

MONITORING OF MEDIA COVERAGE OF EMF-RISKS

Vinzenz Wyss

Heinrich Kuhn

Zurich University of Applied Sciences Winterthur (ZHW)

(Principal contact: heinrich.kuhn@zhwin.ch)

Abstract: An analysis of the processes in risk communication and risk discourse reveals several distinct categories of actors, both participants and those affected by the risk: the originators of the risks, those exposed to the risks, the regulatory authorities, interested members of the general public and scientific experts. In the diverse debate surrounding the treatment of technological risks, they each pursue different interests and appeal to different value systems. All categories of actor ascribe a central role to the media, both as actors themselves and as a forum or arena of public communication. The media influence the choice and relevance of topics geared to public consumption and, by selecting and weighting the events they report on, set priorities within the political arena. A research team at the Zurich University of Applied Sciences Winterthur (ZHW) is developing a monitoring system which may be used as an instrument to systematically and continuously observe, analyse and interpret media coverage of EMF risks.

1. Introduction

"10'000 Antennen spalten die Schweiz" ("Switzerland Split Over 10,000 Antennas"). This headline, from the Swiss financial newspaper CASH, leads into a front-page article highlighting public opposition to new cellular phone towers in Switzerland.[1] The journalist begins with the sentence: "Der Schweiz droht ein neuer Mastenkrieg" ("Switzerland faces a new aerial war"). As Switzerland prepares to auction off UMTS licences for the new generation of mobile radiocommunications technology, the Swiss media are focusing on the opportunities and risks of that technology; they are thus participating in the most recent risk discourse to flare up among the public at large.

Do mobile phones and cellular towers pose a risk to the physical and mental health of the general population? A wide variety of actors representing different interests are concerned with this question, ranging from the originators and those exposed to the risk to organised and unorganised public groups, from regulatory authorities (such as the Swiss Federal Office of Public Health [BAG]) and scientific experts to the mass media themselves.[2]

In the diverse debate surrounding the treatment of technological risks the various categories of actor are separated by characteristic lines of conflict. The difficulty inherent in risk communication is among other things rooted in the content and structure of the discourse. Cognitive and motivational distinctions among the various actors are manifest in different levels of knowledge, in problems of intelligibility, in diverging interests and values and in a lack of credibility and general acceptability.

The risk discourse does not take place solely behind closed doors; it is also conducted in public, and this assigns a special role to the media as a key social player. A research team from ZHW aims to explore the contribution of the Swiss mass media to the public discourse about EMF risks, looking at the attention structures and the selection, handling, information-

gathering and presentational processes used by the media in reporting the subject of EMF. The following questions are central to the investigation:

- Which topics, themes (the thematic context) and categories of actor come to dominate mass-media coverage of EMF risks?
- How and with what arguments do different types of media (the forum, elite, local, quality, rainbow and opinion-forming press, weekly newspapers, news magazines, etc.) present the opportunities and risks of mobile radiocommunications?
- To what extent do the media focus on individual, social and ethical values, and what potential for conflict (of values, goals and interests) is embedded in the risk discourse?

To address these issues, the ZHW research team is developing and testing a monitoring system which may be used as an instrument to systematically and continuously observe, analyse and interpret media coverage of EMF risks.

2. Role of the Media in Risk Discourse

As vehicles and channels of social information and communication, the journalistic media play a prime, if not decisive role in public risk communication. Since the journalistic media constitute the main source of information for a large part of the population, they are often suspected of agenda setting. Attitude and argumentation patterns acquire public and political relevance once they are diffused among wide sections of the population. The media occupy a pivotal position in this respect, both as actors and as a forum or arena of public communication. The media influence the choice and relevance of topics geared to public consumption and, by selecting and weighting the events they report on, set priorities within the political arena. The reality portrayed in and by the media therefore often enjoys a higher public status than actual "objective" reality, because there are certain areas (such as EMF) where most people have no direct experience to reflect upon. Moreover, the majority of the public has no direct access to sound scientific research carried out in the field (technology and risk assessment).

3. Review of Research

Within the field of communication studies there have been a series of content-based analyses of risk communication in media reporting, conveying insights into the journalistic treatment of sciences, technologies and environmental risks.[3] A reliable review of the latest results from media studies research concerned with risk communication and the media has been compiled by Meier/Schanne.[4] There follows a summary of the most important findings:

- Media coverage does not reflect the reality constructed by scientists on the basis of estimates, calculations, data sources and models. Journalism constructs a media-inspired reality, observing certain idiosyncracies of the medium and rules of performance specific to the media. Journalistic coverage of scientific and technical risks is dominated by interpretations of events expounded by representatives of government and public authorities.
- The journalistic construction of risk reveals elements of dramatisation, simplification and political enhancement, reinforcing the public's construction of a subjective social reality. The difference between this and the "objective" reality of the experts encourages the general public and the originators of the risk, as well as various groups within the general population, to develop diverging conceptions of the risks associated with science and technology.[5]
- As the media rarely weigh up risks against opportunities, they tend to report damage, loss and injury rather than the risks themselves. Added weight is given to dramatic or extraordinary aspects of the problem, to mistakes, discrepancies and disputes; scientific information is published and portrayed in simplified terms before it can be corroborated, and technical information on risks is interpreted both inaccurately and with a bias.[6]

Media studies researchers have thus collated a good deal of knowledge about attention and processing structures once risk emerges as a media topic. But neither America nor the German-speaking regions have yielded any studies addressing the subject of EMF and media coverage. The ZHW research project intends to close this gap.

4. Project Goals and Methods

The goal of the planned project is the development, first-time implementation and evaluation of a monitoring system which may be used as an instrument to systematically and continuously observe, analyse and interpret media coverage of EMF risks. The system is designed to monitor, over time, the actors, incidents, events, scenes and thematic contexts featured in media reporting, and to look at the patterns of coverage and the forms of portrayal used to treat the subject of EMF risks. A further focus is the individual, collective/social and ethical values to which arguments appeal during the risk discourse. The aim is also to pinpoint any potential for conflict (of values, goals and interests) embedded in the current risk discourse. Finally, the monitoring system will be able to advise the actors participating in the discourse about the success of their adopted strategies (for communicating information and establishing credibility).

The monitoring system is based on a quantitative analysis of content. The first stage of this analysis is to compile all articles on EMF risks published by the printed Swiss media during one full year of the period under investigation. The individual articles comprise the units of research. The variables which the researchers expect to record are: subject, time, size/length, placement, layout, journalistic portrayal, incident/event, scene of incident/event, author, section, actors, argumentational coherence, context, opportunity-risk correlation, implicit value system, value conflicts, conflicts of goals, conflicts of interests, etc.

5. Conclusion

Research carried out in the media studies field provides insights into the media's treatment of risk-related topics. There is agreement that journalistic coverage constructs a media-inspired reality and does not reflect the scientific construction of reality. Thus enlightened risk originators and actors affected by the risk attempt, as far as possible, to fashion their messages so as to increase the likelihood of crossing the selection thresholds set by the journalists. However, the ability to apply such strategies hinges on knowledge of the media's attention structures and handling processes. This is where the ZHW monitoring system comes in, by furnishing insights into the way the media treat the subject of EMF risks. The target groups are risk originators, editorial staff in the media, regulatory authorities (Swiss Federal Office of Public Health [BAG], Swiss Agency for the Environment Forests and Landscape SAEFL [BUWAL]), interested members of the general public, etc. By making use of this monitoring instrument, they will have access to the latest data on how the public discourse is conducted in the media.

6. References

- [1] Kienzle, André (2000): 10'000 Antennen spalten die Schweiz. In: CASH, November 3, p.1.
- [2] Rohrmann, Bernd (1991): Die Akteure der Risikokommunikation. In: Jungermann, H. / Rohrmann, B. / Wiedemann, P.M. (ed.): Risikokontroversen. Konzepte – Konflikte – Kommunikation. Berlin, p. 355-370.
- [3] Hansen, Anders (1991): The Media and the Social Construction of Environment. In: Media, Culture and Society, 13, H. 4, p. 443-458.
- [4] Meier, Werner A. / Schanne, Michael (1996) (ed.): Gesellschaftliche Risiken in den Medien. Zur Rolle des Journalismus bei der Wahrnehmung und Bewältigung gesellschaftlicher Risiken. Zürich.
- [5] Ruhrmann, Georg (1992) Risikokommunikation. In: Publizistik, 37 H. 1, p. 5-24
- [6] Gutteling, Jan M./ Wiegman, Oene (1996): Exploring Risk Communication. Dordrecht.