Niels Bohr Archive: Annual Report 1998

Staff:

Director Finn Aaserud Academic Assistant Felicity Pors

Librarian/Secretary Anne Lis Rasmussen

Temporary workers Claus Wøller Nordbo (through May)

Jørgen Oliver Jensen (from August)

Scientific Associates Aage Bohr

Hilde Levi

Abraham Pais (also at Rockefeller

University, New York)

Jørgen Kalckar Knud Max Møller

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the University of Copenhagen Henrik Jeppesen
For the Niels Bohr Institute Aage Winther, ch

Aage Winther, chair (through November) Andrew D. Jackson, chair

(from December)

For the Royal Danish Academy of

Sciences and Letters

For the Minister of Education

(until 22 March) and the Minister of Research

(from 23 March)
For the family of Niels Bohr

David Favrholdt

Helge Kragh Anne Bohr Dawids

General remarks

The Niels Bohr Archive (NBA) is a repository of primary material for the history of modern physics, pertaining in particular to the early development of quantum mechanics and the life and career of Niels Bohr. Although the NBA has existed since shortly after Bohr's death in 1962, its future was only secured at the centennial of Bohr's birth in 1985, when a deed of gift from Bohr's wife, Margrethe, provided the opportunity to establish the NBA as an independent non-profit institution. Since 1985, the NBA has had its own board of directors and has received a fixed annual sum for running expenses from the Danish Ministry of Education (as of spring 1998, the Ministry of Research); it has also made ample use of its privilege to apply for project support from private sources.

The core of the collections comprises Bohr's scientific correspondence (6000 letters and drafts) and manuscripts (500 units). This material was catalogued and microfilmed in the early 1960s as part of the Archive for History of Quantum Physics (AHQP), a project sponsored by the American Philosophical Society and the American Physical Society. Since then, 290 microfilms of a wide variety of relevant historical material have been placed in several repositories world-wide.

In addition, the NBA houses several historical collections that cannot be consulted elsewhere. Thus, in 1985 the Bohr family donated the bulk of Bohr's private correspondence, which includes letters to and from central personalities in culture and politics inside and outside Denmark. The equally extensive ``Bohr General Correspondence'' documents Bohr's substantial administrative involvement.

Among papers of Bohr's closest colleagues deposited in the NBA, only the George Hevesy Scientific Correspondence has been organized and microfilmed, but the papers of among others H.A. Kramers, Christian Møller, Oskar Klein, and Léon Rosenfeld are also of great historical interest. Some papers of more recent origin--notably those of Niels Bohr's son, Aage Bohr, Niels Bohr's close collaborator, Stefan Rozental, and Danish solid state physicist Allan Mackintosh--have also been deposited. The large collection of photographs relating to Bohr's career is an especially popular resource. Finally, there are reprint, film, sound tape and video tape collections, as well as a growing library.

Activities in 1998

As part of the major relocation of activities at the Niels Bohr Institute, the NBA moved in October 1998 to new premises within the Niels Bohr Institute, which generously provides accommodation for the NBA. The NBA has thus obtained a more central location as well as a library room and an archives room large enough to house all historical documents in one place. The Villum Kann Rasmussen Foundation has furthermore provided a substantial grant for furnishing the library, which will be made available for researchers in the course of 1999.

The NBA's highest priority continues to be the publication - by Elsevier Science - of the *Niels Bohr Collected Works*, the first volume of which appeared in 1972. A complete list of all eleven volumes, published as well as planned, was given in the Activity Report for 1988. Volume 10, *Complementarity Beyond Physics* (edited by David Favrholdt, professor of philosophy at the University of Odense) is now in print and will be published shortly; volume 11 (edited by Finn Aaserud) will cover Bohr's activities outside science and philosophy, prominently including some of Bohr's previously unpublished writings on his idea of an `open world,' developed during and after World War II. The Chinese translation, by Professor Ge Ge, of Volume 7 appeared in late 1998.

The photograph collection is presently being placed on the Internet. After some technical difficulties, the collection is now expected to be available on-line at the end of February 1999. The support (from the Lounsbery Foundation) of this project, is the latest in long series of external grants provided to organize, register and preserve the NBA's several uncatalogued collections.

At a meeting in the autumn of 1998 with representatives with the Bohr family, it was decided that most of Niels Bohr's family correspondence and political papers, which were only due to become available fifty years after Bohr's death, will be made open to researchers at immediate notice. New additions to the NBA's holdings include: video recordings from the 1988 UNESCO conference in Paris on Niels Bohr and twentieth-century physics; a small collection of letters from Margrethe Bohr donated by addressee Wilfrid Mann; and a book collection from the late Knud Hansen, a former director of the Niels Bohr Institute. Knud Max Møller, who is working at the NBA on his large history of science photograph collection (to be transferred to Aarhus University) has donated a substantial number of books from his private collection.

The preparation for publication of the dissertation of NBA's Ph.D. student, Carsten Jensen, who died in 1991, has now virtually been completed by editors Finn Aaserud, Helge Kragh, Erik Rüdinger and Roger Stuewer. The book, *Controversy and Consensus: Nuclear Beta Decay* 1911-1934, is scheduled for publication in 1999 by Birkhäuser Verlag in Basel.

In 1998, Finn Aaserud attended four conferences: on ``Physicists in the Post-War Political Arena'' at the University of California, Berkeley, U.S.A.; on ``Managing the Archives of History of Science" at the Royal Swedish Academy of Sciences, Stockholm, Sweden; on ``Working with Knowledge'' at the Australian Academy of Science, Canberra, Australia; and on ``The Historiography Recent Science, Technology, and Medicine'' at the Magleås Catholic Conference Center outside Copenhagen.

In 1998, there were nine lectures in the NBA's History of Science Seminar by some of the

foremost scholars in the field. Last but not least, approximately fifty researchers from various countries have visited the NBA over the year.

Finally, the board of directors and the staff would like to express their gratitude to Professor Aage Winther, who retired as chairman of the board in late 1998 after serving in that capacity since the NBA's formal establishment in 1985.

Publications

Finn Aaserud:

``Videnskabernes København i 1920'erne belyst af amerikansk filantropi'' in *Videnskabernes København*, Thomas Söderqvist, Jan Faye, Helge Kragh og Frank Allan Rasmussen (eds.), Roskilde Universitetsforlag, 1998, pp. 201-221.

Finn Aaserud:

``A Project Proposal for Denmark - And a Model for Other European Countries?'' in *Archives of Contemporary Science: Proceedings of the Symposium Organised by the Commission on Bibliography and Documentation, Liège 20-26 July 1997* (International Union of History and Philosophy of Science, Division of the History of Science, Works in Progress 2), Roderick W. Home, Peter Harper, Odile Welfelé (eds.), Liège, Belgium: DHS Secretariat, 1998, pp. 37-48.

Abraham Pais:

``Paul Dirac: aspects of his life and work,'' in *Paul Dirac: The Man and his Work*, Peter Goddard (ed.), Cambridge: Cambridge University Press, 1998, pp. 1-45.