

Understandings of Scientific Autonomy and of the Societal Responsibility of Science in Science Novels from Three National Variants of the Culture of Modernity

Überblick

Laufzeit:

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Forschungsteam:

[Prof. Dr. Uwe Schimank](#) (Projektleitung)

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Details

This project undertakes a critical examination of cultural differences in the conceptions of the autonomy of science as they are manifested in science novels from the U.S., Germany and India. The idea of an autonomous science has become an integral element of the Western culture of modernity. This culture of modernity is not, however, uniform everywhere in the West. Instead, it has several distinct national variants that are connected to key ideas of modernity. This is well documented for the basic idea of individual freedom, and it is plausible to assume that it applies to sphere-specific freedoms as well, such as the freedom of an individual scientist to make decisions about how and what she researches. In Germany, the notion of "inner freedom" dominates, whereas in the U.S., the notion of "exterior freedom" takes precedence. There is a corresponding difference in the understanding of responsibility. Responsibility in German culture means, above all, that society has a responsibility to provide everybody with the means for a decent living and includes the notion of "inner freedom;" in return, the individual is obliged to contribute to the common good. In US culture, society has no such responsibility or moral obligation for individuals' pursuit of happiness.

These considerations lead to the research question that guides the first step of this project: How are these profound, albeit simplified differences reflected in the respective national understandings of scientific freedom and the societal responsibility of science? In order to answer this question, we compare science novels set in Germany and the U.S., and written by German and American authors, from a sociological perspective that is informed by theories of functional differentiation of modernity. We will compare the ways that scientific autonomy and science's

societal responsibility are treated in the novels, and whether scientific autonomy endangered by societal forces such as the economy or politics is stressed over scientific autonomy endangering other societal spheres and the individual's conduct of life. In a second step, science novels that are written and set in India and written by Indian authors will be included in the comparison in order to assess how and in what form, in the wake of the globalization of Western ideas since the late 18th century and the subsequent formation of "multiple modernities" (Eisenstadt 2002), these diverse western-based notions of scientific freedom appear in the context of a non-Western modern culture. Examples of the corpus include "Ein Tiefer Fall" by Bernhard Kegel and "Die Vermessung der Welt" by Daniel Kehlmann for the German case; "Intuition" by Allegra Goodman and the "Science in the Capital" Trilogy by Kim Stanley Robinson for the U.S. case; and "Helium" by Jaspreet Singh and "Serious Men" by Manu Joseph.

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Publikationen**Zeitschriftenbeitrag referiert**

Hanson, Sólveig; Hempel, Fabian, 2021: [Plutoing Pluto: The Roles of Narrative in Arenas of Scientific and Public Discourse](#), in: Narrative, 29 (2), S. 224 - 238, (im Erscheinen)

Hempel, Fabian, 2021: [A Sociological Perspective on the Representation of Science in Climate Change Novels](#), in: Świat i Słowo (World and Word), 36 (1), S. 99 - 112, (im Erscheinen)

Hempel, Fabian, 2020: [A Sociology of Literature Perspective on the Viral Role of Science During](#)

[the COVID-19 Pandemic](#), in: PhiN. Philologie im Netz, Beiheft (24/2020), S. 345 - 357, 11.12.2020, [Link](#) (Stand: 11.12.2020)

Vortrag

Hempel, Fabian, 2021: [Conceptual and Methodological Reflections from Science Novels on the Autonomy and Social Responsibility of Science](#), IV. ISA Forum of Sociology. Session 271 - Posthumanism and Global Debates about Our Technoscientific Futures, International Sociological Association (ISA), Porto Alegre / Online , Brasilien, 24.02.2021, [Link](#) (Stand: 24.02.2021)

Hempel, Fabian, 2021: [Theoretical Reflections from Science Novels on the Autonomy and Social Responsibility of Science and the Cultures of Modernity](#), IV. ISA Forum of Sociology. Session 198 - Functional Theory of Social Systems, International Sociological Association (ISA), Porto Alegre / Online, Brasilien, 25.02.2021, [Link](#) (Stand: 25.02.2021)

Hempel, Fabian, 2021: [A Sociology of Literature Perspective on the Viral Role of Science During the COVID-19 Pandemic](#), Annual Conference of the British Sociological Association. Paper Session 2. Science, Technology and Digital Studies 1, British Sociological Association (BSA), Online, Vereinigtes Königreich, 13.04.2021

Hempel, Fabian, 2021: [Reflections from Two South Asian Science Novels on Postcolonial Transformations in Indian Science](#), Annual Conference of the British Sociological Association. Paper Session 6. Race, Ethnicity and Migration 2, British Sociological Association (BSA), Online, Vereinigtes Königreich, 14.04.2021

Hempel, Fabian; Patri, Krutika, 2021: [Manu Joseph's "Serious Men" as a Subaltern Prism on Modern Science and Indian Society](#), Annual Conference of the British Society for Literature and Science. Panel on Scientific Knowledge, Culture, and Identity, British Society for Literature and Science (BSLS), Online, Vereinigtes Königreich, 08.04.2021

Hempel, Fabian; Schimank, Uwe, 2020: [Ein intuitiver tiefer Fall: Wissenschaftliches Fehlverhalten in Wissenschaftsromanen](#), Literatur/Soziologie Roundtable Workshop, Kulturwissenschaftliches Institut Essen, Essen, Deutschland, 07.02.2020, [Link](#) (Stand: 08.07.2020)

Hempel, Fabian, 2020: [Draft Paper Discussion: "Plutoing Pluto: The Roles of Narrative in the Arenas of Scientific and Public Discourse"](#), Work in Progress, Publications, Presentations, Evolving Perspectives. FMS Workshop, Hanse-Wissenschaftskolleg, Delmenhorst, Deutschland, 13.02.2020

Hempel, Fabian; Schimank, Uwe, 2020: [The Autonomy and Social Responsibility of Science as reflected in Amitav Ghosh's The Calcutta Chromosome](#), BSLS 2020 Annual Conference, British Society for Literature and Science, Sheffield/Online, Vereinigtes Königreich, 15.04.2020, [Link](#) (Stand: 08.07.2020)

Hempel, Fabian, 2020: [Ein literarischer Blick auf den Status wissenschaftlicher Expertisen in der Klimapolitik](#), Umstrittene Expertise. Konflikte um den Status von Expertenwissen in der Politik. Tagung der DGS-Sektion Politische Soziologie, Sektion 'Politische Soziologie' - Deutsche Gesellschaft für Soziologie, Nürnberg/Online, Deutschland, 17.07.2020, [Link](#) (Stand: 17.07.2020)

Hempel, Fabian, 2020: [The Role of Science Novels in the Study of the Autonomy and Social Responsibility of Science](#), Session: Inclusion in Scientific Communities II. EASST/4S 2020 CONFERENCE, European Association for the Study of Science and Technology, Society for Social Studies of Science, Prague/Virtual Conference, Tschechien, 21.08.2020

Hempel, Fabian, 2020: [Eine literarische Perspektive auf die virale Rolle der Wissenschaft während der COVID-19 Pandemie](#), Die experimentelle Konstruktion der Wirklichkeit: Art, Facts, and Artefacts. Jahrestagung der Gesellschaft für Wissenschaft- und Technikforschung, Gesellschaft für Wissenschaft- und Technikforschung, München/Online, Deutschland, 19.11.2020

Hempel, Fabian, 2019: [A \(Science\) Novel Discourse Approach to the Autonomy and Social Responsibility of Science](#), Fiction Meets Science. Workshop, Hanse-Wissenschaftskolleg, Delmenhorst, Deutschland, 05.03.2019

Hempel, Fabian, 2019: [Reflections from Science Novels on the Social Responsibility of Science](#), HERSS Summer School on Responsible Innovation Cultures, Technische Universität München, München, Deutschland, 17.10.2019

Hempel, Fabian; Schimank, Uwe, 2018: [Understandings of Scientific Autonomy and Responsibility in Science Novels: Three National Variants of the Culture of Modernity](#), Varieties of Science Narrative: Fiction Meets Science II. Kickoff Workshop, Hanse-Wissenschaftskolleg,

Delmenhorst, Deutschland, 02.05.2018

Hempel, Fabian; Schimank, Uwe, 2018: [Understandings of Scientific Autonomy and the Societal Responsibility of Science in Amitav Ghosh's The Calcutta Chromosome](#), The Anglophone Science Novel and the Global Dimensions of Science. Amitav Ghosh, The Calcutta Chromosome. A Novel of Fevers, Delirium and Discovery (1995) - An Exploratory Workshop, Universität Oldenburg, Oldenburg, Deutschland, 05.12.2018