Media attention and its repercussions on science: a cross-disciplinary approach

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The medialization of science

The relationship between science and the mass media has attracted the attention of sociologists of science and communication scholars alike. Given the importance of the mass media in framing public opinion in every part of society, media attention can be seen as crucial for science’s public support. In times of a presumptive tightening of the “Sciences’ Media Connection” (Rödder et al. 2012), the question arises not only if media coverage of science is on the rise but also if science in turn orients itself towards the rationalities of the mass media.

This process of mutual influences and dependencies between science and the mass media has been termed “medialization” (Weingart 1998, 2012). A media orientation may result in press conferences and other staged events, in the occurrence of scientific media stars, in the announcement of research results in the media prior to their publication in peer-reviewed journals, and other changes to science’s institutional and epistemic characteristics.

Medialization research systematically investigates structural changes in science towards mass media-related criteria of relevance and locates it on different levels: as changes with regard to the professional role of scientists, as organizational responses and in its resonance in scholarly communication (Franzen et al. 2012). A recent survey article concludes that medialization effects are difficult to grasp and that the interpretation of empirical findings depends to a large extent on theoretical assumptions that makes them in a way incommensurable (Weingart et al. 2012).

Apart from methodological and theoretical constraints it is rather obvious that there are considerable differences between disciplines. Schäfer has addressed this issue; his cross-disciplinary approach (Schäfer 2009) and meta-analysis of medialization research (Schäfer 2012) were focused on the first dimension of medialization, the changes with regard to media coverage. Our complementary aim is to qualify the second dimension, an increasing orientation of science towards the mass media, in that “the interests and values of their publics communicated by the media become an important reference for science” (Weingart 2012).

A cross-disciplinary approach

We therefore proceed on the assumption that it is not science as such that experiences media-related change but that resonance can be observed in various disciplines under specific conditions only. By comparing mathematics, molecular biology and contemporary history, we investigate the implications of medialization in three disciplines that differ in the amount of news coverage as well as in their production and presentation modes of knowledge.
The research question that informs the comparison is: What are the implications of media (or no media) attention for science funding, for research agendas, for universities and the professional self-understanding of scientists, and how do these developments relate to the production of new and reliable knowledge?

**Methods**

We combine three methodical steps to explore the repercussions on science with regard to discipline-related specificities: (1) a media resonance analysis of original research articles from the top journals in each field that were covered by the German press, (2) an in-depth analysis of medialized papers and their accompanied network of articles and (3) semi-structured interviews with scientists, press officers of research institutes/journals, journal editors in the three fields and science journalists.

**References**


Rödder, Simone; Franzen, Martina; Weingart, Peter (eds.): The Sciences’ Media Connection – Communication to the Public and its Repercussions. Sociology of the Sciences Yearbook, Dordrecht: Springer.


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