



# 1970s: Turn of an Era in the History of Science?

Workshop 14–15 September 2015  
Aarhus University

Convenors:

Matthias Heymann  
Janet Martin-Nielsen  
Gabriel Henderson  
Dania Achermann



## Call for Papers

The decade of the 1970s is regarded as a 'turn of an era' by many scholars. Eric Hobsbawm describes the shift from a "golden age" of rapid economic growth to an age of economic stagnation. Helmut Kaelble refers to it as "a major turning point or turning period of the 20<sup>th</sup> century". Niall Ferguson depicts the 1970s as a time of crisis in many spheres: the economic (with high inflation), political (with new movements and political conflicts), social (with increases in abortion, crime, class conflict, marital breakdown, and racial tensions), and popular culture. Konrad Jarausch marks this period as "the end of confidence", describing a shift from progress optimism to cultural pessimism. Jeremy Black emphasizes the rise of environmental transformations and environmental consciousness in the 1970s, whilst Thomas Borstelmann argues that "the years of uncertainty and disillusionment" during this period opened opportunities for reform, improvement and cultural change.

Where do the sciences feature in this picture of the 1970s? Whilst historical interest in this period has risen quickly in recent years, little attention has so far been paid to the role of science in this decade of crisis and political and cultural change. Historian of science Jon Agar, as a rare exception, suggests the "long 1960s" as a "period of 'sea change'" in the history of science. He depicts changing institutional dynamics, a multiplication of experts, the rise of value- and knowledge-based social movements, and orientation towards the self as transformative forces in science and its cultural context. He argues that we lack sufficient synthetic accounts for the sciences. Others prefer to speak of the 'long 1970s' to contrast features of unrest and crisis with enthusiasm in fields such as scientific planning and futurology.

This workshop aims to address these questions and to cast light on the sciences and their relationships to broader themes of political crisis and cultural transformation in the 1970s. This turn of an era raises many questions. How did the events of the 1970s impact the sciences and their perception in broader culture? To what extent were scientists affected by changing economic and political contexts and social interests? How did scientists view society during the 1970s, and how did they seek to portray themselves in light of broader social and political unrest? In what ways did scientists contribute to change in the 1970s? Broader historiographic questions, too, are of interest: How do Cold War science narratives help or hinder to understand the 1970s? Which concepts can serve to investigate the rise of environmental interest in science and broader culture? What continuities and discontinuities in the (environmental) sciences are visible from the pre-1970s to the post-1970s?

Within these broad topics, this workshop will focus on the role of environmental interest and resources in science in the 1970s. Pertinent topics to be discussed are scientific efforts related to nuclear energy, the oil crises, limits of growth, alternative energy technologies, environmental pollution, future planning, etc. Other topics dealing with science and its cultural impact in the 1970s will also be considered.



# Programme

Monday, 14 September 2014

Venue:

Aarhus Universitet, Studenternes Hus, Mogens Zieler Stuen, Building 1422, Frederik Nielsens Vej 2, 8000 Aarhus C

- 8:30–9:00      Nametag pickup and coffee
- 9:00–9:15      **Matthias Heymann** Introductory remarks
- 9:15–9:45      Personal introductions

FIRST SESSION: Bodies: Scientific Ideals and Science Politics

- 9:45–10:30      Keynote: **Rüdiger Graf** (Zentrum für Zeithistorische Forschung, Potsdam, Germany)  
Détente Science? Transformations of Knowledge and Expertise in the 1970s
- 10:30–11:00      Coffee break
- 11:00–11:30      **Dirk Thomaschke** (Carl von Ossietzky University, Oldenburg, Germany)  
Providing Genetic Services: Prenatal Diagnosis, Human Genetics Experts, and Space in Denmark and Germany during the 1970s
- 11:30–12:00      **Giulia Frezza** (Sapienza University of Rome, Italy)  
Science and Medicine in the Factory: Occupational Health and the Critique of Scientific Knowledge in the 1970s Italy
- 12:00–12:30      Discussion
- 12:30–13:30      Lunch



## SECOND SESSION: Regions and Environmental Narratives

- 13:30–14:15      Keynote: **Mark Carey** (University of Oregon, Eugene, USA)  
Feminist Glaciology: Rethinking Power, Knowledge, and Ice in the 1970s
- 14:15–14:45      Coffee break
- 14:45–15:15      **Christian Kehrt** (Helmuth-Schmidt University, Hamburg, Germany)  
"Maybe Never Again Krill": Germany's Antarctic Expeditions in the 1970s
- 15:15–15:45      **Peder Roberts/Lize-Marié van der Watt** (Royal Institute of Technology (KTH), Stockholm, Sweden)  
From Khaki to Green? Arctic Science in the 1970s
- 15:45–16:00      Short break
- 16:00–16:30      **Julia Lajus** (Higher School of Economics, St. Petersburg, Russia)  
Soviet High-Level Experts and their Perception of the Western Left-Wing Vision of "Environmental Crisis"
- 16:30–17:00      **Janet Martin-Nielsen** (Aarhus University, Denmark)  
Politicizing climate: Rhetoric, aims and actions in the UK
- 17:00–17:30      Discussion
- 19:00              Dinner at Restaurant "Langhoff&Juul", Guldsmedgade 30 (for the organiser's account)



## Tuesday, 15 September 2014

### THIRD SESSION: Institutions and Institutional Transformations

- 9:00–9:45      Keynote: **Elke Seefried** (Institut für Zeitgeschichte Munich and Universität Augsburg, Germany)  
The 1970s as a Turning Point in the History of Future Studies (preliminary title)
- 9:45–10:15      Coffee break
- 10:15–10:45      **Sverker Sörlin** (Royal Institute of Technology (KTH), Stockholm, Sweden)  
The Royal Swedish Academy of Sciences and the Emerging Global Climate Change
- 10:45–11:15      **Jennifer Beckman, Katarina Nordström** (Uppsala University, Sweden)  
Scale and expertise in Swedish and Nordic environmental institutionalisation, 1970-1984
- 11:15–11:45      **Isabell Schrickel** (Leuphana University, Lüneburg, Germany)  
Cooperation without Consensus? Integrated Scientific Approaches at IIASA, 1972–1978
- 11:45–12:15      Discussion
- 12:15–13:15      Lunch

### FOURTH SESSION: Governments: Research Programmes, Politics, and Expertise

- 13: 15–14:00      Keynote: **Michael Egan** (McMaster University Hamilton, Canada)  
Crisis Disciplines and the Science of the Environmental Crisis
- 14:00–14:15      Coffee break
- 14:15–14:45      **Gabriel Henderson** (Aarhus University, Denmark)  
Fearing the Trickle-Down – The Development of the National Climate Program Act of 1978
- 14:45–15:15      **Jennifer Hubbard** (Ryerson University, Toronto, Canada)  
Canadian Marine Science and the “Chaining of Prometheus”
- 15:15–15:45      Discussion
- 15:45–16:00      Break
- 16:00–17:00      Commentary by Libby Robin (Australian National University, Canberra, Australia)  
and final discussion
- 19:00              Dinner at Restaurant “Le Basilic”, Mejlgade 85 (optional, for your own account)



## List of Participants

Achermann, Dania	Aarhus University, Denmark	<a href="mailto:danialachermann@css.au.dk">danialachermann@css.au.dk</a>
Beckman, Jenny	Uppsala University, Sweden	<a href="mailto:jenny.beckman@idehist.uu.se">jenny.beckman@idehist.uu.se</a>
Carey, Mark	University of Oregon, Eugene, USA	<a href="mailto:carey@uoregon.edu">carey@uoregon.edu</a>
Egan, Michael	McMaster University, Hamilton, Canada	<a href="mailto:egan@mcmaster.ca">egan@mcmaster.ca</a>
Frezza, Giulia	Sapienza University of Rome, Italy	<a href="mailto:giulia.frezza@uniroma1.it">giulia.frezza@uniroma1.it</a>
Graf, Rüdiger	Zentrum für Zeithistorische Forschung, Potsdam, Germany	<a href="mailto:graf@zzf-pdm.de">graf@zzf-pdm.de</a>
Henderson, Gabriel	Aarhus University, Denmark	<a href="mailto:gabrielh@css.au.dk">gabrielh@css.au.dk</a>
Heymann, Matthias	Aarhus University, Denmark	<a href="mailto:matthias.heymannc@css.au.dk">matthias.heymannc@css.au.dk</a>
Hubbard, Jennifer	Ryerson University, Toronto, Canada	<a href="mailto:jhubbard@history.ryerson.ca">jhubbard@history.ryerson.ca</a>
Jacobsen, Lif Lund	National Danish Archives, Copenhagen, Denmark	<a href="mailto:llj@sa.dk">llj@sa.dk</a>
Kehrt, Christian	Helmut-Schmidt University Hamburg, Germany	<a href="mailto:kehrtc@hsu-hh.de">kehrtc@hsu-hh.de</a>
Lajus, Julia	Higher School of Economics, St. Petersburg, Russia	<a href="mailto:jlajus@hse.ru">jlajus@hse.ru</a>
Martin-Nielsen, Janet	Aarhus University, Denmark	<a href="mailto:janet@css.au.dk">janet@css.au.dk</a>
Nordström, Katarina	Uppsala University, Sweden	<a href="mailto:katarina.nordstrom@hist.uu.se">katarina.nordstrom@hist.uu.se</a>
Roberts, Peder	Royal Institute of Technology (KTH) Stockholm, Sweden	<a href="mailto:pwrobert@kth.se">pwrobert@kth.se</a>
Robin, Libby	Australian National University, Canberra, Australia	<a href="mailto:libby.robin@anu.edu.au">libby.robin@anu.edu.au</a>
Schröckel, Isabell	Leuphana University Lüneburg, Germany	<a href="mailto:isabell.schröckel@gmail.com">isabell.schröckel@gmail.com</a>
Seefried, Elke	Institut für Zeitgeschichte, München, Germany	<a href="mailto:seefried@ifz-muenchen.de">seefried@ifz-muenchen.de</a>
Sörlin, Sverker	Royal Institute of Technology (KTH) Stockholm, Sweden	<a href="mailto:sorlin@kth.se">sorlin@kth.se</a>
Thomaschke, Dirk	Carl von Ossietzky Universität Oldenburg, Germany	<a href="mailto:dirk.thomaschke@uni-oldenburg.de">dirk.thomaschke@uni-oldenburg.de</a>
Van der Watt, Lize-Marié	Royal Institute of Technology (KTH) Stockholm, Sweden	<a href="mailto:susanna.van.der.watt@umu.se">susanna.van.der.watt@umu.se</a>



This workshop is part of the project

## Shaping Cultures of Prediction: Knowledge, Authority and the Construction of Climate Change

Co-ordinated by Matthias Heymann  
Funded by the Danish Research Council (2013–2016)

The project examines the emergence of climate modelling as a culture of prediction in the formative period between ca. 1960 and 1985. Climate modelling has played a major role in forging a scientific consensus about climatic change. Scientific consensus, however, tends to hide the social relations, complex negotiations and tangible interests behind the consensus itself. It straightens the diversity of scientific perceptions and the complexities of historical processes that have shaped it. The project aims at analysing the scientific conflicts, social processes and underlying presumptions that contributed to (1) the emergence of climate modelling as a predominant research strategy, and (2) the controversial application of these models as predictive tools. It will show how climate modelling and its uses emerged from a competition between different knowledge claims and epistemic standards and attained hegemonic status within a diversity of knowledge cultures.

<http://css.au.dk/forskning/projects/cultures-of-prediction/>