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

- Knowledge, Institutions and Gender – KNOWING (2006-2008; EU/FP6)
- Re-Thinking biosciences as culture and practice – GOLD II (2006-2008; BMWF)
- Manouvering Uncertain Research Landscapes (2009-2011; ÖAW)

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)
The perspective 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

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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

Media Attention

„Uni ist ein Spiegel der Gesellschaft“
Unbefristete Stellen, unterbezahnte Lehraufträge, lange Qualifikationsphasen: Bilden Hochschulwissenschaftler in Deutschland mittlerweile das „intelлектuelle Proletariat“?

Friedmann (taz, 07/2010)
Unions against precarious conditions

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

Bildungsgewerkschaft zu den Koalitions-Eckpunkten zum Wissenschaftszeitvertragsgesetz


Newsletter „Templiner Manifest“
GEW, 03.07.2015

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Policies against Precarious Conditions...

ZEIT ONLINE | HOCHSCHULE

 Universität
SPD will Nachwuchs an Hochschulen besser absichern


22. März 2015 10:49 Uhr

38 Kommentare
**Policy Background**

**European Union**
Research Framework Programmes since 1986

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“)
- 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
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
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)

Governance as distributed constellations of power
(Jordan, Wurzel, and Zito 2005)
I. Experience of Uncertainty

Conditions

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

Career Standards
individualising norms (Müller 2012)

“Casualisation”
Short, mostly fixed-term contracts

“Commodification”
quantitative, performance standards (Jacob 2009)
I. Experience of Uncertainty

**Conditions**

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

**Paradox of the Project Form** (Torka 2006)

**Career Standards**
individualising norms (Müller 2012)

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quantitative, performance standards (Jacob 2009)

There is a lot of luck involved... we work certain things on proteins, that’s (sic!) not exactly predictable whether or not it will work or not... when you consider a few things beforehand, you will be successful in about 10% of the cases... (m1.2: 356-64)
I. Experience of Uncertainty

**Conditions**

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

Subjectified Activity
Personal Relation to / Motivation for the Activity (Lohr/Nickel 2009)

*Paradox of the Project Form* (Torka 2006)

Career Standards
individualising norms (Müller 2012)

“Casualisation”
Short, mostly fixed-term contracts

“Commodification”
quantitative, performance standards (Jacob 2009)

The convergence of these conditions establishes a space where...

...quite pervasive experiences of uncertainty develop

...epistemic uncertainties appear as an existential, generalised anxiety (”Unbehagen”) / precarity

The PROJECT MODUS creates a structural link between epistemic and social uncertainties!!
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

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)
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

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
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

Social Systems of Protection
- Unemployment benefits
- Education leave („Bildungskarenz“)
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

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)
## Implications for Research Governance

**Governance Dimensions**  
(De Boer/Enders/Schimank 2007)

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

Thank you for your attention!

REFERENCES:


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