

Two normative models of science in the public sphere: human genome sequencing in German and US mass media

Jürgen Gerhards and Mike S. Schäfer

The public sphere and particularly the mass media have become increasingly important for the legitimation of science. Many publications on the issue explicitly or implicitly deal with the question of how science should be treated in the mass media, putting forward normative models of an ideal “scientific public sphere.” In this article, we first present two ideal types of normative models identified in the literature: the “science-dominated scientific public sphere” and the “contextualized scientific public sphere.” Whereas the first model calls for scientific dominance in mass media debates, the second model argues that science should be contextualized also with non-scientific actors and arguments. The second part of the article outlines how these two models translate into specific demands for mass media debates and proposes how to measure whether concrete cases of science coverage correspond with one of the normative models. We confront the two normative models with the example of media coverage on human genome research in Germany and in the United States in the third part of the article. Our findings show that the mass media debate on this issue is dominated by bio-scientists, affirmative positions, and scientific and medical frames in both countries. Hence, human genome research as an empirical case corresponds to the demands of the scientific dominance model, while failing to meet the demands for more contextualized mass media coverage.

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1. The importance of the public sphere for science

The public sphere is widely acknowledged as a core element of modern democracies. Its importance relates to a basic mechanism of democratic societies in which citizens elect political elites, thereby indirectly determining political decisions. In order to elect their representatives, citizens require access to information about the candidates, their policies and possible societal problems. The public sphere facilitates this access to information and, accordingly, enables citizens to participate. In other words, the public sphere enables citizens to observe decision-makers, to form judgments of societal developments, to articulate their views and opinions and to enact their freedom of speech. In modern societies mass media can be seen as the “master forum” of the