

# Scholars' Adoption of E-Science Practices

(Preliminary) results from a qualitative study of network and other influencing factors

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Hamburg, SUNBELT, 24.05.2013





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## Debate: Blogging is sinful and hampers your research productivity

Posted on 12th September 2011 by marielk in Guest Bloggers and Commentary

*This guest entry is written by Gerald Schneider, who is a professor of international politics at University of Konstanz in Germany. Having recently published an interesting article about the sins of academic writing, in this post he will elaborate on some of the issues linked to research productivity and its linkages to other arenas of communication, both academic and private.*



My distinguished co-author Uncle G. and I have recently published an article entitled "How to avoid the seven deadly sins of academic writing" in the journal *European Political Science*. We have received based on this truly excellent and insightful piece an invitation to contribute a follow-up blog. My alter ego Uncle G. and I have enthusiastically embraced this possibility; you read the results of our deep thinking at this very moment.

## Research Project:

### Scholars' Adoption of E-Science Practices

- Part of the E-Science Research Network Saxony
- Focus on humanities
  - History
  - German Language / Literature
  - Political Science
- Focus on changing practices
- Mixed methods approach
  - Online research
  - Qualitative (episodic) interviews with 12 adopters

## Research Questions:

### Questions about adoption process

- Overall adoption of e-science?
- Characteristics of adopters: disciplines?
- Characteristics of adopters: career level?
- Characteristics of adopters: institutions?
- Role of interpersonal relations in adoption?

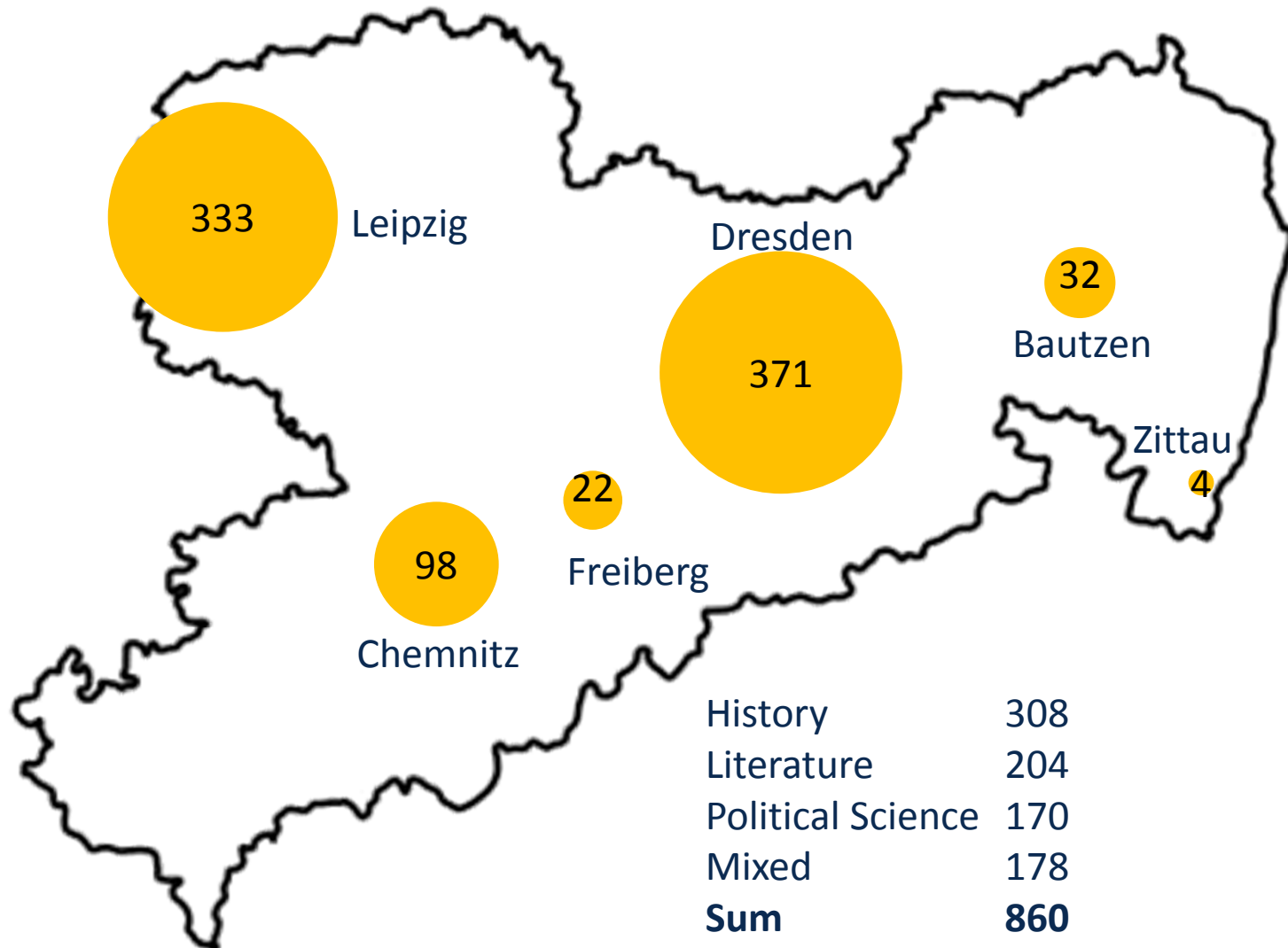
### Methodological questions

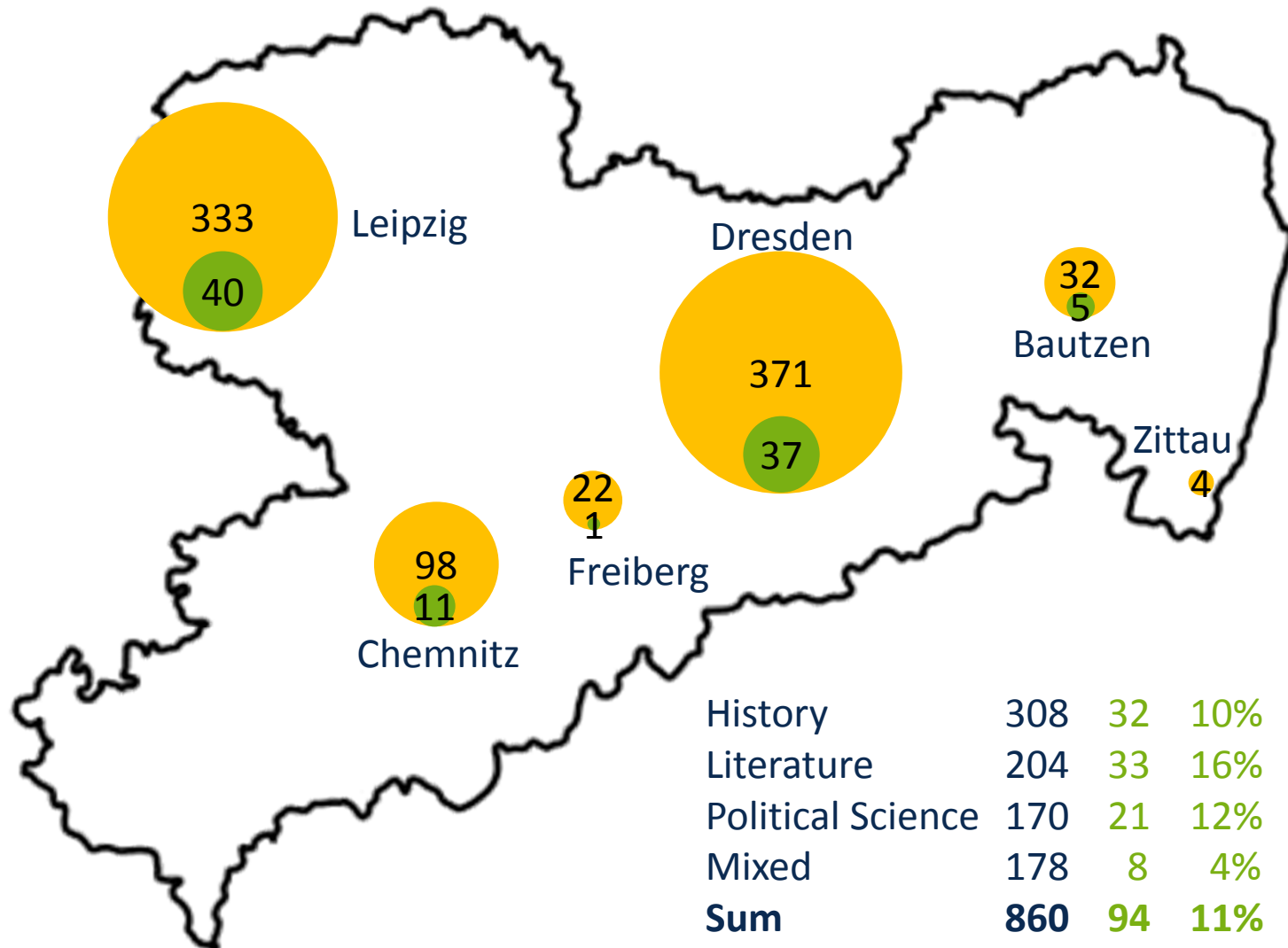
- Role of qualitative methods in SNA?

## Results 1: Online Research

### Methodology

- Research on websites of all academic institutions within Saxony
- Identification of researchers (pre-doc, post-doc, professors) in history, German language & literature and political science
- Research for online traces on institutional and private websites
- Identification of e-science adopters based on observable activities involving digital media (online publications, personal websites, e-science research, extended online teaching)







## What kind of practices?

- Online publications
- Self-marketing
- Science communication / open science
- Teaching (digital resources)
- Research (collaboration / eHumanities)
- But only small overlap

## Adoption rate by career level

- Doctoral student 6%
- Postdoc 12%
- Assistant/associate prof. 14%
- Full prof. 26%

## Results 2: Qualitative Interviews

### Methodology

- 12 interviews with 4 adopters per discipline
- 1h each, „episodic“, conducted in Feb/Mar 2013
- Personal situation, academic work, use of ICT/new media, history of adoption, effects, future developments
- Analysis based on grounded theory framework
- Sample question: *„How did that start that you used digital media in your work?“*

## Little influence of institutional context / close peers

- *Academic work is lonesome work*
  - „Well, basically, as a Historian, one is very much a lone wolf“ (#4, hist.)
  - „The academic work in the humanities is to 80, 90 per cent lonesome work at the desk.“ (#5, hist.)
- *Personal character of academic work*
  - „it’s very diverse, no routine, (...) that is very agreeable, such relatively free work“ (#11, lit.)
  - „Yes, well, that is, well, one has to say, the exchange is rather varying, because ahem it depends on the personal. Well, we- well, I for example have almost nothing to do with my colleagues in the project.“ (#4, hist.)

## Negative influence of official discourse

- *Official acceptance of digital publications*
  - „that is, one problem will be, well, how to keep up the quality when you go online.“ (#4, hist.)
- *Not institutional, but other rewards*
  - „Yes, and then it’s maybe the students or the worried parents, if someone studies early history, and if one is also learning some computer science, then the son or daughter might take off something useful.“ (#6, hist.)

## Prevalence of weak ties in adoption process

- „a friend actually said, well, why don't you do your lectures as website? (...) He was computer scientist (laughs), that was a fortune (...) I got to know many, many computer scientists like him, till today.“ (#11, lit.)
- „maybe it's because I have two sons in that age who also became interested in it, so I could get some advice“ (#8, lit.)
- „It is 15 or more years when an alumni came and said she would like to exercise designing a homepage. (...) Up to then, I did not have any idea about it.“ (#8, lit.)
- „An old friend of mine, ex friend has one [a blog], which is quite well known, but since he's always affronting people, that's also a somewhat ambivalent story.“ (#5, hist.)

## Hypothesis

- *Using digital media is not a legitimate academic practice ...*
  - „don't do, because it is possible, but because it is functional for you.“ (#3, pol. sci)
  - „The next things is Wikipedia. it is of course not to be referred to, but the articles on early history are definitely legitimate as quick reference – we [the researchers] do it ourselves.“ (#6, hist.)
  - „the many e-mails one gets per day and the speed of which one has to answer them and the stress that is caused by that“ (#2, pol. sci.)
- *... it's only informally acceptable.*

## Discussion: Qualitative Interviews in SNA

## Quantitative SNA should embrace qualitative methods more often

- Understanding people's understanding of e.g. survey questions
- Identifying blockages and taboos

## Qualitative research should further develop SNA perspectives

- Assessing mental SNA concepts of interviewees from implicit statements
- Mixing methods from a qualitative perspective



Thank you for your attention!

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