Introducing A Framework For Evaluating The Quality Of Methods To Facilitate Participatory Assessments

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Abstract

This paper discusses a framework to assess the quality of participatory methods (e.g. Consensus Conference, Interactive Backcasting, Policy Delphi) to facilitate participatory assessments on complex and controversial issues.

To be able to structure a complex or controversial problem, knowledge should be produced. This means that any knowledge, indifferent whose knowledge, should be communicated and understood. This requires articulation, confrontation and evaluation of (rival) points of view, and hence, an open dialogue.

Methods have been developed to address mechanisms that obstruct an open dialogue. We refer to these mechanisms as *biases*. A bias is a distortion in the evaluation of another participant's input in the dialogue. We present an evaluation framework that is based on three biases. The *bias of source* concerns all distortions in the evaluation of another person's input that occur as a consequence of the (perceived) characteristics of that person. The *bias of phrasing* concerns distortions induced by the way the message is being phrased. The *bias of attitude* means that the evaluation of input is distorted because it is, or is not, in line with the attitude of the person who evaluates.

We will illustrate this framework by explaining how methods may address the biases.

1. The quality issue in participatory assessments

This paper discusses a framework to assess the quality of methods that are used to facilitate dialogue on complex and controversial issues. In policy areas such as health, education, agriculture, technology, physical and urban planning, water management and environment, participatory planning and evaluation have become fashionable. Regardless of the issue at hand, participatory planning and evaluation or, to put it broadly, *participatory assessments*, have in common some sort of dialogue between (formal) decision-makers and policy stakeholders. Decision-makers in the dialogue processes are mostly policy makers from agencies at different levels of government (local, national and EU) including civil servants or elected officials. The concept of stakeholders refers to three group categories, i.e. representatives of private sector companies, interest groups and NGOs, representatives of the general public (attentive citizens), and scientific experts from universities and other research institutes.

The rationale behind dialogue has been formulated in different ways. Some point to the classical democratic ideal of deliberative democracy (Laird, 1993; Bohman, 1996; Fischer, 2000). Important in this conception of participation are the notions derived from Rousseau that citizens have a right to directly take part in decision-making rather than being represented and that their view should be based on an

open argument on what is best for the common good rather than on partiality and self-interest. In this view, which has been elaborated most clearly by Pateman (1979), participants are open to consider alternatives rather than negotiating fixed positions. To use one of Diesing's (1962) distinctions, this view on participation is based on social instead of economic rationality, i.e. searching and exploring rather than maximizing utility. As such, it has often been linked to the concept of *empowerment*, the idea that participation gives a voice to those who were hitherto not heard (seeFlorin & Wandersman, 1990; Price, 1990).

A quite different view on participation relates to conflict management and (multi level) governance. Participation, it is believed, may help people accept policies and thereby foster implementation (Kasemir, Jaeger, & Jäger, 2003). Even if stakeholders disagree with a final decision, they may accept it as legitimate. After all, they better understand the arguments behind it and are likely to consider the decision procedure as just. In this view, participation is considered a right for people and groups to defend their legitimate interests, but at the same time – and for the benefit of all – the right to decide is in the hands of a few. In complex and highly controversial issues, where problem solving requires the commitment of many and where legal procedures (litigation or enforcement) are weak or inefficient, *co-production* is the preferred alternative (Susskind & Elliot, 1984). Co-production requires consensus building among parties with highly divergent values and, not seldom, conflicting views with respect to 'the facts' as well.

To clarify the authors' position, this paper does not take sides with either the 'empowerment' or 'managerial' view on participation. Instead, we focus on a notion, which, in a sense, overlaps these. Most theories that advocate participation share the notion that it contributes to learning. This happens, because listening and talking to one another provides people with new ideas on the reality at stake, the values relevant for others and themselves and options for problem solving.

Learning through interaction with others goes beyond the transfer and sharing of knowledge. The claim is that, once the process is successful, new knowledge is produced and used as well (Argyris & Schön, 1978; Fischer, 1995). Learning requires the articulation and evaluation of different points of view, including competing knowledge claims. It is the peaceful confrontation between conflicting views, which makes a participatory approach a rational one (political rationality cf: Diesing, 1962; , also Lindblom, 1965). Therefore, the main criterion to measure the quality of participatory decision-making in general and participatory assessments in particular, is to what extent the dialogue has been really open. An open dialogue must be able to structure the problems at stake, that is to articulate, confront and where possible integrate rival views with respect to the problem and its solution alternatives (Hisschemöller & Hoppe, 2001).

Our view reflects the empowerment conception of participation whereas we claim that, for the success of an open dialogue, options and views in the margins or even outside the dominant social systems of knowledge (Dunn, Holzner, Shahidullah, & Hegedus, 1987; Dunn & Holzner, 1988; Holzner, 1986) must be included in the evaluation. Our view on participation is managerial as well, because we consider participation a prerequisite for informed decision-making on complex and controversial issues. Marginal notions have a higher information value than those at the heart of the knowledge system, because they challenge dominant knowledge claims (Dunn, 2001).

2. The issue of method

The issue of method to support participatory assessments appears to be much more controversial than the issues related to participatory discourse. Participatory methods, as the term is used here, have in common that they prescribe a more or less precisely defined procedure, or specific steps, tools or techniques, to facilitate a stakeholder dialogue on a social issue (e.g. Interactive Backcasting, Dialectical Approach, Repertory Grid, Policy Delphi, Consensus Conference). Such methods can be distinguished from regular social science evaluation methods in two ways. Firstly, rather than helping scientists to analyze social issues they assist groups of stakeholders to perform the analysis (with the assistance of scientific inquiry). Secondly, even though we would like to see it differently, the procedures are often loosely defined.

The idea that participatory methods must be defined by precise tools and procedures is certainly not commonly accepted. From a managerial position it can be argued that bringing people together to discuss solutions for problems belongs to the core business of policy rather than science. An argument drawing upon the empowerment view is that voluntary action by citizens must not be hampered by (too much of) structure. From the standpoint of scientists, especially in the fields of natural sciences and economics, it might be put forward that participatory evaluation is not a scientific exercise and methods do not stand the test of scientific rigor (Engels, 2002). So there is a widespread belief that dialogue processes are to a large extent determined by contingencies, the impact of methods on the actual performance being negligible. The ambition of methods must be restricted to structuring the process and providing an entertaining atmosphere.

However, without denying the lack of comprehensive knowledge in the social sciences as regards the quality issue of participatory methods, we claim that much more ambition is needed. As we know from repeated observations, open dialogues do not just occur once stakeholders have accepted an invitation to participate. Instead, there are observable mechanisms that prevent people from listening and talking with one another. No one enters a dialogue without assumptions and expectations. Together with the actual stakeholders, real social relations such as power, culture, race or gender enter the dialogue space. The way this becomes reflected in a dialogue may differ across nations, but as a general mechanism in a group setting people are predisposed to resist conflict (Van de Kerkhof, 2004). Like in formal politics, if conflict is already there and cannot be denied, stakeholders are inclined to reach fake consensus e.g. by taking the debate to an abstract level of values (agreement on "sustainability") or to put the controversial matters on the plate of scientific experts. If conflict is latent, which is frequently the case in environmental or technology related issues, this becomes even more of a problem. Therefore, we agree with those who argue that stakeholder dialogue is not an 'ideal speech' situation (Pellizoni, 2001).

Evaluating the quality of methods used to facilitate participatory assessments starts with an evaluation framework, which highlights some basic predispositions or biases that may inhibit an open dialogue process. The next section will present this framework.

3. An evaluation framework

The influence of biases on learning

The evaluation framework we will present here is pragmatic in the sense that it focuses on the mechanisms that might hamper an open dialogue.

The framework focuses on learning as the aim of a participatory process. Learning can imply first order or second order processes (Van de Kerkhof, 2004, based on Argyris & Schön, 1978 and Van de Graaf et al.,1996). First order learning takes place when participants acquire new insights into the 'facts' concerning the topic under consideration. Second order learning occurs when participants gain new insights into the complex relationship between causal and normative reasoning. Both types of learning are stimulated by an open dialogue, which means that all different (and also rival) points of view that are present in the process are articulated, confronted and evaluated.

As stated before, bringing people together to have them discuss a specific topic is not enough for creating an open dialogue. Methods have been developed in order to suppress the mechanisms that obstruct an open dialogue[1]. We refer to these mechanisms as *biases*. This term is barrowed from psychological literature on evaluative judgment (Probably the most important work on biases is done by Tversky & Kahneman, 1974) A bias is a distortion in the evaluation of a specific cue; in this context a cue is an argument, statement or point of view, expressed by another participant. [2] The minus sign from methods to biases in Figure 1 means that methods can decrease the occurrence of biases. By doing this, an open dialogue is stimulated, which in turn stimulates learning (both indicated with plus signs).
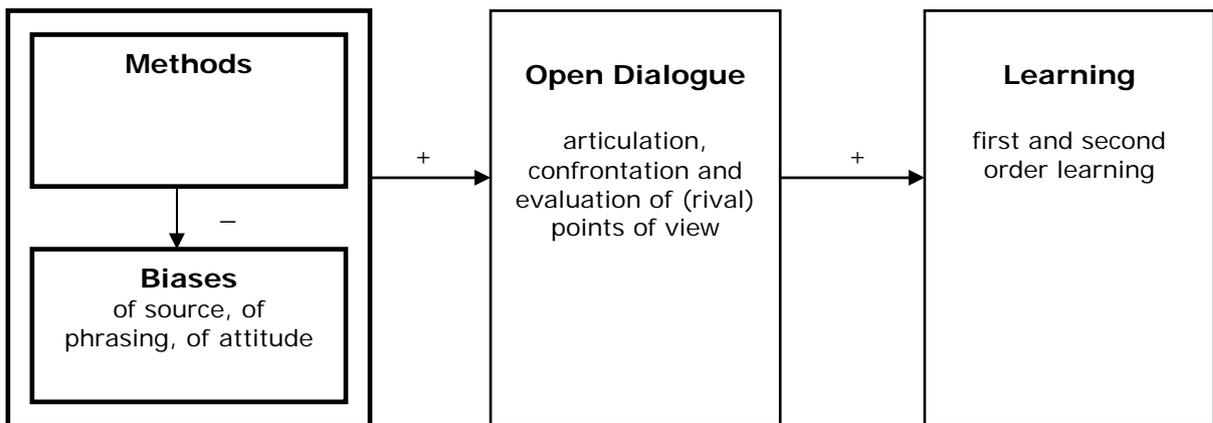

Figure 1 - How methods can contribute to learning

Others have done valuable work on the evaluation of participatory processes and methods (e.g. Webler, 1995, Rowe and Frewer, 2000, Fiorino, 1990, Laird, 1993). Probably most known are the criteria fairness and competence that Webler (1995) has formulated. Fairness means that every participant has a fair and equal chance

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[1]   This framework is developed not to evaluate participatory *processes*, but to evaluate the participatory *methods* that can be and have been used in participatory processes. However, we underline the importance of the context in which the method is being applied. Van de Kerkhof (2004) refers to the *settings* of the participatory process as one of the key variables of learning. Settings refer for instance to the way stakeholders are selected, and to issues as trust, confidence, commitment, competence, and transparency.

[2]   From now on we will use the word 'input' to refer to all possible types of input (point of view, question, argument, statement) a participant can have in a participatory setting.

to defend his/her personal interests and values and to contribute to the definition of the collective will. This touches upon our idea of an open dialogue, since in order for a dialogue to be open, participants must have the opportunity to speak out on issues relevant for them. They must also be able to listen to one another and to communicate their viewpoints. This refers to competence. Competence means that participants have equal access to information and its interpretations and that they can make use of the best available procedures for knowledge selection. It can develop when a participatory process is fair.

The evaluation framework: 3 biases

According to Figure 1, an open dialogue will stimulate learning when the method effectively addresses biases (given a good stakeholder selection method and a certain level of trust, commitment and confidence). We said before that biases are distortions in the evaluation of other participants' input. Being more precise, biases are induced by characteristics of the argument or statement or the person who expresses it, *as perceived by the person who evaluates*. Not the fact that a person is the director of a large oil company makes a participant pay more attention to his arguments, but the fact that due to his position a participant perceives this person to be powerful or an authority. The evaluation of a particular point of view always takes place with reference to the own point of view. People evaluate arguments that they feel support their own point of view more positively than arguments that do not support their own point of view, even when the actual contents of both arguments would be equal. So, biases have to do with evaluative judgments and social interaction between a sender and receiver of verbal arguments, statements or points of view. This touches upon persuasive communication. Persuasive communication has to do with the processing and acceptance of information (see Petty & Wegener, 1999; Petty, Wegener, & Fabrigar, 1997). We might see an open dialogue in which knowledge production takes place as a process of persuasive communication in which a sender tries to convince a receiver about the relevance, importance or truth of the information and/or an interested receiver who does not want to lose relevant information.

We will describe three biases that we think may not be overlooked when aiming at an open dialogue: the *bias of source*, the *bias of phrasing* and the *bias of attitude*.

Bias of source

The bias of source concerns all distortions in a person's evaluation of input that occur as a consequence of the (perceived) characteristics of the person who gives the input (see: Eagly & Chaiken, 1993). You can think of many ways in which the evaluation can be biased due to the source. Relevant characteristics in this respect are for example authority, trustworthiness, expertise, power, attractiveness, status, and credibility, all as perceived by the person who evaluates the input. If I perceive a person as very trustworthy, I will probably listen more carefully to what he says than when I perceive that person as untrustworthy. I can perceive someone as trustworthy because of his appearance, but also because he works at an institution that I find reliable. So, the bias of source relates to what type of stakeholder someone is (or is perceived to be). For instance, being a scientist can make you very trustworthy, but it can also reduce your credibility if people think you are riding your own hobbyhorse. The bias of source can become a problem when persistent images exist, e.g. stereotypes (see for literature on stereotypes for instance: Hamilton & Trolier, 1986; Linville, Salovey, & Fischer, 1986). The idea of an emotional and ignorant public for example seems not to be uncommon among

policymakers (Marris, Wynne, Simmons, & Weldon, 2001; Hisschemöller et al., 2001).

Bias of phrasing

The bias of phrasing concerns all distortions in the evaluation of input that occur as a consequence of the type of verbal communication, or phrasing, that is being used. For example, it includes the wording of the input; an argument can for instance be expressed in very formal terms or in very informal, day-to-day language. Also, a point of view can be expressed very explicitly, or very implicitly, very to-the-point or very long-winded. The bias of phrasing is related to the bias of source when the type of phrasing is strongly connected to the type of stakeholder, think for instance of jargon. The fact that different stakeholders with different frames of reference participate in a process in which the aim is to achieve mutual learning, makes this bias very relevant.

Bias of attitude

Being a stakeholder almost by definition implies having an attitude towards the topic. The bias of attitude means that the evaluation of input is distorted because it is or is not in line with the attitude of the person who evaluates (see for literature on the influence of attitude on evaluation e.g. (Sherif & Hovland, 1961; White, Pahl, Buehner, & Haye, 2003; Poortinga & Pidgeon, 2005; Meijnders et al., 2005). I will probably much easier pick up a new argument that supports my point of view than one that conflicts my point of view. This idea is similar to the confirmation bias, which states that people tend to search, recollect and assimilate information that supports their beliefs (Ross & Anderson, 1982).

4. How do methods address the biases?

Methods can be applied in participatory assessments in order to stimulate an open dialogue. This is done by addressing the biases; by recognizing or even minimizing them. Though methods are not all explicitly designed to address the biases, their quality to facilitate a participatory assessment can very well be evaluated by means of the biases. As an illustration, we will discuss here for each bias the ways in which methods (intend to) do this.

Bias of source

The bias of source is probably most recognized as obstructing an open dialogue. The obvious way of reducing the bias of source is by having participants provide input into the process anonymously. The Delphi method (Linstone & Turoff, 1975) makes use of this characteristic. Originally developed as a forecasting methodology, the Delphi method consists of a number of rounds in which participants anonymously give their probability estimates on a certain issue, after each of which they receive feedback about group scores (either group averages in a conventional Delphi, or group differences in a policy Delphi). Of course, one may ask to what extent anonymity is desirable in a process in which you want people to interact. However, information and communication technology enables people to meet and deliberate without meeting physically (e.g. group decision room).

Another way is to give a special role to those whose input might easily become discarded as a consequence of the bias of source. This idea can be found especially in public participation methods that aim to include citizens in the policy making process. The aim of a consensus conference (Joss, 2000) or a citizens' jury (Crosby, 2003) for example is to give a voice to citizens who are usually not being heard in the policy making process. The assumption underlying these kinds of methods seems to be that if citizens are included in formal policy making processes their voice will not (sufficiently) be heard, for instance due to power differences. Therefore, the bias of source is explicitly addressed by these kinds of methods.

Bias of phrasing

The fact that different people use their own words and phrasings to express their points of view and that this can have a value in itself is recognized by methods that try to map how an individual thinks about an issue. Repertory Grid Technique (Kelly, 1955) for instance, a structured interview technique to elicit and relate the constructs that people have in their mind to make sense of an issue, uses a bottom-up approach. This means there are no predefined elements of the issue in the analysis, but all elements and related constructs are given and phrased by the participant. Another example of a method that aims to map "bottom-up" how individuals think about an issue is Cognitive Mapping (see for instance: Kitchin, 1994; Axelrod, 1976; Lawless, Smee, & O'Shea, 1998; Tegarden & Sheetz, 2003). A Cognitive Map represents the elements and the relation between elements (e.g. causes, correlations) that people perceive in relation to the issue under consideration.

A way to deal with the bias of phrasing is to translate one type of phrasing into the other, or to translate all into one common phrasing. An example of the first one is a consensus conference. The citizens that participate in the panel express their point of view at the end of the process in a document. Not only have they learnt about what experts know during the process, but also have they learnt about the jargon that is being used with respect to the issue. Compared to their initial viewpoint, their written document will be phrased in relative expert-terms, because they have read the scientific reports and listened to experts' presentations. Examples of methods that try to translate different types of phrasing into one common type can be found in methods that quantify points of view. Quantification is a way to remove different types of phrasing, and unify all in the common language of numbers. Q-methodology is a method that is based on factor analysis. This statistical analysis reduces the individual viewpoints to factors that represent shared ways of thinking. Individual viewpoints are gathered by means of ranking a number of elements on a set of criteria (which are e.g. based on previously conducted interviews). Individual preferences can thus be collected and assembled in a collective figure, presenting in statistical terms the ideas of the group.

Bias of attitude

The bias of attitude may be addressed by methods that aim to stimulate people to think outside-the-box, and to be creative. If people are stimulated to be creative and to produce ideas rather than to judge the attractiveness or feasibility of ideas, the influence of their own attitude on the evaluation of other participants' input will probably be lower. Hence, arguments and ideas are uncoupled from attitudes. Probably the most well-known method that focuses on out-of-the-box thinking is Brainstorming (Osborn, 1948). The basic idea of this method is that in an open conversation participants are stimulated to let their creativity run freely, and to

distance themselves from the obstacles to the realization of their ideas. The aim is to find new insights into the problem at hand or the issue under consideration. A method that is based on a different strategy is the Dialectical Inquiry (Mason & Mitroff, 1981). In a Dialectical Inquiry participants explore the thesis, the prevailing strategic plan or option, and the antithesis, the counterplan. The focus of this method is on the conflicting assumptions underlying the thesis and the antithesis. Hence, this method actually forces people to explore conflicting viewpoints and their assumptions.

5. Discussion

We do not want to give any value judgments on what methods and characteristics are best in addressing the biases, since this is mainly an empirical question. Hence, an obvious conclusion here is that more research is needed to gain insight into the question how methods and their characteristics can contribute to an open dialogue. As a starting point for further work we would like to stress that there is a very important difference between what a method aims to do and what the method actually does when it is applied in a participatory process. As an example, we will illustrate this with two methods that are related to authentic versus artificial conflict (based on: Hisschemöller, 2003): Gaming and Simulation methods and the Devil's Advocate method. Both methods have in common that an artificial situation is being created (in the Devil's Advocate Method participants are aware that the Devil's Advocate plays a role). This artificial situation is supposed to stimulate people to be creative. As such, these methods might be used to reduce the bias of attitude (e.g by stimulating out-of-the-box thinking), or the bias of source (e.g. by role-playing). It appears from social-psychological research that learning benefits from authentic conflict, but that artificial conflict only reinforces people's initial beliefs (Nemeth, Brown, & Rogers, 2001). Reinforcing people's initial beliefs probably only strengthens the bias of attitude. Hence, what these methods aim to do is not equal to the actual effect of the methods. Knowing that the aim and effect of methods may deviate makes the urgency of empirical research on the use of methods in participatory assessments even larger.

A conclusion that seems obvious, at this early stage already, is that no method can in itself address all three biases. We would like to argue for a careful combination of methods. In an initial phase of the participatory assessment, methods can for instance be used to articulate individual claims and viewpoints (e.g. Q methodology, Repertory Grid). This enables the input of all viewpoints in the group process that follows, which is the first step towards an open dialogue. During the participatory assessment participants should be stimulated to identify alternative, or conflicting options and viewpoints. This requires participants to think beyond their own viewpoints, and to be creative. Since this is not a natural inclination for everyone (see for instance on need for cognitive closure: Webster & Kruglanski, 1994) specific methods that stimulate people to do this are necessary. Conflicting argumentations and viewpoints should not only be identified, but also assessed. This requires again another type of methods, e.g. the earlier mentioned Dialectical Inquiry that focuses on surfacing assumptions of conflicting argumentations.
Besides the combination of methods, we hope that further work delivers new insights, which will lead to the development of new methods.

Obviously, methods are not the only, and certainly not a unique solution to stimulate an open dialogue. Methods can be applied very carefully, but diversity of viewpoints and hence an open dialogue will not be attained if participants are not carefully selected. The participants should represent the cognitive diversity that exists in society. Not only should the selection of participants ensure the inclusion

of a diversity of knowledge, it should also provide in cutting across existing networks. People in existing networks know each other's point of view, or at least think so, which can hamper an open dialogue (Van de Kerkhof, 2004).

Furthermore, the process should be fair and participants should be competent (or have the chance to become so) (Webler, 1995). They should be willing to engage in a process in which they may be required to distance themselves from their own perspective. Nooteboom (Nooteboom, 1998) uses the concept 'optimal cognitive distance' to indicate that there is an optimal balance between diversity and similarity in beliefs and viewpoints. Diversity in terms of cognitive distance enables participants to learn from each other because they see and know things differently. However, if too diverse, the risk is that participants do not understand each other. Furthermore, the effect of methods is probably dependent on the extent to which the process is transparent, to which trust in the organizers and the participants (and hence also in the process) is created, and to the extent to which there is commitment to the process.

In conclusion, in this paper we argue that more ambition is needed with regard to the use of methods in participatory assessments. In order to structure a participatory process and to create an open dialogue in which learning can take place, methods should be applied. We presented a framework consisting of three biases that can be used to evaluate to what extent a method stimulates an open dialogue. It should be clear that the framework needs empirical elaboration. So does the use of methods in participatory assessments. This paper will serve as the starting point for a further line of research, comprising a field experiment to test and develop methods in participatory assessments.

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