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Risk Communication and Deliberative Democracy: How Democratic Is Risk Communication?

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Abstract: Since the late 1980s, many risk communication studies have discussed the importance of democratic procedure. Such studies have emphasized the introduction of lay opinions and viewpoints into the policy process rather than technocratic policy making, two-way (interactive) communication rather than one-way one, and mutual understanding or consensus rather than persuading the public to accept the experts' judgments. In short, risk communication studies have required more and more citizen engagement in the policy making process. But despite the emphasis on "democracy," many of these risk communication studies have overlooked the importance of democratic procedure itself, whereas they seem to focus on achieving desirable outcomes by using it in risk communication practice. If democratic risk communication deserves the name of "democracy," how democratic is risk communication? For this reason, this paper aims to find a clue to evaluating risk communication from the standpoint of political philosophy. So, to explain the democratic feature of risk communication, I attempt to compare it with public participation from the perspective of deliberative democracy, which is an emerging concept in political theory and political philosophy. In the second section, I outline the risk communication studies which focused on democracy from the late 1980s to the early 1990s, and the grounds for regarding the democratic model as democratic. In the third section, I discuss the reasons for requiring public participation in risk-related decision making. In the fourth section, I examine the differences between risk communication and public participation. And the final section pursues the possibility of evaluating risk communication from the perspective of deliberative democracy. Whereas this approach is overly speculative, it will provide the meanings of the term "democracy" in risk communication study.

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1. Introduction

One of the most remarkable features of deliberative democracy is its attempt to address the design and the evaluation of public participation in decision making in actual democratic society, without remaining a speculative ideal of democracy. So far, many public participation studies have discussed the importance of public participation in various decision making processes (such

as affairs of local community, health care policy, environmental policy, and so on) from the perspective of deliberative democracy. In this paper, I will discuss the problem of public participation in science and technology policy which includes health and environmental risk, and more specially, that of compatibility among risk communication¹, public participation, and deliberative democracy, or that of raising the issue of risk communication in public participation studies and its democratic legitimacy.

Since Fiorino divided the types of risk communication into “technical model” and “democratic model” (1989), many risk communication studies have discussed the importance of the latter. Such studies have emphasized the introduction of lay opinions and viewpoints into the policy process rather than technocratic policy making, two-way (interactive) communication rather than one-way one, and mutual understanding or consensus rather than persuading the public to accept the experts’ judgments. In short, risk communication studies have required more and more citizen engagement in the policy making process. In this sense, the democratic model is a type of public participation. Likewise, public participation methods in policy making which includes health and environmental risk partially play a role in risk communication². Therefore, risk communication and public participation are closely related.

It is also a fact, however, that they are different. For example, general definitions of public participation articulate the participation of citizens in *decision making itself*, while that of risk communication does not. In sum, risk communication aims to arrive at mutual understanding or consensus, not participation of citizens in *decision making itself*. If this is so, what is the crucial difference between these two types of “democracy”, that is, the democratic model of risk communication, and public participation as a more democratic decision making method? How democratic is risk communication in the first place?

In this paper, I attempt to compare these two types of democracy from the perspective of deliberative democracy. The next section outlines the risk communication studies which focused on democracy from the late 1980s to the early 1990s, and the grounds for regarding the democratic model as democratic. In the third section, I discuss the reasons for requiring public participation in risk-related decision making. In the fourth section, I examine the differences between risk communication and public participation. And the final section pursues the possibility of evaluating risk communication from the perspective of deliberative democracy. The purpose of this paper is not to underestimate or deny the democratic character of risk communication, but to find a clue to evaluating risk communication from the standpoint of political philosophy. Whereas this approach is overly speculative, it will provide the meanings of the term “democracy” in risk communication study.

1 Needless to say, there are several models of risk communication such as decide-announce-defend (DAD), information provision, negotiation, mediation, dialogue, and so on. This paper assumes any types of risk communication in which participants discuss about risk issues.

2 For example, in “consensus conference” and “citizens’ jury” for science and technology issues, which are well known as major public participation methods, participants do not only become informed about scientific knowledge, but repeatedly discuss and cross-examine with experts.

2. Risk Communication and Democracy

2.1. Emphasis on “Democracy” in Risk Communication Studies

The development of risk communication, Leiss argues (1996), can be divided into three phases: Phase I (about 1975–84) which emphasized scientific and quantitative data in risk communication, Phase II (1985–94) which focused on improvement of communication technique for the purpose of persuading the public as the recipients of risk messages, and Phase III (1995–current) which requires socially responsible risk communication. According to him, risk communication based on a scientific and quantitative conception of risk in the Phase I period aroused public distrust of the experts and the institutions. For this reason, risk communication studies had centered on improvement of communication technique for the purpose of persuading the public in the Phase II period. But since this effort alone could not regain public trust, in the Phase III period, risk communication with a focus on social context has been required (*ibid.*, 88–90). References to “democracy” in risk communication studies were just found in the Phase II and III periods. Leiss never mentions “democracy” or the “democratic model,” but his explanation shows that risk communication practice has become, step-by-step, democratic.

Meanwhile, the primary focus of Phase II and III seems to be the search for a risk communication model appropriate for democratic society, as well as the improvement of communication technique. In these periods, many risk communication studies offered alternative models of risk communication appropriate to the decision making process in democratic society, while they regarded conventional risk communication as one-way information provision from experts to non-experts. These two types of risk communication can be divided into a “technical model” and a “democratic one.” According to Fiorino (1989), who first introduced this distinction to risk communication studies, the technical model is one that emerged from natural sciences, statistics, engineering, economics, and epidemiology, and it theorizes that risk messages are scientifically and quantitatively expressed by the experts. Thus the lay public’s concerns about risks are regarded as irrational. On the other hand, the democratic model is one that emerged from sociology, anthropology, political science, and philosophy as a criticism of the technical model, and it “accepts the legitimacy of lay judgments and the social and political values they reflect.” (*ibid.*, 294)

This kind of introduction of democratic value to risk communication studies was one of the features of this field from the late 1980s to the early 1990s³. For example, Plough and Krinsky (1987) offer a “symbolic definition” of risk communication which allows the cultural, social, and political elements of risk, against the conventional definition that “is reductionist, focusing on quantifiable variables” (*ibid.*, 227). There are two features in conventional risk communication, they argue, that “centers on the intentionality of the source of information and the quality of the information,” (*ibid.*, 226) and that “restricts the purview of its study to how “experts” inform about the truth.” (*ibid.*, 227) In short, only scientifically accurate data mean legitimate risk information in the conventional definition, and it is risk communication to convey it from experts

3 For example, Otway (1987) and Laird (1989). These types of study can be found largely in *Risk Analysis* and *Science, technology, and Human Values*.

to non-experts. Thus, the symbolic definition would not be compatible with the conventional one. Plough and Krimsky explain, however, that “cultural rationality,” which focuses on the social context of risk and the democratic process, “seeks technological knowledge and incorporates it within a broader decision framework,” (*ibid.*, 229) whereas “technical rationality,” which supports the conventional definition, denies the cultural one. In this respect, it should be noted that the democratization of risk communication studies in those days did not lie in denying expert judgment or quantitative assessment of risk.

Now, these focuses on democratic risk communication indicate that many researchers have begun to think that risk communication should be established as a political decision making process appropriate to democratic society. Each argument seems to imply, explicitly or implicitly, that lay perceived risks and opinions are incorporated in risk communication practice under the banner of democracy. Next, I review the grounds for making this type of risk communication democratic.

2.2. Legitimacy of Democratic Model of Risk Communication

How is democratic risk communication in the late 1980s and the early 1990s more democratic than the conventional one? In other words, in what respect is it democratically legitimate? This would become clear by comparing the democratic model with the technical one.

According to Rowan, the technical model aims at “informing and persuading.” (Rowan 1994, 399) In short, “others should simply understand and accept experts’ statistical characterization of risks,” (*ibid.*, 393) because only technical risk data refers to true risk information for the proponents of this model. This idea seems to defend the purity of scientific rationality. That is, eliminating any knowledge other than scientific fact provides efficiency in this model. As a result, non-experts have no choice but to accept the experts’ judgments. In contrast, proponents of the democratic model emphasize fair procedure in risk management. They assume that “all parties affected by a given risk should be committed to an extended, searching, and sincere dialogue on how to manage risk justly,” and “since the goal of democratic risk communication is mutual understanding, persuasive efforts to gain agreement are out of place.” (*ibid.*, 400) In this respect, it would appear that “fair participation in the risk-related decision making process” and “expression of free and unconstrained preferences” make this model democratic.

Moreover, what is important here is that democratic risk communication implicitly premises “deliberation” or “discussion” between experts and non-experts, since there is no mutual understanding and consensus without them. But many of the risk communication studies do not consider the importance of democratic procedure itself, whereas they seem to focus on achieving desirable outcomes by using the democratic model. So, the next section deals with the reason why participation of non-experts or citizens in risk-related policy should be required.

3. Risk, Public Participation, and Deliberative Democracy

The argument that it is necessary for risk-related decision making to promote public participation is not new. For example, Shrader-Frechette (1985), who has consistently insisted on the importance of democratic procedure in risk-related policies, gives three reasons for

incorporating citizens in technology-related controversies. First, “such controversies almost always involve health, safety, political, or economic risks to the public.” Second, “the procedure of having scientist-judges...would involve the public at so late a date that its concerns might not be heeded.” Third, the citizen’s engagement with technology-related controversies “would place the burden of proof on those who did not wish to guarantee the democratic process.” (*ibid.*, 299) If this engagement of citizens in risk-related issues involves deliberation between scientists and citizens, then deliberative democracy is useful to evaluate the democratic implications of such procedures.

As many theorists have defined it (e.g. Bohman and Rehg 1997, ix; Elster 1998, 8; Fishkin 2002, 221), deliberative democracy refers to the democratic theory or practice which attempts to promote participation of citizens in policy making through free deliberation among equal citizens. A limitation of representative democracy is behind the development of this concept. Researchers at IPPR (Institute for Public Policy Research), a think-tank which introduced a citizens’ jury to the United Kingdom, indicates that “[t]he structure of representative government supports and reinforces the idea of *passive citizen*.” (Stewart *et al.*, 2) In representative democracy, ordinary citizens participate in politics by voting in elections. But in fact they have no opportunity to participate in any decision making which affects them. For this reason, proponents of deliberative democracy have defended and evaluated citizen’s participation in public policy, such as health care policy and environmental policy (e.g. Smith 2003; Gutmann and Thompson 2004, ch4.).

And now, these concerns with the passive citizen and separating citizens from public policy may be just as valid for risk-related policy. Namely, specialization of risk management in which scientific knowledge is privileged results in public concerns about risks being regarded as irrational and democratic procedure being ignored. It can be assumed that deliberative democratic theory is applicable to risk communication study, because it may promote deliberation among decision makers, experts, stakeholders, and citizens, and defend risk communication as democratic procedure. Nonetheless, it should be noted that risk communication differs from public participation, to which corresponds the idea of deliberative democracy. So, in the next section, I will examine the differences between risk communication and public participation.

4. Differences between Risk Communication and Deliberative Democracy

Needless to say, risk communication is one form of public participation, in that citizens participate in the decision making process. Moreover, it is also a fact that public participation in decision making which involves health or environmental risk partially plays the role of risk communication. Nonetheless, risk communication differs from public participation. In this section, I discuss the differences between them.

4.1. Difference of the Definitions

The difference between the definitions of risk communication and public participation allows us to know the essential difference between them. First, what is common in the definitions of public participation is that citizens participate in *decision making itself*, not that they

participate in some processes of decision making. For example, Renn *et al.* (1996) define public participation as “...forums for exchange that are organized for the purpose of facilitating communication between government, citizens, stakeholders and interest groups, and businesses regarding a specific decision or problem.” (2) Many theorists and institutions provide similar definitions of public participation (e.g. Beierle and Cayford 2002, 6; Stoker 1997, 157; U. S. DOE 1995). In sum, public participation refers, by definition, to the citizen’s participation in final decision making.

On the other hand, what is common in the definitions of risk communication is that risk communication is the exchange of information and opinion. This feature can be found in any definition of risk communication (NRC 1989, 21; Covello 1992, 359; Leiss 1996, 86; FAO/WTO 1997). Unlike public participation, definitions of risk communication do not require any participation of citizens in final decision making.

Thus, definitions of public participation commonly highlight the degree that citizens engage in decision making, whereas that of risk communication emphasizes the mutuality of information flows. Moreover, this difference is crucial from the point of view of deliberative democracy. This is because, according to the proponents of deliberative democracy, it is legitimate to the extent that outcomes emerge from free deliberation among equal citizens, i.e. citizens participate in final decision making (Cohen 1989, 22; Benhabib 1994, 26). In this respect, it might be said that deliberative democracy corresponds to public participation, rather than risk communication.

4.2. An Issue on Citizenship

There is another difference between public participation and risk communication. This is an issue on citizenship. That is, there is no reference to the “citizen” in the definitions of risk communication, whereas public participation (or citizen participation) is literally “the participation of citizens.” It is not clear who participates in risk communication (citizens, publics, individuals, or consumers?). This ambiguity of participants is problematic for risk communication, because it may divide risk-related policy into “politics” and “market.”

Now, Sagoff’s distinction between “citizen” and “consumer” is useful in this regard, since they represent the distinction between “politics” and “market.” He argues that “[a]s a *citizen*, I am concerned with the public interest, rather than my own interest; with the good of the community, rather than simply the well-being of my family.” Conversely, “[i]n my role as a *consumer*, I concern myself with personal or self-regarding wants and interests; I pursue the goals I have as an individual.” (Sagoff 1988, 8) This means that “my preference as a citizen” is not consistent with “my preference as a consumer,” and that I, “as a citizen,” should prioritize other-regarding preferences over self-regarding ones in the case of political decision. If this is so, then risk communication, which by definition does not require the participants as citizen, may allow them to express self-regarding preferences as consumer. This is wrong, however, because public policy that involves health and environmental risk and thus requires risk communication would have impact on not only my own interests but on other’s interests as well. Therefore, if the democratic model of risk communication is to be worthy of being called “democracy,” the participants of risk communication, “as citizen”, should take into account the common good or other-regarding preferences rather than just self-regarding ones.

5. From Democratic model to Deliberative Model of Risk Communication

Given the difference between public participation and risk communication as mentioned above, proponents of deliberative democracy may not support the latter, since it guarantees neither the engagement of citizens in final decision making nor the participants as citizen in it. But there are four reasons why it is inappropriate to completely separate risk communication from deliberative democracy.

First, definitions of democratic risk communication premise the deliberation among participants for the purpose of mutual understanding or consensus, by incorporating phrases like “exchange of information and opinion about risks among participants” into them. Second, deliberative public participation in risk-related policy partially plays the role of risk communication practice in this process. Third, democratic risk communication requires citizen’s other-regarding preferences rather than consumer’s self-regarding ones. These reasons have already been discussed above. And last, as Hunold and Young argue (1998), “discussions of distributive equity cannot answer who has and ought to have the right to make decisions, and according to what procedures.” (85) Indeed, inequalities of benefits and risks derived from a policy (e.g. hazardous plant, BSE, pesticide residue, GM crops, and so on) are of ethical concern. But it is also an important ethical issue to examine how affected people should participate in such policies. In sum, ethics needs to address the fairness of opportunity to participate in the risk-related decision making process, as well as that of the distribution of the risks and benefits.

Nonetheless, even though these reasons justify the application of deliberative democratic theory to risk communication study, one cannot ignore the differences between public participation and risk communication. Despite this, is it possible to say that deliberative democracy supports not only public participation but also risk communication? To answer this question, let me focus on the democratic function of *deliberation itself*, which is absolutely common to them.

Deliberation does not merely refer to participation of citizens in policy making discussion. Rather, for proponents of deliberative democracy, deliberation itself is an activity of democracy, because “citizen’s rights to freedom of speech and association can be upheld through reference to the idea of deliberation itself.” (Drysek 2000, 172) In this respect, if risk communication ensures the free deliberation among equal participants, it is democratic. What should be noted here, however, is that there are two types of explanations of deliberation itself. Namely, one is the deliberation as outcome of discussion and the other is the deliberation as procedure of discussion. On the one hand, the former defines deliberation as “decision-making by means of arguments” (Elster 1998, 8) or as “discussion that involves judicious argument, critical listening, and earnest decision making.” (Gustile 2000, 22) On the other, the latter defines deliberation as “a dialogical process of exchanging reasons for the purpose of resolving problematic situations that cannot be settled without interpersonal coordination and cooperation,” (Bohman 1996, 27), or as ““a conversation whereby individuals speak and listen sequentially” before making a collective decision.” (Gambetta 1998, 19)

Now, the latter explanation of deliberation seems to correspond to “the exchange of information and opinion about risk among participants” in democratic risk communication. Moreover,

despite requiring deliberation before making a decision, it emphasizes the importance of deliberation itself among those who are in different positions, rather than the participation of citizens in final decision making. In this sense, deliberation makes risk communication democratically legitimate, without violating its definition (i.e. interactive exchange of opinion and information about risks) and its goal (i.e. mutual understanding or consensus). Likewise, such risk communication satisfies the condition of democratic legitimacy in deliberative democratic theory, that is, free and unconstrained deliberation among equals. Therefore, it is possible to say that risk communication is democratic from the perspective of deliberative democracy, to the extent that risk communication refers to free and unconstrained deliberation in which equal participants exchange their own opinions and information about risks before making a decision about risk-related policy.

6. Conclusions

In this paper, I have discussed the possibility of evaluating risk communication from the perspective of deliberative democracy. The reason why risk communication should be examined from the standpoint of political philosophy is that its meaning of democracy has been underestimated. As mentioned above, if it is possible to apply deliberative democratic theory to risk communication study, democratic risk communication can be considered as democratic to the extent that it premises deliberation. In this respect, risk communication needs to be regarded as one form of democratic public participation. Moreover, such risk communication will require the concept of “citizenship,” because a public policy that involves health and environmental risk and thus requires risk communication may have impact on not only my own interests but other’s interests as well. If this is so, “the task of citizenship is to rise above self-interest and take seriously the nature of the common good.” (Fishkin and Ackerman 2003, 21) For this reason, democratic risk communication must refer to a public participation in which its participants are asked to express not self-regarding but other-regarding preference about risks. As Gutmann and Thompson argue, “greater participation not only gives more citizens the chance to enjoy the benefits of taking part in deliberation, it also can help develop the virtues of citizenship, encouraging citizens to consider political issues in a more public-spirited mode.” (2004, 30) Risk communication is genuinely democratic insofar as it promotes the function of citizenship.

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