

More Than **Curious**

A Science Memoir

William H. Press



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Names and events in this work are true insofar as
the author's memory and records allow, and except for
a small number of pseudonyms adopted. The author welcomes
corrections on matters of fact (as distinct from opinion,
interpretation, as-remembered, or as-then-thought)
and will attempt to include these in future releases.

Cover: Pandora's Cluster by James Webb Space Telescope,
image courtesy Space Telescope Science Institute

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Praise for *More Than Curious*

“Press has written a riveting book, distinctive in style and theme. He is a top-rank scientist, having attained status and respect as a member of the U.S. academic elite. But unlike most such people, he finds ‘ivory towers’ constricting and has relished forays into the wider policy and political arena. He addresses important issues, and the narrative is laced and enlivened by intrigues and personality conflicts, recounted with unusual frankness. This enlightening and brilliantly-written book deserves wide readership.”

—Martin Rees, University of Cambridge and Astronomer Royal

“In *More Than Curious*, bear witness to the life and times one of the last of the Citizen Scientists. Bill Press is an astrophysicist like no other, who gifted his brilliance to the work of other scientists, and to multiple U.S. Presidents—through the Cold War and beyond. A natural storyteller, Press’s crystalline and lucid accounts of people, places, and things, leave you feeling like a front-row witness to his extraordinary journey.”

—Neil deGrasse Tyson, American Museum of Natural History

“This is a superbly interesting book, with personal insights, sometimes funny, often deep, into a half century of science and science’s interplay with politics and public affairs. It has been shaped by the author’s intense curiosity and creativity and his amazingly broad interests and expertise. Once I started reading, it was near impossible to put down.”

—Kip S. Thorne, Caltech, Nobel Laureate

“An epic tale of a scientific career told through unique behind-the-scenes portraits of the people, organizations and issues that defined late 20th century physics and things to which it led.”

—Stephen Wolfram, Wolfram Research, Inc.

“As a memoir, *More Than Curious* is a picaresque exploration of high-level bureaucratic and academic politics. Pick it up anywhere, and within ten pages you’ll find a sharp (sometimes snarky) insight into some event or public figure that Bill encountered in a long and productive career.”

—Stewart Baker, Steptoe & Johnson, former NSA General Counsel

“This book is a gift: William H. Press places his scientific work in the context of the human stories and social and political institutions that swirled around him, writing with elegance and closely-observed detail.

The memoir is also an ethnography and history of science in our lifetimes, a rare look not only at a scientific sensibility at work, but of how the scientific establishment relates to the world of politics, economics, and corporate power. I loved it.”

—Sherry Turkle, MIT, author most recently of *Alone Together*, *Reclaiming Conversation*, and *The Empathy Diaries*.

“In this well written and vivid memoir, [Press] gives first-hand accounts of hobnobbing with such scientific luminaries as Richard Feynman, Edward Teller, and Kip Thorne, as well as with political leaders including Jimmy Carter and Barack Obama. Throughout, Press conveys the thrill of science and the obligations of its practitioners.”

—Alan Lightman, MIT, author of *Einstein’s Dreams*

“Press shows himself a perceptive raconteur. His engaging vignettes create a fifty-year mosaic of physics, physicists, scientific institutions, and science policy.”

—Steven Koonin, former Caltech provost and U.S. Under Secretary of Energy

“Press, one of the most consequential scientists of his generation, takes the reader on a tour of his life in science through seventy candid, vivid and highly-interesting vignettes... You won’t be able to put it down.”

—Michael S. Turner, University of Chicago, former Assistant Director, National Science Foundation

“Press represents the best of academic and public service excellence in America. His scientific expertise and contribution to the nation’s security underwrite a remarkable life story. The lessons apply to all who aspire for meaning and consequence in their personal and professional lives.”

—General Norton A. Schwartz (Ret.), former Chief of Staff, United States Air Force

“[His] book on algorithms is the most dog-eared volume on my bookshelf; this latest one, by the same William H. Press, is yet another wonderful surprise, and I suspect that it too will get more than its share of wear and tear, both in my hands and in those of many others.”

—David E. Shaw, D. E. Shaw Research and Columbia University

Preface

A combination of chance family origin, some amount of ability, and unusual luck put me in places and times to observe at close range some significant events and notable personalities in science, and to see and record some noteworthy interactions of science and scientists with politics and public affairs. Along the way, I got to know not just many in my own generation of scientists, but also an older generation whose famous discoveries went back in some cases to the 1930s. Later, I worked with (or for) not just scientists, but also technology capitalists and billionaires, nuclear weapons designers, admirals and generals, and political leaders including two U.S. presidents. Reader, be assured: I was never close to winning any big prize for my own work. But my Ph.D. advisor, Kip, and my Ph.D. student, Adam, each did win Nobel Prizes for theirs—for discoveries that I had in a small way participated in.

Over time, I came to think that parts of this story might be interesting to other scientists, or to present or future historians of science, or perhaps even to a general reader or two. The enforced isolation of the COVID pandemic in 2020, left me with the time and motivation to extract a narrative from my files and memory, and turn it into something like a memoir. In fact I did this twice: You are reading the shorter, more circumspect version, most directly the story of the making of a scientist, the body of his and others' scientific work, and some decades of his life in the public realm. I am pleased to make this version available to all who are interested.

A longer, less polished, more personal version, written for my family, is for now unpublishable. It has more stories about sometimes difficult people, and it is freer with my unvarnished judgements about them—not just about their science. But too many of them are alive, and too many of these are still my friends, implying that these are stories not ready to be told. My life apart from science (and apart from my journey to becoming a scientist) is also described more fully in the longer, family version. A time-locked archive will someday make that version available to others. But not soon. In the meantime, I hope the stories in this volume will amuse or instruct.

I decided to publish this memoir openly under a (free) Creative Commons license after discussions with several publishers. Regrettably,

there seems today to be no significant commercial market for scientific memoirs of a kind that was once typified by the Sloan Foundation's Series of Scientific Autobiographies. At the time, I found all of the Sloan volumes fascinating—even, or especially, the badly written ones. (A badly written memoir is sometimes more revealing than a slick and polished one.) A market does still exist for streamlined scientist-memoirs with exciting, dramatic arcs (“my path to a Nobel Prize!”), but that isn't *my* life, unfortunately. My anecdotes are picaresque, many, and I hope interesting or funny. Friends in the book business advised me that an academic or specialty press could easily be found to publish this work. But that would yield a tiny readership as compared to open publishing. Physicist Joe Polchinski came to a similar conclusion, posting his 2017 memoir on the ArXiv (albeit under tragic circumstances); Charlie Kennel entrusted his beautifully written 2023 memoir to the University of California's public eScholarship repository; and there are other examples of this trend. I like CERN's Zenodo repository for its promise of maintaining availability for twenty years or the lifetime of the European Union, whichever is *longer*. No commercial publisher offers that deal for keeping a book in print!

Memoir is, by definition, as remembered. From my pre-publication circulation of this work, I have already learned that others remember some events herein quite differently from me. I have corrected, and will try to correct in future updates, things objectively untrue that I wrongly state as fact, as opposed to memory, interpretation, or what I thought or knew at the time. For disputes in these latter categories, I enthusiastically invite participants to record their own versions in blogs, articles, podcasts, books, or social media, and to archive such recollections in one of the several permanent online scientific repositories. Then, future historians (if they actually care!) can try to sort things out.

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