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Assessing Technologies: Global Patterns of Trust and Distrust

Report on one session at the XVIII World Congress of Sociology

Yokohama, Japan, July 13–19, 2014

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Technology assessment (TA) had never been treated as a relevant topic within the International Sociological Association (ISA) before. The first steps towards establishing this association were taken in 1948, at the initiative of the Social Science Department of UNESCO. Its formal foundation was in 1949. The World Congress of Sociology in Japan was hopefully the beginning of continuous integration of TA into the thematic sessions within the ISA.

1 Towards TA

Topics close to TA that had been addressed at previous congresses were related to risk assessment, governance of science and technology, technological innovation cultures, etc. The session on “Assessing Technologies: Global Patterns of Trust and Distrust”¹ was therefore accepted as part of RC23 (Sociology of Science and Technology) activities. The session was organised by the Institute of Technology Assessment and Systems Analysis, KIT, based on invited papers. These contributions basically addressed the tension between and the widespread unquestioned acceptance of technological innovation, implementation and application on the one hand and, the general loss of confidence in the function and services of technology due to severe technical accidents, environmental catastrophes, and failed projects on the other hand.

The sociological relevance of the presented papers was underlined in the call. The call stressed that technology has become a vital part of societal infrastructures and, thus, is very much embedded and accepted in the individual practices of everyday life. However, besides the dissemination of technology in our daily social life, there is evidence of growing public resistance against

technological developments in general or against large technical infrastructure projects in particular. Although these issues have been part of discourses in Science and Technology Studies as well as of different multidisciplinary and interdisciplinary approaches in many countries for decades, this perspective was still not present at ISA.

Although some authors had addressed fundamental problems of sociological (technical) analysis many decades before, they were no recurring themes since many other relevant topics were on the agenda, like poverty, racism, etc. on a global scale. For instance, Merrill already underlined in the *International Encyclopedia of Social Sciences* in 1972 that “the study of the conditions and consequences of technical change merges into the general study of sociocultural change” (entry “Technology”, Vol. 15, p. 577). Meanwhile, many other renowned sociologists are working intensively on these issues. One can name Trevor Pinch, Bruno Latour, Andrew Webster, or also Robert K. Merton, Peter Weingart, Karin Knorr-Cetina, Arie Rip, Helga Nowotny, and Luis Sanz-Menéndez, who are all former members of the ISA RC23 board. Nevertheless, surprisingly, TA as a *concept* was never placed on the agenda of an ISA world congress, possibly because the TA community never tried to bring TA into the sociological debate, or because they felt the TA topics were outside the scope of this disciplinary approach. The issues covered by the RC23 sessions are usually about social inequalities, economic development, governance, sustainable innovation, the role of universities, environmental impacts of science and technology, globalisation, surveillance, technology foresight, scientific culture, and so forth. One can say that these are also topics of TA.

2 Overview of the Papers Presented

In six presented papers and one distributed paper, the session on “Assessing Technologies: Global Patterns of Trust and Distrust” provided perspectives from several countries and regions, as well as from different disciplinary approaches.²

Christian Büscher and *Patrick Sumpf* (ITAS/KIT, Germany) presented the case of the German “Energiewende”. Here, growing public discomfort with the project has already led to a lack

of confidence in the reliability and security of the new energy system and its networks. Some doomsday scenarios of expected major breakdowns have started to emerge. However, as the authors underline, “the sociological problem arises from a probable shift of disappointment attribution from external references (e.g. politics) to self-reference (own decision), making smart grids primarily a problem of increased choice between decision alternatives. This future outlook might entail the paradox experience with technology”.

Jodyn Platt and colleagues (University of Michigan, USA) presented their study on “Public Trust in Health Information Sharing and Health Systems in the United States”, which was based on a national survey. As the authors conclude, “the public’s trust of technological change that promotes information sharing in the U.S. health system is not a foregone conclusion. Understanding the nature of the public’s scepticism and uncertainty about the risks and benefits to themselves and their communities of interest can inform future development of information governance and data brokerage”.

In his paper “Technology and Citizens: The Case of a Citizens’ Jury on National Pandemic Response System in South Korea”, *Young Hee Lee* (The Catholic University of Korea, South Korea) addressed different technology assessment methods. As he noted, the model of the citizens’ jury used in his study differs from the method of consensus conferences in that all the participants were randomly selected. The modalities of opinion collection and presentation allowed to illustrate the differences and non-alignment between the participating citizens. The author concluded that these characteristics of a citizens’ jury have a highly positive impact on the realisation of genuine democracy in South Korea.

The paper “Research on public attitude towards social impact assessment of the Chang E Lunar Probe Program” also presented an Asian case. *Bowen Hou* (co-authoring with *Haijie Yin*, both from School of Humanities and Social Sciences, Harbin Institute of Technology, China) analysed the public’s attitude towards and the social impact of both high-tech engineering and engineering with no direct interest in the outcome. Results of their survey-based study on the

Chinese Chang E Lunar Probe Program suggest the relevance of five major impact factors to the public's attitude: military, political, economic, psycho-social, and educational factors.

In their paper "Trust and the Reflection on Social Media Related Risks", *Christoph Dukat* (co-authoring with Simon Caton, both from KIT, Germany) underlined that the public's attitude, at least towards social media technology, is commonly un-reflected: "to put it shortly, people's naive confidence in technology is disturbed by short moments of reflection caused by the thematization of technology related problems, respectively risks".

The session concluded with a distributed paper by *Silvia Akter* (East West University, Dhaka, Bangladesh) on "Privacy and Security Issues of Mobile Phones: Perceptions of University Students". Respondents to her surveys showed a significant demand for a strong pro-user regulatory board in government administration: "The study finds that security concerns will be more significant in the coming days than before".

As both the papers and the following discussion showed, the contribution of sociology to the field of technology assessment seems highly relevant worldwide. A dialogue between sociology and technology assessment should not be limited to Europe or the US, but – as the international perspective presented by the papers in this panel showed – is also relevant in other regions of the world. Different perspectives were presented and discussed in the session, reflecting on the contribution of sociology to the question of the function of technology in our societies. It seems there are global patterns of dissemination of technology in the fundamental spheres of social life. But that does not mean that trust has increased. The dissemination of technology in our daily life can happen with the energy systems, or with the health information systems, or even with high-tech engineering experiments, and happens also with the use of mobile communication systems and social media. Although there may be distrust, the perception of risk may not be evident. And this becomes a significant element of discussion about the function of technology in social life, which is also fundamental to understand the role of technology assessment. It may therefore be necessary

to develop this debate in these international sociological fora, where it is possible to confront experiences and approaches of experts from all continents. There have already been TA-related topics (responsible innovation, governance, foresight, risk analysis, the role of institutions, etc.) under discussion. But from now on, TA definitely has a place in ISA and in its world congresses. In particular, the ISA World Congress of Sociology can provide an important forum for this in the RC23 of Sociology of Science and Technology. The next opportunity will be the ISA Forum of Sociology in Vienna in 2016.

Notes

- 1) The session was organised by Antonio Moniz (from ITAS/KIT and UNL), Nuno Boavida (Universidade Nova de Lisboa-UNL, Cesnova/IET), Christina Götz, and Constanze Scherz (both ITAS/KIT).
- 2) Further information on this session can be retrieved at <https://isaconf.confex.com/isaconf/wc2014/webprogram/Symposium192.html>.

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