

Call for Papers

**Science in the Nation-State: Historic and Current Configurations in Global Perspective, 1800-2010**

Universität Tübingen, September 11-13, 2014

*The conference allows for the exploration of the relationship between science and the nation-state from a new perspective. In nation-states that have traditionally been known to support research science (such as England, France, Germany, and the US), the profession evolved under the protective wing, and as an ally, of the political sovereign. Academic professions have played a significant role in the consolidation of national states. The conference focuses on historical configurations of science and the nation-state in Europe and in North America in order to compare these configurations to emerging science-oriented states such as China and India – countries that have significantly expanded their science budgets in recent decades. The relationship between science as a profession and the national state will provide an analytical framework for discussing important historic developments in different countries. What has been the public role of the academic professions? And what are the effects on research of “national policy decisions”?*

During the past two decades, national systems of research science have been exposed to radical transformations. Changes have included a reorganization of institutions of higher education, an implementation of administrative tools for the regulation and supervision of research, and they have also involved an unprecedented internationalization of science.

During the course of a career, researchers today move back and forth between laboratories in Europe, the US, and Asia. The sheer number of international research projects and the extent of collaboration across national boundaries have probably never been greater and their expansion is actively supported by national science organizations. Through its “Bologna Process” (1999) and “Lisbon Strategy” (2000), the EU has sought to implement a “European Higher Education Area” and a “European Research Area,” and fields such as astronomy have taken the lead. Universities are urged to increase their international visibility and they compete for promising students. Traditions of research and education in European or American countries no longer seem to provide an advantage over fast-growing university systems in China, South Korea, Brazil or the United Arab Emirates. Global rankings have established new international criteria for competition. Such measures have emerged from global management methods. Through organizations such as the OECD, they exert a standardizing pressure on traditional and national approaches to supporting science and education.

The internationalization of research also affects the composition of teams in laboratories. Scientists move between an increasing number of research centers around the world and their experience has changed the way they communicate. International meetings and English-speaking online publications provide research communities with an exchange of ideas and developments that is both global and immediate.

These observations suggest that researchers are increasingly detached from their national research cultures and that leading scientists abandon such links altogether. Similar to developments in business, there emerges a type of researcher disconnected from any national community. The case of stem cell research illustrates that researchers go where they find conducive legal and financial conditions for their work. In all of these ways, research science seems to approach the ideal of an “international community” and in the context of theories about the waning role of nation-states, this leads to the thesis that the nation-state plays a diminishing role in research science.

One obvious way to counter this assessment is to point to the aforementioned efforts by China and other nation-states. Many countries aim to strengthen their educational self-reliance by nurturing elites of academics and engineers in local universities and other research institutions. And national interests have guided science and education policy in Europe and in North America as well. Aware of training future competition, for example, some American universities have considered restricting the number of PhD-students in certain fields of engineering. The EU has sought to keep up with developments in the US and in Asia by coordinating and pooling research efforts among its member states.

We would like to create an opportunity for bringing together historians, sociologists, and scholars in neighboring disciplines to reconsider the relationship between science and the nation-state. We are particularly interested in an analysis of the relationship between the profession of science and the nation-state since 1800 and in how this relationship has shifted in recent decades.

While the peculiar political context of a national state has been relevant for the profession of science in any country, the profession has also played an important role in evolving national states. From the founding of the Royal Society in seventeenth-century England, research science has evolved into the authoritative discourse for solving questions of knowledge. Science was institutionalized through an alliance with the political sovereign that came with legal and financial protection and support. This also enabled science to institute against competing world views a discourse based on experience, experiment, and methodology. By supporting science,

nation-states have dedicated themselves to universalistic values associated with research science. The political sovereign bequeathed on science the authority to identify relevant topics and questions and to assess the relevance and quality of contributions to the scientific discourse. States frequently provided a budget for research and for hiring scientists. (They have also, of course, tried to influence science.) In return, the academic professions became an important pillar of modern national states – of their economies and their education and health care systems.

In recent cultural-studies-approaches to the history and sociology of science, the reciprocal relationship between science and the nation-state has frequently been neglected. It remains important, however, for analyzing the evolving role of science since 1800. At a time when old nation-states seem to delegate or surrender sovereignty, what new sources arise for legitimizing and empowering the scientific discourse? Questions such as these are of relevance given the supra-national support of science by the EU and given the rise of scientific institutions in countries with limited democratic legitimacy.

The conference provides room for a diachronic and international comparison for the period since 1800: 1) What are founding constellations (and founding myths) of national states in Europe and in North America that have traditionally supported research science and what are essential structures of national systems of science today? 2) What is the relationship between science and the nation-state in countries with evolving institutions of science such as China, Brazil, or India? 3) Against this backdrop, what are key developments in Europe and North America in the most recent past since about 1970?

These perspectives open up questions such as the following:

1) “Old” science-oriented nation-states.

What was the role of the profession in important reforms of national systems of science, such as the reform period of universities in German states after 1810 or in the transformation of American universities in the late nineteenth century? Also of interest are debates about science policy as well as important institutional decisions (such as the founding of the Kaiser-Wilhelm-Gesellschaft, the National Science Foundation and the National Institutes of Health, etc.). How has an increased interest in technology development by the national states transformed structures and options for basic scientific research in the nineteenth century and in the context of war since 1914 and 1940? What are some of the implications of the relatively late interest in science-related technology and research science by the US government? Relevant topics also include debates within the research profession concerning changes in its political environment in the context of such issues as war and economic competitiveness.

2) “New” science-oriented nation-states.

What are the key motives driving national and institutional policies in countries such as China, the United Arab Emirates, or Brazil? What is the significance of technology-development and national prosperity when compared to other motives for (basic) research? What have been founding moments for a national dedication to science, and how have they shaped peculiar national cultures and structures of science in a given country? Many researchers from India, China, and other countries are trained abroad, and some continue to work there. What is the significance of such diaspora communities for national states with emerging institutions of science? How much leverage do research academies and universities have in conflicts with the state? How do countries such as China legitimize supporting research in the humanities and social sciences as well as basic research in the natural sciences? What is the political role of scientific associations, and how does the science profession’s long-standing claim for autonomy play out in emerging democratic countries?

3) “Old” science-oriented nation-states since 1970.

To what extent does the EU limit its efforts to support research to issues related to its administrative responsibilities? What is the role of autonomous basic research on the European level? (The field of astronomy may provide examples.) What efforts have been underway for an institutional development of research on a European scale (such as an academy of sciences, scientific associations, and universities) and what have been the motives driving the creation of new institutions? What have been the implications of efforts to define a “European research area” for national traditions of research? For example, what is the significance of the Lisbon-strategy for national scientific institutions such as the German Research Foundation (DFG), Agence Nationale de la Recherche, and others? Are there historic models for a convergence of national systems of research, such as the American or the German states during the nineteenth century? To what extent do developments in Europe prefigure a European national state? Or do these developments instead point to an emerging supra-national elite that has other historic precursors?

The conference takes place at Universität Tübingen from September 11 to 13, 2014. Pending financial support that we are currently applying for, we will cover presenters' travel to/from Tübingen as well as accommodation during the conference.

PD Dr. Andreas Franzmann (Sociology, Tübingen)

PD Dr. Axel Jansen (History, Tübingen)

AR Dr. Peter Münte (Sociology, Bielefeld)