

## Seminar

Fall 2018

University of Cologne

### *Innovation and Society*

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### *Modul Märkte, Institutionen und Organisationen*

Friday, 5 October 2018, 11:00–12:30 (Introduction)

Friday, 12 October 2018, 01:30–5:30 (Part 1)

Saturday, 13 October 2018, 09:00–5:00 (Parts 2 & 3)

Sunday, 14 October 2018, 09:00–4:00 (Part 4 and final discussion)

MPIfG, Paulstraße 3

## Course Description

Technological innovations are core drivers of economic and social dynamics in modern societies. The seminar introduces social science perspectives on the origins, forms, and effects of innovations. Key questions discussed are where inventions and innovations come from, how regional divides in innovative activity emerge, how states influence and direct innovation, and how technological change affects societies. Besides delving into empirical material, we will work through exemplary debates on the forms and functions of innovation since World War II, especially concerning the issues of industrial policy and international competitiveness. Corresponding to the field of innovation research, the seminar covers literatures from a wealth of theoretical and methodological perspectives, among them history and historical sociology, economics, quantitative political science, comparative political sociology, and social network analysis.

## Participation in the seminar

All participants will be expected to *read all of the texts* on the syllabus, *take an active part in class discussions*, *give a brief presentation* and *prepare a term paper of 15–20 pages* due on 15 February 2019, 12:00 pm. Term papers have to be sent in in two versions: an electronic version goes to te@mpifg.de; for a printed version has to be handed in according to the regulations of the ISS.<sup>1</sup> The printout has to include a signed declaration. For the term paper original research on literature, data, or material is required. Term papers have to be written in English. All texts are made available on the ILIAS-website of the course.

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<sup>1</sup> To be found at: <http://www.iss-wiso.uni-koeln.de/studium/studierende/soziologie-und-empirische-sozial-und-wirtschaftsforschung/hausarbeiten/>.

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

## Readings

### Part 1: Where do innovations come from?

Fred Block, 2011. Innovation and the Invisible Hand of Government, in: *State of Innovation. The U.S. Government's Role in Technology Development*, edited by Fred Block and Matthew Keller, 1–26. Paradigm.

Harro van Lente and Arie Rip, 1998: The Rise of Membrane Technology: From Rhetorics to Social Reality. *Social Studies of Science* 28, 221–254.

Richard K. Lester and Michael J. Piore, 2004: *Innovation. The Missing Dimension*. Cambridge, MA: Harvard University Press, 1–12, 35–73.

David C. Mowery and Nathan Rosenberg, [1989] 1995. *Technology and the Pursuit of Economic Growth*. Cambridge University Press, chapters 2, 3, 4 & 6.

Walter W. Powell and Kurt Sandholtz, 2012. Chance, Nécessité, et Naïveté: Ingredients to Create a New Organizational Form. In: *The Emergence of Organizations and Markets*, edited by John F. Padgett and Walter W. Powell, 379–433. Princeton University Press.

Joseph Schumpeter, 1912: *Theorie der wirtschaftlichen Entwicklung*. Duncker & Humblot, pp. 124–164. (English translation provided, German original preferred.)

### Part 2: Regional structures of innovation

Gernot Grabher, 1993: The Weakness of Strong Ties. The Lock-in of Regional Development in the Ruhr Area. In: *The Embedded Firm. On the Socioeconomics of Industrial Networks*, edited by Gernot Grabher. Routledge, 255–277.

Jonas Nahm, 2017. Renewable Futures and Industrial Legacies: Wind and Solar Sectors in China, Germany, and the United States. *Business and Politics* 19, 1: 68–106.

Jeffrey Sachs, 2003. The Global Innovation Divide, in: *Innovation Policy and the Economy, Volume 3*, edited by Adam B. Jaffe, Josh Lerner and Scott Stern, 131–141. NBER.

AnnaLee Saxenian, 1996. Inside-Out: Regional Networks and Industrial Adaptation in Silicon Valley and Route 128. *Cityscape*, 2, 2: 41–60.

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

### Part 3: Innovation and the state

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

Gregory Hooks, 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.

Daniel Lee Kleinman 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.

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

### Part 4: Societal reactions to innovation

Sheila Jasanoff 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.

Helen Milner, 2006. The Digital Divide. The Role of Political Institutions in Technology Diffusion. *Comparative Political Studies* 39, 2, 176–199.

Joel Mokyr, 1992. Technological Inertia in Economic History. *Journal of Economic History*, 52, 2, 325–338.

Dieter Rucht, 1990. Campaigns, Skirmishes and Battles: Anti-nuclear Movements in the USA, France and West Germany. *Organization and Environment* 4, 3, 193–222.

Edward P. Thompson, 1967. Time, Work-Discipline, and Industrial Capitalism. *Past & Present* 38, 56–97.