Environmental problems, such as global warming, destruction of natural landscape, and species extinction, have attracted primary concerns in contemporary societies. When considering public policies that affect natural environment, however, people often hold opposing opinions. How can we reconcile these debates and make people accept the policies which are favorable to the environment? I think that deliberative democracy can answer these problems appropriately.

The aim of this paper is to investigate the application of deliberative democracy to environmental issues. I begin by exploring the sources of environmental policy debates and typical response of liberal democracy. Then, I will point out several mistakes of this response. In the second section, I will examine the main features of deliberation which proposed by deliberative democracy, and then analyze effects of deliberation. In the third section, I will discuss the design of a particular deliberative institution – deliberative polling, and examine how ideals of deliberative democracy can be applied to actual environmental issues. I will argue that deliberative democracy could, both in theory and in practice, make a great contribution to environmental protection. In the end of the paper, I will discuss the limits of public deliberation.

I. Environmental Problems and Democratic Response

In recent years, many countries often face with serious debates when they propose environment-related policies, such as projects of land development and public constructions. Before exploring the solutions of environmental policy debates, we must survey the sources of these debates.

1. The sources of environmental policy debates

There are two important sources of environmental policy debates. The first is ‘value conflict’. There are various values associated with sustainable development of the environment. These values include resource, amenity, aesthetic, historical, spiritual, and cultural values of natural environment, as well as potential scientific and medical values of the diversity of species. The conflicts between these values and the value of economic growth are frequently occurred. In Taiwan, for instance, there are serious debates about the issue of ‘whether the government should build Suao-Hualien highway’. This highway, which

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links the underdeveloped part of eastern Taiwan to the more populous part of northern Taiwan, is expected to create large economic benefit of tourism and transportation and to improve local development. However, building this highway may cause damages to natural landscapes and habitats of local species. In cases like this, economic values and environmental values are doomed to be in conflict. Maximizing one seems to be at the expense of the other.

The second source of debates is the complexity of environmental problems. Environmental policies often refer to various special knowledge, such as economics, ecology, engineering, and so on. The mass public cannot fully grasp related knowledge and information of such complicated problems. Some environmentalists thus argue that environmental policies cannot be decided by ill-informed citizens and should be decided by experts of environmental sciences (Hayward, 1995: 216). However, I do not think that it is the best way to make policy decisions, because experts often hold contrary opinions and divergent judgments on the controversial issue. Moreover, policies decided only by experts are difficult to be enforced when lacking of citizens’ participation and approval. What can we do in the face of such difficult position? I begin by discussing the typical solution of liberal democracy.

2. Response of the aggregative conception of democracy

Democracy implies that “collective decision making with the participation of all who will be affected by the decision or their representatives.” On the theoretical level, the concept of democracy emphasizes ideals of the self-government and political equality of the citizens. On the practical level, it appeals to a fair procedure of voting and makes decisions according to majority rule. In representative democracy, legislative representatives make policies according to majority’s inclinations. In many policy debates, the government may even consult the mass public directly by plebiscite. Regardless of different forms, voting is a popular method to reconcile the debates in democratic countries.

But in the secret ballot, which nearly all democratic elections adopt, citizens or their representatives do not need to justify their positions. They may easily tend to treat the vote as an instrument of satisfying their self-interests. Democratic decision-making procedures will thus become only a mechanism for aggregating individuals’ interests and preferences over alternative policy options. This approach is called the aggregative conception of democracy.

Behind the aggregative conception of democracy is, I believe, the liberal commitment to respect individual liberty and their conceptions of the good. Thus, in policy-making process, a government should consider every citizen’s preferences seriously and make decisions based

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on the aggregation of these preferences. According to the aggregative conception, individual preferences are taken as fixed, and the major task of the government is to find policies which satisfy the greatest number of people. Thus, voting, opinion polling, and cost-benefit analysis\(^4\) play important roles in environmental policy-making processes.

3. What’s wrong with the aggregation of preferences?
   
The first problem with the aggregative conception of democracy is that people’s preferences about policy options may be irrational, or grounded on insufficient information. Samuel Freeman argues that the assumption underlying the aggregative conception is “the identification of a person’s good with his or her revealed preferences or occurrent desires.”\(^5\) But there is no guarantee that people’s preferences are based on full information and rational choice. In fact, most citizens suffer from what Anthony Downs called the ‘rational ignorance’. Many social science researches discover that voters are poor in knowledge about the policies in question, and they also lack of the incentives for acquiring information. Most people feel that they must spend a lot of time and energy to become well-informed, while “his or her individual vote or opinion will not make much difference to policy outcomes, so there is little reason to make the effort to become more informed.”\(^6\) It is therefore rational for them to keep politically ignorant and apathetic.

   However, taking preferences grounded on insufficient information and ill-considered judgment as the basis of policy-making is much likely to produce terrible outcomes, especially in environmental issues. When considering public policies regarding the environment, most people tend to privilege economic interests over environmental considerations. They do not willing to sacrifice economic interests for environmental protection. Even if they take environmental values into account, they only consider instrumental values. Moreover, people usually do not consider interests of future generations seriously. As a consequence, the aggregative conception of democracy easily leads to shortsighted policies at the cost of long-term environmental protection.

   Second, advocates of the aggregative conception misunderstand the nature of human preferences. Cass R. Sunstein argues that human preferences are not fixed and stable, but are influenced by legal rules, measures of government, and many other factors. For example, governmental reward measures of beautifying environment may induce people to generate new preferences or attitudes toward the environment. Such preferences or attitudes may increase people’s satisfaction and welfare. Therefore, “a system that takes existing private

\(^4\) Cost-benefit analysis is an appraisal technique which has been used to compare economic costs and benefits of proposed policies or programs. Smith claims that cost-benefit analysis realizes two principles: (1) public decisions should be based on the aggregation of individuals’ preferences; (2) the principle of distributional or economic efficiency. See Smith, 2003: 29.


preferences as the basis for political choice will sacrifice important opportunities for social improvement."\(^7\)

Third, the aggregative conception is based on the role confusion. Bruce Ackerman and James S. Fishkin argue that there is a big difference between role of the consumer and of the citizen. When we choose among competing products, we can make decision solely based on our preferences. For example, no one can condemn that I choose Apple rather than Nokia when I bought a cellular phone. Choosing policies, however, is not an act of consumption, “but a collective act of power – one that will profoundly shape the fate of millions of our fellow citizens, and billions more throughout the world.”\(^8\) Thus, making policy decisions based on private preferences is irresponsible. We should behave like citizens and consider public interests seriously.

### II. Deliberative Democracy and Public Deliberation

Deliberative democracy emerged in response to difficulties of the aggregative conception of democracy. In contrast with the latter which values the fair procedure of voting, deliberative democracy pays much attention to the process of public deliberation before voting. In my opinion, the key to understanding deliberative democracy is exact the idea of deliberation.

#### 1. What is deliberation?

Although different theorists of deliberative democracy have different detailed claims, most, if not all, of them agree to three points of deliberation. First of all, deliberation is not just thinking and information exchange. It must be doing so for public interests. I call this ‘the constraint of public interests.’ As Freeman argues, what distinguishes deliberative conception from aggregative conception is not that the former involves thinking and discussion while the later does not. The aggregative conception also encourages people to think over carefully and to discuss with others. The relevant distinction between two conceptions relates to the objects which citizens think about (Freeman, 2000: 377). According to the aggregative conception, people think about private preferences and choose policy which maximize self-interest or group interests. This kind of thinking and decision thus can only be called prudence. On the other hand, according to the deliberative conception, people think about public interests. Only this kind of thinking can be deliberation.

Second, the idea of deliberation implies that “decision making by means of arguments offered by and to participants” (Elster, 1998a: 8). That is, it emphasizes the importance of argumentation and reason-giving. Citizens or their representatives should not appeal to force

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or political power when they confront with a policy debate. Instead, they should give reasons to justify their positions, and then make decisions according to the pros and cons of these reasons. More importantly, public deliberation requires that we should give reciprocal reasons. I call this ‘the constraint of reciprocity.’ A reason is reciprocal in the sense that it can be accepted by those who have different interests and opinions. J. Cohen suggests that, “[I]n an idealized deliberative setting, it will not do simply to advance reasons that one takes to be true or compelling: such considerations may be rejected by others who are themselves reasonable. One must instead find reasons that are compelling to others …” (Cohen, 1996: 100) If we want to convince others, we must consider not only our private interests but also others’ interests. In other words, we should abstain from narrow self-interest and appeal to widely shared considerations. Advocates of deliberative democracy believe that “the participants would tend to be more other-regarding in their outlook” through the process of giving reciprocal reasons (Ibid., 113).

It may be objected that these two constraints depart from an important fact of human nature, i.e. everyone wants to maximize his or her self-interest. Why are people willing to consider public interests and give reciprocal reasons to justify their positions? In reply to this question, advocates of deliberative democracy suggest that everyone is free and equal and has different interests. It is for this reason that no one can claim that his or her interests should have a higher priority. If we want to cooperate fairly and live peacefully with others, we should look for policies which others can reasonably accept. Therefore, we must conform to constraints of deliberation when we deliberate on public policies.

Third, deliberation must be public, i.e. “the deliberation itself must take place in public, not merely in the privacy of one’s mind.” To be more exact, citizens must give reasons and discuss with others in public forums, which is an open space that can involves anyone who wants to participate. I call this ‘the constraint of publicity.’ According to the openness of public forum, discussions about political issues between friends or members of associations are not deliberation, even if they occur in public places.

It is worth to notice that the third constraint has close connection with the first one. When citizens deliberate in public forums, they disincline to adopt private considerations in order to avoid accusations of selfish or narrow-minded. As Jon Elster argued, “the presence of a public makes it especially hard to appear motivated merely by self-interest. … Publicity does not eliminate base motives, but forces or induces speakers to hide them.” Given the constraint of publicity, citizens have to justify their positions by considerations of public

10 John Rawls claims that discussions between friends or members of associations belong to what he called ‘the background culture,’ in which people can appeal to personal or nonreciprocal considerations to discuss with others. See John Rawls, Political Liberalism (New York: Columbia University Press, 1993): 215-216.
2. Effects of public deliberation

Advocates of deliberative democracy argue that public deliberation raises the possibility of emergence of good collective decisions. There are at least two reasons to justify this claim. First, public deliberation has a brainstorming effect, which could improve our limited capacities and fallible judgments. James D. Fearon argues that public deliberation is ‘additively valuable’ in the sense that someone might offer a perspective that had not occurred to others. It is also ‘multiplicatively valuable’ in the sense that participants might figure out new perspectives that had not occurred to any of them. These two functions constitute the brainstorming effect which makes public deliberation less likely to produce ill-informed outcomes, and can thus response appropriately to the second source of environmental policy debates, i.e. lacking of full information of complicated environmental problems.

Second, public deliberation has a transformative effect. It can transform individuals’ preferences from private interests to public interests. It is a distinguishing characteristic of deliberative democracy that “democracy revolves around the transformation rather than simply the aggregation of preferences” (Elster, 1998a: 1). Advocates of deliberative democracy contend that preferences are transformable: the process of deliberation with its three constraints may force or induce people to revise existing preferences. To be sure, it is impossible to transform people’s preferences altogether through public deliberation. The point is that, “… the very process of engaging in extended dialogue about shared public problems will produce a greater susceptibility to the public interest – or at least to considerations beyond narrow, short-term self-interest or immediate personal gratification” (Ackerman and Fishkin, 2003: 22). The transformative effect thus makes public deliberation less likely to produce self-interested outcomes. We must admit that it is impossible to solve the first source of debates, i.e. value conflict, completely. However, as long as people become more willing to consider public interests, there will be a great progress in quality of public deliberation.

Because of these two effects, deliberative democracy has received considerable supports by environmentalists. Environmentalists generally believe that public deliberation “will enable citizens to learn from each other and to find interests such as environmental ones that are general to all.” As a consequence, citizens tend to arrive at decisions which are conducive to environmental protection.

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13 Hayward also notes that environmentalists who adopt an anthropocentric perspective and those who adopt an ecocentric perspective both support for active citizen participation, even though their reasons are different. See Hayward, 1995: 220-221.
III. From Theory to Practice: Deliberative Institutions

The aforementioned analysis indicates that deliberative democracy is theoretically desirable. Here, we want to ask: is it feasible in practice? It is said that a major failing of deliberative democracy is that “it generally remains a highly abstract and theoretical endeavour – that it fails to systematically engage in the ‘messy’ and more detailed task of institutional design” (Smith, 2003: 79). To solve this difficulty, many advocates of deliberative democracy have developed various deliberative institutions in the past two decades. Such institutional innovations include deliberative polling, citizens’ juries, planning cells, consensus conferences, and so on. I take Fishkin’s deliberative polling as an example to demonstrate the viability of deliberative democracy.

Deliberative polling is a particular form of public forums. It uses the method of random sampling to select participants to ensure statistical representation of the population and a diversity of views. Participants are gathered together in a meeting place to discuss public issues. They fill out pre-deliberation questionnaire about the issue in question. Then, they receive balanced background materials and exchange opinions in small groups (each group includes approximately fifteen members). In the process of discussion, a trained moderator creates an atmosphere of rational discussion and encourages participants to express their perspectives and to listen to others’ views seriously. After small group discussions, participants can ask questions to a panel of experts in larger plenary sessions. They complete the same questionnaire after the process of deliberation. The results and edited proceedings of discussions will be broadcast through Internet and media coverage.15

Deliberative polling has been used on many environmental issues. The results of application indicate that participants’ opinions have a dramatically change, and their decisions become more well-informed and conducive to environmental protection. For example, Texas has been held three times of deliberative polling to deliberate on the regulation of electric utility. Participants were asked to make the ‘first choice’ among four options of providing electric power: (a) using more renewable energy (e.g. wind and solar power); (b) building more fossil fuel (e.g. gas or coal) plants; (c) investing in conservation to limit the need for power; or (d) buying and transporting energy from the service territory outside. The pre-deliberation questionnaire shows that a majority of participates choose renewable energy. At the end of the deliberative polling, majority support energy conservation (in three times of deliberative polling, support percentage rose from 11 to 46 percent, from 7 to 31 percent, and from 16 to 50 percent). An explanation for this change is that participants learned the complexities of wind and solar power as the principal power supply. Moreover, there are above 80 percent of participates expressed that they are willing to pay extra money for such conservation measures (Ackerman and Fishkin, 2003: 22; Fishkin, 1997: 200-203). This result

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means that people become more willing to make modest sacrifices of self-interest for environmental protection after deliberation.

The results of application also indicate that the experience of public deliberation can help people to overcome rational ignorance and political apathy. Participants become more willing to learn new information and different perspectives, because they feel themselves have real voices in the process of deliberation. Many participants expressed that they are interested in participating follow-up meetings to know further information. In a deliberative polling held in New Haven in 2002, the organizers had anticipated that 250 residents attending, but only 133 individuals actually turned up. The deliberative activity was very successful and its results were broadcasted through mass media. In another deliberative polling held in two years later, there are 242 individuals turned up. These results of application show that, ideals of deliberative democracy can be institutionalized – it is not utopian.

IV. The Limits of Public Deliberation

Although public deliberation has many merits, it has limits as well. I will briefly discuss three of them. The first limit is that public deliberation cannot ensure producing a consensus, especially for the highly controversial issues (like environmental problems). We still need voting (by all citizens or their representatives) to make decisions in cases that consensus cannot be reached after deliberation. However, I think that it is not a shortcoming peculiar to deliberative democracy. There is no theory of democracy or institutional designs can guarantee to reach a consensus. Although we still need voting to make final decisions, as Peter Levine states, “there is a world of difference between a vote that follows rich deliberation and one in which people simply register their ‘raw’ opinions.”

Another limit of public deliberation is that it cannot guarantee the quality and policy impact of outcome of deliberation. The outcomes of deliberation may be unfavorable to the environment. In Australia, for example, Tasmania’s Glenorchy City Council established a local organization of environmental deliberation – Waste Management Task Force (WMTF) in 2001. It invited Glenorchy citizens to attend regular meetings to deliberate on waste issues. Unexpectedly, after a series of collective deliberation, the suggestion of WMFT is: not to introduce green waste collection service and not to ban backyard burning (Zwart, 2007: 495-497). This may due to the problems of institutional designs: some factors which can bring

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17 In addition to the merits which we mentioned earlier, deliberation has other merits, such as promoting the development of local party organizations, increasing the practical involvement of local elites, and encouraging more continuing conversation and reflection about the issues in question. See Ackerman and Fishkin, 2003: 24-26.

about favorable environmental outcomes did not present in Glenorchy case. These factors include: the careful framing of the issues, the use of consensus building techniques, and participants' ability and willingness to deliberate about and supporting good environmental policies (Ibid., 498-504). However, even if we were able to overcome these problems, we cannot ensure policy impact of deliberation. This is mainly due to the fact that deliberative activities are generally held by civic organizations which lack of political power, the government and legislators may ignore outcomes of deliberation. In order to increase the policy impact of deliberation, advocates of deliberative democracy claim that we should generate social pressures through extensive media coverage (Levine, Fung and Gastil, 2005: 277-278). But I think that this strategy only has a short-term effect, and we should figure out other more effective strategies.

The third limit is that public deliberation cannot deal with cross-national issues properly. To date, deliberative institutions, such as deliberative polling and consensus conference, have been used at local and national level. However, whether they can be used at international level is far from obvious. This is a serious problem for deliberation of environmental issues, because many environmental problems (such as air pollution and global warming) have cross-border effects. The solutions thus depend on decisions and actions of every country. Therefore, designing cross-national deliberative innovations to deal with global environmental problems is still a severe challenge for deliberative democracy.

V. Conclusion

According to the analysis of this paper, we can see that advocates of deliberative democracy have achieved an important result in politics: allowing public deliberation for citizens on all political issues. The idea of public deliberation emphasizes getting good and full information, exchanging and criticizing different perspectives rationally, and making decisions accordingly. The result indicates that citizens are indeed capable of deliberating complicated nature regarding environmental issues. And if the procedures are fully justified as well as implemented, the decisions of citizens are usually conducive to environmental protection.

This result has a particular significance in East Asia as deliberative democracy has been received a great deal of attention among sociologists, philosophers, and political scientists recently. As we know, several deliberative activities have been held in the region already. In Taiwan, for instance, the idea of deliberative democracy is put forward in the form of consensus conferences with success up to some extent for the country on the policy of national health insurance and other issues. We all know this is only the beginning of a long journey which, if implemented correctly, a more prosperous future would likely to be imminent.
References


