Einstein And Oppenheimer: The Meaning Of Genius
Albert Einstein and J. Robert Oppenheimer, two iconic scientists of the twentieth century, belonged to different generations, with the boundary marked by the advent of quantum mechanics. By exploring how these men differed—in their worldview, in their work, and in their day—the book provides powerful insights into the lives of two critical figures and into the scientific culture of their times. In Einstein’s and Oppenheimer’s philosophical and ethical positions, their views of nuclear weapons, their ethnic and cultural commitments, their opinions on the unification of physics, even the role of Buddhist detachment in their thinking, the book traces the broader issues that have shaped science and the world. Einstein is invariably seen as a lone and singular genius, while Oppenheimer is generally viewed in a particular scientific, political, and historical context. Silvan Schweber considers the circumstances behind this perception, in Einstein’s coherent and consistent self-image, and its relation to his singular vision of the world, and in Oppenheimer’s contrasting lack of certainty and related non-belief in a unitary, ultimate theory. Of greater importance, perhaps, is the role that timing and chance seem to have played in the two scientists’ contrasting characters and accomplishments—with Einstein’s having the advantage of maturing at a propitious time for theoretical physics, when the Newtonian framework was showing weaknesses. Bringing to light little-examined aspects of these lives, Schweber expands our understanding of two great figures of twentieth-century physics but also our sense of what such greatness means, in personal, scientific, and cultural terms.
Starred Review* Typically viewed as solitary geniuses, the two most prominent scientists of twentieth-century America—Einstein and Oppenheimer—here appear in their defining social contexts. Einstein may have achieved remarkable feats in the apparent isolation of a Swiss patent office. Yet Schweber deflates the myth of the iconoclastic loner, detailing the revolutionary’s extensive debt to the community of European researchers. Schweber’s insightful narrative indeed reveals how Einstein’s subsequent reliance upon his unaided talents left him stranded in sterile theorizing, cut off from the collaboration of younger colleagues exploring quantum mechanics. As one of those colleagues, Oppenheimer captured the limelight as the director of the Manhattan Project, a position awarded him because of the leadership he had already demonstrated in fusing the diverse talents of pioneering scientists at Berkeley. But the publicly triumphant Oppenheimer delved deep in Vedic scripture and American Pragmatism trying to quell self-doubts born of his ambivalent Jewishness and his costly tardiness in reaching the frontiers of physics. Schweber finally confronts readers with ruptures in both men’s public lives, as Einstein breaks with institutions resistant to his personal imperatives and Oppenheimer self-destructs in the glare of a security-clearance hearing. Those interested in the history of culture will learn much from these parallel dramas illuminating the oft-neglected social dynamics of science. --Bryce Christensen

You’d be forgiven for thinking there is little we don’t know already about Einstein and Oppenheimer. Yet this book plots the lives of the 20th century’s most charismatic physicists to a greater end than biography. Focusing on the cultural milieus in which they thrived, Schweber investigates Einstein and Oppenheimer’s very different manifestations of genius—one solitary, one social. Schweber’s depth of analysis, particularly in describing both scientists’ affinities for Buddhist thought, insists that there is much more to learn about each. (Seed 2008-03-01)The real interest of Mr. Schweber’s account—and what makes his dual biography unusual—is the emphasis he places not on Einstein’s or Oppenheimer’s scientific achievements, which have been often enough described, but on their later careers, when both found themselves, for different reasons, strangely sidelined. --Eric Ormsby (New York Sun 2008-05-21)Schweber has set himself quite a task in seeking to add to our understanding [of Einstein and Oppenheimer]. By my reckoning he has succeeded, not so much by uncovering significant new material as by reflecting wisely and eloquently on Einstein’s and Oppenheimer’s politics, their relationships with their colleagues, and their contributions to science. --Lawrence Black (Times Higher Education Supplement 2008-05-22)Have we not heard enough of these two men? Yet Silvan S. Schweber shows us in his new book, Einstein and Oppenheimer, that there is still more to say. What we know about these two giants of physics largely concerns their
genius--their formidable mental powers--but this focus tends to foreground the individual at the expense of intellectual and scientific context. Schweber’s aim is ambitious: to capture another quality that he calls the greatness of Einstein and Oppenheimer--to show how their actions altered humanity’s "ideas concerning what human beings can be or do." We know much about the genius of these two men, Schweber implies, but little of their greatness. --Robert P. Crease (American Scientist 2008-09-01)

In a brief review, it is not possible to do full justice to Schweber’s probing book, which merits careful reading. --Michael W. Friedlander (Physics World 2009-02-01)

In six illuminating essays focusing on the later years of these fascinating figures, Schweber shows that no scientist--however great--is an island. --P.D. Smith (The Guardian 2010-01-16)

This is an inspired idea--to do a sort of dual biography, in revealing how these two consequential physicists’ lives and careers played off against one another. There is much here to ponder on the interplay of genius. Professor Schweber tells the story with admirable concision and authority.

I really enjoyed this book - it dives in to the two scientists personal beliefs on many different levels and contrasts their personalities. This is admittedly probably not for someone who has never read a physics biography and more particularly probably not for someone who already does not know something about either character. It IS technically sound and thorough in its analysis. The author seems to pick a topic and then provide a very large amount of his research into the following chapter about the two personalities. It is not a quick, cover-to-cover read, but its in depth analysis is backed up by an extreme amount of research on the topic.

I am a 68 year old homemaker who loves to read and learn new things. I have very little understanding of math and physics, and there were several parts of this book which I didn’t understand. However, what I did understand was fascinating. The comparison between Einstein and Oppenheimer as to their way of thinking, working, and their attitudes toward the world in general was enlightening. They were so different, yet so alike. The book shows them for what they were, two different humans taking different roads to the same end.

THE AUTHOR HAS BEEN COMPILING A BIOGRAPHY OF HANS BETHE. HE HAS PREVIOUSLY PUBLISHED A BOOK COMPARING OPPENHEIMER AND BETHE. DURING THIS TIME HE HAS DONE EXTENSIVE RESEARCH ON MANY PROMINENT PHYSICISTS WHOM BETHE HAS INTERACTED WITH (SOME WHO THE AUTHOR KNEW QUITE WELL). THE WORD "GENIUS"
HAS BEEN APPLIED TO MOST OF THESE MEN AT ONE TIME OR ANOTHER. ONE MAY NOT
AGREE WITH ALL THE AUTHOR’S CONCLUSIONS. BUT THESE CONCLUSIONS ARE BASED
ON EXTENSIVE RESEARCH AND THOUGHT. IF NOTHING ELSE, THEY SHOULD STIMULATE
YOUR THOUGHT PROCESSES AND OPEN UP A NEW HORIZON. RECENTLY THERE HAVE
BEEN MANY BOOKS ON EINSTEIN AND ON OPPENHEIMER, BOTH COMPLEX MEN FROM
THE VIEWPOINT OF US MORTALS HOWEVER THIS BOOK IS UNIQUE IN ITS COVERAGE
AND INSIGHTFUL COMPARISONS

“...The person endowed with [great] talent thinks more rapidly and accurately than [other
people]; on the other hand, the genius perceives a world different from [other people], though only
by looking more deeply into the world that lies before them.” (Philosopher Schopenhauer)
The above quote is found in this extremely well-researched and well-written book (subtitled “The Meaning of
Genius”) authored by Silvan Schweber who is Professor of Physics and Professor in the History of
Ideas, Emeritus, at Brandeis University. (Brandeis University is a private research university founded
in 1948 and located in Massachusetts. It is named after the first Jewish Justice of the U.S. Supreme
Court, Louis Brandeis.) Schweber tells us in his acknowledgements that this book "is the result of
lectures I gave during the 2005 Einstein celebrations and of my continued involvement with the life
of Oppenheimer." Schweber explains his book: “It explores aspects of the lives and personalities of
[Albert] Einstein [1879 to 1955] and [J. Robert] Oppenheimer [1904 to 1967] that have received less
attention [in other popular books]: their views of individual and collective creativity, their link to
Buddhist thought, their metaphysics, and in particular, how they coped with their lives after having
climbed to summits that are unreachable to almost everyone else--this last, an aspect of their lives
that is put into sharper relief by a comparative study... [Another] possible [subtitle] for [this] book
might have been “The Scientific and Political Scene of Their Times.” This book is not a full-scale
biography of these two men (nor is it meant to be). What it does is look at their lives, the meaning of
greatness, and their interactions in order to better understand them, both individually and in the
larger community and context of their time. Thus this book examines these two men individually with
two chapters devoted first to Einstein and then two devoted to Oppenheimer. The final two chapters
examine Einstein and Oppenheimer together. What I especially found interesting were the excerpts
of actual correspondence reproduced in the main narrative not only of Einstein and Oppenheimer
but also of significant others of that time. The only appendix has a copy of the “Russell-Einstein
Manifesto” of July, 1955 (drafted by philosopher Bertrand Russell and Albert Einstein), outlining the
dangers posed by nuclear weapons and calling for world leaders to seek peaceful resolutions to
Science can and does shape our world, and it certainly has left a mark on history, and two of the prominent examples of this are Oppenheimer, and Einstein, during the twentieth century. If the most significant event of that century was the second world war, then the event which stopped the war is at least equally important. The theories developed by Einstein and enhanced by Oppenheimer were instrumental in fostering the development of the atomic bomb. Japan folded after the bomb was used, and the development of the bomb was an example of a concerted effort of scientific know-how, and unlimited resources joining to reach a goal. One can argue whether great times make great men, or great men just appear during these times, but no one can argue that these two men were giants in their field at a time when giants were needed. This story is less about any solid connection between these two men, although they were together at Princeton for several years and did associate with each other, but rather more about their scientific styles, findings and beliefs which were more different that similar. The book is very heavy with scientific theory and physics, development and doctrine, with very little in the way of character development or sub-plot. If you have a scientific background and find the works of scientists of interest, especially in how their theories are developed and what scientific "schools" that they support you will find this aspect fully developed in the book. If you have a minimal science background much of this book will be hard to understand.

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