scientific arguments with Feynman (it was not exactly a level playing field), staring at the back of his head as he stood writing and talking at the blackboard, and asking myself, What the hell is going on in there? Hard as he tries, Gleick doesn't answer that question, nor can we expect him to. A better question, the key question to ask of any biography, is, does he bring the central character back to life? I don't know how others will answer that question, but I can tell you my answer: I can see my friend's face, and I can hear his voice, on every page.

This book is, as the subtitle implies, not only a biography, but also a scientific biography. Gleick has taken on the daunting task of telling us who Feynman was, and also just what he did and why we should care. Not a scientist himself, he has clearly immersed himself in the science (as he did in his previous book, *Chaos*) to the point where he can explain it with clarity and grace. To be

sure, some scientists will grumble (have grumbled) that the treatment is superficial and maybe even wrong in places, and some nonscientists will react with their normal reflexes, finding this science, like all science, impenetrable. Don't pay any attention. Having tried my hand at this kind of writing, I can tell you that what Gleick has done is remarkable. Scientists, especially physicists, will generally know exactly what he is writing about, and although they may flinch at an occasional phrase, they will generally appreciate the elegance of his discussions. Nonscientists will find that, unlike Stephen Hawking's book, this one does not have to be left in a prominent place on the coffee table in order to recoup one's investment.

Genius is a fitting tribute to Richard Feynman. Gleick's research is meticulous, his analysis is full of surprising insights, and his writing is fiercely readable. The picaresque, curious (double meaning) character of Feynman's own tales (as told to Ralph Leighton, and nearly everyone else he knew) is recognizable on these pages, but so is the far more important Feynman, the one who left the world richer for having passed through it. First-rate scientific biographies are rare. Einstein and Bohr have had pretty good ones, and my own favorite has been Pearce Williams' *Michael Faraday*. Months before he died, Feynman thrilled a class of Caltech freshmen by saying (of a famous 1987 celestial event), "Kepler had his supernova, and Tycho Brahe had his. Then 400 years passed. Now I've had mine." Well, Einstein, Bohr, and Faraday have had their biographies, and now Feynman has his.

Lest I forget to mention it: What did Gleick quote me as saying? Among other things, he managed to pick up one of my better lines. About the big red books, *The Feynman Lectures in Physics*, Gleick says,

"They were not just authoritative. A physicist [me], citing one of many celebrated passages, would dryly pay homage to 'Book II, Chapter 41, verse 6.'"

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