

Niels Bohr Archive: Annual Report 2001

Staff:

Director	Finn Aaserud
Academic Assistant	Felicity Pors
Librarian/Secretary	Anne Lis Rasmussen
Conservator	Judith Hjartbro
Scientific Associates	Aage Bohr Jørgen Kalckar Hilde Levi Knud Max Møller Erik Rüdinger

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For the Vice-Chancellor of the University of Copenhagen	Henrik Jeppesen
For the Niels Bohr Institute	Andrew D. Jackson, chair
For the Royal Danish Academy of Sciences and Letters	David Favrholt (until 6 October) Jørgen Christensen Dalsgaard (from 7 October)
For the Minister of Science, Technology and Development	Kirsti Andersen
For the family of Niels Bohr	Anne Bohr Dawids (until 6 October) Vilhelm Bohr (from 7 October)

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 not-for-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 (1985-1998 and 2000-2001), the Ministry of Research (1998-2000) and the Ministry of Science, Technology and Development (from 2001); 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. The outcome was 290 microfilms of various relevant historical material, which have been placed in several repositories world-wide, including the NBA.

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 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.

The NBA continues the publication - through Elsevier - of the *Niels Bohr Collected Works*, the first volume of which appeared in 1972. A complete list of the ten volumes published so far is posted on the NBA's website, www.nba.nbi.dk. Volume 11 (edited by Finn Aaserud and the only one remaining) 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.

In early 1999, upon consultation with the Research Ministry, the NBA increased its special activities disseminating natural science for the public, particularly gymnasium (high-school) students (for details, see the website).

Activities in 2001

In 2001, the NBA's website has been improved considerably, and it continues to be developed. It now contains detailed information on most of the NBA's holdings and activities.

The organisation, conservation and registration of the papers of Aage Bohr and Allan Mackintosh - for which NBA has received support from Danish National Lottery (*Tips/Lottomidler*), as well as from the AIP Center for History of Physics - has been completed. In 2001, Aaserud began an extensive tape-recorded oral history interview with the Danish experimental physicist N.O. Lassen, who has worked with the Niels Bohr Institute's cyclotron from its completion in 1938 until its removal in 1994. The interview is the first of several projected oral history interviews with scientists connected with the Niels Bohr Institute.

The NBA's photograph collection can now be consulted on the Web and is becoming an ever more popular resource. In 2001, the photograph and other collections have been used extensively. In this connection the centenary of the Nobel Prize (instituted in 1901) should be mentioned in particular, especially as regards the exhibition arranged by the Nobel Museum in Stockholm, which includes major exhibits on Niels Bohr and George Hevesy, using considerable film material and a collection of Hevesy's chemicals loaned from the NBA. Moreover, the NBA contributed substantially with artefacts and photographic material to the exhibition in Denmark celebrating the 13 Danish Nobel Prize winners, which was first shown at the Royal Library in Copenhagen, and has thereafter been moved to the Steno Museum, Aarhus.

Aaserud has taken part in the launching of an ambitious book project on the history of Danish natural science originating from the University of Aarhus, as well as in the planning of VIDEN NET (KNOWLEDGE NET) at the Copenhagen Business School. In May, he participated in a joint meeting in London between the Royal Society and the Royal Society of Literature, thus establishing contact with dramatists writing on subjects related to the history of science. On the same trip, Aaserud visited for the first time the National Cataloguing Unit for the Archives of Contemporary Scientists (NCUACS), located in Bath and led by Peter Harper.

In 2001, the NBA organised five events in its series of History of Science Seminars, with speakers from at home and abroad. Moreover, in September the NBA organised a successful two-day symposium, "*Copenhagen and beyond: drama meets history of science*". The papers and background material for the symposium continue to be entered on the NBA website.

The NBA continues to be visited by several researchers from all over the world.

As part of the public dissemination programme, the NBA has hosted or co-hosted several lectures (for details, see the website) and contributed to the well-attended NBI arrangement

on the annual *Kulturnatten* (Culture Night) in Copenhagen.

Publications

The list below includes only publications by NBA staff. On our web site we hope to develop a more general list of publications based on any research carried out using the NBA's archival resources.

Finn Aaserud:

"I know how little I have deserved this ..." in *Neighbouring Nobel: The History of Thirteen Danish Nobel Prizes*, Henry Nielsen and Keld Nielsen (eds.) (Århus: Aarhus University Press, 2001), pp. 272-312.

Finn Aaserud:

"Jeg ved, hvor lidt jeg har fortjent dette ..." in *Nabo til Nobel: Historien om tretten danske Nobelpriser*, Henry Nielsen and Keld Nielsen (eds.) (Århus: Aarhus Universitetsforlag, 2001), pp. 221-253.

Finn Aaserud:

"Niels Bohr - dansker og verdensborger" in *Aktuel Naturvidenskab 3* (July 2001), 30-32.

Finn Aaserud:

"Wir brauchen einen Dialog" in Michael Frayn, *Kopenhagen: Stück in zwei Akten, mit zehn wissenschaftsgeschichtlichen Kommentaren* (Göttingen: Wallstein, 2001), pp. 143-148.

Felicity Pors and Finn Aaserud:

"The Physical Tourist: Historical Sites of Physical Science in Copenhagen" in *Physics in Perspective 3* (2001), 230-248.

Finn Aaserud:

"Levi, Hilde Bertha" in *Dansk Kvindesbiografisk Leksikon, Bind 2: Karen Hannover - Ann-Sofi Norin* (Copenhagen: Rosinante, 2001), pp. 418-419.

Felicity Pors:

"Lehmann, Inge" in *ibid.*, pp. 406-407.

Felicity Pors:

"Trolle, Birgit" in *Dansk Kvindesbiografisk Leksikon, Bind 3: Charlotte Norrie - Christina Astrand* (Copenhagen: Rosinante, 2001), pp. 481-482.

Felicity Pors:

"Vinter Hansen, Julie" in *ibid.*, pp. 594-595.