



Niels Bohr's Times, In Physics, Philosophy, and Polity

By Abraham Pais

Download now

Read Online ➔

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais

Abraham Pais's life of Albert Einstein was one of the finest scientific biographies ever written. When it first appeared in 1982, *Christian Science Monitor* called it "an extraordinary biography of an extraordinary man," and Timothy Ferris, in *The New York Times Book Review*, said it was "the biography of Einstein he himself would have liked best," adding that "it is a work against which future scientific biographies will be measured." As a respected physicist himself, Pais was the first biographer to give Einstein's thinking its full due, yet despite the occasional high level of science needed to discuss Einstein's ideas, the book was a national bestseller. Indeed, it was one of *The New York Times's* Best Books of the Year, and the winner of the 1983 American Book Award for Science. Now Pais turns to Niels Bohr, to illuminate the life and thought of another giant of 20th-century physics. Bohr was the first to understand how atoms were put together, he played a major role in shaping the theory of the atomic nucleus, he decoded the atomic spectrum of hydrogen, an achievement which marks him as the founder of the quantum dynamics of atoms, and his concept of complementarity (which provides the philosophical underpinning for quantum theory) qualifies him as one of the twentieth century's greatest philosophers. Pais covers all of these achievements with sophistication and clarity, but he also reveals the many other facets of the man. Perhaps most important, he shows that Bohr was not only a great scientist, but also a great nurturer of young scientific talent, acting as father figure extraordinaire for several generations of physicists. Bohr's Institute of Theoretical Physics, which he founded in Copenhagen and for which he tirelessly raised funds, was the world's leading center for physics all through the 1920s and 1930s, the birthplace of Heisenberg's papers on the uncertainty relations, Dirac's first paper on quantum electrodynamics, and other pivotal works. And Pais reveals as well the personal side of Bohr, the avid reader and crossword puzzle solver (Bohr loved Icelandic sagas, Goethe and Schiller, Dickens and Mark Twain--while studying in England early in his career, he improved his English by reading *The Pickwick Papers* with a dictionary to one side); his aid to Jews and other refugees in the 1930s and during the war; the tragic loss of his son Christian (who died in a sailing accident right before Bohr's eyes); and his attempts during and after the war to promote openness between East and West, meeting with both Roosevelt and Churchill (the former was quite courteous, the latter lectured Bohr like a schoolboy).

Bohr's research, his teaching, his friendships with the major scientists of our time, his aid to refugees, his role as philosopher, administrator, and fund raiser, his devotion to science and to his family--all these qualities are illuminated by Pais in a marvelous biography that captures the essence of one of the best-loved figures of this century.

 [Download Niels Bohr's Times, In Physics, Philosophy, a ...pdf](#)

 [Read Online Niels Bohr's Times, In Physics, Philosophy, ...pdf](#)

Niels Bohr's Times, In Physics, Philosophy, and Polity

By Abraham Pais

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais

Abraham Pais's life of Albert Einstein was one of the finest scientific biographies ever written. When it first appeared in 1982, *Christian Science Monitor* called it "an extraordinary biography of an extraordinary man," and Timothy Ferris, in *The New York Times Book Review*, said it was "the biography of Einstein he himself would have liked best," adding that "it is a work against which future scientific biographies will be measured." As a respected physicist himself, Pais was the first biographer to give Einstein's thinking its full due, yet despite the occasional high level of science needed to discuss Einstein's ideas, the book was a national bestseller. Indeed, it was one of *The New York Times's* Best Books of the Year, and the winner of the 1983 American Book Award for Science.

Now Pais turns to Niels Bohr, to illuminate the life and thought of another giant of 20th-century physics. Bohr was the first to understand how atoms were put together, he played a major role in shaping the theory of the atomic nucleus, he decoded the atomic spectrum of hydrogen, an achievement which marks him as the founder of the quantum dynamics of atoms, and his concept of complementarity (which provides the philosophical underpinning for quantum theory) qualifies him as one of the twentieth century's greatest philosophers. Pais covers all of these achievements with sophistication and clarity, but he also reveals the many other facets of the man. Perhaps most important, he shows that Bohr was not only a great scientist, but also a great nurturer of young scientific talent, acting as father figure extraordinaire for several generations of physicists. Bohr's Institute of Theoretical Physics, which he founded in Copenhagen and for which he tirelessly raised funds, was the world's leading center for physics all through the 1920s and 1930s, the birthplace of Heisenberg's papers on the uncertainty relations, Dirac's first paper on quantum electrodynamics, and other pivotal works. And Pais reveals as well the personal side of Bohr, the avid reader and crossword puzzle solver (Bohr loved Icelandic sagas, Goethe and Schiller, Dickens and Mark Twain--while studying in England early in his career, he improved his English by reading *The Pickwick Papers* with a dictionary to one side); his aid to Jews and other refugees in the 1930s and during the war; the tragic loss of his son Christian (who died in a sailing accident right before Bohr's eyes); and his attempts during and after the war to promote openness between East and West, meeting with both Roosevelt and Churchill (the former was quite courteous, the latter lectured Bohr like a schoolboy).

Bohr's research, his teaching, his friendships with the major scientists of our time, his aid to refugees, his role as philosopher, administrator, and fund raiser, his devotion to science and to his family--all these qualities are illuminated by Pais in a marvelous biography that captures the essence of one of the best-loved figures of this century.

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais Bibliography

- Sales Rank: #742305 in Books
- Published on: 1991-10-03
- Ingredients: Example Ingredients
- Original language: English
- Number of items: 1
- Dimensions: 9.56" h x 1.36" w x 6.50" l,
- Binding: Hardcover

- 604 pages

 [**Download** Niels Bohr's Times, In Physics, Philosophy, a ...pdf](#)

 [**Read Online** Niels Bohr's Times, In Physics, Philosophy, ...pdf](#)

Download and Read Free Online Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais

Editorial Review

From Publishers Weekly

When Einstein's revolution opened a window to quantum physics, it was the Dane Niels Bohr (1885-1962) who went through it to decode the first atomic spectrum (and to win a Nobel Prize in 1922). Bohr's career as a physicist spanned the full development of quantum mechanics, which he approached with a kind of *gemutlichkeit* that we do not associate with theoretical genius. Pais, a former physics professor who first met his subject in 1946, is a diligent biographer who captures Bohr and his era with the intensity of a devoted protege. Bohr's broad career, touching many important developments and figures in his field (Heisenberg, Pauli, Rutherford among them), and overflowing into European post-WW II policy requires a biographer with deep resources such as Pais, who here preserves the social and scientific dimensions of a full epoch of physics in his depiction of Bohr's singular life. Illustrations.

Copyright 1991 Reed Business Information, Inc.

Review

Advance praise for Neils Bohr's Times 'To anyone who worked under Bohr and was influenced by him, the book is fascinating and to any physicist with the slightest interest in the history of his subject it is to be highly recommended. ... the picture of intense argument, and excitement, of great minds seeking the truth and of their strengths and weaknesses comes through vividly, as does the central question - does God play dice? Dr Pais has done a fine job.' Sir Nevill Mott, Nobel Laureate

'Pais gives us an intimate picture of Niels Bohr, the great human being. He also shows in a profound manner how Bohr's ideas on atomic physics and quantum mechanics evolved, often painfully, and guided most of the scientists working in the field.' Hans A Bethe, Nobel Laureate

'What struck me most was Pais' account of the intellectual battles that established the basis of modern physical science. We now take the truth of quantum mechanics as read, but it was a great and exciting struggle, and Bohr's finest hour.' Sir Sam Edwards FRS

'A. Pais' "Niels Bohr's Times" illuminates the probing, deep exertion within Bohr that was midwife to the birth of twentieth century physics. One watches audacious improvisation accompanied by internal doubt of sufficiency and substantiality ... It is a pleasure to catch glimpses of the author's humour abd his personal as well as intellectual impressions; Abraham Pais is very much a part of "Niels Bohr's Times".' Mitchell Feigenbaum

`Niels Bohr could not have asked for a better biographer than Abraham Pais.' The New York Times Book Review

`A close-up portrait of a truly extraordinary, and extraordinarily appealing, personality..... Pais is himself a physicist of great distinction. He writes with authority and, in addition, with unfailing grace and considerable charm.' Science

`Abraham Pais is a physicist who has made fundamental contributions to the quantum picture of reality. But during the last 14 years he has shown himself to be a historian of science who combines deep scientific insight with meticulous scholarship. He is perhaps the unique example in modern times of a world-class physicist turned historian.' London Review of Books

`For many people, a review of this book will not be needed. Anyone familiar with Abraham Pais's previous historical/biographical studies of Einstein (*Subtle is the Lord*) or particle physics (*Inward Bound*) will already be certain that this book about Bohr is one which must go to the top of the priority list.' The Observatory

'The book is a delight to read, and Pais gives the layman a glimpse into the make-up of a great man, and also a glimpse into the make-up of the world.' Paul Roberton, Regina Leader Post, 10 October 1992

'Through a detailed and eminently readable account of Bohr's life and work, his importance to the development of twentieth century physics is established without a doubt ... this very rich book, to which it is impossible to do full justice within the confines of this review. My best advice would be to read it yourself!' A J Kox, European Journal of Physics 1992

About the Author

About the Author:

Abraham Pais is Detlev W. Bronk Professor of Physics Emeritus at Rockefeller University in New York. He is also the author of *'Subtle is the Lord...'* (for which he won an American Book Award) and *Inward Bound*.

Users Review

From reader reviews:

Brian Alexander:

As people who live in typically the modest era should be change about what going on or data even knowledge to make them keep up with the era that is always change and make progress. Some of you maybe can update themselves by studying books. It is a good choice in your case but the problems coming to anyone is you don't know which one you should start with. This Niels Bohr's Times, In Physics, Philosophy, and Polity is our recommendation to help you keep up with the world. Why, since this book serves what you want and need in this era.

Richard Segers:

Do you considered one of people who can't read pleasurable if the sentence chained from the straightway, hold on guys this aren't like that. This Niels Bohr's Times, In Physics, Philosophy, and Polity book is readable through you who hate the perfect word style. You will find the data here are arrange for enjoyable examining experience without leaving even decrease the knowledge that want to deliver to you. The writer connected with Niels Bohr's Times, In Physics, Philosophy, and Polity content conveys thinking easily to understand by many people. The printed and e-book are not different in the content material but it just different as it. So , do you still thinking Niels Bohr's Times, In Physics, Philosophy, and Polity is not loveable to be your top checklist reading book?

Sherrill Height:

This Niels Bohr's Times, In Physics, Philosophy, and Polity are usually reliable for you who want to become

a successful person, why. The reason why of this Niels Bohr's Times, In Physics, Philosophy, and Polity can be one of several great books you must have is actually giving you more than just simple examining food but feed anyone with information that probably will shock your before knowledge. This book is definitely handy, you can bring it all over the place and whenever your conditions at e-book and printed people. Beside that this Niels Bohr's Times, In Physics, Philosophy, and Polity giving you an enormous of experience including rich vocabulary, giving you test of critical thinking that we understand it useful in your day exercise. So , let's have it and enjoy reading.

Alice Billups:

E-book is one of source of knowledge. We can add our expertise from it. Not only for students but also native or citizen have to have book to know the up-date information of year to year. As we know those publications have many advantages. Beside we all add our knowledge, also can bring us to around the world. By book Niels Bohr's Times, In Physics, Philosophy, and Polity we can have more advantage. Don't one to be creative people? To become creative person must like to read a book. Just choose the best book that appropriate with your aim. Don't end up being doubt to change your life by this book Niels Bohr's Times, In Physics, Philosophy, and Polity. You can more pleasing than now.

Download and Read Online Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais #U0TBMEY6KI7

Read Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais for online ebook

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais books to read online.

Online Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais ebook PDF download

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais Doc

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais Mobipocket

Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais EPub

U0TBMEY6KI7: Niels Bohr's Times, In Physics, Philosophy, and Polity By Abraham Pais