


Institut für Wissenschafts- und Technikforschung




On **>modes of coping<** with uncertainties

How young academic life scientists (learn to) deal with precarious conditions

by Lisa Sigl

Research Colloquium @ zhb Dortmund
July 08, 2015



Projects & Empirical Basis

➤ **How do academic research and work cultures change within their societal contexts?** (Gibbons et al. 1994 „mode2“, Jasanoff 2004 „co-production“)

Biographical Interviews (2-3 h)

Projects	<p><i>Knowledge, Institutions and Gender –</i> KNOWING <small>(2006-2008; EU/FP6)</small></p>	<p><i>Re-Thinking biosciences as culture and practice –</i> GOLD II <small>(2006-2008; BMWF)</small></p>	<p>Maneuvering Uncertain Research Landscapes <small>(2009-2011; ÖAW)</small></p>
Projekt Leader: Ulrike Felt Projekt Collaborators: Maximilian Fochler, Lisa Sigl, Veronika Wöhrer			

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Research Questions:

Why do researchers experience uncertainties?
 How do they experience uncertainties?
 To what broader societal contexts and transformations are these uncertainties linked?

How do researchers cope with these uncertainties?
 Do uncertainties in turn contribute to the transformation of research and work cultures?
 And if so, how?

Projects & Empirical Basis

➤ **How do academic research and work cultures change within their societal contexts?** (Gibbons et al. 1994 „mode2“, Jasanoff 2004 „co-production“)

Biographical Interviews (2-3 h)
Perspektive of young researchers in the life sciences (PhDs, Postdocs)

Material: 14 qualitative, biographical Interviews, 5 group discussions, observations, quantitative „Life Course Questionnaires“

Methodical Approach: Grounded Theory

Projects	<i>Knowledge, Institutions and Gender –</i> KNOWING <small>(2006-2008; EU/FP6)</small>	<i>Re-Thinking biosciences as culture and practice –</i> GOLD II <small>(2006-2008; BMWF)</small>	Maneuvering Uncertain Research Landscapes <small>(2009-2011; ÖAW)</small>
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Course of the Presentation

Relevance & Policy Background

I. Experience of Uncertainty

- + *Conditions* for the development of uncertainty experiences
- + *Character* of uncertainty experiences

II. >Modes of Coping< with Uncertainties

⇒ *Implications for Research Governance*

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Media Attention



Akademische Prekarität

„Uni ist ein Spiegel der Gesellschaft“

Unbefristete Stellen, unterbezahlte Lehraufträge, lange Qualifikationsphasen: Bilden Hochschulwissenschaftler in Deutschland mittlerweile das „intellektuelle Proletariat“?

Friedmann (taz, 07/2010)

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Unions against precarious conditions

GEW: „Durchbruch im Kampf gegen das Befristungsunwesen in der Wissenschaft“

Bildungsgewerkschaft zu den Koalitions-Eckpunkten zum Wissenschaftszeitvertragsgesetz

Die Gewerkschaft Erziehung und Wissenschaft (GEW) hat die von CDU/CSU und SPD vorgelegten Eckpunkte zur Novellierung des Wissenschaftszeitvertragsgesetzes als „Durchbruch im Kampf gegen das Befristungsunwesen in der Wissenschaft“ begrüßt. „Immer mehr Zeitverträge mit immer kürzeren Laufzeiten – diese Entwicklung schadet nicht nur den Wissenschaftlerinnen und Wissenschaftlern, sondern auch der Kontinuität und damit Qualität von Forschung und Lehre sowie der Attraktivität des Arbeitsplatzes Hochschule und Forschung.“



Newsletter „Templiner Manifest“
GEW, 03.07.2015

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Policies against Precarious Conditions..?

ZEIT  ONLINE | HOCHSCHULE

START POLITIK WIRTSCHAFT GESELLSCHAFT KULTUR WISSEN DIGITAL **STUDIUM** KARRIERE

Start > Studium > Hochschule > Universität: SPD will Nachwuchs an Hochschulen besser absichern

UNIVERSITÄT

SPD will Nachwuchs an Hochschulen besser absichern

Prekäre Arbeitsverhältnisse und kurze Beschäftigungszeiten an Unis nehmen zu. Die große Koalition will diesen Trend per Gesetz brechen. Als Vorbild könnte Bayern dienen.

22. März 2015 10:49 Uhr

38 Kommentare | 

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Policy Background

European Union



Research Framework Programmes since 1986

Lisbon-Process 2000: „knowledge-based society / economy“

academic activity shows up on the radar for regimes of productivity, profitability and instrumental reasoning

On national level

- Research, Technology & Innovation Reports & Strategies
- Shift Towards Competitive Funding Mechanisms
- New Evaluation Criteria

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The Case “Austria”

Since 1990s: more conscious „science policies“:

- | | |
|------|--|
| 1994 | Setup of “Fachhochschulen” (Univ. for Applied Sciences) |
| 1999 | Green Book on Austrian Research Policy („Grünbuch zur österreichischen Forschungspolitik“) |
| 2000 | Establishment of „Rat für Forschung und Technologieentwicklung“ (Austrian Council for Research & Technology Development) |
| 2002 | Universitätsgesetz 2002 |
| 2009 | Collective Contract (“Kollektivvertrag für die ArbeitnehmerInnen der Universitäten”) |

Ongoing: e.g. international criteria for knowledge production and innovation performance evaluation adopted or reinforced

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Research Programmes & Regional Policies

Research Programmes and focuses:

e.g. GenAU (seit 2000, funded by „Forschungsmilliarde“) oder nano-initiative

Vienna: E.g.: Research site St. Marx

> Since 1988, the **Campus Vienna Biocenter (CVBC)** has developed into one of the most outstanding and prominent life sciences hubs... in Austria... With the foundation of the Research Institute of Molecular Pathology (IMP)... quickly a University building went up next door... start-up Intercell was spun off the University and the IMP... the Austrian Academy of Sciences founded two new research institutes, IMBA and GMI, situated next door to the IMP. <

Quelle: <http://www.viennabiocenter.org>

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The Project Modus of Funding...

...makes working conditions more flexible and precarious

Austrian Case:

Shift to competitive project funding at universities

2007-2011: Project funds increased 30% (BMWF 2011: 107)

Life Sciences: up to 80% externally funded

⇒as a result, researchers are increasingly employed part-time and for shorter time periods

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Safe? No, certainly not... You can qualify for the profession, but then you need to perform extraordinarily to have a salary... as soon as you are in... you need to fight to stay in. (f8: 604-10)

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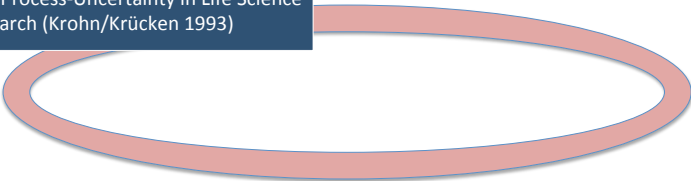
**Governance as distributed
constellations of power**

(Jordan, Wurzel, and Zito 2005)

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I. Experience of Uncertainty Conditions

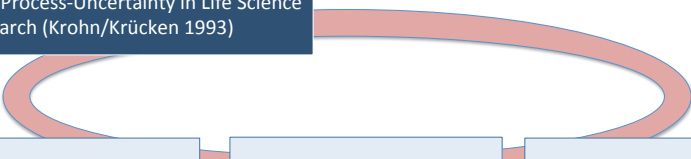
Epistemic Uncertainties
Output- and Process-Uncertainty in Life Science
Research (Krohn/Krücken 1993)



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I. Experience of Uncertainty Conditions

Epistemic Uncertainties
Output- and Process-Uncertainty in Life Science
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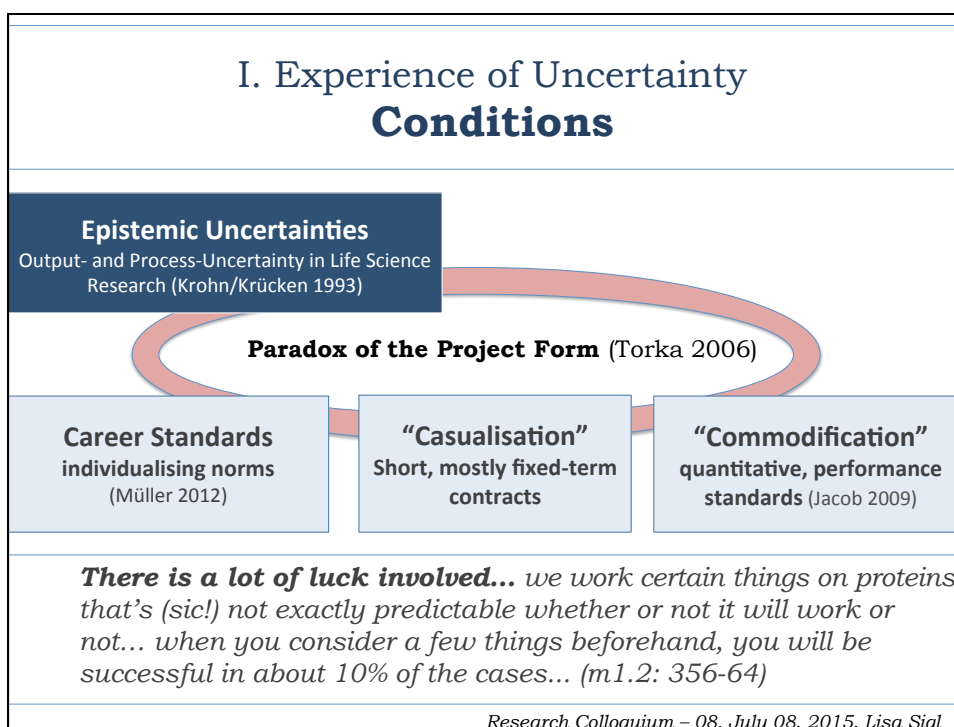
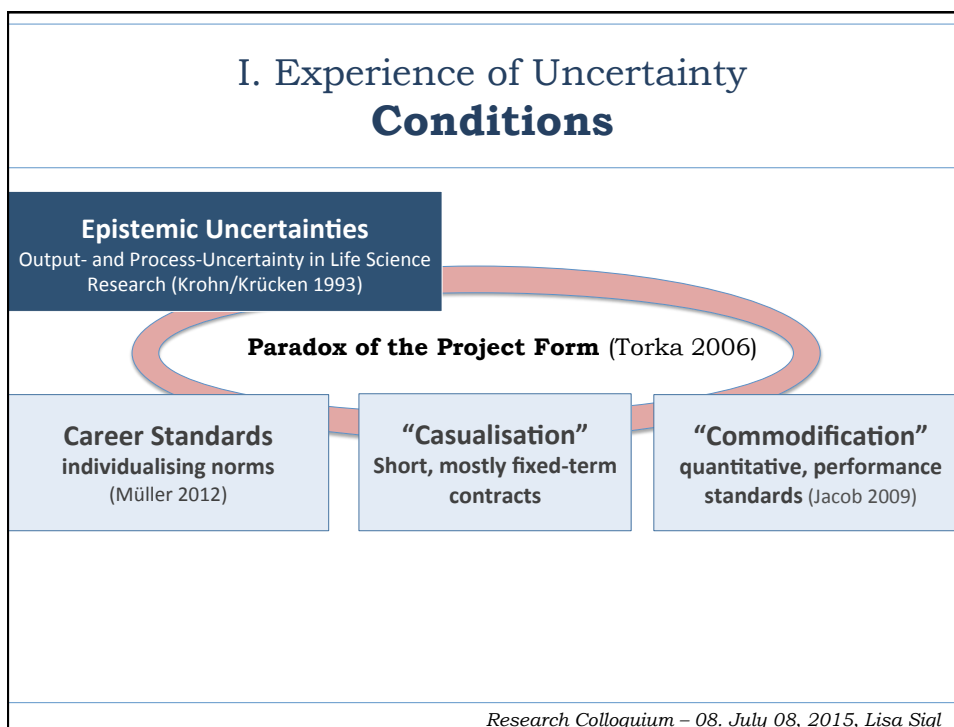


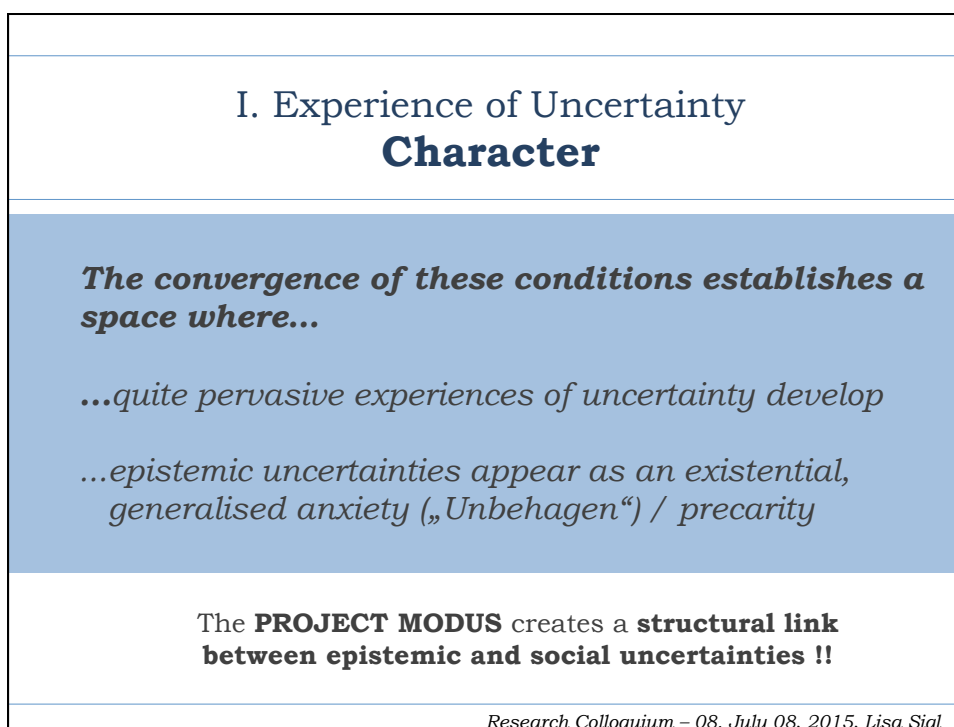
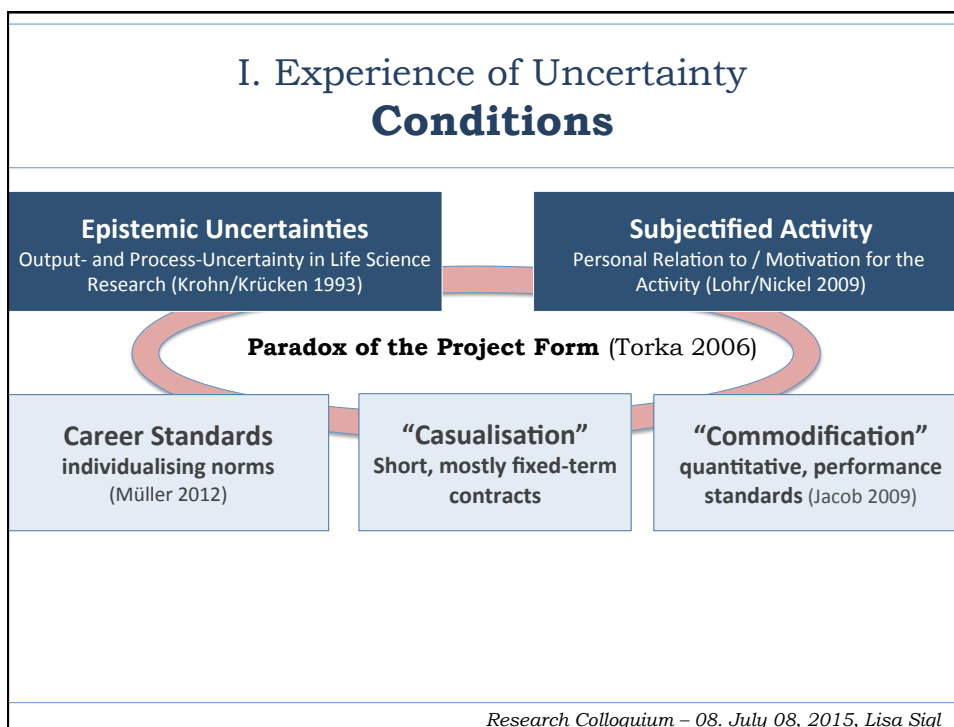
Career Standards
individualising norms
(Müller 2012)

“Casualisation”
Short, mostly fixed-term
contracts

“Commodification”
quantitative, performance
standards (Jacob 2009)

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II. >modes of coping< with Uncertainties

2 social modes

- ++ Coping as a member of a clan
- ++ Coping as a member of a collective

2 individuelle modes

- ++ Coping as a manager
- ++ Coping as a trickster

(semi)institutionalised modes

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II. >modes of coping< with Uncertainties

modes of coping <> typologies of coping

De-personalised logics

“modes of ordering” (Law 1994) Sinn aus der Umwelt und sich selbst darin machen (Blackman et al. 2011)

Combined flexibly...

...with regard to situatedness
...with regard to embedding in the social structures

Personalised ideal types

e.g. Klecha/Reimer (2008):

- Managers of precarity
- Career-oriented idealists
- fragile middle
- Opportunist scientists (Gelegenheitswissenschaftler)
- Transitional scientists (Übergangswissenschaftler)

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II. >modes of coping< with uncertainties 2 social modes

There is no protection at all. You can only hope that – should the experiments not work out ... that the supervisor ... will allow for you [to stay] anyways. (m4.2: 929-32)

Leitmotif: paternalistic care

- Protection is granted via a system of guardianship

++ Coping as a member of a clan

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II. >modes of coping< mit Unsicherheiten 2 soziale Modi

++ Coping as a member of a collective

So, most things only work through teamwork. You will almost never be able to achieve anything alone... (f8: 253-7)

Leitmotif: „Commonalising“ von experience

- Protection is granted via self-organised solidarity

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II. >modes of coping< mit Unsicherheiten 2 individuelle Modi

the... [one] project... is very risky... I hope that something will come out but also that... with its little sub-projects, that I can define sub-targets that can lead to a publication anyways. I hope that I can accomplish a certain, a certain output this way (f6.1: 469-77)

Leitmotif: Optimising individual performance / output

- Protection granted via orientation at career requirements

++ Coping like a manager

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II. >modes of coping< mit Unsicherheiten 2 individuelle Modi

++ Coping like a trickster

I would apply for a different project, but continue doing my idea... That is a bit exaggerated... Formally you work on a project but really you work on... this actual project that has been previously rejected... (m1.2: 891-6)

Leitmotif: reclaim a livable present with worthwhile research

- Protection via a mindset that rejects experience of uncertainty

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II. >modes of coping< with uncertainties
(semi)institutionalised modes

Semi-institutionalised collective modus
e.g. lab meetings

Institutionalised
Possibility to prolong projects
Intermediary funding for projects

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II. >modes of coping< with uncertainties
(semi)institutionalised modes

Semi-institutionalised
e.g. lab meetings

Institutionalised
Possibility to prolong projects
Intermediary funding for projects

Social Systems of Protection

- Unemployment benefits
- Education leave („Bildungskarenz“)

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Transformation of Research Cultures

Beginning of a Contract: collective & trickster

End of Contract: clan & manager

When the beginning of a contract is close to the end of the contract...

⇒ Shift towards individual and clan-modus

⇒ Collective and trickster modus under pressure

- Might marginalise risky research
- Lost potential of collective research

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*In our situation it is very difficult to plan something. If I could I would really like the feeling of having more than three or five years to work on certain projects... **then we could be concerned more about planning the scientific stuff... but the way it is right now, we're mostly planning our own futures.** (m1.2: 289-94)*

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Implications for Research Governance

Governance Dimensions (De Boer/Enders/Schimank 2007)

Academic self-governance
Competition
Stakeholder guidance
State regulation
Managerial self-governance

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Implications for Research Governance

Governance Dimensions (De Boer/Enders/Schimank 2007)

Academic self-governance

Competition

Researchers experience risky research as taking a biographical risk

⇒ This influences how researchers choose their research questions and projects

⇒ Rationales of social security gain relevance to the detriment of other rationales (e.g. scientific or societal relevance)

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Thank you for your attention!

REFERENZEN:

Blackman, Lisa, John **Cromby**, Derek **Hook**, Dimitris **Papadopoulos**, and Valerie **Walkerdine**. 2008. Creating Subjectivities. *Subjectivities* 22(1): 1-27.

BMWF - Bundesministerium für Wissenschaft und Forschung. (2011). *Universitätsbericht 2011*. Vienna: bm.w.f.

De Boer, H. F., J. **Enders**, and U. **Schimank**. "Comparing Higher Education Governance Systems in Four European Countries." In *Governance and Performance of Education Systems*, edited by N. C. Soguel and P. Jaccard. 35-54. Dordrecht: Springer, 2007.

Felt, Ulrike, and Maximilian **Fochler**. 2010. "Riskante Verwicklungen des epistemischen, strukturellen und biographischen: Governance-Strukturen und deren mikropolitische Implikationen für das akademische Leben". In *Governance des Österreichischen Innovationssystems*, edited by Peter Biegelbauer. 297-328. Innsbruck: StudienVerlag.

Friedmann, Alexandra. 2010. *Akademische Prekarität: „Uni ist Ein Spiegel Der Gesellschaft“*. Taz. Die tageszeitung, [accessed April 24, 2010].

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *New Production of Knowledge: Dynamics of Science and Research in Contemporary Societies*. London, Thousand Oaks, New Delhi: SAGE Publications.

Jacob, Merle. "On Commodification and the Governance of Academic Research." *Minerva* 47 (2009): 391-405.

Jasanoff, S. (Ed.). (2004). *States of Knowledge. The Co-Production of Science and Social Order*. London/New York: Routledge.

Krohn, Wolfgang and Georg **Krücken**. 1993. Risiko als Konstruktion und Wirklichkeit. Eine Einführung in die sozialwissenschaftliche Risikoforschung. In *Risikante Technologien: Reflexion und Regulation. Einführung in die sozialwissenschaftliche Risikoforschung*, edited by W. Krohn and G. Krücken. Frankfurt am Main: Suhrkamp, 9-44.

Klecha, Stephan and Melanie **Reimer** (2008). Wissenschaft als besonderer Arbeitsmarkt, In: Klecha/Krumbein: Die Beschäftigungssituation von wissenschaftlichem Nachwuchs, Wiesbaden: VS.

Lohr, Karin and Hildegard Maria **Nickel**, eds. 2009. *Subjektivierung von Arbeit. Riskante Chancen*, Forum Frauenforschung, Münster: Verlag Westfälisches Dampfboot.

Law, J. (1992). Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity. Retrieved from www.lancs.ac.uk/fass/sociology/papers/law-notes-on-ant.pdf

Lorey, Isabell. 2011. "Governmental Precarization." *Transversal Journal* (8).

Müller, Ruth. "Collaborating in Life Science Research Groups: The Question of Authorship." *Higher Education Policy* 25, no. 3 (2012): 289-311.

Torka, Marc. 2006. Die Projektformigkeit der Forschung. Die Hochschule. *Journal für Wissenschaft und Bildung* (1): 63-83.

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