

GP 6: Militrische Kontexte

Time: Tuesday 11:45–13:00

Location: HSZ 204

GP 6.1 Tue 11:45 HSZ 204

The Hanford Nuclear Reservation (1943-1987): a Case Study of the Interface between Physics and Biology during the Cold War. — ●DANIELE MACUGLIA — Fishbein Center for the History of Science and Medicine, The University of Chicago, 1126 E. 59th Street, Chicago, IL 60637, USA

During its active period (1943-1987) the Hanford Nuclear Reservation shaped the history of US nuclear research. It also constitutes an interesting case study of the interface between physics, biology and the politics of Cold War society. Although supposed to turn the US into a stronger military force during the Cold War, the remarkable biological consequences of the nuclear research carried out in the facility ended up overshadowing its original political purpose. The high-level of radioactive waste harmed thousands of people living in the area, causing relevant environmental disasters which make the site the most contaminated area in the US even today. Nuclear research is uniquely dangerous since radiation can cause severe consequences both in terms of lives injured and environmental damage. I will address various ways in which nuclear physics and biology were used - and abused - at the Hanford Site to combine the needs of politics with the needs of a healthy society. This paper will further investigate the moral responsibility of science to society and the way in which biological research informed nuclear physics about the deleterious consequences of radiation on environment and on the human body.

GP 6.2 Tue 12:10 HSZ 204

Exploring Greenland: Denmark, the US Military and the Geophysical Sciences in the Cold War — ●MATTHIAS HEYMANN — Aarhus University

This paper explores a vacant spot in the cold war history of science: the development of research activities in the physical environmental sciences and in nuclear science and technology in Greenland. In the post-war period scientific exploration of the polar areas became a strategically important element in American and Soviet defense policy. Particularly geophysical fields like meteorology, geology, seismology, oceanography and others profited greatly from military interest. While Denmark maintained formal sovereignty over Greenland, research ac-

tivities were strongly dominated by US military interests. This paper sets out to summarize the limited current state of knowledge about activities in the environmental physical sciences in Greenland and their entanglement with military, geopolitical, colonial and environmental interests of both the USA and Denmark. It is intended to raise open questions and map out new research challenges. It points out problems of particular historical interest, such as the question of a distortion of the sciences by military engagement, the relation scientific internationalization and military classification of research results, and the shift from military predominance in research planning to emerging environmental interests in Arctic regions in the later cold war period. The paper provides an overview on a collaborative research project pursued at Aarhus University and Florida State University and its latest research results.

GP 6.3 Tue 12:35 HSZ 204

Cold War, Ionospheric Research in Greenland, and the Politics of Rockets — ●HENRIK KNUDSEN — Department of Science Studies, Aarhus University

Issued on the front page the 4 of July 1968 leading Danish newspaper Politiken enthusiastically announced the commencement of a Danish-American "grand rocket program" to investigate the "splendid natural phenomena" of sunspots, solar flares, and polar cap absorption from Thule Air Base, Greenland. Enthusiasm and national pride was immense and understandably so even if the scramble for space enjoyed far less public and political support in Europe compared to the two arm wrestling super powers. From the early 1960s participation in transnational projects allowed Danish scientist to take gradual steps into the field of rocket borne space research. Now activities were about to reach a new level. The ink was hardly dry when the same paper the next day reported that the Danish government in a sweeping move had decided to call of the American part of the joint effort. In the following weeks newspapers reported from what most participants took to be a major political mishap by the Danish government. The paper will situate the American rocket project in the US Cold War military-technological agenda and outline the complex political appropriation process that lead to the rejection. Finally the political appropriation of arctic big science experimentation will be discussed.