

Summer Term 2016

University of Cologne

Faculty of Management, Economics and Social Sciences

Cologne Center for Comparative Politics (CCCP)

Chair of International Comparative Political Economy and Economic Sociology

MA Course: Technology Policy

Modul: Basismodul Seminar Politikwissenschaft II (PO 2015)

ECTS: 9 (PO 2015)

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Office Hours: By appointment, please write an email to: te@mpifg.de

Time: Fridays, 10:00–11:30

Location: MPIfG, Paulstraße 3, Seminarraum I

Course Description

All capitalist states direct, regulate and stimulate technological change. The seminar examines this field of state activity, focusing on its history, international varieties and politics. Characteristically, state intervention in technological development has often been a cross-cutting and loosely structured exercise located between defense, economic, environmental, industrial and science policies. Mainly based on case studies, the seminar examines how technology policies were devised and implemented in this broad domain of state intervention. What drove states to take on responsibilities for technological development, technological innovation and the adoption of technologies? What do technology policies teach us about state-business relationships and institutional arrangements in capitalist societies? Besides delving into empirical material, we will work through exemplary political debates on the forms and functions of technology policies since the Second World War, especially with regard to knowledge-based production and national competitiveness policies.

Participation in the seminar

All participants will be expected to *read all of the required texts* on the syllabus, *take an active part in class discussions*, *prepare response memos* on the required readings for two of the weeks (1000 words each) and *write a term paper of 15–20 pages* due on 19 September 2016, 10:00 am (PO 2015: 6000 words; PO 2007/2008: 5000 words). Term papers have to be sent in in two versions: an electronic version goes to te@mpifg.de; a paper version either goes to the secretary of the Cologne Center for Comparative Politics or to Timur Ergen, MPIfG, Paulstr. 3, 50676 Köln. The paper version has to include a signed declaration.¹ For the term paper own research on literature/data/material is required. All papers are checked for plagiarism. For further information about plagiarism, please read through the material on: www.cccp.uni-koeln.de. We use the software “turnitin” to check for plagiarism.² Memos and term papers have to be written in English language. The response memos are intended to prepare the ground for discussions by asking participants to set out their responses to the readings in writ-

¹ To be found at: http://www.cccp.uni-koeln.de/fileadmin/wiso_fak/cccp/Lehre/ErklaerungzuArbeiten.pdf.

² See: <http://www.wiso-it.uni-koeln.de/turnitin.html>.

ten form. Memos should not just summarize the readings, but rather take up specific arguments, compare the positions of different authors, raise questions of evidence, usefulness or plausibility or draw attention to particular strengths and weaknesses in the arguments and descriptions. We will share these memos through email. In order for everyone to have time to read over the comments of others, these will be due by 4 pm on the day before the class meets. All texts are made available on the ILIAS-website of the course.

For registration and further organizational matters please contact Timur Ergen (te@mpifg.de).

Recommended readings

Recommended books introducing the debates relevant to the seminar include,

- Block, Fred and Matthew Keller, 2011. *State of Innovation: The U.S. Government's Role in Technology Development*. Paradigm Publishers.
- Evans, Peter, 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton University Press.
- Graham, Otis L., 1992. *Losing Time: The Industrial Policy Debate*. Harvard University Press.
- Mazzucato, Mariana, 2013. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. Anthem Press.
- Mowery, David C. and Nathan Rosenberg, 1989. *Technology and the Pursuit of Economic Growth*. Cambridge University Press.
- Weiss, Linda, 2014. *America Inc.? Innovation and Enterprise in the National Security State*. Cornell University Press.
- Ziegler, Nicholas, 1997. *Governing Ideas: Strategies for Innovation in France and Germany*. Cornell University Press.

Course Schedule

April 15, 2016

Introduction

Overview of the course, introduction of the participants, discussion of term paper and response memo requirements.

Part 1: The state and technological development

April 22, 2016

Mapping the field I

Lundvall, Bengt-Åke and Susana Borrás, 2005. Science, Technology and Innovation Policy. In: Jan Fagerberg, David C. Mowery and Richard R. Nelson (eds): *The Oxford Handbook of Innovation*. Oxford University Press, 599–631.

April 29, 2016

Mapping the field II

Mowery, David C. and Nathan Rosenberg, [1989] 1995. *Technology and the Pursuit of Economic Growth*. Cambridge University Press, chapters 2, 3 & 4.

May 6, 2016

Mapping the field III

Mowery, David C. and Nathan Rosenberg, [1989] 1995. *Technology and the Pursuit of Economic Growth*. Cambridge University Press, chapters 6 & 7.

Part 2: Analyses of technology policy

May 13, 2016

Institutions and national systems

Soskice, David, 1996. German Technology Policy, Innovation, and National Institutional Frameworks. *WZB Discussion Paper*, FS I 96-319, Berlin: WZB.

May 27, 2016

Professional expertise

Ziegler, J. Nicholas, 1993. Knowledge-bearing Elites and Industrial Competitiveness in France and Germany. *Sloan School of Management Working Paper*, 3637-93, Cambridge, MA: MIT.

June 3, 2016

State-business relations and economic development

Evans, Peter, 1995. *Embedded Autonomy. States and Industrial Transformation*. Princeton University Press, chapters 1, 2 & 3.

June 10, 2016

National security and technology policy

Hooks, Gregory, 1990. The Rise of the Pentagon and U.S. State Building: The Defense Program as Industrial Policy. *American Journal of Sociology* 96 (2), 358–404.

Weiss, Linda, 2014. *America Inc? Innovation and Enterprise in the National Security State*. Cornell University Press, chapters 1 & 9.

June 17, 2016

Technology policy and the academy

Kleinman, Daniel Lee and Steven P. Vallas, 2001. Science, Capitalism, and the Rise of the “Knowledge Worker”: The Changing Structure of Knowledge Production in the United States. *Theory and Society*, 30 (4), 451–492.

July 1, 2016

Technology policy and social movements

Ergen, Timur 2016: Commercial Countermovements. The Case of Alternative Energy Support. *Draft Paper*.

July 8, 2016

Technology policy and the politics of risk

Jasanoff, Sheila, 1985. Technological Innovation in a Corporatist State: The Case of Biotechnology in the Federal Republic of Germany. *Research Policy* 14, 23–38.

Jasanoff, Sheila and Sang-Hyun Kim, 2009. Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. *Minerva* 47 (2), 119–146.

Part 3: Case studies: Early Debates

July 15, 2016

Technological gaps and the American challenge

OECD, 1968. *Technological Gaps. General Report*. Paris.

Hauff, Volker and Fritz W. Scharpf, 1975. *Modernisierung der Volkswirtschaft. Technologiepolitik als Strukturpolitik*. Europäische Verlagsanstalt. (optional)

July 22, 2016

Industrial policy, competitiveness and the Japanese challenge

Reich, Robert B., 1982. Why the U.S. Needs an Industrial Policy. *Harvard Business Review* 1/2, 74–81.

Etzioni, Amitai, 1983. The MITization of America? *The Public Interest* 72, 44–51.

Paul Krugman, 1994. Competitiveness: A Dangerous Obsession. *Foreign Affairs* 73 (March/April), 28–44.