

## Science communication after the Tohoku earthquake: "bilateral communication" for what?

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In Britain, the BSE scandals from late 1980's to mid 90's created a massive crisis for scientific communities, which was called "a crisis of trust". As a result, British government dramatically changed its policy for science communication; from paternalistic policy making to public engagement, or from public understanding of science (PUS) to bilateral dialogue. In fact, Japan faced a similar crisis in 1995, when Kobe earthquake, Tokyo subway sarin gas attack, and sodium leak at the Monju fast-breeder reactor happened in quick succession. This has created a bilateral-science-communication fad in Japan. For example, Science Council of Japan took a leadership role in starting as many as 22 science cafes at the same time during Science Week in 2006. However, in these cafes, "interactivity" or "bidirectionality" only means "questions welcomed".

The Tohoku earthquake and the subsequent Fukushima nuclear plant accident caused the second crisis of trust for the government and scientists in Japan. And this time, it seems to trigger serious reflection about the whole concept of scientific communication and we can see some noteworthy trend. The 4th Basic Program for Science and Technology which was approved in a Cabinet meeting on 19th August advocates an emphasis on public engagement in scientific policy making.

This situation raises important and fundamental questions: why we need public engagement? what is it that citizens engage in science policy? what is meant by "bidirectionality" of communication? What is the aim of dialogue over scientific matters? what is the point for scientists of such a dialogue? I will try to answer these questions from a viewpoint of philosophy of science.

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