

INVITED ESSAY

## The role of organizations in the public communication of science – Early research, recent studies, and open questions

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### 1 Early conceptualizations of organizations in the public communication of science

Organizational science communication of higher education institutions (and research institutes outside the university sector) came into view of scholars of “science journalism” soon after the begin of systematic studies of the scientist-journalist relationship. While the pioneering French study of scientists’ relationship with the mass media by Boltanski and Maldidier (1970) focused on implications of the norms of the scientific community for public communication by scientists, early surveys of scientists in the United States (Dunwoody & Ryan, 1982, 1983) and – peripherally – also in Germany (Krüger, 1985; Peters & Krüger, 1985) considered both the scientific community and the university (or other public research organizations) as relevant contexts of the scientist-journalist relationship. The issue of organizational science public relations (PR) was also addressed by scholars and practitioners in publications and workshops in Europe (see, e.g., Peters, 1984; Ruß-Mohl, 1990; Zerges & Becker, 1992) in the 1980s and early 1990s. While researchers were not oblivious of self-interests’ influence in public communication activities of universities and other research institutions, the dominant perspective on science communication was that of the relationship of science and the media, and PR officers at science organizations were largely conceptualized as “mediators between scientists and journalists” (Dunwoody & Ryan, 1983) or as “practitioner in the middle” (Rogers, 1988).

In semi-structured interviews with PR officers at German universities and research centers conducted in 1983 (Peters, 1984), most of them subscribed to the role as “mediator” – and a speaker for the organization and its leadership. A first type of mediation mentioned was smoothing the interactions between scientists and journalists by creating contact, briefing scientists about how media work, and attempting to reduce misunderstandings of scientists’ claims by journalists during media interviews. A second type of mediation concerned balancing the organizations’ interest in creating a positive public image with the journalists’ interest in newsworthy information, exemplified by the following quote: “Our task is to sell the position of our own house while considering the demands of the *colleagues in the media* [!] at the same time” (Peters, 1984, p. 106).<sup>1</sup> The idea of a partnership with journalists was widespread, in particular among PR officers who often had been former journalists themselves. Some PR officers credibly claimed in the interviews that they considered addressing the information demands of the public – represented by journalists – as a democratic duty and not just as a strategy to promote organizational goals. However, this view coexisted with instrumental views of public communication of some other PR officers, as expressed in the following quote:

We have to tell people who give us money [for what we are doing here]. And in a democracy this is the public represented by politics. The

1 Quotes from the interviews are translated from German by the author.



ultimate goal is that mainly politicians, people with political influence, do not consider nonsense what we are doing here. [...] In between [us and the political decision-makers] we have to inform the whole *proletariat* (!) entitled to vote [...]. We don't care about [that]. If it was only for public enlightenment, we wouldn't be so motivated. Well, then we would have to be teachers. (Peters, 1984, p. 92)

The cynicism of this quote is not at all typical for the interviews, but the viewpoint that “the public” or general media audience is not the final addressee of public communication and its intended impact was mentioned in several interviews.

Against the view of universities' public communication staff just mediating the relationship of science and journalism, Nelkin (1987, pp. 132–153) demonstrated the rise of strategic goals and approaches in public communication distinct from the popularization paradigm of sharing scientific research and findings with the goal of public education and intellectual inclusion in the United States: “Since the 1960s and 1970s professional societies, academic institutions, and research organizations have all increased their public relations activities in order to enhance institutional prestige, encourage public support of research, and influence public policy towards science and technology” (Nelkin, 1987, p. 137). Nelkin saw the “Selling Science” approach not limited to formal science organizations but as an emerging perspective of (leading) scientists and scientific institutions that science needs PR to pursue its interest as a stakeholder in society. However, she also recognized the specific interests of major research universities: “Good public relations is important to these institutions, which must attract good students and staff, obtain money for research, and maintain public legitimacy” (p. 138). Nelkin thus considered the rise of organizational PR as part of a more general trend toward strategic orientation of science as stakeholder in public communication. This development got a first boost in the 1970s and 1980s with the emergence of “big science” and its huge demand for resources (e.g., NA-

SA's space program), and the rise of technical controversy (e.g., Mazur, 1981) about risky scientific-technical innovations such as nuclear power and genetic engineering in which the legitimacy of politicized technoscience was challenged. While the shift toward more strategic PR originated outside higher education institutions (HEIs), the latter eventually followed the model of non-university research institutes.

## 2 Views of organizational PR in the articles of this Thematic Section

The above paragraphs serve as a kind of prolog and reminder that organizational science communication did find some scholarly interest before the “organizational turn” (Schäfer & Fähnrich, 2020) in science communication research. The four research papers of this Thematic Section are situated in the context of a second boost of strategic communication related to the implementation of new public management in science organizations with consequences for their public branding and communication strategies, as explicated in the case study of “the wow-academy” by Väliverronen, Sihvonen, Laaksonen and Koskela (2022). In the following I briefly discuss the contributions of the four articles in the light of three general themes:

- › the rise of strategic organizational communication of HEIs under the influence of new public management and its implications (Fürst, Volk, Schäfer, Vogler, & Sörensen, 2022; Väliverronen et al., 2022),
- › the intention and ability of HEIs to establish a centralized public communication strategy that integrates all organizational units and members into one organizational voice or choir (Koivumäki & Wilkinson, 2022; Väliverronen et al., 2022; Voigt, 2022),
- › the interdependency of scientists' individual public communication and organizational PR (Fürst et al., 2022; Koivumäki & Wilkinson, 2022).

## 2.1 Rise of strategic communication and its possible implications

There is hardly disagreement among scholars and practitioners that the public relations of HEIs are changing toward a corporate model, and that its managerial status increases. New job titles for heads of university PR departments such as “chief communication officer” suggest importance and power. Yet, systematic studies of changes in HEI communication departments are rare. Fürst et al. (2022) present such a study based on a survey of HEI leaders in Switzerland. Asking them about their perception of changes in the past five to ten years with respect to indicators of intensification, diversification, professionalization and increasing strategic alignment of the PR of their organizations, they found evidence for changes of most indicators, but little support for increased influence of the PR department on strategic decision-making of the organization. Generally, the latter result seems to be in line with that by Kohring, Marcinkowski, Lindner, and Karis (2013) for German HEIs who claim that “[u]niversity decision makers attribute little influence and only moderate expertise to their PR managers” (p. 177). Fürst et al. (2022) further found that respondents ascribing to goals such as good public image and social impact and being aware of their competition with other HEIs, noted more recent changes toward intense, diverse, professional, and strategic PR. There is some evidence thus that strategic goal setting with respect to the social environment of HEIs and the perception of a competition between HEIs are drivers of the change of organizational public relations.

Diagnosing a trend toward “medialization of science”, Weingart (2001, 2012) has pointed to potential repercussions of a stronger “coupling” between science and media for the autonomy of science. In a recent essay, Weingart (2022) has extended this critique with respect to public communication of scientific communicators. He argues that striving for public resonance, especially through organizational PR similar to that of corporations, may contradict both the values of science

and the expectations of the public, and – against the intention – may actually endanger public trust in science rather than foster it. The tension between the scientific culture and the rise of a corporate-like PR approach of scientific organizations is evident in the two Finnish contributions. Välvirronen et al. (2022) present a case study of a management reform following a large university merger. This reform tried to establish a “promotional culture” in the branding of the new Tampere University. Yet, researchers and students of the university were excluded from participation in the reform, and in social media they subversively obstructed the implementation of the new communication strategy. Based on an analysis of newspaper articles and social media posts, Välvirronen et al. (2022) reconstruct the “clash between the values represented by the university community and the new management” (p. 502).

In interviews with researchers and communication professionals, Koivumäki and Wilkinson (2022) explored possible incentives motivating scientists for public communication. One of their findings was that the scientists in their case study tended to reject direct financial incentives as motivation for public communication (p. 478). One might interpret this finding as indicating that being paid for communication activities would mark them as an activity outside their professional role, an activity on behalf of others (i. e., the PR department) and perhaps with the expectation that the payment comes along with expectations restricting their professional autonomy. As Rödder (2012) found in her study of the human genome project community, many scientists are ambivalent about public communication. From a survey of German and U.S. neuroscientists, Peters (2013, p. 14106) concluded that “norms of the scientific community [...] do not generally discourage media interactions, but [...] include explicit expectations about who should represent science in the media and how.” A comparison of scientists from 16 disciplines revealed that peer norms regarding public communication are relevant for all disciplines analyzed, but more so for scientists from

natural sciences than for scientists from social sciences and humanities (Peters, Spangenberg, & Lo, 2012, p. 259–260). Scientists tend to find public communication acceptable if there is a convincing reason justifying it in light of the norms of the scientific community. Rejecting direct benefits may be an indicator that scientists still regard academic norms relevant for public communication of science, even if these norms have changed over time and are diverse across the spectrum of scientific disciplines and research fields.

## 2.2 Merging voices to form a choir

The article by Voigt (2022) in this issue, describing college television initiatives in German HEIs, points to an important aspect of organizational PR. Universities host many public communicators that are not legitimized to speak for the whole organization, but are still perceived as voices of the university, and thus will contribute to shaping its public image. College television initiatives can be linked to a journalism program, for example, or can be activities of independent student groups. Student bodies within the university may engage in public debates. Students may post in social media about their university. University institutes may have own resources for PR, their own media contacts, social media profiles, or organize events. In eight countries Entradas et al. (2020) have inventoried public communication activities and resources at the institute level and found such a rich “biodiversity” of public engagement activities, leading Entradas (2022) to assume a trend toward decentralization of organizational science communication rather than centralization. Many researchers have traditionally interacted with journalists without the mediation of a PR officer, and many are also active on social media. Above all that, collaborative projects involving partners from several research organizations may have their own formal or informal PR, and project funders may interfere with their PR. For the chief communication officer of a university who is interested that the organization speaks with one voice – or at least as a harmonious choir with many

voices but one melody – this must be a challenge.

Given this situation, one may ask two questions. First, do HEIs want to move toward centralization of public communication in order to speak with one voice or do they cherish a diverse spectrum of voices which may have advantages in addressing diverse publics? Second, if they wanted more centralization of public communication, would they actually have the means and power to centralize communication? Both questions cannot easily be answered in general. The case study of the new Tampere University by Välvirronen et al. (2022) suggests that as part of the new public management style the management “might seek to control the voices in organizations” if their messages are not “in line with the organizational voice” (p. 496). Yet, in “fundamentally heterogeneous and polyvocal sites” (p. 496) like universities such an attempt might fail. Organization members have both the motivation and the means to resist demands of the management perceived as incompatible with the academic culture. The hybrid media system and higher authenticity of ordinary organization members compared to the “official voice of the organization or its management” (p. 496) gives protest an advantage over official voices.

It is not intended to be read this way, but the article by Koivumäki and Wilkinson (2022) presents an alternative, more subtle strategy of integrating researchers into the “university choir” compared with the confrontational top-down approach of Tampere University. The article provides results of a research collaboration between researchers and communication professionals in a Finnish project about developing organizational and institutional incentives to motivate scientists to engage in social media communication – obviously with the main goal to increase the volume of output which relates to universities’ interest in public visibility. Recommended approaches are integrating communication into the job description and evaluation of researchers, providing substantial feedback to social media posts, and emphasizing the crucial role of leaders in

creating an organizational culture that encourages the use of social media. However, these incentives may also be used to motivate researchers to consider the stakeholder interests of the university or institute in the content of their posts and thereby amplify the organizational voice.

### 2.3 Individual scientists and organizational PR

Koivumäki's and Wilkinson's study connects well to what German PR officers in 1983 said about their interactions with the researchers of their organizations (Peters, 1984). Motivating them for public communication was a general problem too, and PR officers used some variants of the strategies mentioned above such as providing feedback and recognition by peers and organizational management by circulating press clippings. In the survey of HEI leaders by Fürst et al. (2022, p. 525) 26% of the respondents strongly agreed that "the [central communication] department has an increasing influence on how HEI members communicate publicly." There is thus some evidence about growing influence of the PR departments on the communication of individual researchers but other indicators of changes in HEI communication were more pronounced.

Some surveys have addressed the issue of how the organization influences researchers' public communication. In a survey of scientists by Dunwoody and Ryan (1983) two-thirds of the 287 respondents agreed that "public information personnel sometimes hinder scientists who want to be completely open about their research efforts." In another survey of 1354 biomedical researchers in five countries, about 35% agreed that they would have to get permission from their institution if they wanted to talk with a journalist (Peters et al., 2009, pp. 77–78). The differences between the five countries (Germany, France, Great Britain, USA, Japan) were rather small. However, there were large country differences regarding whom the researchers had to ask. In Germany, France, and Japan researchers had to get permission from their leader; in the United States and Great Britain they had to ask

the PR department. This finding was replicated in a comparison of German and U.S. neuroscientists (Peters, 2013, p. 14107). In her survey of scientists in Germany, USA, and Taiwan, Lo (2016, p. 129) asked about organizational regulations or guidelines for blogging. Only 9.4% of the German respondents knew of such regulations compared to 21.2% in the USA and 22.8% in Taiwan.

The conclusion from the cited studies is that universities may motivate scientists to communicate with the public but also exercise some degree of control – presumably to make sure that the intended communication does not jeopardize organizational reputation. In Anglo-Saxon countries this organizational control is most often executed by PR departments; in Germany, France, and Japan it is mostly executed through the hierarchy in the institutes. Another finding is that consultation requirements with the PR department differ largely by scientific discipline. In the humanities and social sciences, the PR department plays only a minor role; in natural sciences and engineering, more than half of the respondents had to consult the PR department before having media contacts (Peters et al., 2012, p. 163).

While most interviewed PR officers in the 1983 study (Peters, 1984) distinguished clearly between their speaker role for the organization and their involvement as mediator in the communication of scientific research in which individual scientists remained the dominant communicators, the role of individual scientists in the context of organizational science communication seems to move gradually toward that of "content providers" for organizational PR. Researchers are still visible as individuals in the public self-presentation of HEIs, branded as members of the organization through corporate design such as mandatory (PowerPoint) presentation formats with organizational logos, as mentioned by Välvirronen et al. (2022). They remain visible because they can more credibly and authentically than organizations represent the idealized image of science as truth-seeking in the common interest, and



meet the “personalization” demands of old and new media.

### 3 Gaps in research

The contributions to this Thematic Section provide an in-depth view of organizational changes with potential implications for public communication of science. They do not attempt to analyze these implications from an audience point of view. Yet, it would be naive to assume that encouragement of scientists’ public communication activities by universities or their monitoring and control is neutral to the content. We may expect a number of positive effects of organizational PR on the quality of science communication such as improved suitability for lay audiences, professionalism of videos, podcasts or graphs, and the training and briefing of scientists. But research organizations have interests and goals, and these translate into desired communication impacts. Some of these desired impacts are quite general such as public visibility, while some may be rather specific such as emphasizing a particular strength of a university in order to attract a project or sponsor.

The crucial question from the audience perspective is how organizational PR shapes the public representation of science, the form and content of communication, and the relationship with publics. For example, one may hypothesize that organizational PR emphasizes contributions to knowledge creation that can be attributed to the university rather than the scientific community, such as research infrastructures or funding. This might move the public image of science from that of an intellectual endeavor to that of an industrial production process. There seems little research overall on how the selection of topics, the framing of science, and the presentation of scientific outcomes differ between the self-presentation of HEIs and other types of science communication, such as investigative science journalism. An example of how such research could look is provided by Fahnestock (1986) who compared popular science articles written

by journalists with those written by scientists. Adapting this research approach to the current media environment, a way to study the impact of organizational science PR on science communication would be to compare the content of science communication produced with or without the involvement of professional science PR.

### Conflict of interests

The author declares no conflict of interests.

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