

Introduction: Public Participation in Science and Technology in East Asia

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In the recent history of democracy, East Asian countries have tried vigorously to consolidate their democratic foundation, and to implement new practices of public participations to create strong civil societies. Such efforts extend to the field of science and technology policy-making, which has been dominated by elites and experts, but has now become the touchstone to examine the depth of democratization. This special issue shows how STS scholars from Japan, Taiwan and our Western counterparts approach public participation of science and technology. The three research articles and Brian Wynne's critical commentary collectively demonstrate the diversity of cases, methods and theoretical perspectives in this important field, and we hope this special issue opens up more room for further intellectual adventure.

For the past few years, public participation in science and technology has been a highlight of East Asian STS conferences or workshops, held in Taipei, Seoul, Tokyo, Kobe or Shenyang. Scholars present various cases, from how communities are involved with environmental controversies in Korea, to how labor workers challenge "bad epidemiology" preventing them from asking for health compensation in Taiwan, to how amateur designers create alternative computer games in Japan. The article by Juraku, Suzuki and Sakura in this special issue adds interesting findings to this group of publications, and demonstrates how specific Japanese local contexts lead to particular ways of mobilization toward techno scientific controversy like the sitting of nuclear power plant. Equally impressively, some formalized participatory methods, like consensus conference, citizen jury and deliberative polls, have often been the focus of STS scrutiny, attracting much discussion and debate. Among them, the consensus conference, innovated by the Danish Board of Technology in the

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1980s, has been most enthusiastically adopted by Korea, Japan and Taiwan in the past decade as an important way to democratize science and technology policy-making. Chen and Deng's article in this special issue examines how lay participants interact with experts in two consensus conferences in Taiwan, on surrogate motherhood and prenatal testing, respectively. The diverse but converge links to the efforts to promote consensus conference among the East Asian societies would serve as a showcase to exhibit East Asian STS community's shared agenda as well as dilemma. Therefore, let us briefly tell the story of how the ideas and practices of consensus conference and other deliberative methods travel to and among East Asia, as a window to observe the recent trend and reflection in public participation.

When the ideas and practices of deliberative democracy became mature in 1980s in the Western societies, they developed sophisticated methods of public participation such as consensus conference, scenario workshop, citizen jury, and deliberative polls. South Korea is the first country in East Asia to implement a pilot project of consensus conference in 1998 to discuss safety and ethics of Genetically Modified (GMO) food. In the next year, Professor Hwan-Suk Kim, a sociologist from Kookming University as well as a leading activist of the People's Solidarity for Participatory Democracy, a social movement organization, gained support from the Korean National Commission for UNESCO (KNCU) to organize the second consensus conference. The issue for the conference was on cloning, which was very popular in Korea because of the duplication of a cow by the well-known scientist, Dr. Woo-Suk Hwang (Kim 2002). The KNCU appointed Professor Kim as the project manager of the conference. He had visited the Danish Board of Technology in the early 1990s to learn both the basic principle of deliberative democracy and detailed procedures of different public participation practices, invented by this Danish institution. STS scholars in Korea also promote consensus conference to community level (Lee 2004) and explore other deliberative methods such as citizen jury (Cho 2005).

Also in the 1990s, Dr. Yukio Wakamatsu from Tokyo Denki University also spent his sabbatical leave on the Danish Board of Technology. After he returned to Japan, he organized a group of Japanese scholars, including Prof. Tadashi Kobayashi, to initiate the first consensus conference held at Osaka in 1998 on the issue of genetic therapy (Kobayashi 2004). The financial support came from non-profit organizations. In the following year, the second consensus conference was held in Tokyo to discuss social influence of information technology. However, there was still no support from the Japanese government. Not until 2000 did the first national-level consensus conference on GMO food receive support from the Ministry of Agriculture, Forestry and Fisheries (MAFF). Another regional-level consensus conference on human genome research was organized in 2001 (Kobayashi 2005; Nishizawa 2005). Various new methods, including the science café, have been developed and presented at the 7th East Asian STS conference in Kobe and Osaka in 2007.

In Taiwan, the road to consensus conference came from a governmental reform. In 2000, a group of scholars was organized by the Ministry of Health in Taiwan to work on the National Health Insurance (NHI) reform. One of the crucial issues in the reform project was to expand both the scale and the scope of public participation in NHI decision-making, especially regarding the quality of health services and payment structures. Prof. Dung-sheng Chen, a sociologist from the National Taiwan

University, was invited to lead a team to explore the mechanism for public participation. Together with Prof. Kuo-ming Lin and other scholars, they have experimented with various innovative methods, and the consensus conference on NHI payment, held in 2001, gained a lot of attention. The reform team have also experimented on and invented other models of deliberative public participations, including deliberative polling, civic group forum, and scenario workshop. The research group has later collaborated both with the local community and various levels of government agencies to promote deliberative participatory models, with issues ranging from sky-cab, surrogate motherhood, to air pollution.

Reviewing the brief history of deliberative public participations in East Asia, we first notice that these new democratic practices mainly gain their inspiration from Europe and the US, and particularly Denmark. For example, all the organizers of consensus conference in Korea, Japan and Taiwan coincidentally visited the Danish Board of Technology at different times. Only through the East Asian STS network did these East Asian STS scholars started to turn their gaze from Europe and the US to neighboring countries within East Asia. While consensus conference is the most noticeable model exercised by East Asian societies, STS scholars have explored other innovative participatory methods and even designed some new models that fit in with newly democratic countries (Deng and Wu 2004). The importance of socio-cultural contexts in designing participatory methods has increasingly become our agenda. Juraku, Suzuki and Sakura's article (this issue) echoes such reflection.

Secondly, most of these public participation methods are mainly initiated by university professors, including STS scholars. In the East Asian societies, it is quite common that university professors devote themselves to social reforms, viewing themselves as public intellectuals. Therefore, the association between theory and practice has often been the major concern in the STS community, particularly in the field of techno science and democracy. However, differences of deliberative public participations exist among the East Asian countries. Compared to Taiwan and Japan, South Korea has the strongest foundation of social movements; it is thus not surprising that the initial practice of consensus conference is rallied by activists teaching at universities. In both Japan and Taiwan, intellectual elites have closer ties with governmental agencies in carrying out deliberative public participation than their Korean colleagues. Scholars in East Asian countries not only enthusiastically experiment with various methods, but also evaluate them systematically (Chen and Lin 2006; Kim 2002; Kobayashi 2004; Lin and Chen 2005; Nishizawa 2005). Chen and Deng's article (doi:10.1007/s12280-007-9003-6) joins this evaluation.

Thirdly, the tension between the state and these state-sponsored methods has become an important issue. With a long tradition of the authoritarian state, public policies have been decided by political elites as well as by experts affiliated with the state even after democratization. Since civil societies in East Asian countries are not as strong as those in western ones, and the authoritarian states had dominated the economic, social and cultural subsystems before democratization, new initiatives usually need various kinds of support from the government. Indeed, so far, most of formalized public participation practices are sponsored by various levels of governmental agencies. It already causes some suspicion of impartiality among the public, as implicitly discussed in both Taiwanese and Japanese case studies in this issue. State bodies have often shown reluctance to implement the citizen's conclusion or

assume the deficit model in the first place. Levidow's article (doi:[10.1007/s12280-007-9001-x](https://doi.org/10.1007/s12280-007-9001-x)) analyzes the multi-levels of tension in the state-sponsored public participation in Europe, which could enrich the increasing discussion and reflection among the East Asian STS community on current efforts on participatory models.

Although the East Asian STS scholars have been enthusiastically promoting deliberative public participation and are often optimistic about possible impacts of these practices on both democratic development and democratization of science and technology, they begin to reflect what are the limitations of their deliberative models (e.g., Chen 2006). We believe that Wynne's timely insightful critical commentary in this issue, particularly in the conceptualization of "public participation" and the policy-making frame that implicitly excluding the uninvited participation, will further inspire the East Asian STS community to enlarge their scopes of reflection on deliberative democracy and techno sciecné.

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