How Lazy are University Professors Really:

A not so Seriously Meant Note on Observations Made During an Online Inquiry

Von Torben Schubert und Ulrich Schmoch

1. Introduction

The seminal work of Merton in the sociology of science decisively influenced the image of scientists in the public's perception. In particular, his norms of science »communalism«, »universalism«, and »disinterestedness« draw a picture of an unselfish, studious scientist steadily searching for the truth (Merton 1942). In a different approach, Luhmann (1994) supports this view by claiming »truth« and »reputation« as »symbolic generalised media«, thus as basic orientations of science. Felt et al. (1995) already stated that this idealistic perspective is often not fulfilled and introduce »individual interest«, »privatisation« and »self-interest« as opposite concepts to Merton, in particular in the context of closer interaction between public science and industry. Beck (1986) raises fundamental doubts referring to the orientation of science to truth. An allegation of the last decade is that the self-organisation of the scientific community is not efficient as to the production of scientific outputs. With particular regard to the German organisation at universities, critics assert that professors, once they have achieved a secure tenure position, substantially reduce their scientific activities whilst increasing activities which lead to purely private (and often quite material) returns. So the new accusation is that of idleness and egoism as counterconcepts to Merton's ideas. The most recent (and also extreme) peak of the current animadversion is a book written by two German authors (Kamenz / Wehrle 2007), who principally argue that more than half of German professors are »inactive while 5 out of 100 are so lazy that they – according to law – would have to be dismissed«¹, where a second claim is that professors are, if active at all, much more interested in their side jobs than in the advancement of science, as the subtitle of their book »Lazy in the Universities, Hard-working in the Side Jobs«² indicates (see also footnote 3).

The book written by Kamenz and Wehrle has, almost naturally, received great attention in nearly all major magazines and newspapers (e.g. *Süddeutsche Zeitung* 03/05/07, *Frankfurter Allgemeine Zeitung* 03/12/07, *Welt am Sonntag* 03/04/07, *Westdeutsche Allgemeine Zeitung* 03/08/07). Because the empirical methodology underlying the analyses certainly owes more to populism than to sound empirical procedure,³ we regard it as unfortunate that some of it is even positive (e.g. *Spiegel* 03/05/07, *Handelsblatt* 04/27/07, *Westfälische Rundschau* 03/09/07). In fact, we think such work should not remain unanswered by the scientific community. In an on-line survey we made some surprising observations.

1) The passage in italics was literally translated from Werle (2007: 24).

2) The passage in italics was literally translated.

3) Apart from an abundance of anecdotal »evidence«, Kamenz and Wehrle advertised in the paper that they were looking for professors willing to do consultancy. This job description said that the work would amount to about 2 - 3 days per week, which conflicts, for obvious reasons of indivisibility (even a professor cannot perform two tasks simultaneously), with a full professorship. Kamenz and Wehrle received 40 applications. From this they infer to the working morale of the 38.000 German professors very generally.

2. Evidence from a German Survey

Between February and March 2007, a large online survey concerning new modes of governance in the German public science sector was conducted, which was funded by the German Research Association (DFG). The main focus of this inquiry was the influence of new public management instruments on the scientific performance of publicly funded German research units. In total, 1,908 such institutes in the fields of astrophysics, nanotechnology, biotechnology and economics received a questionnaire. From these we have got 473 (nearly 25 %) valid answers, of which 331 were from holders of university chairs. The remaining were non-university units, which we will disregard in this study.

However, apart from the answers given by the participants, the script routinely recorded the time needed to fill out the questionnaire, and of especial interest, the time at which it was sent off. Seemingly of no relevance for the questions of this census, we noticed quickly that a significant share of questionnaires was filled out very early in the morning or very late in the evening. Taking only the questionnaires from university professors into account, the distribution of answers along the time-axis is given in the following figure⁴:

Figure 1: Kernel Density of Answer Times with Corresponding Bandwidth Intervals

4) We took the Gaussian kernel with bandwidth chosen by cross validation. In addition, we provided 1 standard deviation tolerance intervals.

Clearly, it can be seen that although the bulk of the probability mass lies between 8:00 am and 5:00 pm, a considerable share of answers was given outside that core time. Because the area under the density curve is the cumulative density, we can obtain an estimate of that share by numerically integrating the density function (Simpson's procedure).⁵ It then turned out that the share of answers given outside the core time accumulated to about 33.5 %. Between 7:00 pm and 8:00 am it was still 16.2 %. And even for the span between 10:00 pm and 8:00 am, the estimated probability was no less than 6.2 %. In fact, we received the latest (or earliest) answer at 3:45 am.

3. Conclusion

We already noted in the title that this analysis should not be taken too seriously.⁶ In fact, there are many reasons for this. First, it is true that there may be some bias in our survey, because it can be argued that we received answers mainly from those professors who take their job seriously. In any case, we can be quite sure that this survey is less biased than the observations based on the job advertisement of Kamenz and Wehrle (see footnote 3). Second, even if we believe in the unbiasedness of the data, a late answer does not necessarily indicate that a professor is working hard. Maybe he answered at 3 o'clock in the morning because he could not sleep anymore (after having slept all day already) or he just stepped out of a bar. It may also be true that this was the time that he entered his university office after managing his private company (a common prejudice). On the contrary, an answer in the core time does not necessarily indicate that the participant does not take his job seriously. We do not know if he was still in his office at 12:00 pm.

However, ruling out unlikely explanations, we think that the response times at least indicate that a considerable number of German professors did not manage to answer the questionnaire during the core time. Further, a considerable number of professors was willing to spend some of their leisure time filling out surveys without expecting more in return than a summary of the main findings. Therefore, without claiming that self-interest is irrelevant, we regard this observation as a convincing indication that Merton's ideals of communalism and of searching for the truth still prove to be vivid principles of the scientific community rather than idleness and egoism, as shabby propaganda wants us to believe.

References

- Beck, U. (1986): *Risikogesellschaft. Auf dem Weg in eine andere Moderne*, Frankfurt / Main.
- Felt, U. / H. Nowotny / K. Taschwer (1995): *Wissenschaftsforschung. Eine Einführung*. Frankfurt / Main-New York.
- Jansen, D. / A. Wald / K. Franke / U. Schmoch / T. Schubert (2007): Third Party Research Funding and Performance in Research. On the Effects of Institutional Conditions on Research Performance of Teams, in: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 59, S. 125-149.
- Kamenz, U. / M. Wehrle (2007): *Professor Untat: Was faul ist hinter den Kulissen*, Berlin.
- Luhmann, N. (1994): *Die Wissenschaft der Gesellschaft*, Frankfurt / Main.

5) This estimator is a bit unconventional, but was chosen to be in line with the results in Figure 1. However, its consistency is proven in the corresponding working paper (Schubert / Schmoch, 2007) but is left out here, because it is quite difficult and technical.

6) For a less ironic contribution compare also Jansen et al. (2007). Here the multidimensionality of scientific output and specialisation tendencies of research units are stressed, also showing that in a cluster analysis of scientific units across their output profiles no cluster of units which are below average in every respect emerges. Thus, there is no »lazy cluster of slackers«.

- Merton, R. K. (1942): The Normative Structure of Science, in: N. W. Storer (Hrsg.) (1974), The Sociology of Science, Chicago, S. 267-278.
- Schubert, T. / U. Schmoch (2007): How Lazy are German Professors Really: A not so Seriously Meant Note on Observations Made During an Online-Inquiry, ISI Working Paper, ISI-A-8-07, <http://publica.fraunhofer.de/eprints/N-61028.pdf>
- Werle, K (2007): Professoren: Faul in der Universität, fleißig bei den Nebenjobs. Ein Buch klärt auf, in: Managermagazin 37, S. 24-25.

Acknowledgements

The research underlying this paper was supported by the German Research Association (Deutsche Forschungsgemeinschaft, DFG) in a project on »performance indicators for research groups« (SCHM 1719/1-2) which is part of a larger research group on »international competitiveness and innovation capacity of universities and research institutions – new forms of governance« (FOR 517).

Dr. Torben Schubert
Fraunhofer-Institut für System- und Innovationsforschung (ISI)
Breslauer Straße 48, 76139 Karlsruhe
Universität Karlsruhe (TH)
Institut für Wirtschaftspolitik und Wirtschaftsforschung, Sektion Systemdynamik
Waldhornstr. 27, 76131 Karlsruhe
torben.schubert@isi.fraunhofer.de

Dr. Ulrich Schmoch
Fraunhofer-Institut für System- und Innovationsforschung (ISI)
Breslauer Straße 48, 76139 Karlsruhe
ulrich.schmoch@isi.fraunhofer.de