
Classic Feynman: All the Adventures of a Curious Character

R.P. Feynman

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Caltech, in Pasadena, California, has a long history of Nobel Prize winners in physics, including Carl D. Anderson, who in 1932 discovered the positron, the first evidence of antimatter, and whose concept we use every day when we perform PET. The most famed Nobel laureate of Caltech is Richard P. Feynman, a theoretic nuclear physicist known more for his eccentric personality than his prize in physics on the interaction of electrically charged particles with photons. A wide variety of books on Dr. Feynman have been published, including previous collections of stories, memoirs, and lectures on physics. *Classic Feynman* is a compilation of previously published materials, including narratives about his energetic passion for science and humorous anecdotes about his life as a nuclear physicist. The book covers Feynman's early childhood in New York, his university years at Massachusetts Institute of Technology and Princeton, his work on the atomic bomb in Los Alamos, his teaching in Brazil, and his life in Southern California.

The book begins with Feynman's childhood in Far Rockaway, New York. Feynman claims that his father, Melville Feynman, had a great and lasting influence on his love of science. They would read the *Encyclopedia Britannica* together at home. And on their frequent weekend hiking trips through the Catskill Mountains, his father would talk to him about nature, biology, and science. As a boy, Richard Feynman often realized that his father did not get the details correct when explaining, for example, the transformation of a maggot into a caterpillar; however, he loved that his father was trying to explain complicated concepts and admired his father's deep love for the principles of science—principles that stayed with Richard throughout his own life.

His father taught him something else that proved equally useful in his later life: a certain healthy disrespect for things. Richard's father was in the uniform business and knew there was no difference between a person with uniform on and a person with uniform off. The pope may have a hat, and a general, epaulets, but it was just a costume to Feynman's father.

Before receiving his doctorate degree in physics, Richard Feynman was recruited to work on the Manhattan Project at Los Alamos, New Mexico, to build the first atomic bomb. Almost all physics research stopped during the war in order to focus on work being done at Los Alamos. Feynman's wife, Arlene, had tuberculosis and stayed at a sanatorium nearby in Albuquerque where he visited on weekends until her death. There was no entertainment at Los Alamos, so Richard Feynman learned to crack safes for fun, taking out top-secret reports. After he was finished, he would hand it back to the person who wrote it, saying, "Thanks for your report." When he could not manually figure out the combination, he used psychology, knowing that physicists often used mathematic constants or important dates as their combinations.

Before he began working at Caltech, Richard Feynman spent a sabbatical year in Brazil. Feynman had played the bongo drums while at Los Alamos, and when the season of *Carnaval* came around, he joined a small samba school from Copacabana Beach called *Farçantes de Copacabana*, made up of people from the poor sections of Rio. Richard played the percussion instrument *frigideira*. Because the people in the band were very poor, he did not want to wear his regular university clothes during rehearsal and would instead put on an old undershirt and old pants and sneak out through the basement of his luxury hotel. His band could not compete against the big samba schools from the cities, but he did get much enjoyment trying to win local contests at the beaches.

From 1951 until his death in 1988, Richard Feynman taught at Caltech. There, he developed his theory of quantum electrodynamics, which earned him the Nobel Prize. He also originated the "Feynman diagrams" used in the conceptualization of interactions between particles, most notably between the electron and positron. While at Caltech, he was asked to serve on the Presidential Commission on the Space Shuttle Challenger Accident in 1986, which showed that the O-rings of the booster rockets were the cause of the astronauts' deaths.

Overall, *Classic Feynman* is an engaging and entertaining book about one of the world's most known theoretic nuclear physicists. Included with the book is a CD recording—in itself worth the price of the book—of Dr. Feynman giving a lecture at the University of California at Santa Barbara commemorating the 30th anniversary of the atomic bomb.

Classic Feynman is a remarkable collection of stories that I think both physicists and physicians will enjoy.

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