

## Trust, advertising and science communication

---

**Emma Weitkamp**

**Abstract**

This issue of JCOM presents some interesting challenges relating to trust and the media ecology that supports science communication. Weingart and Guenther have organised a set of commentaries considering the issue of trust and media from different points of view, by asking for responses to their paper 'Science Communication and the Issue of Trust'. The commentaries focus on traditional and social media and the actors that contribute to media content, though they do not consider 'paid for' content (also known as advertising), which is the subject of a paper by Silva and Simonian also published in this issue of JCOM.

**Keywords**

Public engagement with science and technology; Science and media; Science communication: theory and models

---

**Trust in the communicator**

In their paper, Weingart and Guenther outline the science communication context by considering both the actors that play a role in communicating science via the media (whether that be scientists, journalists, government and non-governmental organisations, public relations experts and the potential hotchpotch of individuals that comprise the blogger community). As they point out 'science communication has become an arena in which many different stakeholders battle for attention and the power of definition, because there is money in the game, there are jobs to be captured, and there are professional identities at stake. It is no surprise, therefore, that even the definition of 'science communication' itself is embattled' (p. 1–2). These different 'science communicators' also have very different agendas and Weingart and Guenther argue that as a result they attract different levels of trust from the public. The paper moves on to consider how the medium of communication influences trust and they identify the complexity in understanding the way trust is attributed in the relatively uncontrolled realm of social media.

Mike Schäfer picks up the topic of trust in the medium arguing that better models or theoretical constructs are needed to frame research in this area. He argues that trust is actually a matter of control, we trust when we have control over another or a situation (in the case of science, the public may not know what science does and may feel they have little influence over scientific research, placing them in a situation of low control). Schäfer goes on to outline a number of problematic areas, in relation to the measurement of trust but also in terms of understanding what determines trust in science and how trust can be generated. Finally, but importantly, Schäfer points out that we also know little about what mediates

distrust in science and whether 'distrust is 'just' a lack of trust, or a different phenomenon' altogether.

This issue of trust relationships is also picked up by Matthias Kohring, who points out that it is only in situations where risk arises that the truster/trustee relationship becomes important. Given that the truster (the person/group placing trust in another) cannot know whether that trust is justified, it becomes apparent that 'trust does not eliminate this underlying risk perception but it helps to compensate for it' (p. 2). Kohring argues that non-experts cannot check or validate expert knowledge, so they are dependent on trust relationships. Importantly, Kohring points out that a perception of risk is necessary for a trust relationship to arise, and that this perception of risk is not the same as distrust (which arises only when trust is withdrawn). For Kohring, this gets to the heart of the difference between the traditional 'deficit' model of science communication, which sees a gap in knowledge as the problem. Kohring takes this gap in knowledge as a given (not something to be filled, but something to be acknowledged), and instead focuses on the expectations (e.g. between scientists and non-scientists) that arise in a trust relationship. This suggests that public dialogue projects need to consider carefully the *expectations* of the different publics involved.

Weingart & Guenther's discussion of professionalization is picked up by Sascha Dickel, who argues that an 'implicit theoretical base of their argument is that the integrity of science *as an institution* depends on the integrity of science *as a profession*' (p. 1). He makes the case that society has transferred trust in the individual to trust in the institution through recognition of 'professions' (such as doctors, lawyers), but questions whether this applies to science, where interactions between individuals from the 'lay public' do not regularly interact with scientists (thereby cementing the trust relationship). Instead Dickel argues that there may be other means of establishing trust, particularly by focusing on trust in technology. He provides an example of the ways that trust in pharmaceuticals has shifted from professional pharmacists to regulatory systems and asks whether science might be moving in a similar direction. Thus, Dickel suggests that the new media ecologies presented by Weingart and Guenther, combined with moves toward open science and the rise of citizen science are enabling new 'technologies of certification' that 'transform trust in professions into trust in processes' (p. 5).

### Where does advertising fit in?

Advertising also raises questions of trust, and there is, of course, much research that has been done on advertising, both in the context of consumer influence and issues of trust. Currently, there seems to be some interest in 'green' advertising and its impacts on consumers (including trust in 'green' products) (e.g. Atkinson and Rosenthal [2014], Leonidou et al. [2011], Tucker et al. [2012]). Atkinson and Rosenthal [2014] explored how different elements of eco-labelling influence trust, finding that providing specific arguments was most important, while Tucker et al. [2012] investigated the ways that individual consumer characteristics influenced receptivity to green messages in advertisements, finding that consumers with positive attitudes towards environmental protection were open to green advertising, to highlight a small fraction of the current interest. But neither Atkinson and Rosenthal, nor Tucker et al. specifically consider the role of science in either claim making or processing, nor are there studies (as far as I know) of the impact of scientific claims in advertising on consumers' attitudes toward science,

their understanding of science or their trust in science; all of which are areas that have been explored in relation to other types of media (e.g. newspapers and to a degree Internet).

Further, there is little research on the role that advertising professionals could (and do) play in communicating science, especially as neither we (the science communication community) nor they (the advertising community) would necessarily consider advertising copywriters and designers as science communicators. Silva and Simonian remind us that advertising is about communication and in fact that advertising agencies can be quite innovative in their communications approaches (hence their interest in whether or not the pan-Amazonian advertising community innovates in sustainable ways) and that advertising (in the form of social marketing) can be undertaken for public good (as in the case of public health campaigns) or pro-environmental reasons (for example advertising campaigns undertaken by environmental non-governmental organisations (NGOs)). Some work is beginning to emerge that explores how consumers understand scientific (or often pseudoscientific) claims in advertising (see for example: Dodds, Tseñlon and Weitkamp [2008]; Ringrow [2014] ) and content analysis studies seeking to understand the ways that scientific claims are made in advertising (see for example: Leonidou et al. [2011]; Torres [2013] ), but this remains a relatively under explored area of science communication.

Silva and Simonian raise interesting questions about the ways that green issues (which are as much social as scientific) could (but largely don't) influence the advertising community in pan-Amazonia. Although they provide examples of advertising agencies that use sustainable practices within their own consultancies (rather than to promote the 'green' features of products or even undertake 'greenwashing' where products are made to seem more sustainable than they really are), they find little evidence of this amongst advertising professionals in Pan-Amazonia. It's seems that these advertising professionals don't recognise sustainability issues as a potential asset that might be used to promote their own agencies or the products they advertise (there is of course an inherent contradiction between sustainability, which requires less consumption, and advertising, which promotes consumption). This paper prompted me to reconsider the question of advertising and what role it plays (if any) in the communication of science and how trust (in the advertiser) might mediate this, but it also suggests interesting avenues for further exploration in terms of the ways that scientific research is adopted and mobilised within industry.

## Author

Dr. Emma Weitkamp is an Associate Professor in Science Communication at the University of the West of England, Bristol where she teaches on an MSc in Science Communication and provides training in science communication for practitioners and Ph.D. students. Emma is also Editor in Chief of JCOM.

E-mail: [Emma.Weitkamp@uwe.ac.uk](mailto:Emma.Weitkamp@uwe.ac.uk).

## References

Atkinson, L. and Rosenthal, S. (2014). 'Signaling the green sell: the influence of eco-label source, argument specificity, and product involvement on consumer trust'. *Journal of Advertising* 43 (1), pp. 33–45. DOI: [10.1080/00913367.2013.834803](https://doi.org/10.1080/00913367.2013.834803).

- Dickel, S. (2016). 'Trust in Technologies? Science after de-professionalization'. *JCOM* 15 (05), C04. URL: [http://jcom.sissa.it/archive/15/05/JCOM\\_1505\\_2016\\_C00/JCOM\\_1505\\_2016\\_C04](http://jcom.sissa.it/archive/15/05/JCOM_1505_2016_C00/JCOM_1505_2016_C04).
- Dodds, R. E., Tseelon, E. and Weitkamp, E. L. C. (2008). 'Making Sense of scientific claims in advertising. A study of scientifically aware consumers'. *Public Understanding of Science* 17 (2), pp. 211–230. DOI: [10.1177/0963662506065559](https://doi.org/10.1177/0963662506065559).
- Kohring, L. (2016). 'Science communication and trust in science: A critique of the traditional discourse on science communication'. *JCOM* 15 (05), C03. URL: [http://jcom.sissa.it/archive/15/05/JCOM\\_1505\\_2016\\_C00/JCOM\\_1505\\_2016\\_C03](http://jcom.sissa.it/archive/15/05/JCOM_1505_2016_C00/JCOM_1505_2016_C03).
- Leonidou, L. C., Leonidou, C. N., Palihawadana, D. and Hultman, M. (2011). 'Evaluating the green advertising practices of international firms: a trend analysis'. *International Marketing Review* 28 (1), pp. 6–33. DOI: [10.1108/02651331111107080](https://doi.org/10.1108/02651331111107080).
- Ringrow, H. L. (2014). 'Peptides, proteins and peeling active ingredients: exploring 'scientific' language in English and French cosmetics advertising'. *Études de Stylistique Anglaise* 7, pp. 183–210. URL: <http://eprints.port.ac.uk/18279/>.
- Schäfer, M. S. (2016). 'Mediated trust in science: concept, measurement and perspectives for science communication'. *JCOM* 15 (05), C02. URL: [http://jcom.sissa.it/archive/15/05/JCOM\\_1505\\_2016\\_C00/JCOM\\_1505\\_2016\\_C02](http://jcom.sissa.it/archive/15/05/JCOM_1505_2016_C00/JCOM_1505_2016_C02).
- Torres, H. A. C. (2013). 'Usos de la ciencia en la publicidad televisiva colombiana. Un estudio exploratorio sobre las representaciones de la ciencia en televisión'. *Univesitas Humanisticas* 76 (July/December). URL: <http://oai.redalyc.org/articulo.oa?id=79128762019>.
- Tucker, E. M., Rifon, N. J., Lee, E. M. and Reece, B. B. (2012). 'Consumer receptivity to green ads'. *Journal of Advertising* 41 (4), pp. 9–23. DOI: [10.1080/00913367.2012.10672454](https://doi.org/10.1080/00913367.2012.10672454).
- Weingart, P. and Guenther, L. (2016). 'Science communication and the issue of trust'. *JCOM* 15 (05), C01. URL: [http://jcom.sissa.it/archive/15/05/JCOM\\_1505\\_2016\\_C00/JCOM\\_1505\\_2016\\_C01](http://jcom.sissa.it/archive/15/05/JCOM_1505_2016_C00/JCOM_1505_2016_C01).

## How to cite

Weitkamp E. (2016). 'Trust, advertising and science communication'. *JCOM* 15 (05), E.



This article is licensed under the terms of the Creative Commons Attribution - NonCommercial - NoDerivativeWorks 4.0 License.  
ISSN 1824 – 2049. Published by SISSA Medialab. <http://jcom.sissa.it/>.