

Science Communication in University Education
-Its significance and difficulties in Japanese society-

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- The Science Communication Exercise -

Osaka University Center for the Study of Communication-Design (CSCD) was established on April 2005.

The mission of the center is to design communication systems or methods between the society and university experts or among experts themselves and to practice them.

As a part of the CSCD projects to archive our mission we are planning to provide some courses to promote the capabilities of the science technology communication for graduate students.

Now two courses are finished the test run phase; one is a lecture course and another is an exercise course.

Since April 2006, these two courses will start as regular programs of Osaka University.

The purposes of those courses are mainly

- 1) to awake the introspective viewpoints for their own expertised knowledge, senses of value and frameworks to deal some issues.
- 2) to build up their basic capabilities to communicate with concerning citizens.

In this paper, I report the outline of the exercise course test run finished this May, and discuss the significances and problems of it in the context of Japanese society. For the test run of our exercise course, we recruited about 20 graduate students from different specialties and discussing about scientific issues.

In last course, we chose the BSE (mad cow) issue as main theme.

This 5 days course required two week, and 6 hours for each days.

In this course, the students were working together, as a member of three groups to be divided in consideration of all group's balance of gender, age and specialties.

Through this discussion, they are expected to be aware that difference of their explanation procedures and concepts used for explanations are constrained by each disciplinary framework.

After brief self-introduction for others of their groups, they were given a task to do role-play of NGO concerning the BSE issues.

On the first three days, they were required to study both of scientific and social aspect of the BSE, to make their policy.

After this first three days they had a week for a kind of qualitative research for their families or friends as homework.

On last two days after the research homework, they had to refine their policy, and make a brochure to explain their policy for both of risk management organizations and citizen.

At first, the BSE issue is chosen because of its complexity.

Almost all specialties like biology, chemistry, ethics, and sociology are involved in this problem in some degrees.

This means that many of students can have their own aspect along their specialties.

Moreover, a Japanese government's procedure of the BSE issues revealed one of characteristic points of Japanese culture, which explained why Japanese couldn't deal this kinds of issues well.

The lack of any organizations which take the role of counter policy advocates in deliberative processes is this point that make all discussion in Japan superficial.

- The background of Japanese Science Communication -

First of all, we must understand political and cultural background of Japanese

STS issues.

Same as other countries, people's trust on the Japanese government as a risk management authority had been falling down during 1990s.

On 2003, Japanese government made the Food Safety Commission (FSC) under the direct control of the cabinet office.

The roles of the FSC are the risk assessment (in a scientific manner) and the risk communication with public.

And government insisted on the independence of the FSC from other governmental organizations.

The concept of the independent risk assessment organization, however, seems not to work well in Japan.

Last December, Dr. Kiyotoshi KANEKO (NCNP / National Center of Neurology and Psychiatry), revealed his intention to resign the vice chair of the Prions Experts Committee of the FSC soon after the SFC release final report about the BSE of U.S. beef.

He claimed that the FSC had not been given enough room to discuss the risk of U.S. beef.

Kaneko thought that the FSC was not a Risk Assessment institute but -at best- a scapegoat to receive public anxiety and anger against the governmental decision making process which were accused as insufficient or inadequate.

He also claimed that Japanese citizen and media have a misunderstanding of the risk communication concept, which divides the role of the risk assessments organization and the risk management organization.

The FSC are appointed to be responsible institute on not only the risk assessment but also risk communication, so Kaneko and other experts had been required to be panelists on town meetings dealing the BSE issues with bureaucrats in charge of the risk managements.

On those meetings, Kaneko experienced that all citizen and media did not ask questions on risk management but only question related to the risk management. Finally media concluded that the FSC gave the stating signal to reassume the import of U.S. Beef.

In this case, I could not say that bureaucrat who design this system intentionally make the FSC scapegoat, because essential reasons of this problem are embedded to Japanese culture (too deeply to deal intentionally).

If independency of the Risk Assessment, society should have dialectic structure like figure 2 indicate.

In the other hand, the fact in Japan has been like figure 1 which shows the picture from the citizens.

In this structure, the Risk Assessment organization and the Risk Management organization are clearly have been banded together.

Unless the government insists the independence of the Risk Assessment, many of people cannot find any advance from the old style Advisory Council system, which are fragmenting problems and under control of each ministries.

The public debates must be built between the government and people who have opposite opinions (usually, those opinions must be proposed by Opposition Party, Civil Society Organization/ Non-Profit Organization, Community Organization or Scientific Experts).

Only after this debate, the questions that the Risk Assessment Organization analyzes are elaborated and, then, the Risk Assessment Organization can establish the legitimacy and credibility of independency.

This deliberative process is the necessary condition of the democracy.

For promoting the science communication in Japan, we must solve very weak policy advancing capabilities of opposition parties, NGOs or other civil society organizations.

The lack of the deliberative systems is jeopardizing the legitimacy of the independency of the FSC as the risk assessment institute.

This is not intentional but very structural problem of Japanese society.

So, in our last exercise, students were required to do the role-play of NGOs sector.

They had to assume who their organization's supporters are, think what kinds of policy or information they need or want, and finally conclude what policies they

should advocate.

Their policies are not only appropriate scientifically, but also easily understandable for the people who are assumed as supporters of their virtual organization.

They should be both of actors and evaluators of the science communication.

Many of Japanese (university) scholars claim wrong or irrelevant pictures of science in Japanese media or political discourse.

If, however, they want to adjust or refine those pictures, they must understand how those pictures are made and floated through the society.

Even many of students will not go to NGO sectors, however, if they can evaluate the ability of NGO's science communication and contribute their resource (money or information), it will be very helpful for both of society and scholars themselves.

It is our end of this exercise course that students recognize this win-win relationship of the science communication.

Needless to say, the promotion of the NGO sector as a new human resource market for graduate students is certainly helpful for considerable numbers of graduate students who want to find their job carrier on this sector.

- Conclusion: Lessons form Our Experience –

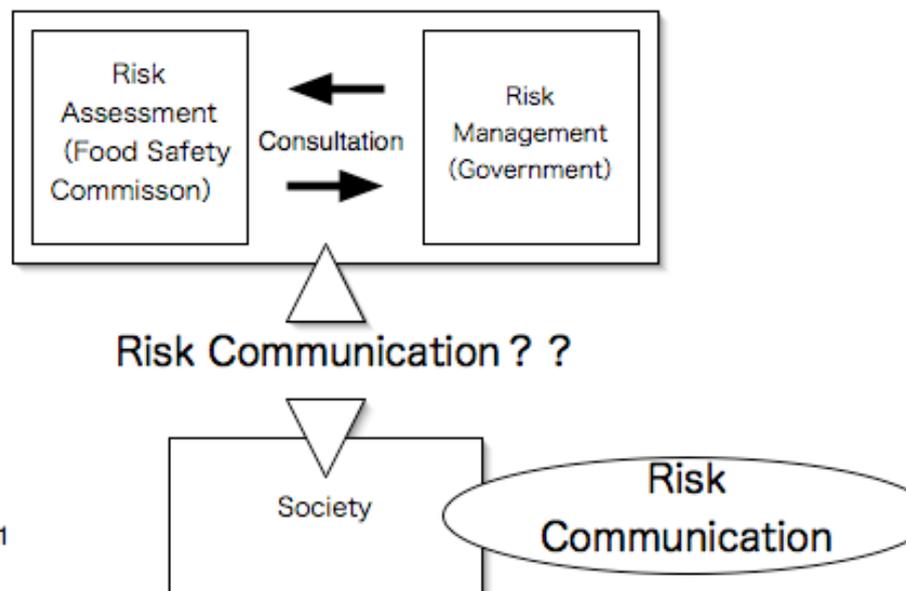


fig. 01

