

Business as usual or new reasons and means for communicating science?

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Abstract

Growing amounts of research press releases submitted from an increasing number of universities and a shift in communication focus from a national audience towards a larger international public, are changes we can register in science communication, but not explain with current models used in science communication research. By investigating similarities and differences between models of public relations on one hand and models of science communication on the other, this paper presents a solution to that challenge. In a model proposed by Van der Sanden and Meijman, science communication is understood as an activity described by its form and its function. The model operates with four functions: public understanding of, public awareness of, public engagement with and public participation in science. This paper shows how a fifth function – public relations in science – can be included in this model by using Grunig and Hunts four classic models of public relations. We thereby may be able to understand research press releases as both instruments to market universities and instruments that contribute to educating the public. The results are discussed by use of Grunig's mixed motives model.

Introduction

When PCST 2012 finished in Florence, the last speaker, Rick Borchelt, called for an investigation of uncharted territories on the map of science communication research. This paper takes up Borchelts challenge. Growing amounts of research press releases submitted from an increasing number of universities and a shift in communication focus from a national audience towards a larger international public, are changes we can register in science communication but not explain with current models used in science communication research. By investigating similarities and differences between models of

public relations on one hand and a models of science communication on the other, this paper asks which communication model to use if research press releases are to be understood as both an instrument to market universities (securing funding and recruiting students and staff) and as an instrument that contributes to educating the public (Gregory and Miller,1998; Broks, 2006). Public relations activities (PR) from universities, such as press releases, have been criticized and described as ‘para-journalism’ and ‘pseudo-journalistic’ (Bauer et al., 2013; Bauer & Gregory, 2007; Göpfert 2007). Seen through the eyes of its critiques, PR is often synonymous with campaigning for public acceptance in problematic fields of science and therefore seen as attempts to fool the public (Nelkin, 1995; Weingart, 2012). This negative view on PR mirrors the *public understanding of science* and the *science and society* paradigms (Bauer et al., 2007) that both define a problem of communication in the relation between science and the public and with the problem located on the side of the public (attitude, trust etc.) Critiques therefore do not believe these problems are solved by cheating the public with doubtful PR and propaganda. However we may view increasing PR from universities as something else than efforts “to withhold sensitive information or to otherwise exercise communication controls over the news conveyed to the public” (Nelkin, 1995: 143). Van der Sanden and Meijman argues that: “within the development of science communication, all distinct targets, modalities and instruments must be investigated and validated on their own merits, according to the particular field of science communication” (Van der Sanden & Meijman, 2008:90). In a model proposed by Van der Sanden and Meijman (2008), science communication is understood as an activity described by its form and its function, where form is divided into modality and instrument and the functions are defined as: public understanding of, public awareness of, public engagement with and public participation in science. Following Van der Sanden and Meijmans understanding of science communication to explore research press releases, this paper first shows why we need to ask new questions in relation to PR and press releases from universities. This relates to (1) the development of the modern university and (2) the shift from the *scientist* towards the *university* as the primary sender of information to the public. Next it shows how these new PR questions can be asked and answered if we combine the communication goals in Grunig and Hunt’s four classical models of public relations

(Grunig & Hunt, 1984) with the different functions (goals) of science communication described by Van der Sanden and Meijman (2008). The paper concludes that, by matching these different models, we can add an extra function – *public relations in science* – to the Van der Sanden and Meijmans model. Finally this new function is put into perspective by use of Grunig's mixed motives model (Grunig in Heath, 2002).

The modern university and public relations

At the turn of the twenty first century the university sector has changed differently from anything ever seen before. According to Altmann and Ebersberger (2013) several things happen simultaneous. The university sector is growing fast together with the number of students. Combined with a new role for universities as support to economic and social development, these changes has paved the way for the concept of *the entrepreneurial university*, changing the overall mission of the university (Altmann & Ebersberger, 2013). As a consequence universities are now seen as operating on a competitive global market of higher education (Weingart & Maasen, 2007) and on a market where commercialization of knowledge and research findings are recognized as an important part of managing a university. This has changed the corporate culture of universities and they put still more effort in promoting university studies, recruiting staff and students and in strengthening the general image of the single institution, not just locally, also globally (Altmann & Ebersberger, 2013). This is done by informing the public about the organizations accomplishments. In the public relations literature this is referred to as boundary spanning work (Springton & Leichty, 1994), divided in a representational and an informational function. According to press releases both boundary spanning functions are relevant. If exposure in the mass media is taken as a measure of impact (visibility), distributing research results to journalists in a press release is effective. Nelkin very early acknowledged that PR officers employed in scientific institutions: “do contribute in important ways to informing the public” and do have a function as: “a useful source of information for journalists.” (Nelkin, 1995:141). From the literature we know working conditions for science journalists in mass media is rapidly changing. They must produce more stories faster, leaving lesser time for researching. More and more science reporting is left to generalists (Williams & Clifford, 2010). A

recent survey also showed more than eight out of ten science journalists indicate press releases as a main story source (Bauer et al., 2013). This may explain why universities experience press releases as effective instruments and ways to perform the representational boundary spanning function. Since press releases also play important roles in building an image e.g. at university websites, they also fulfill the experienced branding needs of the *modern university*. Taking this a step further, the changing media reality combined with the experienced branding needs of universities, might explain the massive growth in press releases. Despite worsening working conditions for journalists, the amount of science stories in mass media has exploded since the 1990's (Bauer, 2012). Besides the increase in available media platforms related to the internet, this registered increase in science news reporting might as well be related to the growing media orientation of universities (Kohring et al., 2013; Peters, 2012). Furthermore a well written press release easily becomes a news story when communication officers, when writing the release, use knowledge about how journalists prefer to receive information (informational boundary spanning work). For the public this means that news stories based on press releases from universities become a significant source of knowledge about science. An obvious question: is this a problem, as the critiques of PR say? Or is it an unavoidable consequence of the changes in both mass media and the modern university that we need to understand and then learn how to deal with? This article argues in favor of the last position.

Universities as primary sender of information

By visiting university websites or reading science stories in newspapers, one can quickly be convinced that research press releases can also be seen as part of an organizational communication. Even though a specific press release will always communicate specific results from named researchers, the university as organization often stands as the sender of the messages. The name of the specific university is highlighted and replicated by the mass media. This perspective is seldom recognized in the science communication literature. Here the concerns mostly focus on relations between the two broad entities *science* and *public* and on the relation between the two individualistic entities, the *scientist* and the *journalist*. By leaving it that way, we miss an

important opportunity for a closer look on the organizations where the scientists carry out their research, and these organizations motives for communicating. For who communicate to the public and why – is it the scientist, the science community or the university? The currently most correct answer will be: all of them and often at the same time. Motives for communicating science from scientists are several. Some sees themselves as specialist, some takes the position of representing the science community in more general terms and some see communicating science as a strategy to obtain funding and attract research partners and clever students (Horst, 2013; Wien, 2013). Add to this, motives at the organizational level, and we have a mixed picture. This means that reasons for and effects of public communication of science should be explored as an entangled activity opening for the possibility, that research press releases can have more than one purpose – even at the same time.

Combining goals of public relations with functions of science communication

The four functions in the communication model of Van der Sanden and Meijman (VSM-model) corresponds with the *public understanding of science* and the *science and society* paradigms and seeks to solve communication problems. The purpose, or function, of science communication is therefore closely related to achieving specific goals. Besides *public understanding* the VSM-model operates with the functions: *public awareness of*, *public engagement with* or *public participation in* science. The model divides the form of communication in modality and instruments and can be illustrated like this: [Science communication = Modality + Instrument + Function]. As examples of modalities are mentioned science education, science promotion and prevention of knowledge deprivation (2008:90). Outreach, dialogue and events are examples of instruments in science communication. A research press release is also an instrument, but before including it in the VSM-model, we need to look at its different functions. This brings us to the four PR models of Grunig and Hunt. They all represent tools to create relations to specific publics, not far from the mindset governing the VSM-model just described. The four PR models are named *Press Agency/Publicity*, *Public Information*, *Two-Way Asymmetric* and *Two-Way Symmetric* model (Grunig and Hunt, 1984:22). They all differ in purpose and nature of communication. Together they represent a historical

development in public relations, but cannot be said to succeed each other. By the introduction of the later mixed motives model, Grunig has argued, that instead of looking at the four PR models as individual strategies and tools one has to choose between, a mixed use of the different models for creating public relations much better reflects the way effective organizations use the models in practice (Grunig in Heath, 2001; Grunig et al., 2002). In the first two models the communication is one-way. In the oldest model, the *Press Agency/Publicity* model, the purpose is described as propaganda. Focus is solely on getting attention and complete truth is not essential. In the *Public Information* model the purpose is dissemination of information. Here truth is important. In the last two models the communication goes both ways. In the *Asymmetric model* PR officers seek information about their target groups and their needs before communicating (informational boundary spanning). The final model, *Two-Way Symmetric*, focuses on mutual understanding and on inviting the public into the processes by means of communication. Among science communication researchers this reminds of the recent focus on public participation. Whereas the focus of public engagement as part of the *science and society* paradigm has been criticized for ideologically still defining a problem on the side of the public, the *Two-Way symmetric* PR model and the *public participation in science* (PPS) function focuses on mutual negotiations for common good. As already indicated there are similarities between models of *public relations* and *science communication*. The goals of creating relations, linking people, and establishing communicative connections and shared views, are the most obvious characteristics in common. These goals can all be summarized as operating boundary spanning activities between a special entity (science, a university, a company) and the surroundings of this entity (certain publics or target groups). If we turn to the differences, these depend on how the different functions and goals of the models are matched. No matter which of the functions in the VSM-model we compare with the goal of the *Press Agency/Publicity* model, the result will be propaganda (and absolute truth not important) against noble goals of educating the public. The *Press Agency/Publicity* model therefore best matches the PR critique raised by science communication researcher. This makes this PR model unsuitable for exploring new trends related to press releases from universities. If we instead combine the remaining functions and goals by looking for similarities, the picture

turns out differently and in favor of merging the different models in the following ways. In the *Public Information* model, dissemination of information can be compared with the function *public understanding of science* (PUS) in the VSM-model. Truth is regarded as important and the communication is one-way. The *One-way Asymmetric* model drawing on scientific persuasion (informational boundary spanning) corresponds with *public engagement in science* (PES). Ask the public what they think before trying to solve the defined communication problem. While the final PR model, the *Two-way Symmetric* model, emphasizing balanced effects, two-way communication and mutual understanding, best mirrors the function of *public participation in science* (PPS).

Discussion and conclusion

Having showed how the goals of the PR models combines with the different functions of science communication in the VSM-model, it seems reasonable to include the proposed fifth function, *public relations in science*, in the model of Van der Sanden and Meijman. Thereby we can start investigating the growing amount of research press releases (instrument) as something else than propaganda. The associated modality of the new function might be promoting science (a modality already mentioned by Van der Sanden and Meijman), but it might as well be market the university or making the public understand as well as a combination of two or more purposes. Following the mixed motives model and the knowledge we have about contemporary mass media and modern universities, it seems obvious why universities combine different communication strategies in order to obtain different goals in the relation between science and the public. The new fifth function (*public relations in science*) makes it possibly to start investigate this complex picture more systematically and parallel with investigations of the rest of the already commonly acknowledged functions of science communication, all together expanding the research agenda.

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