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RISK DELIBERATION

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1 Introduction

Public deliberation has been suggested as a remedy to a range of structural problems that are associated with aggregative and inflexible forms of decision-making. It is assumed that by making democratic institutions more deliberative, a 'democracy deficit', expressed in voter numbers in decline and increased mistrust in public institutions, can be overcome. What is perceived as 'good risk governance' in the EU is explicitly announced to involve deliberative participatory elements. For example, the European Commission's white paper on European Governance (CEC 2001a:3) proposes that good governance implies that "more people and organisations [are] involved in shaping and delivering EU policy". This includes efforts to democratising expertise, to improve access and participation and to involve relevant stakeholders at every stage of the process, from the "identification of risks to the evaluation of policies intended to manage them" (CEC 2001b: 25). Thus, making risk regulation decision-making processes more deliberative is mainly about making them more inclusive, "questions normally seen as the province of experts and functionaries, lobbyists and politicians, must somehow be brought before the public at large for comment, debate, and in some cases, resolution" (Whiteside 2006:118).

Deliberative risk governance may sound as an adequate response to calls for a remedy to democracy deficits as well as too narrow technocratic approaches to risk. It is important however not to confuse public deliberation as a *social phenomenon*, which may take many forms, with public deliberation as a *policy tool*, which is always framed around particular issues and objectives (cf. Plows 2007). Policy tools will always be imperfect and have undesired and unanticipated side effects, and perhaps more importantly, they will always be connected to a particular political economy.

For example, when nuclear power was discussed in the 1970s and when GM crops were debated in the 1990s, both issues were connected to powerful science communities before public discussions were generated, but the issues arose in very different circumstances, the state had a more central role in the 1970s nuclear power debate than three decades later on the issue of biotechnology, characterised by a "science by free markets".[1] Such changes pose new challenges to public deliberation and the policy tools aiming to stimulate public engagement and debate need to be understood in relation to such changes.

Involving the public in deliberations on science and technology has almost become political orthodoxy. As Alan Irwin (2006:300) writes, today "even the most science-centred government report is incomplete without a section on 'public engagement'". That a growing

interest in public deliberation takes place in conjunction with great changes in the direction of science and technology developments is somewhat paradoxical:

> Just at a time when globalization seems to render the governance of science and technology more obscure, remote and inaccessible, so we begin to appreciate the inherent openness to the exercise of human agency and – potentially – to deliberate social choice (Stirling 2005:218).

The aim with this report is to clarify the role of a new type of expertise employed to organise public deliberation processes in risk governance, and what versions of the public different techniques and methods bring about. The next and second part of this report gives a brief background to earlier ideas in literature about the benefits with public deliberation in the area of risk assessment and risk management, focusing on *why* public deliberation has been put forward as valuable, for example because of its capability to empower citizens or to improve the understanding and management of risk and *when* this seem to be particularly important. In a third part we describe our theoretical perspective for how to understand institutionalised forms for public deliberation in a global political economy. We argue that a centrality of the public has been accompanied with the emergence of a new type of expertise that employs different techniques of elicitation – the opinion poll, the focus group, the citizen jury, etc – to generate and process the views and opinions of different publics and feed them into the policy-making process. Efforts to refine methods for generating policy-useful public deliberations mean that, at least to some extent, the focus has shifted from the question of 'why' there is a need to involve the public, to the question of 'how' to do this.

In a fourth part, the attention is on the role of experts in relation to four methods (citizens' juries, consensus conferences, scenario workshops and focus groups) aiming to generate high-qualitative deliberations among citizens. The questions posed to the methods are: where and in relation to what problem were they once developed, how easy do they travel, what kind of expertise are connected to them, what function do they have and what conceptions of the public do they deploy? The fifth part of the report examines in detail a case, *GM Nation*, which consisted of a series of events happening in the UK in 2003, representing one of the largest participatory processes around disputed technologies in Europe. In the sixth and concluding part we draw conclusions on the basis of our findings, which have relevance for how to understand public deliberation as a policy tool in the area of risk governance. In addition, we reflect upon and suggest some ideas for how to understand an integrative approach to the governance of risk and how risk-informed decision-making; a

precautionary approach; and a deliberative approach are all important aspects of risk governance.

2 Why a deliberative approach to risk?

What we refer to as a deliberative approach to risk is connected to policy tools that are aiming to be inclusive, participatory and to generate qualitative discussions among citizens on particular issues. The emergence of such practices are associated with commitments to change the way decisions on technology are made, and how risks are assessed and managed – from established, narrow, quantitative, opaque, exclusive expert-based procedures such as probabilistic risk assessment and cost-benefit analysis, – to new, relatively unconstrained, qualitative, transparent and inclusive procedures, such as consensus conferences or deliberative polls (Stirling 2005:219; see also Fischer 2003; Whiteside 2006). Some definitions of deliberation, emphasise that such processes are aiming towards 'consensus' or 'closure', as the following two examples:

> The word "deliberation" implies equality among the participants, peer review as a means for verifying understandings (i.e., holding knowledge claims up to public scrutiny), and an orientation toward resolving conflicts in consensual rather than adversarial ways. (Klinke and Renn 2002:1075).

> [P]eople confer, ponder, exchange views, consider evidence, reflect on matters of mutual interest, negotiate and attempt to persuade each other…deliberation implies an iterative process that moves towards closure" (Stern and Finberg 1996:73, quoted in Burgess et a. 2007:300)

Burgess et al. (2007: 301) stress that deliberative processes are not always aiming towards closure – they may also be useful in opening-up the array of potential policy actions, and provide with valuable social learning. The list of reasons why public deliberation has been asserted as valuable in the area of risk, science and technology development and in environmental decision-making can be made long. From a review over an extensive part of the literature in this area, Judith Petts (2004:117) concludes that public deliberation has been asserted as a means of enhancing: democracy, institutional legitimacy, procedural fairness, social learning, the integration of social values into technical decisions, public trust and confidence in decisions and decision-makers, and quality assurance in expert-centred decision-making. Because of the range of benefits associated with public deliberations we find little use in restricting what count as 'public deliberation' to certain forms – consensus-

seeking or aiming towards closure – as the need for consensus or closure most likely depends on what aspect or value is emphasised in the above list.

To bring some order in the long list of 'whys', different motivations for a participatory deliberative approach to issues connected to technology and risk, is captured by the three-fold distinction between normative, instrumental and substantive rationales (Stirling 2005:220-222). A normative rationale is based on the idea that all citizens have a right to take part in decisions that affect them, and benefits emphasised are empowerment of citizens, equality and social justice. According to this view broader participatory processes are good in themselves.

An instrumental motivation is based on the idea that the involvement of citizens may lead to increased trust and acceptance, the benefits emphasises are connected to the expected results such as the elimination or mitigation of conflicts and expressed mistrust. Finally, substantive arguments for broader participation is related to an expected improved quality of the decisions either because of the substantive input in terms of the breadth and depth of knowledge that can be elicited in participatory processes or because of the idea that the substantive outcome it may generate is of higher quality (i.e. protecting the environment and human health) because the involvement of citizens leads to more preventive outcomes.

That latter point – the tendency that citizens tend to be more precautionary than governing elites – is taken up in a study by Dryzek et al. (2007a). On the basis of a comparative study of consensus conferences, involving panels of lay citizens, conducted in several countries (France, the United States, Canada, United Kingdom, Australia, and Switzerland) on the issue of GM foods the authors argue, that precautionary worldviews are pervasive in deliberative publics. This is the case even when 'neutral mini-publics', i.e. lay citizens that are selected on the criteria that they have no prior partisanship on an issue, are put together in order to deliberate and reflect on an issue and provide with policy recommendation.

The reason for this, they argue, is structural: governments "are constrained by their position in the transnational political economy. Mini-publics for their part have a mandate to worry" (Dryzek et al. 2007:4a). Since reflective publics are not under the same constraints as governing elites, and because the very act of putting together a group of citizens to deliberate implies that there are perceived risks that could potentially become politically problematic, "it is the task of the lay citizens to worry" (ibid:9).

This perspective of top-down organised deliberative events is based on the idea that such processes to varying degrees evoke two polarised extremes: the Promethean worldviews of governing elites, which means great faith in the human capacity to manipulate complex

systems for their own advantages. In a Promethean worldview, neither technological complexities nor ecosystems put any serious constraints on human activity or economic growth and; the precautionary worldview, in which the uncertainties with new technology is associated with caution and in which material goods do not take precedence over other values such as quality of life, freedom and participation.

The study by Dryzek et al. (2007a) could be used as an argument within the substantive rationale for public deliberations on risk, but at the same time the result of the study also provides with the argument that the likelihood that the governing elites would in fact change policy in lines with precautionary publics is small (this we will come back to in the next section). The question of when public deliberation is needed, and on what type of issues it is particularly urgent, is of course connected to the rationales for why public involvement is seen as important.

2.1 When a deliberative approach to risk?

The debate on how to evaluate and manage risks has been dominated by a dichotomy between expert-based analytical approaches and participatory approaches (Stirling 2005) and it has focused on three major strategies: 1) risk-based approaches including numerical thresholds; 2) reduction activities derived from the application of the precautionary principle and 3) standards derived from discursive processes such as roundtables, deliberative rule making, mediation or citizen panels (Klinke and Renn 2002:1071).

With these three strategies as a starting point Andreas Klinke and Ortwin Renn (2002) have offered a classification of risk types and argue that some strategies for risk management are better for some types of risks. In what they call an "analytical-deliberative approach"[2], they argue that the extents to which deliberation and analysis are needed are dependent on which type of risk we are dealing with. Further, while they make a distinction between three risk management strategies – risk-based, precautionary and deliberative approaches – they argue that deliberation is an important feature of all three approaches, and that deliberation take the form of different types of discourse that are connected to the three approaches.

Klinke and Renn (2002:1078) use a classification of the handling of risk, which distinguishes between *normal*, *intermediate* and *intolerable* areas of risk management. Normal risks are, according to this distinction, characterised by low complexity and are well understood by science and regulation. The intermediate and intolerable areas of risk "go beyond ordinary dimensions", which means that the reliability of assessment is low, the

statistical uncertainty high, the extent of damage can be catastrophic and knowledge about the distribution of consequences is missing.

Klinke and Renn (2002:1085f) connect three types of risk management strategies to different types of risk, these strategies are: risk-based management, precaution-based management and discourse-based management.[3]

Risk-based management: this strategy relies on scientific risk assessments, which are seen as necessary for the management of complex risks. Complexity in this context refers to difficulties in identifying and quantifying casual links between a multitude of variables and specific adverse effects. According to this reasoning, complex phenomena demand complex methods of assessments, risks characterised by high complexity, low uncertainty and no ambiguity do not require the participation of others than scientists and experts who can handle these methods. Thus, in a risk-based approach, deliberation mainly involves experts and takes the form of epistemological discourse. The objective of such a discourse is to find the most adequate description or explanation of a phenomenon and what is at stake are cognitive conflicts. An epistemological discourse may reveal that there is more uncertainty and ambiguity hidden than what was first anticipated. Epistemological discourses can be organised in different forms and Klinke and Renn suggest the consensus conference, as one option. The consensus conference is a method that has been frequently used for resolving cognitive conflicts in medical treatment (we will discuss this method in more detail later on, what the authors are referring to is the US-style consensus conference, see chapter 4, this report).

Precaution-based management: risks that are characterised by uncertainty require, according to the authors, a precaution-based management. They define uncertainty as a situation when the confidence in estimated cause and effect chains are low. When this is the case, the task is to find an adequate balance between the costs of being overcautious versus the costs of not being cautious enough, and this requires the inclusion of scientists as well as policymakers and major stakeholder groups, such as industry and directly affected groups. Classic precaution-based management tools are ALARA (as low as reasonable achievable) and BACT (best available control technology).

The effort in trying to find the right balance between too little and too much precaution is based upon what Klinke and Renn term reflective discourse. Reflective discourse deals with the clarification of knowledge and the assessment of tradeoffs between too little or too much precaution. What are at stake here, according to this reasoning, are both cognitive and evaluative conflicts. Questions such as “how safe is safe enough?”; “how much

uncertainty is one willing to accept?"; and "is the risk worth the potential benefit?" are part of a reflective discourse.

Discourse-based management: issues characterised by ambiguity require, according to Klinke and Renn, a discourse-based strategy. They define ambiguity as situations in which there are a variability of interpretations based on identical observations or data assessments, for example, when there are effects that are judged as harmless by science but perceived as threats by other groups. Ambiguities cannot be resolved by increased efficiency since the outcome in itself is controversial, i.e. concerns about the costs to society may not be connected to for example increased risk to health, but to other values. Thus the main task when issues are characterised by ambiguity is to balance between differing values, and this task cannot be delegated to technical risk specialists only. What is at stake, in what Klinke and Renn refer to as a participatory discourse, are conflicts over cognitive, evaluative and normative issues. It should involve the same type of actors as in a precaution-based approach, namely agency staff, experts, and stakeholders, and in addition include representatives of the public(s). Integral to such discourse may be issues of fairness and environmental justice, visions of future technological developments etc. A participatory discourse may, as suggested by the authors, be organised in the form of the Danish model of consensus conferences (see chapter 4, this report), which include lay people, or in the form of citizen panels or juries, voluntary advisory groups etc.

All the approaches suggested by Klinke and Renn are deliberative, in the sense that they all rely on different types of discourse and issues to be reflected upon and discussed among the actors involved. The third approach is according to their view not more "deliberative" than the others but it is more participatory and inclusive.[4] There are however arguments against restricting public involvement to certain discourses, for example Brian Wynne's (1996) famous study of the Cumbrian sheep farmers' specialist knowledge of local environmental conditions show that who can contribute to an epistemological discourse is not given, and that there are many reasons to include a broader set of actors when cognitive conflicts are at stake.

The analytic-deliberative approach to risk management presented above rests on the assumption that different types of risk can be (correctly) categorised. Robin Holt (2004) contributes with another perspective to the problem of categorising risk, and suggests a different view on the role of public deliberation. Rather than suggesting that a participatory deliberative approach is suitable for certain kinds of risk issues, Holt argues that since the act of classifying problems is in itself problematic, risk management needs to be argumentative,

deliberative and participatory in order to allow an "'image' of the problem to 'emerge gradually'" (2004:259). Holt (2004:252) discusses the categorisation of problems as being 'tame', 'messes', 'wicked' and 'wicked messes' in relation to organisational aspects of risk, and not to inherent characteristics of the risks themselves. The categorisation of problems as 'tame' is according to Holt, connected to an orthodox perspective on risk and a rational calculative approach.

According to Klinke and Renn problems that appear to be normal may later on be defined as intermediate or intolerable, although they only mention this very briefly and do not discuss this in terms of the social organisation of risk. Holt (2004:261) argues that very few problems are tame (or normal) in the organisational climate of globalisation and "assuming that the accurate identification of the nature of the problem is itself possible can draw risk management into presuming a constancy that is pure fabrication. A problem may begin as a mess and then become a wicked mess, or begin as a tame problem and then unravel into a wicked problem". Like the analytical-deliberative approach presented above, others have argued for the importance of broad and inclusive public deliberations in risk situations characterised by low uncertainty and low consensus (Winickoff et al. 2005:106f).

Approaches which distinguish between different types of discourse and degrees of public deliberation for certain risk issues tend to base their argumentation on a dichotomy between analytical and participatory approaches to risk. This, as Andrew Stirling (2005) has pointed out, may not be a very productive starting point if we want to evaluate different approaches to the social appraisal of science and technology.

Instead of relying on the dichotomy between analytical expert-based approaches and more open and flexible participatory approaches Stirling suggests that we look at distinctions that are crosscutting and that may be equally relevant to both. One such crosscutting distinction is that between *opening up* or *closing down* the process of technological choice.

When the social appraisal process is about closing down the aim is instrumentally to assist policy-making: "Whether analytical or participatory, the role of social appraisal process lies in cutting through the messy, intractable and conflict-prone diversity of interests and perspectives to develop a clear authoritative, prescriptive recommendation to inform decisions" (Stirling 2005:228). The outcome of a process aiming to close down, is a *unitary and prescriptive* policy advice, and it involves only a small number of choices or courses of action to be explored, which appear as favourable in the light of how the process has been framed, and the framing conditions in themselves are never explored in detail.

When the social appraisal process is about opening up the process of technological choice, the aim is to explore a wide range of possibilities, and the outcome is rather a *plural and conditional* advice. It involves a systematic exploration of how framing conditions relate to "the real world of divergent contexts, public constituencies, disciplinary perspectives and stakeholder interests" (ibid:229).

While the distinction between a narrow analytical approach and a broad participatory approach concerns the range of *inputs* that are included, such as issues, possibilities, perspectives and options, the distinction between opening up or closing down concerns the range of *outputs* "that are sustained in parallel and conveyed to wider governance discourses" (ibid: 230). Even though Stirling admits that the distinctions between narrow and broad and closed and open have some correspondence, the point is that narrow processes may be aiming at opening up (for instance by techniques such as scenarios or multi-criteria mapping) and broader processes may be subject to closing down or opening up, dependent on whether the result is a single framework or a diversity of evaluative frameworks.

As for the question of *when* public deliberation is appropriate, this must always be related to the aim and motivation for involving citizens in deliberations. Dryzek et al. argue that the motivation for those that are organising deliberative events are often instrumental, i.e. to create acceptance for a given technology and that the clash between the two extremes – Promethean and precautionary worldviews – leads to outcomes of public deliberations that only in very few cases will lead to greater legitimacy or to changes in policy towards more precautionary and preventive lines (2007:34):

> If precautionary worldviews are as pervasive in deliberating publics as we suggest, then the generally Promethean positions of governing elites cannot easily be legitimated by deliberative means – at least not on technological risk. In this light, it is ironic that these issues are exactly those that governments across the developed world have identified as most ripe for deliberative and participatory treatment. When Promethean elites encounter precautionary publics, something has to give.

The 'something' that has to give, may according to the authors, be deliberative legitimation. This is the case when governing elites ignore the recommendations of reflective mini-publics. Another strategy would be to "manipulate mini-publics to produce Promethean conclusions" (ibid: 35), this however, seem difficult, as the comparative study performed by Dryzek et al. was based on a selection of 'tough' cases (i.e. countries in which GM technology is relatively well established; seen as economically important; and in which the organisers of the consensus conferences hoped for a pro-GM conclusion), though even when following these

criteria the deliberative mini-publics produced precautionary outcomes. The third option that Dryzek et al. identify is that it is the Promethean commitments of elites that to some extent must give way. This, they argue, can only come about in societies where ecological modernization, which is committed to economic growth but not to a Promethean position, serves a link between economic imperatives of government and Promethean commitment.[5] The starting point for Dryzek and co-authors is that public deliberation can only be motivated as a means to enhance democracy and to improve substantial outcomes, when the institutional requirements for this is in place.

The literature on the topic risk and deliberation is immense, and this brief excursion into this literature is evidently restricted. In the following we make a few clarifications about our own views on public deliberation as a policy tool in risk governance.

2.2 Preliminary remarks on public deliberation as a policy tool in risk governance

This report is concerned with public deliberation as a policy tool in the governance of risk, that is, top-down organised processes, designed so as to be inclusive, participatory and deliberative to varying degrees. These will always be framed around particular issues and be constrained by a particular political economy and framing conditions involving biases as to whom may speak, about what, and in what terms. This does not mean that the motives for inviting a broader set of actors in risk deliberations must always be instrumental. The motives for setting up deliberative processes may be mixed and they may also shift during the course of events. As stated above we do not restrict our definition to processes aiming to consensus or closure as that would leave out an ‘opening up’ approach, which as Stirling (2005:230) asserts, employ a pluralistic rather than a consensual discourse. Whether ‘closure’ or ‘consensus’ is a preferable element in public deliberation exercises must be seen in relation to the rationale for inviting the public, and what a public engagement exercise is supposed to achieve.

Similarly, the question of what kind of risk issues that are in particular need for public deliberations, and what issues can be handled in more closed expert-dominated processes, must be answered in the light of the rationales for public involvement. From a normative perspective the answer would most likely be connected to the impact the issue has on people’s lives, following the argument that people should be involved in decisions that affect them. From an instrumental point of view, if the objective is to eliminate or mitigate conflicts or mistrust the use of public deliberation as a policy tool sometimes might be contra-productive (as shown in the study by Dryzek et al. 2007). With a substantive rationale, it does not seem

reasonable to exclude a wider public from epistemological discourse as suggested by Klinke and Renn, since this is based on the idea that who is an expert on what issues is not always evident beforehand, and that broader inclusive processes could lead to the identification of issues and problems that would be overlooked otherwise.

3 From 'why' to 'how': the emergence of expertise on public deliberation

As stated in the introduction, a new centrality of "the public" has been accompanied by the growth of a new kind of expertise that employs different technologies of elicitation – the opinion poll, the focus group, the citizen jury, etc – to generate and process the views and opinions of different publics and feed them into the policy-making process. Distinct genres of methods for generating qualitative deliberation among citizens can be seen as particular methods of social inquiry, with certain devices for qualifying participants, the issues discussed, as well as the kind of deliberations they generate. Both the subjects (targeted 'publics') and objects (legitimate issues for discussions) of publicness are constituted through the mediums of publicity (cf. Rawls 1993 in Barnett, *forthcoming* 2008:3). One important group of experts acting in this arena can be referred to as 'mediators' (Elam et al. 2007:7):

> Processes of presenting and translating esoteric science-based problems could be studied *as an area for the cultivation of new forms of expertise*. […] Mediators help define the *context* of public policies with which different parties and emergent stakeholders can be encouraged to identify. In the first instance, mediators seek neither to oblige, nor to advise publics to respond in particular ways to technically defined problems; they seek only to place themselves in 'the middle of things'. Their ambition is to seed certain ideas and enable different parties to come together and interact in relation to them. Mediators seek to activate different parties in the government of their own affairs. They aim to act as catalysts, and as the ones capable of getting new policy programmes off the ground, and new social movements up and running (Osborne, 2004: 440).

Some mediators are experts not only in making translations of esoteric science, but on methods for generating and translating lay opinions. A new centrality of the public has been accompanied by the deployment of a range of *technologies of elicitation* (Lezaun & Soneryd, 2007). Lay opinions on techno-scientific matters are typically produced in transient and experimental settings: the small group of individuals assembled in a focus group, the public or semi-public forums in which citizens and experts address each other for a few hours, the slightly more permanent "citizen juries" where stakeholders and citizens aim to work out a common understanding of the issues under deliberation, etc. These assemblies are managed

by what Rose has described as “experts of community,” social science and psychology professionals deploying the “whole array of little devices and techniques that have been invented to make communities real” (Rose, 1999: 189–90).

3.1 Mediating public participation processes

Mediation and the role of mediators have so far been neglected in studies of participatory processes. It is almost 30 years ago since Sherry Arnstein’s (1969) famous article “A ladder of citizen participation” was published. Today there are still evaluations of public participation methods which uses the same type of terminology, and who are using the ladder metaphor indirectly by speaking about higher and lower levels of participation (see for instance Rowe and Frewer 2000). These types of studies of public participation still have their relevance, but there is also a pressing need for studies, which consider the emergence of a new type of expertise around public participation methods. Five years after Arnstein wrote the article, the first citizens’ jury was held in the United States. A few years after, in 1977, the first consensus conference was organised, although at that stage, the involvement of citizens was a less important characteristic than later on. Since then, citizens’ juries and consensus conferences, together with other methods for citizen participation, have become established, standardised, imported and deployed in several countries and in relation to various kinds of issues.

Government-led mechanisms for inviting the public, to deliberate upon often-controversial matters, are not merely tools for manipulation and legitimization. They also work productively in various ways in “assembling the subjects of citizen participation” (cf. Miller and Rose 1997). Different genres of public participation methods will highlight different features of participation and deliberation and draw upon different conceptions of the public.

Social scientists act as ‘intermediaries’ between governments and publics and it has been suggested, that, “greater attention should be given to these public intermediaries and spokespeople within public understanding of science research and practice” (Irwin 2001:15). One way of directing the attention to such intermediaries and their role is to look at distinct methods for generating qualitative deliberations: where and in relation to what problem were they once developed, how easy do they travel, what kind of expertise are connected to them, what function do they have and what conceptions of the public do they deploy? The following sections will analyse four methods: two methods that elicit input from citizens in the form of judgments and decisions (citizens’ juries and consensus conferences), one that is developed

especially for generating discussions and decisions about the future (scenario workshops), and finally one that elicit input from citizens in the form of opinions (focus groups).

4 Methods aiming to generate high-quality deliberations among citizens

4.1 The development and spread of public participation methods

This report has no ambition to map the range of public participation methods that exist and are in use, nevertheless there is no doubt that methods designed to generate deliberations among citizens are increasingly flourishing. The consensus conference is one of the public participation methods that frequently is referred to in social sciences and policy discussions, as a tool that meet many of the requirements associated with deliberative approaches (see Giddens 2007; Fischer 2003). In an overview over "systemic procedures for inclusive deliberative appraisal" (Stirling 1999:43) the following methods are mentioned: consensus conferences, citizens' juries, scenario workshops, focus groups, deliberative polls and strategic niche management. Within "formalised public participation methods" Gene and Frewer (2000:8f) include: referenda, public hearings, public opinion surveys, negotiated rule-making, consensus conferences, citizens' jury/panel, citizen/public advisory committee, and focus groups.

In the following analysis, the intention is not to evaluate public participation methods according to criteria for determining their "success "(this has been done elsewhere, see for instance Fiorino 1990; Webler 1995; Rowe and Frewer 2000). Instead, the attention is on the initial ideas and initiators of the four selected methods, how they have developed and spread to be used in other contexts and in relation to other problems than those they initially were developed for.

4.1.1 The citizens' jury

The citizens' jury was initiated and developed by political scientists at the Jefferson Center, Minneapolis, Minnesota. The Center was founded in 1974 and the same year the first citizens' jury was conducted as a pilot project, on a national health care plan. The invention of the citizens' jury was part of the Center's proclaimed aim of doing research and development of new democratic processes, rather than reflecting on existing institutions.[6] Since then, the citizens' jury has been used as a method for involving citizens in discussions on a range of topics such as budget priorities, environmental issues and local school district facility needs. The method has been used in Germany, Denmark, Spain, Australia, and elsewhere, but most frequently it has been used in the UK (Dryzek and Tucker 2007b).

The Jefferson Center has the copyright on the trademark ‘Citizens Jury’, with legal standing in the United States, which means that permission is needed from the Center before a citizens’ jury is conducted in the US. The Center presents itself as a non-profit, non-partisan organization and states that its aim is to “create and maintain a high quality method for engaging a microcosm of the public in the discussion of on public policy issues” and that “Its commitment is to empower the public in a fair and neutral setting”.[7]

The citizens’ jury is similar to ‘the planning cell’ (*Planungszelle*), which was invented in Germany in the early 1970s. Ned Crosby, the founder of the citizens’ jury concept in the United States and Peter Dienel, the founder of Planungzelle in Germany, worked out their methods independently of each other, and did not meet until several years after they had initiated their concepts.[8] Both concepts are based on the idea of citizens’ panels, consisting of a small group of selected citizens, who meet and deliberate and reflect on issues, with the aim to give policy recommendation on a given issue.

Crosby is still working on developing the citizens jury method, especially in trying to find forms for institutionalising it in the US and is now more focused on ‘election oriented’ citizens juries rather than ‘issue oriented’ citizen juries.[9] Today, the Jefferson Center is closed down, but a webpage is up which provides with a historical archive of its previously conducted citizens’ juries, and it offers a handbook on how to conduct them (Citizens Jury Handbook 2004).

In the middle of the 1990’s, after Ned Crosby and Peter Dienel had visited the Institute for Public Policy Research (IPPR) in London, IPPR published the booklet “Citizens’ Juries: Theory into Practice” (Coote and Lenaghan 1995), which lead to the initiation of the method in the UK, and the rest of Europe.[10] IPPR conducted five citizens’ juries in 1995, because the citizens’ jury is a relatively expensive method, and the institute is dependent on external funding it has not conducted any citizens’ juries since 1996.[11]

The citizens’ jury has since then become an established method. An example of its use can be seen in Prime Minister Gordon Brown’s announcement in September 2007, to set the ground for a “new type of politics” in the UK, that would involve “citizens’ juries, a nationwide citizens’ summit and standing commission to tackle long term issues”.[12] Citizens’ juries, together with other elements in Brown’s ‘new type of politics’, are assumed to assist in creating “a Government that reflects the whole of the national interests”, and “a politics built on consensus, not division”.[13] Whether the announced plan to increasingly use citizens’ juries would actually improve public policy was however hotly debated in news media.[14]

From the perspective of IPPR, the citizens' juries run by the UK government is a misuse of the concept, for several reasons. Firstly, because it is not presented as a consultative tool but as a decision-making process; secondly, the results from the citizens' jury processes are not reported publicly; and thirdly, citizens' are not part of the evaluation process. This has led to discussions at the institute to start running citizens' juries again.[15]

Public participation methods seem to spread in ways out of the control of their founders/initiators, and they may be used in ways that show little resemblance with the initial concept. Before we explore some of the initial ideas in the citizens' jury concept, we will describe the establishment of three other methods, the next one being the consensus conference.

4.1.2 The consensus conference

The first *consensus conference* was conducted in 1977, and it was organised by the US National Institutes of Health (NIH) on the topic breast cancer screening.[16] It was a controversial topic and there was disagreement whether the values of screening countered the risks involved in being exposed to the radiation. In order to discuss this issue, a panel was put together that included researchers, health care providers, methodologists and a public representative. Deliberations took place both in closed rooms and in public. After this the NIH conducted several consensus conferences, also termed consensus development conferences. Their function has been compared with the peer review system (Kalberer 1985). The consensus conference brought together scientists, practitioners, and consumers to deliberate on controversial issues.

The consensus panel considered a specific set of the pre-posed questions in an open forum, where all sides of the issue were explored. The panel report was termed a "consensus statement" and this was widely disseminated to all interested parties. The idea behind this type of consensus conference was that it could foster "the production of sound recommendations that are likely to receive wide acceptance" (Kalberer 1985:64). The input from the consumer panellists and participants was important because it could entail issues that "would have been missing had the deliberations been confined to scientists and physicians" (Kalberer 1985:69).

Participation and deliberation was an important feature of the NIH consensus conference, but the involvement of lay people was limited (or non-existent). It was not until a Danish version of the consensus conference was developed that the involvement of citizens/lay people became the primary feature of the method. It is the Danish-style consensus

conference that is now frequently referred to and used worldwide. Consensus conferences in the area of medical controversies following the "US-style" had been conducted in Denmark since 1983. Consensus conferences on technology issues developed parallel to the medical ones, and in a different regime (Horst and Horst 1996). The background to the import of the method to the technology policy area was the current critical debate about contemporary technology developments in Denmark and demands from leftwing parties and social movements for more public involvement in technology discussions.[17]

In 1985 a parliamentary decision was made by a center-left majority (against the position held by the conservative Government, who was in minority) to establish the Technology Board (in Danish, Teknologinaevnet). The big role model for the Danish Technology Board was the Office of Technology Assessment (OTA), set up by the US congress in 1972. In the 1980's many European countries followed the example of OTA, which led to the establishment of new institutions and methods for technology assessments all over Europe (Joss 1998:15). In the middle of the 1970's OTA had made clear that "technology assessment without participation was hardly viable". Participation was also a key issue when institutions for technology assessment were set up in Europe (ibid: 18). Almost simultaneously as this decision was adopted in the parliament, the Danish Research Council for social sciences came up with an initiative termed 'Technology and Society'.

The initiative was organised with a subcommittee and a single-man secretariat, and the man employed was Bo Carstens, an economist, who had previously worked in the ministry of finance. Within the Technology and Society initiative, Carstens was working closely in cooperation with a subcommittee, encompassing social scientists as well people with previous experience from medical consensus conferences. From the subcommittee the idea came up that consensus conferences might also be used for broader policy issues. In March 1986 the Technology and Society initiative resulted in a conference on the topic of hybrid network technology and this was the first time the consensus conference methodology was used for wider issues of technology and society. Later on the same year, when the Technology Board was set up, Bo Carstens became its general secretary.[18]

The idea behind the 1986 consensus conference on hybrid network technology was that it should stimulate an informative discussion on the use and need for the technology and that it should involve people other than technical experts. The people that were involved were 'elite' discussants of sorts, in the sense that one of them was an author, another one editor in chief for a newspaper etc. They were not however, experts on the subject for discussion, and

that was the reason they were invited as participants with the task to critically interrogate a panel of technical experts.[19]

The conference on hybrid network technology did not according to Bo Carstens have much impact politically. Later conferences were to different degrees successful, in terms of how it informed the wider debate:[20]

> When I said success I meant that it made an impact on the debate, the mass media, and the way they discussed legislation in the parliament. You couldn't say that we arrived at conclusions A, B, and C, and then the parliament made laws according to our proposals. That is not how it works. But it led to greater awareness of the problems, and inspiration for the discussions. It was very important in the Teknologinaevnet [the Technology Board] to make sure that society and important parts of society, regarded us as fair and balanced, at the same time as they saw us as somebody who came up with results and made interesting things. Because a lot of people, including the government, preferred to just close us down. So we had to prove that it was a good idea to work like this.

In 1987 the Technology Board arranged a consensus conference on the topic of biotechnology and this time randomly selected, lay people, were involved. This is the conference most often referred to as the 'first Danish-styled consensus conference' because it entailed a lay-panel. When the Danish Board of Technology (DBT) was founded in 1995, it replaced the Technology Board, and since then it has continued to work with the method. The conference on biotechnology was, according to Carstens, more successful than the 1986-conference on hybrid networks: it mattered that the Technology Board was established, even if it did not yet have a permanent standing, that it was associated with a committee in the parliament and that there were politicians interested in technology issues. Although, the Technology Board initially faced a delicate situation of being seen as an "anti-technology leftwing construction" and had to balance between being supportive to social movement organisations and debate and "acting in a way that was accepted as a fair and balanced way of doing things". [21]

The DBT is tasked with the promotion of the ongoing discussion about technology, to evaluate technology and to advise the Danish parliament (the Folketing) and other governmental bodies on technology and society matters. DBT has similar aims as its predecessor the Technology Board/Teknologinaevnen, but has legal standing in that the Danish parliament established it, as an independent body. DBT receives an annual subsidy of around 10 million DKK (approx. 1.3 million Euro) and it submits an annual report to the parliament and the government.[22]

The DBT has thus become an established body within the Danish political system. The element that was imported to the Danish-style consensus conference, from the US-style medical consensus conferences was the idea of having two panels – one panel with experts and one panel who critically questioned the experts. Apart from adopting this feature, there is little connection between the type of consensus conferences that were held by the NIH, and the ones that were held by the DBT (and as noted earlier these two types were running parallel and in different regimes, in Denmark during the 1990's). It was not a matter of translating the same concept into a Danish context, but rather a source of inspiration and the import of an idea into a new concept. Today the Danish-style consensus conference has been widely copied, and more than 20 countries worldwide have used the method for discussions on science and technology policy.[23]

4.1.3 Scenario workshops

As presented in the earlier section, the DBT has been crucial for the development and spread of consensus conferences. The DBT has also developed the method *scenario workshops*. Similar to the two previous methods it is a method that elicits judgments and decisions; what makes it a distinct genre of public participation methods is that it is developed especially to foster discussions about the future.

In the beginning of the 1990's the Technology Board (eg. the predecessor to the DBT) was encouraged to work more coherently and with continuity. The result was that three themes were identified and became the themes for more coherent and long-term projects: ecological housing, future work and traffic. It was in relation to these themes that the scenario workshop method was developed. The inspiration came from *future workshops*, a method developed and used by Robert Jungk in Austria during the 1950's and onwards. Robert Jungk and Norbert Müllert (1984), the authors of a handbook in how to conduct future workshops (or zukunftswerkstätten) describe democracy as building on citizens' images and visions of the future, since long-term planning affects the conditions of life for all. The phrase "the future belongs to all" (Jungk and Müllert 1984:13) captures the motives behind future workshops and the view that it is problematic if there are no fora available for democratic discussions about what kind of futures citizens' want.

Robert Jungk's ideas were influenced by his own engagement in the peace movement and anti-nuclear activism. He was interested in setting citizens' initiatives in motion, and at the outset of his work with future workshops he did not want to formulate rules for best practice, but wanted to keep the bottom-up perspective as far as possible (Jungk's preface to

the Danish translation of *Future Workshops,* 1984). The philosophical roots behind future workshops/scenario workshops are thus quite different from the ideas that nourished the development of new methods for solving conflicts around medical sciences (eg. the US-style consensus conferences).

With inspiration from the Austrian future workshops, the DBT developed the method and added the element of predefined scenarios, which citizens' would reflect upon and criticise. Ida-Elisabeth Andersen at DBT, who developed the method, had been studying Jungk's work in the early 1980's in her previous profession, teaching at universities:[24]

> He received great attention here in Denmark during the 1980s…I brought the ideas with me to DBT. When we got the theme on future ecological housing, we all agreed that future workshops were very exciting. We wanted the philosophy to be based on Jungk's ideas: that *if* something were to happen, if changes were to come about, then citizens must be involved, they have to want it themselves. Therefore it was this kind of method we needed. At the same time, at the DBT, we have to focus on technology, and it is not a given that technology becomes a main feature when you look at housing. So that is why the scenarios were added, to make sure we would stimulate discussions that would focus on technology…among the principles we wanted to adopt was the principle of 'equal standing', that all participated on equal terms.

The first scenario workshop, on ecological housing, was conducted in 1993. The year after, in 1994 the European Commission, which had increasingly started to show an interest in public participation methods, invited the DBT and other organisations specialised in different kinds of methods to the Commission. On the basis of this meeting the Commission was to choose a few methods that would be adopted in pilot projects. The DBT presented consensus conferences and scenario workshops. The scenario workshop was one of the methods chosen, and pilot projects were conducted in four countries (the UK, Germany, France and the Netherlands). The aim with the pilot projects was to test the method's robustness, and whether it could be translated into other contexts and people than Denmark and the Danes. Andersen was involved in the pilot projects and for instance trained people who were to conduct the workshops.

Due to EU funded projects supporting and assisting on the use of the method, the scenario workshop subsequently reached the status of being an established and frequently practiced method. It has been used in several countries all over Europe and under the term "European Awareness Scenario Workshop, it is the only method developed at the DBT that has become a registered trademark.[25] Although the status of being a trademark may have little

(or no) significance in practice, it marks a shift from the earlier ideas around future workshops expressed and practiced from an activist perspective and towards a standardised method upheld by the European Commission as a tool that supports sustainable development and innovation.[26] According to Andersen, a trademark or not is unimportant as DBT has no interest in protecting the method, since its philosophy has always been to leave its own methods open, to be practiced and developed by others.[27]

4.1.4 Focus group methodology

Focus group methodology is different from the three previous tools, in that it is not primarily a method for eliciting judgements and decisions, but one for doing research on the public and to elicit opinions. The methodology has its origins in the type of group interviews conducted at Columbia University in the 1930's in which participants were encouraged to speak more freely themselves (Morgan 1998:38). With the book *The Focused Interview* (Merton, Kendall and Fiske), which was published in 1956, these kinds of group interviews got their name 'focus groups'.

From the beginning of the 1950's until the 1980's the method was almost exclusively used in the context of market investigations. In marketing, there were actors who saw the usefulness of focus groups, and created areas for their application. For instance, if the selling of a product was decreasing, focus groups could be arranged in order to find an explanation. Market researchers spent 30 years of improving the method, and there was no sign of actors in spheres outside of marketing that were interested in using the method. (Morgan 1998:39). It was not until the middle of the 1980's that focus groups were used in a wider sense and in other settings than marketing.

Focus groups are now used within many disciplines of social science as well as in marketing. In particular it has been used in research on 'sensitive' issues such as the sexual behaviour in research on the spread of HIV (Morgan 1996) and it has been described as ideal for risk related issues (Wynne et al. 1993: 26).

Even though focus group methodology is not primarily a tool for enhancing citizen participation, but a research technique, it has been stated that: "An important theme that reappears in many of these uses of focus groups is their ability to 'give a voice' to marginalized groups" (Morgan 1996:133).

Focus group methodology is used widely in social science research and on many different kinds of issues. The following provides with an example of how the method has been used on "risk issues". In the beginning of the 1990's, the research centre, Centre for the

Study of Environmental Change (CSEC), Lancaster University, was one of the first to develop the method specifically on risk related issues, and this has had impact on how public opinion has been discussed and portrayed by other academics as well as in policy discussions.

When CSEC started to take an interest in focus group methodology in the early 1990s, the motives for this were connected to a deep dissatisfaction with how publics and public opinion often were presented in relation to technology and risk. According to the former director of the Centre, Robin Grove-White, there was a wish to contrast "simplified rationalistic accounts of supposedly ignorant or irrational attitudes on the part of the public", there was a big difference between "what people said to us, when we were asking sociologically informed questions about risk and trust, compared with what the polls of the nuclear authorities were showing".[28]

The Centre's first contact with the method was in 1990/1991, in relation to a project on the future of leisure in the UK. The dissatisfaction with the kind of results that quantitative methods could generate led to the search for other methods. Through personal contacts with commercial consultants, who had previously done work for NGOs, the Centre was informed about focus group methodology and how it had been used in commercial markets research. The commercial consultants at first assisted several research projects with their competence, and later on researchers at CSEC developed their own competence in the field.

CSEC's use of focus group methodology was part of a development of pioneering work of a qualitative kind to the area of public understanding of risk:[29]

> Jackie Burgess was doing parallel work, and there were others, but I think we were being more adventurous about it, and we were being very productive. We did a lot of work, a lot of individual studies, and a major study from Lancashire County Council, about what people thought about sustainability.

In working with the method there were different kinds of balancing acts for the researchers to perform. For instance, in addition to the enthusiasm over the method's ability to capture the texture of what people reason about, and the conversations it generated, there was also the awareness of the risk of steering what people said in the context of the focus groups:[30]

> There is a subtle balance between steering people into a space where they then would be open…and actually forcing them into conclusions that you want. So we had to be very rigorous amongst ourselves and quite brutal with each other about how to do this, and sometimes we did it better than others.

Another type of balancing act is connected to presenting the results without compromising with them, and to present them in a way that would not be too critical from the standpoint of the funding body or policy makers, because of the risk that a too critical standpoint would lead to a complete rejection of the results. This was particularly evident in a study conducted at CSEC, partly funded by a part of Unilever, a major producer and manufacturer of foods products, and which resulted in the report Uncertain World: Genetically Modified Organisms, Food and Public Attitudes in Britain. The report was published in 1997, and this was a little bit ahead of its time, before the GM debate had reached its most critical points in 1999. The difficulties were connected to the fact that Unilever was very optimistic about GM foods at this point, and the report outlined the tensions, which would eventually blow up:[31]

> I guess the most influential report was Uncertain World, if only because it did change how public opinion was pictured, particularly within industry, and it caused big divisions within Unilever… The report had been commissioned at a time when Unilever had very high expectations of GM for process foods, and we were saying: "storms ahead, this is really going to blow up quite soon, all the signs are here". In the report, how to nuance those conclusions was quite tricky, because it had to be down in a way that didn't compromise with what we were finding, but on the other hand we didn't want to be unduly, or put it in a way so that it would leave the thing to be rejected completely, so it had to be, this balance act. It caused a lot of difficulties inside Unilever, but within 18 months, suddenly the roof had gone off the issue and Unilever had this report that they were suddenly very proud of: "Oh, we were the first to put this on the alert".

During the 1990's, CSEC used focus groups methodology on issues such as GM foods, climate change, sustainable development, and nuclear power. As with the other methods previously discussed, it is difficult to discern in what ways the use of the methods actually have had any impact on policy issues, this would demand thorough evaluations of a range of cases. In some cases the work of CSEC had impact on policy discussions and on how public opinion was portrayed, rather than any big policy consequences. Focus groups can be used both as a way of opening up debates and closing them down, this we will take up in later sections, in relation to the issue of what conceptions of the public that different methods deploy.

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Since all four methods discussed have been used a long time and therefore could be expected to be distinctive enough so that it is possible to speak of each in generic terms, the application

of the models can differ to significant degrees, leading to different constructions of the public and the topics opened up for discussion. Our approach of focusing mediation highlights the fluidity of these "genres" of public participation methods. The methods are often presented and evaluated as if each had its own niche for application, in practice however, the design, organisation, outcomes, etc. differs. A problem when, for example, the consensus conference is transported to other countries and political cultures is that the context in which the Danish-style consensus conference once was developed is overlooked. When used in other contexts there will be different versions of the lay people adopted and different types of interactions between experts and citizens than what was initially intended. There is for instance a comparative study of consensus conferences conducted in different countries, which show very different applications of the method, and as a result of another design and political culture than the Danish, different versions of the public are mobilised (see Dryzek and Tucker 2007b).

The methods change, as they travel from one organisation to another, some elements may be lost on the way and some remain, some are altered and new ones are added. Mediators (organisations like the Danish Board of Technology, political or social scientists, consultants or other actors) specialised in public participation methods have a crucial role in initiating models and guidelines for how to target and engage relevant publics. Equally they have an important role in designing and conducting the methods, i.e. applying them in relation to particular projects and issues.

Our four methods have all initially developed in relation to a specific problem: a national health care plan (citizens' juries), scientific controversies around the risk of breast cancer screening (consensus conferences), ecological housing (scenario workshops) or methodological problems of how to generate knowledge useful for research or marketing (focus groups). Through different routes, and first and foremost through people that have found an interest in the methods and have applied them in a new setting and in relation to new problems, they have spread and sometimes developed into something quite different from the 'original' model. There are efforts to protect the models from misuse, for instance by the registration of trademarks (citizens jury and scenario workshops). It is difficult to tell whether such efforts have any effects, but it is an indicator that some mediators of public participation methods at least have the ambition to standardise and perhaps by that enhance the status of 'their' method. Sometimes methods are used in order to counteract other powerful methodologies, which contain different conception of the public. This was the case when

CSEC started to work with focus groups, as a way to counteract the portrayal of the public in quantitative research.

The public does not speak for itself: “A public seems to be a singular collective subject, but by the mode of its appearance, any public also seems divided against itself, so opening a space in which claims and counter claims as to its true opinions, feelings, wishes, and interests can prolifilate” (Barnett, forthcoming: 4) To emphasise the mediation of public concerns and public opinion, cultivates a “healthy scepticism about any given claim to embody ‘the’ public will or interest” (ibid.). The next sections will discuss the variety in which different conceptions of the public are deployed in different public participation methods.

4.2 Designing deliberative events and the construction of publics

The widespread use of the four methods makes it relevant to investigate in more detail what particular versions of ‘the public’ or subject for citizen participation they assemble. The following sections will discuss the methods in terms of assumptions about the ‘subjects of citizen participation’, and the specific arrangements needed in order to engage these assumed/predefined versions of the public.

Two of our selected methods can be subsumed under the more generic term ‘citizens’ panels’ (citizens’ juries and consensus conferences) which build upon the idea of the juridical process, in which evidence is put forward by advocates (expert witnesses), to be judged and evaluated by a panel of carefully selected citizens. In addition, other ideas or analogies to existing decision-making structures are highlighted by methods drawing upon a citizens’ panel, and that is the idea of “the peer review system” and the public “town meeting” (Jørgensen 1995:18).

The distinctions between different ways of conceptualising the public will be discussed more in detail below, the following two sections will mainly draw upon elements in the citizens jury and the consensus conference.

4.2.1 An idealized citizenry with a common sense vantage point

The controlled space of the citizens’ jury or the consensus conference could be compared to that of the court: it is based on an adversary system in which advocates present opposing versions of the “same” events or the “same” issues, to be evaluated by a group of citizens, who by being composed as a jury is capable of a specific “vantage point” in sorting claims on factual matters. There are epistemic distinctions drawn in the court between “the adversary

parties who enunciate arguments and counter-arguments, the judges and juries who decide the facts and allocate responsibilities, and the relatively disengaged commentators who report upon and analyse the action" (Lynch and McNally 1999:183-184). It is worth to explore these epistemic distinctions further, in order to examine what version of "the public" that the citizens' jury and the consensus conference deploy.

According to Michael Lynch and Ruth McNally (1999:184) the trial court "systematically highlights, elucidates, and frames the jury's 'common sense' vantage point". We argue that in the context of the citizens' panels, this vantage point is mediated through the selection of participants, various devices for fostering a certain kind of dialogue between citizens, and the epistemic distinction between neutral moderators (and citizens) and expert witnesses who are advocates for specific standpoints in relation to the charge.

The *selection process* is crucial for the kind of idealised citizenry the citizens' panel produces. In brief, a citizens' jury is put together by a group of randomly selected people, through a quota system, which typically includes five demographic variables (age, gender, education, race and geographic location). A sixth variable is usually added, this may be another demographic variable, or it may be the attitudes of the jurors, related to the topic discussed. The ability to create a "representative microcosm" of a given community is emphasised as a unique feature of the citizens' jury.[32] In order to achieve this, the Citizens Jury Handbook (2004) offers guidance in how to select variables, conduct the survey and subsequent procedures such as tracking potential jurors and protecting the selection process against bias. Great faith in the selection procedures is expressed, in terms of the interchangeability of jurors and the ability to find "a perfect substitute" if a selected juror declines his or her seat.[33]

In the citizens' jury, *various devices* are used in order to shape and foster a certain kind of dialogue. The citizens' jury tries to foster collective deliberations rather than mere individual reflections, for instance by trying to get the jurors all thinking that "while they are individuals, they are also members of the same community".[34] The moderator plays an important role in instructing the jurors about their behaviour. The responsibilities of the moderator are to participate in the design of the agenda and the charge and to facilitate the dialogue. Facilitating includes "to help jurors to clarify and refine their statements without putting words in their mouths", to ensure that all participants feel respected, to keep track of time, to explain rules of procedures, to facilitate interaction between jurors and witnesses, to ensure no inappropriate lobbying is going on, to question experts if jurors are reluctant/unable

to do so, to facilitate the interaction between the jurors themselves, which could mean to "restrain vocal jurors" and "bring out the ideas of the quiet jurors".[35]

The common sense vantage point of the jury can only be reached if there are some actors that can rest on a position of *value neutrality or epistemic purity*. This position is assumed for the moderator and other project staff, and the jurors themselves. The project staff of a citizens' jury is to ensure the integrity of the process. In order to do this, the project staff "must work exceptionally hard to keep their own personal opinions and views out of the process".[36] The moderator should have "a reputation for non-partisanship" and "an ability to be empathetic".[37]

Within the citizens' jury structure, an advisory committee is composed of either "wise and thoughtful' individuals" or "stakeholders or advocates".[38] The task for the advisory committee is to advice the project staff on the charge, agenda and witness list. Expert witnesses are chosen in order to get a balance between *advocates for specific standpoints* in relation to the charge.

The value neutrality of jurors is also assumed, since they are not supposed to presume from the outset that one or the other party is right. They are however also expected to make judgements over the witnesses' presentations and decide what aspects can be judged reasonable, plausible and credible. The epistemic purity of jurors is highlighted by the fact that jurors are expected to construct the case through the initial charge, together with the arguments and counter-arguments presented by the witnesses. It is seen as desirable, or obligatory even, that the organisers of the citizens' jury are able to keep control over the framing of the entire event, by not letting the final verdict be based on information that has not been expressed within the scope of the citizens' jury procedures: "a Citizens Jury should not be allowed to reach conclusions on an issue if they have not heard testimony pertaining to the issue".[39]

In *Studies in Ethnomethodology* (1967) Harold Garfinkel describes the features of the jurors' activities as a special method of social inquiry. The rules of decision making that should to shape jury deliberations make up an "official line", which jurors in practice can only deal with, with great ambiguity. The jurors' sorting of claims produces a "corpus of knowledge" that partly is formed chronologically and partly formed through empirical relationships (Garfinkel 1967:107):

> This "corpus" is treated by the jurors at any given time as "the case". By "the case" is meant the logical mode of "actual" and is contrasted by jurors with the logical modes of "supposed", "possible", "fanciful",

> "hypothetical", and the like. The decisions to treat, say, claims of speed, directions of travel, and so on as parts of "the case" are, in the jurors' eyes, critical decisions. The decisions as to what "actually happened" provide jurors the grounds that they use in inferring the social support that they feel they are entitled to receive for the verdict they choose. The "corpus" permits them to infer the legitimacy of their expectation that they will be socially supported for their choice of verdict.

Thus, if the jury analogy is used consistently, the jurors' role in the citizens' jury is not to contribute with substantial input to 'the corpus of knowledge' but to sort it and make judgements about their trustworthiness. The idea of participants that are capable to deliberate from a specific vantage point because they are not advocates for a particular viewpoint, resembles John Rawls idea about rational deliberations under "a veil of ignorance". Deliberation will be rational, he argues, if it takes place in a setting in which participants are "deprived of information" that would make them advocates for particular interests and values, but in which they "have enough knowledge to rank the alternatives" (Rawls 1999: 123). In the citizens' jury the knowledge which is sufficient for ranking alternatives is provided to the jurors by the witnesses, and the "local credibility" that jurors ascribe to "argument, demonstration and persuasive appeal" (Lynch and McNally 1999:183) presented at the hearings will depend on how science is presented in particular cases (ibid: 187).

Similar to the citizen's jury, the jury analogy can be used in order to discuss certain elements of the consensus conference. What we would like to add in the following discussion is that methods for public participation may draw on combinations of elements of various decision-making structures and the consensus conference is a good example for illustrating this.

4.2.2 The ability to tap into the wider community

Deliberations among citizens in the consensus conference should aim towards consensus. It is stated in the general description of the method offered by the DBT that deliberations do not end until the lay panel has reached consensus. It has been suggested that the meaning of "consensus" in the Danish-style consensus conference is not the same as the absence of disagreement, rather it is a particular political and ideological formation based on ideas about how to reach decisions that reflects the common good (Irwin and Horst 2007). The Danish version of consensus also exhibits a particular view of the citizens or the "lay people", as relevant experts, contributing substantially to an extended peer review system, and as members of a wider society and capable of being involved in discussions aiming to reach consensus on the common good.

It is assumed that the “emotional and experience-based views of ‘ordinary people’ is important in the decision making process and in order to cover aspects that experts, politicians and interested parties may have overlooked. Another purpose, which the DBT explicitly associates with the consensus conference, is its ability to expand and enrich the scope of traditional debate.[40]

As noted above, the element that the Danish-style consensus conference adopted from the US-style conference was the idea with two panels, one with experts and one panel that would critically interrogate the experts. The difference was that the interrogating panel was not composed by other professionals as in the US-style conference, but by lay people. Ida-Elisabeth Andersen, who has worked at the DBT since 1988 explicates the philosophy behind the involvement of lay people: [41]

> They are citizens – they should be compared with politicians in the respect that they are supposed to find the common good together – on the other hand, when the process is over, they are often more qualified to make a decision than most politicians. We do not imagine that they are an average of the population with an innocent view of the world, but we imagine that they together embrace differences and manifoldness and a spectrum. As philosophers say, there are 20 arguments in a conflict, and that is what they are assumed to cover. That is our idea, not that they are representative as such, but that they are representing variety.

The selection process should ensure that a variety is represented. The citizen’s panel should consist of citizens, which vary in terms of age, gender, employment and geographical location. Moreover they should be “open-minded” in relation to the topic and “interested in debating” the issue. It is stated however that most important is that they represent a broad experience base in relation to the topic.[42] The dual ambition to keep the citizen panel neutral (which means that those citizens’ who are not “open-minded”, are excluded in the recruitment process) while at the same time engaging citizens who represent a broad experience base reflects the combination of different decision-making ideas in the consensus conference. Even though the balancing between these goals will most likely differ in concrete examples, the epistemic distinction between a lay panel and expert witnesses, and thus the “jury analogy” is crucial for the structure of the consensus conference. It should be pointed out though, that both the citizens’ jury and consensus conference, “stage a more complex politics of expertise than do most juridical settings” (Blok 2007:164f), and allow for a multiplicity of perspectives, “rather than a simple duality of ‘for’ or ‘against’” (ibid).

What has underpinned the work of the DBT from the beginning is the idea of "independent" information and knowledge of new technology, and this was also the reason the Board of Technology was set up:[43]

> The Board of Technology was established at the end of the 1980's because the parliament (folketinget) wished to have more independent evaluations, and information on new technology. Therefore independence has always been an important value in our work, also in the work we now do in relation to the parliament.

Each year a procedure that involves a range of actors (NGOs etc.) results in a list of possible topics that are later on ranked according to certain criteria. These criteria are whether the suggested topic concerns technology; if it conceives a problem; if it is of current relevance; whether it is interesting, i.e. if there is a clear target group; and whether it is a task for the DBT or if some other actors are dealing with the question. Today the DBT chose five topics to focus on for the next year (due to budget restrictions, before they had a budget that could include ten topics). A shrinking budget means that the DBT does not work as much with consensus conferences as they used to.[44]

The DBT over the recent years has suffered yearly cuts in their budget, however, as noted above its role and relation to the Danish parliament is institutionalised in legislation. This status in relation to the parliament is one of the main features of the Danish-style consensus conference. This does not mean that politicians always listen to the recommendation that is the result from a consensus conference, but it is the idea of policy recommendations that lies behind the overarching goal to reach consensus:[45]

> It is all about finding the point at which participants can agree, how far one can reach…When we emphasise consensus, it is because of the political effects it may have. If the panel comes out with two or three standpoints, the politicians can choose what ever they want. Of course they do that anyway, but this is the reason why the panel should reach consensus.

What make the Danish-style consensus conference a distinct genre of participation methods is not only its emphasis on consensus, but a particular version of consensus thinking that is embedded in the social and political culture. For this reason a feature that is unique for the Danish-style consensus conference special is its institutionalisation in Danish society and its (DBT's) legal standing in relation to the parliament. This can be related to ideas of "folkelig"

(eg. 'popular' in a positive sense of being embedded within a wider collective) and nation building (Irwin and Horst 2007).

Irwin and Horst (2007:11) relates the involvement of lay people in the work of the DBT to a set of political and cultural ideas. One of these ideas is scepticism towards a one-dimensional biased of experts and elite knowledge and "the sense of the 'common man' as the locus for viable solutions in the community". Lay people are thus seen as the only actors who can adopt the perspective of the whole community. Further, this also reflects a strong political belief in the common good and commitment to building a shared national culture.

The "lay person" is according to the DBT, not seen as disinterested or innocent of issues, but as possessing embodied knowledge about the practical world. Yet, the distinction between experts and lay people structures the entire event, and there is an ambition to screen out "hidden experts" among citizen panel applications (Bruun Jensen, 2005: 226, in Blok 2007:179). According to Anders Blok (2007:173), the structuring of consensus conferences can be compared with Latour's "Modern Constitution", the separation of science from politics, knowledge from power and facts from values. The epistemic distinction between advocates, neutral project staff and moderators, as well as a group of citizens deliberating from the vantage point of being citizens capable of sorting factual claims that we discussed in connection to the citizens' jury is thus highly relevant also for the structuring of the consensus conference. What can be added is the underlying assumption that Alan Irwin and Maja Horst (2007) have pointed out, of the layperson as being able to tap in to a wider sense of community, and that this is an element of citizen participation that is highlighted in the Danish-style of consensus conference.

4.2.3 Experts among other experts

Compared to the citizens' jury and the consensus conference, it is a different version of the citizen that is mobilised in the scenario workshop. It is not an idealised citizenry with a common sense vantage point, but citizens are involved as a group of actors among other groups. Further, it is a citizen who is supposed to contribute with knowledge, and not only to sort the knowledge claims of experts:[46]

> The experiences and vision of all the actors contribute to the proposals and plans of actions resulting from the workshop. All groups contribute with their knowledge and experiences from local activities, for instance as local residents, business people and so on. They can all be regarded and defined as experts, because local experience and knowledge is a crucial factor in this locally oriented method.

Similar to the previous methods it is organised so as to elicit decisions from a group of citizens, but in this case these are joint decisions between different kinds of expertise (local residents, technical expertise etc.) instead of decisions taken by citizens on the credibility of and experts. While the citizens engaged in the consensus conference and the citizens' jury are expected to make judgements on the credibility of expert witnesses, the participants in the scenario workshop are not expected to judge neither the credibility nor the desirability or probability of the presented scenarios.

The recruitment of participants, as described earlier, is based on the idea that all participants represent different types of expertise and all are expected to be involved in critical discussions over the pre-defined scenarios, the development if them, as well as in the making of an action plan for how to make imagined futures real. This is a very different structure from the citizens' jury and the consensus conference, which build on a division of expert witnesses and a citizen panel/jury. Another crucial difference is the use of scenarios as a device for stimulating deliberations, compared to the devices used in the other methods: "the charge", "introductory material" and "expert/advocate presentations".

The scenario workshop has also been described, as opposed to citizens' juries and consensus conferences and similar methods, as a tool for "positive technology assessment". The scenario workshop do not start from controversial and complex technology or science, but from a description of "malfunctions in society" and function so as to generate "positive discussions about technology" and how technology development could be used as a remedy to some problems.[47]

4.2.4 Simulations of the public

The selection criteria in the citizens' jury were related to representativeness of a given population as well as the creation of an idealised citizenry or a microcosm, which ensured the epistemic distinction between advocates on the one hand and citizens able to sort claims from a "common sense vantage" point on the other. The consensus conference selected participants in the citizens' panel in order to ensure diversity, because this would ensure that all relevant arguments would be present. The design of focus groups, including selection criteria of participants in the groups, must always be related to the aim of the project and the research questions posed. Even though selection criteria may differ there are some "rules of thumb". According to David L Morgan (1997:34) focus group projects most often: use homogeneous strangers as participants, rely on relatively structured interviews with high moderator

involvement, have 6-10 participants per group, and have a total of three to five groups per project.

The usefulness of several focus groups, instead of one, is indicative for a significant difference between the role of the citizens that the citizens' jury and the consensus conference mobilise, and the group of individuals that are recruited to focus groups. If the aim is to create a citizenry with a 'common sense' vantage point or a certain ability to "tap into a wider sense of community" there is no need to convene other citizen's juries or panels to see what conclusions they come up with – that would render the selection procedures and designs that these methods are based upon completely useless.

Similarly, in a trial there would be little point in convening five juries to see what verdicts they all came up with. If a legal jury finds someone guilty, they *are* convicted, by definition. The jury system does not try to find out about the jurors, but about the accused, i.e. 'find' in a special legal sense, of 'finding' them guilty or innocent. The decisions that the citizen's jury and the consensus conference generate have the same "real" effect as the jury in a trial only if the policy recommendations they present are followed. This does not mean that the credibility that the jurors/citizens ascribed to the arguments and demonstrations made at the hearings is a definite statement of expert witnesses credibility, it is a "local credibility" that is ascribed to the presentation of "evidence" at the time for the hearings. Rather than convening several citizens' juries or panels at the same time, the logic to these methods makes it more relevant to convene a jury/panel after some time, if new or previously neglected "evidence" has come up.

In contrast to these "real" events (or rather, events with real effects) of judging the credibility of experts, the focus group is framed as an experiment – as bounded, safe simulations of publics to see what thoughts and opinions they would express on various topics in a "discussion that resembles a lively conversation among friends or neighbours" (Morgan 1988:22, in Lezaun 2007). By making the analogy to the natural conversation focus groups methodology is based on the assumption that what participants express in the focus group is also what they would express outside the experiment, and what a real (imagined) public would express. This crucial difference from the other methods we so far have discussed can also be seen in the motivation of selection criteria when composing focus groups.

According to focus group handbooks, thinking about selection criteria, is important since the composition of the selected participants will affect the quality of deliberations. In the selection process "minimizing sample bias" is more important than achieving generalizability: "the shift away from an emphasis on generalizability also means a shift from

random sampling toward theoretically motivated sampling" (Morgan 1997:35). A method for controlling the group composition so that it matches chosen categories of participants is known as segmentation, and aims to create homogeneity within the focus group. This homogeneity is assumed to facilitate "more free-flowing conversations among participants" and "analyses that examine differences in perspective between groups" (ibid: 35). The goal is however to reach homogeneity in background and not in attitudes. The background variables that are common are sex, race, age, and social class. The handbook reflects on why these variables are important in terms of how comfortable participants will feel in expressing their thoughts and experiences and for instance that people from the same age group might communicate better with each other: "it is not the actual differences among participants but whether they perceive each other to be different that determines their willingness to discuss a topic together" (ibid: 36).

Similarly, the moderator's role is not to ensure for instance the epistemic distinction between advocates and a neutral disinterested position, but to ensure that participants speak freely about their views. The focus group might use a structured (and high moderator involvement) or less structured (and low moderator involvement) approach, the motives for the latter reads: "If the goal is to learn something new from the participants, then it is best to let them speak for themselves" and a less structured approach is to prefer (ibid:40).

Low-moderator-involvement is usually of more interest for social science researchers. The advices given to low-moderator involvement groups are mainly about letting the group moderate themselves, by instructing the group initially on how to handle problems, for example, the moderator may initially say: "If the group runs out of things to say, just remember that what we're interested in is [research topic] and we want to hear as many things about this as possible" (ibid: 53) and emphasise that it is their experiences and stories that are important etc.

Following Stirling's distinction between processes that opens up issues for debate and those that closes down policy options, focus group methodology could be used in both ways. Institutional devices set up to promote deliberation, may sometimes "entrench the very 'mischief of factions' they were meant to avoid" (Bohman 1996:2). Methods that in some contexts are used in order to produce qualitative deliberations can also be counteracting the overarching goal of improved public deliberation. For example, "[t]he now-common use of 'focus groups' further undermines deliberation by tailoring political discourse to already-existing opinions, so that market strategies replace debate and discussion" (ibid). This tension between eliciting relevant "public opinions" and stimulating public deliberations are likely to

be present in many exercises, even when they are presented as being primarily means to improve participation and deliberation.[48] The way focus groups was used at the research centre CSEC, as a way to counter act simplified notions of the public and public concerns in quantitative research, rather aimed at opening up issues for debate and to present a more nuanced picture of what people reason about in relation to risk issues. In the following the role of mediators, different versions of the public, and different approaches to demonstration and dialogue in relation to our four methods will be discussed.

*

Expertise is connected to the four selected methods in different ways. In consensus conferences and citizens' juries, experts play an important role as witnesses and are selected on the basis of their standpoint in relation to the topic for discussion. This means that science in this context is not presented so as to convey unambiguous messages. On the contrary, in consensus conferences and citizens' juries, expertise connotes interests and particular standpoints and the task is to choose expert witnesses so that all viewpoints on a given topic is represented. Even though public deliberation as a policy tool can never escape framing problems and biases, the methods are designed to deal with such biases.

Another kind of expertise is the project staff – the experts on the process – as mediators of the process, these experts play a crucial role in constructing neutrality, by assembling all elements together (demographically, and in terms of opinions, knowledges, etc) and in trying to avoid biases. Mediating is also the main task of moderators and facilitators of dialogue, the may be active in fostering a certain kind of dialogue and shaping the behaviour of participants, or they may "teach" participants to moderate themselves.

Mediators may be social scientists, who design a research project, and put together focus groups, to be transcribed and analysed by the social scientists themselves. In other cases, for example in consensus conferences, when the reporting is done by participants in the citizens' panel, the role of the mediator may be to give initial instructions for how this may be done, or as in the case of citizens' juries, the mediators' role is to ensure that the participants agree with what is included in the report.

The four methods that we have discussed have different functions. While three of them (citizens' juries, consensus conferences, and scenario workshops) are designed so as to generate decisions, they do so in different ways.

Publics may be assigned the role of 'sorting claims' or 'contributing with claims'. The main task for the citizens in the citizens' jury and the consensus conference is to sort the claims made by the expert witnesses. They have the function of generating judgements on the

credibility of experts. These are “real events”, meaning that the judgements they make are the local credibility that is ascribed to the expert witnesses’ presentations at the time of the hearings. Whether the judgements and policy recommendations made by the citizen panel or jury will be followed depend on whether these methods are plugged into a decision-making process or not; both methods are designed in a way that assumes that they are (or might be).

The scenario workshop is similar to the previously mentioned methods, since it is organised so as to elicit decisions. A difference is that in scenario workshops joint decisions are taken by different kinds of expertise (local residents, technical expertise etc.) and not by citizens alone on the credibility of experts. The scenario workshop is also designed to be plugged in to a decision making process, and one of its main outcomes is a concrete action plan for how to actually implement the ideas resulting from deliberations. It is different from the previously mentioned methods, in that it does not start from a problematic technology but from a societal problem, and then aim to generate concrete plans as solutions to that problem. These solutions may include suggestions about technology developments, and in that sense it is a method for positive technology assessments. The focus group is in contrast to the other methods, framed as an experiment – as bounded, safe simulations of publics to see what thoughts and opinions a real (imagined) public would express on the topics discussed.

As discussed in the previous sections of this report different approaches to mediation lead to different versions of the public. For example the idealised citizenry with a ‘common sense’ vantage point is relevant in both the citizens’ jury and the consensus conference. These two methods are structured around expert and counter-experts that seek to justify their commitments in front of a “lay jury”. This is similar to the kind of expertise that Wynne (1993:328) has ascribed to citizens – that lay people could be seen as experts on evaluating the trustworthiness of expert knowledge and that they can contribute with a social meaning of expert knowledge “in the sense of its institutional dimensions”. This also resembles the idea that the consensus conference is based on, and in some sense also the citizens’ jury (because of the aim and devices used to try to get the jurors to think they belong to the same community), is the idea of lay people as tapped into a wider community or nation.

The way the methods are used and what they can achieve, depends on the organisers’ rationale for involving the public. It is therefore important to analyse the micro-politics of actual uses of these and other methods and how this links to wider socio-political structures, as Anders Blok (2007:165) writes in an analysis of a consensus conference: “Such politics might be said to unfold in different stages, corresponding to an outside–inside–outside pattern, with wider sociopolitical influences being ‘mediated’ into the conference and then

brought back out again via, for instance, media reporting...knowledge about this macro context is necessary for understanding the micropolitics of expertise during the conference."

Such macro-politics may be accounted for in analysing for example how the charge in a citizens' jury, or the introductory material in a consensus conference, scenario workshop or focus group, are framed; and how the reports from these as well as how the analysis from focus group discussions feed into policy. The following chapter uses the *GM Nation? Public debate*, as a case that can illustrate the linkages between the macro-politics around GM crops and a public participation process that had a hybrid structure, mixing various modes of mediation and constructing different kinds of publics.

5 GM Nation – an example of a hybrid process with multiple modes, stages and scales

The *GM Nation* series of events in the UK in 2003 represent one of the largest participatory processes around disputed technologies in Europe. It had nearly 700 meetings and if measured by the amount of completed GM Nation questionnaires involved 36,557 participants. This was conducted in a moment of political crisis following several years of intense public controversy and mobilisation on the GMO issue and preceded the government's intention to make a decision on whether to allow commercial cultivation of the crops in the UK. *GM Nation* also reveals another category or genre for our study – one that involves a hybrid or baroque structure, mixing various modes and scales of public engagement and deliberation. These mixed modes or types of for a can be said to invoke or enrol different modes of publicness. GM Nation also can illustrate the importance of historic context or conjuncture, revealing how deliberative fora and processes can play different roles and take on different forms depending on their context.

5.1 Origins of GM Nation and the relationship with the Farmscale Evaluations: Demonstration and Dialogue in the UK GMO case

Preparation for GM Nation began in late 2002, with the main processes running in 2003. The initiative for the debate came from the UK's Agriculture and Environment Biotechnology Commission (AEBC), a multistakeholder body. The AEBC itself was established due to a legitimacy crisis of the government's initial solely technocratic regime centred on the scientific advisory body ACRE to which the new body now ran in parallel. The new commission recommended a public debate in its 2001 report *Crops On Trial.* The strategic aim of this report was to block any attempt to use the results of a series of Farm Scale

Evaluations (FSE's) as the trigger and sole route of legitimisation for a forthcoming government decision on the commercial cultivation of GM crops. The FSE's were an extensive series of large natural scientific demonstrations/experiments that played a central role in mediating the political controversy.

Thus 'the public' and its deliberations were brought in by the AEBC as a counterweight to technocratic modes based on a natural scientific experiment/demonstration. GM Nation can be seen as a shift to dialogue in a situation where the model of demonstration via the FSE's could no longer gain legitimacy. Yet the relationship between the two would remain problematic. Despite the ascendancy of the principle of dialogue, the FSE's continued to be the most powerful source of 'truth' for the government, thus maintaining the hegemony of technocratic modes. The initial assumption of the organisers of *GM Nation* was that this public forum would include deliberation on the FSE's and therefore also constitute some sort of 'extended peer review' situating the science in its broader social context and holding it to account (see Funtowicz and Ravetz 1992, on 'post normal science').

However, the actual unfolding of events meant that *GM Nation* had to be concluded and present its final report to government before the publication of the FSE results. Thus the two were kept separate, as social and natural scientific 'information feeds' exclusively for the government to base its decisions on. Thus despite the publics of GM Nation bringing many hybrids of social and natural scientific knowledges to the discussions, the effect of this institutional separation was to subjectivise the public participation into 'public opinion' and 'values'. Thus like Latour's (2004) description of a 'modern constitution' with a separate 'house of nature' and a 'house of society', the UK GMO crisis was managed by an institutional bifurcation between two committees ACRE and the AEBC, the former drawing its authority from the natural scientific experiment/demonstration of the FSE's, the latter from the social experiment/demonstration of GM Nation. This separated 'facts' from 'values', with the public confined to expressing the latter while the former kept the epistemological prestige and 'constitutional' power in the government's decision making process.

The UK government had accepted the AEBC's advice calling for the debate in May 2002, announcing that there should be a 'national dialogue' on GM. The government asked the AEBC to recommend the form a debate should take. After much trading of documents and positions the eventual shape of GM Nation arose. The government then announced that a 'GM Dialogue' itself would be separated into three different strands – 1) a science review centred on experts (although this would attempt to be 'publicly driven', allowing public debate to set questions and also use a web interface and some public meetings/workshops, 2)

an economic study conducted by the cabinet office, and 3) the public debate itself – GM Nation. Thus this 3 way separation and division of labour also implicitly laid borders around GM Nation. As we shall see in an examination of the management and mediation of information flows between the three strands, despite the intentions that the three should interact and inform each other, in practice they were kept separate, thus reinforcing the bifurcation between 'facts' and values' noted above.

A Public Debate *Steering Board* (PDSB) was formally launched in Sept 2002. The PDSB would be the most visible mediators and translators of the process – for example the PDSB would also eventually draw up the debates Final Report in 2003. AEBC Chair, Malcolm Grant was invited by the Secretary of State to also chair the steering board and appoint a membership that could gain public confidence and symbolise independence from the government. For example it included both a leading figure from the Five Year Freeze anti-GM coalition as well as from the industry body the 'Agricultural Biotechnology Council' (ABC), made up of six agrochemical multinational companies. Eight of its members were also commissioners from the AEBC, while two were co-opted from government departments.

At its first meeting the PDSB appointed a contractor to actually run the debate. Due to budgetary constraints and established subcontracting arrangements the government's agency called the Central Office of Information (CoI) was appointed, although this raised criticisms that public trust in the independence of the debate might be compromised. During this time there was also a dispute between the PDSB and the government over timescales and funding – with the government in Feb 2003 eventually agreeing to extend the timescales and double the funding to £500,000. Other important mediators of the process would be Corr Willbourn, a psychotherapy based consultancy and practitioners of group process who would design and run the foundation discussion workshops and the Narrow But Deep component.

5.2 Structure of GM Nation and Engaged and Abstract publics

GM Nation involved a hybrid or baroque structure, mixing various modes and scales of public engagement and deliberation – thus invoking or enrolling different modes of publicness. It involved a mixture of focus group style discussions amongst participants selected for broad demographic representativeness and attitudinal 'neutrality' and a larger scale series of public fora open to all interested members of the public. Thus there were: a) Nine foundation workshops along the lines of focus groups, b) The open public meetings organised into 3 'tiers' including i) 6 major 'national' meetings organised, mediated and structured by PDSB, ii) around 40 tier 2 meetings organised mainly by local government, and iii) an estimated 629

'tier 3' local meetings/ events organised by community and civil society groups. Tiers 2 and 3 were a more heterogeneous affair of varied format and quality. GM Nation also had C) Ten 'Narrow but deep' closed and mediated focus groups style events of pre- selected participants – to act as 'control' for the open meetings.

At the heart of controversies around *GM Nation* lies a tension between the modes of publicness elicited by the focus group style events (Foundation Workshops and 'Narrow but Deep') on the one hand and the open public meetings on the other. While the former elicits purified and abstract publics, the latter summons engaged or issue publics (Converse 1964; Marres 2005). A worry had been expressed by the organisers as well as by commentators from the media, government and industry that the open public fora would be or had been in some sense 'captured' by the already engaged sections of the public that constituted the existing widespread opposition to GMO's in society at large. Thus the focus group style component would act as a 'control' by carefully selecting participants and screening them for 'neutrality', as well as by paying attention to careful mediation and facilitation of these events. This reveals a 'construction of neutrality' or a 'purification' process generating an 'abstract public'. A 'pure public' is thus constructed according to its distance from the issue. There is a danger here that this 'pure public' can be used by powerful groups such as industry and government to articulate a supposed 'silent majority' to act as a counterweight to the manifest and self-articulated social opposition to the technology. It also disregards the epistemic and democratic value of the engaged publics, constituted by their relationship to the issue, and rooted in widespread socio-material networks around food, health, farming, wildlife and environment. However, the question could also be turned the other way up. Just as the 'purified publics' elicited by the closed focus style groups can be seen as a control on the 'engaged publics' of the open meetings, legitimating the exercise for some, so the opposite can also be true. Given the widespread atmosphere of mistrust in government, experts and industry that has contributed to the GMO crisis and other techno-political contestations, this mistrust can also spread to the experts of mediation and their technologies of elicitation such as the focus group. The very fact that a focus group is selected by what will inevitably be seen as 'government appointed' experts adds to this mistrust and raises questions as to its legitimacy, especially amongst those sections of the public engaged in the issue and alienated from the government. This will become even more problematic if the focus groups or other deliberative fora such as citizens' juries arrive at conclusions that may be construed as broadly supportive of controversial government programmes. Thus having open fora where any member of the public can turn up and 'have their say' can also be seen to

act as a ‘control’ on the selected closed meetings. This in turn relates to the issue of scale, where a large amount of the public meetings such as in GM Nation can add to its legitimacy in contrast to the legitimation problems sometimes encountered by small selected samples in closed deliberations. Thus the two modes of publicness elicited by the GM Nation process can help to supplement each other. However, this also lays emphasis on the question of the mediation and translation quality between these fora (Horlick-Jones et al 2007) a question we will examine in more detail in the next sections.

5.3 Detailed examination of the mediation of GM Nation

The Foundation Discussion Workshops (FDW): Nine of these were conducted; eight amongst the ‘general public’ and a ninth was from amongst participants actively involved in opposing or supporting the new technology. Those selected for the ’general public’ workshops were screened to exclude anyone who indicated a previous interest or engagement in the GM issue in order to construct neutrality. Each of these workshops lasted for three hours, had two facilitators and comprised of 18 – 20 participants. Thus these workshops were significantly larger than the standard focus group format. Attendees for the eight ’general public’ workshops were selected to represent four broad lifestage and two broad socio-economic groupings (these latter were categorised according to the standard social science/ marketing A-E social class categorisation). See table below:

TABLE 1: The Sample

Teenagers 15 –18 years	Girls, 15 – 16, ABC1 Manchester	Boys, 17 – 18, C1C2DE Ludlow
Young Singles 20 – 27 years	ABC1 London	C1C2DE Reading
Young families and couples 28 – 40 years	C1C2DE Belfast/Co. Down	ABC1 Edinburgh
Older families and empty nesters 41 – 75 years	ABC1, 41 – 54 Bromsgrove	C1C2DE, 55 – 75 Ruthin
Actively Involved	Norwich	

Table from Corr Willbourn 2003a.

The workshops were carried out by the contacted private consultancy Corr Willbourn, (David Corr and Hugh Willbourn, who have backgrounds in psychotherapy) and were designed and conducted according to a set of methods they describe as 'phenomenological and process-oriented qualitative research' derived from Heideggerian phenomenology and the Process Work of Arnold Mindell (Corr Willbourn 2003a). They claim this approach allows participants to 'engage with the topic(s) of discussion with the minimum of prior framing by the researchers' (ibid). They also emphasise their use of 'Clean language' (from field of applied cognitive linguistics) to form the bedrock of the question generation process in order 'to avoid, as far as is possible, inherent framing and bias' (ibid). The workshop structure is supposed to be fluid, with participants given sense of 'ownership of process' and its structure, with their concerns and interests followed to guide subsequent questions, exercises and interventions. Furthermore, Corr Willbourn claim that 'workshops are conducted using processes and tasks in a naturalistic way, such that participants can engage without having to adopt ways of being that are alien to them' (ibid). Finally, the organisers claim to have facilitated the workshops guided by the client-centred counselling and psychotherapy model of Rogerian practice to give 'unconditional positive regard to all modes of expression and all content'.

Thus when recruited, the general public sample were not informed of the specific research agenda or topic of GM foods, only that it concerned 'food and farming' and the workshops began with what the organisers describe as a 'simple and open question'. This was 'What has caught your attention recently?'. Corr and Willbourn report that the participants 'simply responded in a free-association like manner' with answers ranging from chocolate, the industrial action in the Fire Service, the Middle East conflicts, Iraq, UK house prices etc. This was taken to demonstrate the lack of 'contamination' by the researcher's agenda and the pre-existing significance/insignificance of the GM conflict in the participants' everyday concerns. The next move was to introduce the concept of GM and note the participant's 'spontaneous awareness and understandings'. Participants were given 'post-it-notes' and were asked to write on these whatever came to them in response to the phrase 'Genetic Modification'. These were also written onto a flipchart and verbally repeated by a facilitator. Corr Willbourn state: 'Participants were given no other frame and were encouraged simply to jot down whatever came to them'. The organisers then undertook a significant act of mediation/translation by grouping these spontaneous post-it-note responses according to an emergent set of categories. They claim 'Despite the absence of participant categorisation, we

can group many of their evocations on the basis of similarity of meaning' (ibid p27). They sum up these categories of response in the following table:

Table 2 – Spontaneous responses to GM

Ubiquitous		Very common		Less common		Single mention
Category	Number of mentions	Category	No. of mentions	Category	No. of mentions	Category
Food	65	Unsure/ ignorant	35	Future	19	News
Unnatural	51	Chemicals	30	Economical	17	Related
Science	46	Unwanted/ bad	29	Scary	16	Connected
Crops/ farming	39	Health	27	Mutation	16	Good
Fake	39	Questions (typically 'what is it?'	25	Greed	12	Government-backed
				Activism	12	Humans
				Third World	11	Expensive
				Disgusting	8	Evolved
				Improved/ enhanced		Packaging
				Medicine	6	
				Dolly	5	

From Corr Willbourn 2003a.

These categorisations would be a key step in the process of formulating the set of questions for the GM Nation project. Following this elicitation of primary associations and questions through the post-it-note exercise the facilitators then asked the participants in small groups to collect up their key questions about GM. Again, this played a significant role in elicting the framing of the GM Nation debate and its key questions.

For Corr and Willbourn this 'post-it-note' exercise and the subsequent probing and prompted elaboration of it reveals a spontaneous and underlying public rationality, relating the issue of GMO's to the categories of everyday experience:

> Open-ended probing of the responses toward the post-it note responses indicated that while the vast majority had little or no technical understanding of GM, they did possess a robust contextual understanding founded in their lived experience. Thus GM is something which, as the previous exercise showed, is likely to impact food, farming, health, the future, and economics and so on. It has been said that the general public cannot genuinely address the issues around GM without a proper technical understanding as a basis. This research shows very clearly that this is not true. The general public possess many adequate ways to engage in the debate – provided that it is framed in terms of their lived world. While all readily admitted their lack of technical and scientific knowledge, and many wanted more information, their own concerns (whether political, social, environmental, health-related, economic or otherwise), were deemed to provide a robust basis for participation in the debate (Corr Willbourn 2003a 29,30).

Throughout their report Corr and Willbourn emphasise how these ‘primary associations and questions’ revealed by workshop participants are ‘founded in their lived world or their existential engagement with the world’ (ibid p40) and equip them to participate in the GM debate despite not having a previous engagement or technical familiarity with it. In this, Corr and Willbourn claim a kinship with other work on the legitimacy of lay knowledge such as the PABE report (public attitudes to Biotechnology in Europe) (Marris et al 2001) associated with the approach of Brian Wynne.

The workshops also attempted to uncover underlying attitudes towards the GM issue. Drawing on their experience of psychotherapy, Corr and Willbourn argue that such attitudes can not be elicited by a simple and direct question and normal conversational responses: ‘Attitudes are typically subtle and highly inflected, and few individuals are gifted with the articulateness to do true justice to their attitudes in normal conversation’ (Corr Willbourn 2003a 41). Thus ‘unselfconscious expression of attitudes’ had to be accessed via a series of ‘games’, which we may understand as specialised ‘technologies of elicitation’ (Lezaun and Soneryd 2007). Corr and Willbourn were able to deploy a number of such technologies from their psychotherapeutic repertoire: They refer to a ‘Snakes and Ladders process’ and also to a ‘Story Generation process’ the latter of which is described in their report. Here participants were invited to gather in small groups and write stories that captured the essence of how they felt about GM. Corr and Willbourn claim that ‘underlying attitudes show themselves in the tone and qualities of the story’ which are then translated and interpreted by Corr and Willbourn into policy messages and framings for their report. Again, many subtle and theoretically rich and sophisticated understandings of the potential dynamics of technology in society were revealed.

Following analysis of all the foundation workshops, Corr Willbourn grouped the results and emerging participant concerns into six framings: i) food, ii) choice, iii) information needs, iv) uncertainty and trust, v) targets and intended trajectory and vi) ethics. These are set out in more detail and with associated questions in the table below.

Table 3. Six Frames

Frame	Core Topics (aggregated)
Food	Health issues Aesthetics Product values; taste, nutrition Economics; micro and macro Political issues Production consequences; land use, agricultural employment, impacts on integrity of organic production.
Choice	Do we, the public, actually have any choice? Is there a zero option? Why are we having the debate now and not 5 years ago? Can choice be executed through clear labeling? How will this affect organic farming?
Information needs	'I don't know what I don't but probably should know – who will tell me . . . and can I trust these actors/their information? Who will ensure that information is unbiased and freely available or at the very least can I hear all sides of the argument?
Uncertainty/trust	Who is responsible now, and who will be responsible if things go wrong in the future? What are the motives of corporate actors? What is the government's real position? What is the worst case scenario?
Targets and intended trajectory	Which organisms will be genetically modified? What different implications arise from genetically modifying plants, animals, humans? What are the medical implications/possibilities?
Ethics	Why is it being done at all? Who decides and polices the boundaries? What are the motives of corporate actors? Why has this technology been allowed to progress this far without public consultation – is this to close off real debate? Are we capable and willing of addressing the deeper moral issues this technology throws up? Is GM an example of science for science sake – let's hear honestly and personally from those involved. How will this impact the world economy and the control of the developing world by the developed world?

(From Corr Willbourn 2003a p61)

These framings would then become translated via the Corr Willbourn report (2003a) and by other mediators and processes of mediation to inform the rest of the debate – including the science review and the sets of 'stimulus materials' and questionnaires that would structure the open meetings. The quality of this process of translation and the uses of the subsequent materials will be addressed below. First however, we shall conclude this section on the Foundation Discussion Workshops with some further observations and comments on this component of GM Nation.

The particular techniques used by Corr Willbourn, while broadly following the standard focus group format also deployed some novel and unique elicitation technologies that are specific to their own approach. Firstly, the larger size of these meetings with 18-20 participants meant that the intensity and quality of face to face interactions between participants would be less than a usual focus group. Furthermore, despite Corr Willbourn's claims to methods promoting 'naturalistic talk' (as if this were completely possible in standard focus groups), as the official evaluators found: '[t]he groups were very much facilitator-centred, which meant that interaction between participants was highly mediated by the instructions and prompts of the (two) facilitators.' (Horlick-Jones *et al*, 2007, 127). The evaluators therefore found that 'the groups did not generate much in the way of quasi naturalistic talk' (ibid).

In other ways, the FDW corresponded more to focus groups than to the other genres outlined in section 4 of this report. Thus as we have seen, they attempted to create fora composed of relatively homogenous participants according to 'life-stage', socio-economic status and with the teenagers, gender. This therefore attempts to access underlying rationalities that may be supposed to be found in such groups, and contrasts with other formats which try to construct attitudinal balance within the group to generate deliberation between these different attitudinal standpoints. Corr Willbourn's approach also used novel techniques including games, other mediated and structures exercises and also even employed a professional cartoonist to attend the encounters and reflect on the process and issues in a graphical and amusing way, feeding these cartoons back into the discussion. Some of these cartoons would also find their way into the 'stimulus' materials used in later stages of the debate.

5.3.1 Translating the Foundation Discussions: Constructing the 'stimulus materials' and questionnaire.

The six overlapping framings of the Corr Willbourn Report (2003a) – food, choice, information needs, uncertainty and trust, ethics and the targets and intended trajectory of GM technology – were combined with findings from a parallel report based on desk research to be 'distilled' into a series of tools for public engagement and participation that would be central to structuring the debate.

The questions about GM from participants in the FDW's (such as What is GM? How is it done? Why make it? How do I know it will be safe?) became central to constructing the stimulus materials. These questions were used to gather information for the materials. The debate evaluators argue that at this stage these questions were used more than the six framings, suggesting this tended to construct lay perspectives in the classic 'knowledge deficit' terms criticised in the work of Brian Wynne (Horlick-Jones et al, 2007, 130). The end product was also the result of several battles in a contested process. As the participants of the foundation workshops expressed a desire for more diverse views coming from a variety of acknowledged partisan sources, some members of the steering board won the argument to have additional more pluralistic and diverse stimulus material. A variety of stakeholders engaged in the debate were therefore enrolled to help prepare their own answers and perspectives to the questions emerging from the foundation workshops. These were then passed to a subcontracted company 'Creative Research' working with the science museum to be worked into a more standardized, and perhaps more neutral format. However, by April 2003 the decision to attribute sources was abandoned due to lack of time to contact all the sources to gain consent (Reynolds and Szerszynski 2007, 109). Thus the stimulus materials ended up being bland statements that were unattributed to any sources, perhaps making them less successful at stimulating and framing the debate. These materials were also put on a CD-Rom in a form identical to both the pages of the *GM Nation* website and a booklet.

To these 'stimulus material' packs was also attached a feedback questionnaire. This consisted of a series of thirteen questions that took the form of a series of statements ranging from the optimistic or favourable to the critical or pessimistic towards GM crops. A series of 'tick boxes' were then offered in response to these statements offering five choices ranging from 'agree strongly' to 'disagree strongly'. After these thirteen closed questions there followed another two more open questions where participants were allowed five dotted lines to express there views, and also some more tick boxes to present 'information about you' including gender, age, postcode and their involvement with the debate.

The *GM Nation* information pack formed by this combination of the stimulus materials and feedback form/questionnaire would be distributed in the mass open meetings of

GM Nation public debates as well as the selected 'control' of the 'Narrow-But Deep' discussion groups. They were also distributed via the website and post. It therefore formed a mobile technology of engagement and participation, with the ability to incorporate many events and situations into '*GM Nation*'. They became a tool that attempted to standardise the diverse moments and modes of participation into a nationally coherent and somehow measurable entity. The Central office of Communications declared that wherever a batch of thirty or more feedback forms were ordered they would assume this represented a *GM Nation* meeting (*GM Nation* PDSB 2003: 59).

In their study of *GM Nation* the official academic evaluation team create a new category for assessing such events, one they call its 'translation quality' (Horlick-Jones et al 2007, 121). They define this as the mechanisms for the management, translation and utilisation of knowledge, particularly the ways conclusions drawn from one stage of *GM Nation* process become a source for informing and shaping its subsequent stages. This is especially important when considering events such as GM Nation, which utilise multiple modes, stages and scales of engagement. Thus in our task of understanding the role of mediators in public deliberation alongside consideration of different practices of elicitation we also need to consider these practices of translation. The development of the stimulus materials and questionnaire form the first significant stage in *GM Nation's* translation process – judged by the evaluators as of poor quality (ibid. 131). Other key stages in the translation process included the gathering of information from the open public meetings and the 'Narrow but Deep' groups and finally how all this information was analysed and developed into the final report by the Steering Board.

5.3.2 The Open Public Meetings: tiers 1, 2 and 3.

The public debate itself was launched on 3 June 2003 with a press briefing in London, and the first of the six Tier 1 'national' meetings in Birmingham. The rest of the Tier 1 (T1) events took place in Swansea, Harrogate, Taunton, Glasgow and Belfast over the next ten days, attended in total by over 1,000 people. These 'tier 1' meetings were fairly large events usually held in venues with a capacity of 150 – 200 people. The smallest of these events was in Belfast with 100 in attendance, the largest in Harrogate with 240. Admission was by ticket only, with tickets available in advance from the CoI, although in principle any member of the public could attend. They were resourced and organised by the CoI, who also employed professional facilitators to run the events. They CoI also employed professional assessors, typically local academics, who would attempt to observe and gather qualitative evidence of

the group discussions. All tier one events followed a standardised form, with seating arranged around separate tables allowing groups of about a dozen to sit together. People could choose where they sat, often sitting with friends and associates. On each table were placed collections of the stimulus materials in the *GM Nation* toolkits and a discussion guide, plus notepads and pens. The events were each started by a screening the specially commissioned *GM Nation* video which portrayed small group discussions of the issue by members of the lay public, scientists and farmers in an attempt to portray the different kinds of argument common in the debate. Following this, the facilitator introduced the debate, describing its background. (Some tier one meetings were also addressed by PDSB members). After this introduction participants would begin their own round table discussion which would last around an hour. Each table was asked to elect a spokesperson who would report back on the discussion to a final plenary feedback session. This form of meeting seemed to have attracted the 'publics of GM' (Reynolds and Szerszynski 2007), those mainly already interested and engaged in the debate and elicited a discussion 'characteristic of a knowledgeable and experience engagement with GM issues' (Horlick-Jones *et al* 2007, 84). Some problems with the 'translation process' have been identified. Firstly it was observed that the stimulus materials derived from the previous FDW stage of the process were little used by the participants, secondly that the verbal feedback session format of brief reports by one spokesperson from each table reduced the findings to brief, repetitive 'soundbites' loosing any complexity and nuance of the deliberations, and thirdly that the work discussion observers was not standardised or coordinated across meetings. Therefore Horlick-Jones *et al* conclude that "the organisers were restricted in their capacity to capture the rich detail of the discussions' (*ibid.* 132). Thus the questionnaire became the main tool to collect findings from this part of the debate, a factor limiting the quality of the final part of the translation process composition of the PSDB's final report.

Tiers two (T2 - regional) and three (T3 - local) of the open meeting component of *GM Nation* had a far more heterogeneous format. Around forty T2 meetings were held, mainly organised by local government, with around 30 of these assisted by the CoI with technical support and professional facilitation. Size varied between 30 people in Inverness to 200 in Cambridge. The format tended to be that of a traditional public debate, with speakers for and against sitting on a platform, followed by questions and answers and comments and debate from the floor, where the public sat in rows. A further estimated 629 T3 events were organised by a variety of local community groups, including local and parish councils, Friends of the Earth groups, agricultural colleges, churches, women's institutes, village halls,

organic food outlets, farmers markets, Royal Agricultural Shows and scientific institutions such as the John Innes Centre in Norwich. These varied in format, some holding to the T1 round table format, others taking the form of 'for and against' debates. The main standardising component tying this diverse collection together was the use of the GM Nation toolkit of stimulus materials and feedback questionnaires. Again, as in the T1 meetings, this format appears to have elicited and engaged form of publicness, attracting those from the widespread networks around for example the subpolitics of food, health and wildlife that became drawn into the controversy and forming the multiple issue publics of GM (Reynolds and Szerszynski 2007).

5.3.3 The 'Narrow But Deep' component

During the same period as the open debate in June / July 2003 a series of ten smaller closed meetings were convened, again by Corr Willbourn. These were organised to act as a 'control' after the PDSB expressed worries about the open meetings might attract predominantly engaged publics already involved in the issue. Thus participants were selected by professional recruiters and screened to exclude any with a prior engagement with the issue in an attempt to construct a microcosm of the 'general public'. These meetings were called 'reconvened group discussions' by Corr Willbourn (although they did not consist of the same participants as at the FDW component) and also called 'Narrow But Deep' by the PDSB – suggesting a smaller sample of the population but with more extended deliberation.

Ten different groups were convened with a total of 77 participants, Each group met twice over a two week period for discussions which, like the Foundation Workshops, resembled focus groups more than any of the other genres discussed – first for one and one half-hours, then later for between two and two and a half hours. In the first meeting they were exposed to the *GM Nation* stimulus material; between the two meetings participants were encouraged to collect more information, and kept a diary to record their thoughts; finally, in the second meeting, the participants discussed what they had decided were the salient issues. At the beginning of both sessions, they completed the *GM Nation* questionnaire or 'feedback form' with its thirteen closed questions, in order to determine how their opinion changed over the two weeks.

Four broad 'lifestage' and two broad socio-economic groupings were recruited. See table below:

Young Singles aged 20 - 27	Young Families aged 28 - 40	Older Families aged 41 - 59	Empty Nesters aged 60 - 75
1. Urban, Sheffield, ABC1, students in tertiary education	3. Urban, Chislehurst, Kent, C1C2DE	6. Rural, Dungannon, County Tyrone, ABC1	9. Urban, Glasgow, ABC1
2. Urban, Glasgow, C1C2DE, non-students	4. Urban, Cardiff, C1C2DE	7. Rural, Barnstaple, Devon, C1C2DE	10. Rural, King's Lynn, Norfolk, C1C2DE
	5. Rural, Morpeth, Northumberland, ABC1	8. Urban, Chislehurst, ABC1	

(Source: Corr Willbourn 2003b).

Participants were supposed to deliberate on what Corr Willbourn describe as the ‘six key questions/topic areas that the AEBC Steering Board had previously identified as being crucial outputs of the debate process’ (2003b). These were: The issue of GM; What future would you like to see for GM?; The possible commercialisation of GM crops in the UK; What do you think might be the impact of GM on our world?; What benefits and risks do you see GM bringing?; and what are the options for proceeding with this?

The outputs from the NBD discussions thus consisted of: two sets of questionnaires, one completed before each meeting; the diaries recoding individual processes of information search and deliberation; and the transcripts from the meetings. All these were then synthesised into a report by Corr Wilbourn (2003b) (and would in turn feed into the final report on the whole of GM Nation commissioned by the PDSB).

Based upon these outputs, Corr Wilbourn report that the discussions in session 1 of the NBD revealed underlying attitudes to the GM issue that were more or less identical to those identified in the Foundation Discussion Workshop study. However, as the NBD process went on, the majority of participants became noticeably clearer in their opinions, and in particular more concerned about possible negative consequences of GM technology. As Corr Wilbourn put it, ‘the comparisons between the pre (session 1) and post (reconvened) questionnaire data show that, in general, more information and deliberation led to higher levels of concern about GM in the broad sense. For all questions the levels of Don’t know/unsure fell’ (2003b: 16). Overall, Corr Wilbourn report that ‘the majority of the general public who took part in this research strongly support adherence to the Precautionary Principle with regards to GM technology in general and to the commercialisation of GM crops specifically. Thus they

believe that at present commercial exploitation of GM crops cannot be given the “Green light”. Equally, very few of these participants gave GM technology the “Red light”. At present it would be fair to characterise the public’s position as giving GM the “Amber light”.’

However, it is crucial here to explore the way that the opinions elicited in the NBD discussions were mediated. As with any deliberative process, there are crucial junctures in the design and conducting of the NBD where the work of constructing neutrality occurs, and it is at these junctures that contestation over the validity of the outputs takes place. Here we will just concentrate on a few of these junctures: the choice of how substantive ‘stimulus material’ would be gathered; the selection of points at which the questionnaires would be filled in; the deliberative genre used; and the distilling of the discussion transcripts and returned questionnaires by Corr Willbourn into the NBD report.

Firstly, the design choices meant that participants were encouraged to find their own sources of information between the discussions. The participants’ diaries act as a record of their information search and methods of thought; the sources of information they recorded varied from media, NGO’s, scientific institutions and academia. Interestingly, participants also refer to holding their own mini-dialogue events with workmates, friends and school students. This method of allowing participants to select their own information material and consider it in their own time away from the formal deliberative forum represents a different model to other modes of deliberation, where informational material is pre-selected and controlled, and also often presented in a controlled environment. It can therefore elicit a different response. Critics could claim that this is less ‘scientific’ in that the informational material are less standardised, making rigorous comparison difficult. However, this raises the question of whether deliberative fora are intended to reach this level of standardisation and scientificity. Certainly the diaries are revealing of the pathways that people choose in their own, unguided search for information, in a way that the provision of standardised material would not be.

Secondly, the choice of the specific points in the process when they filled in the questionnaires is also significant. The participants filled in the standard GM Nation questionnaire twice – once *before* each meeting. Interestingly Corr Willbourn describe the second of these as the ‘post-deliberative questionnaire’, even though it was to be completed before the second meeting whose objective was to allow the deliberative process to develop in more depth. This suggests a notion of deliberation as not necessarily a group activity, but also an individual contemplative one undertaken by participants in the fortnight’s gap between meetings.

Thirdly, as mentioned above, the discussions were broadly conducted as focus groups; although participants were asked to discuss six 'key questions', they were not forced to come to consensual answers to them. Horlick-Jones *et al* (2007: 137-9) argue that this lack of any constraint to come to a decision meant that the NBD groups were not genuinely deliberative; instead, they simply elicited opinions from their participants, and encouraged them to go off on imaginative tangents. They also suggest that the focus-group-like character of the discussions was the main reason for their developing a rather precautionary tone, in that participants were not constrained to balance risks and benefits in any final calculus. Corr Willbourn defend the idea that, while the participants were not asked to produce a scientific assessment, in the conversations they did nevertheless 'provide an assessment grounded in their lived experience and citizenship' (Corr Willbourn 2003b: 19).

Nevertheless, fourthly, the choice of deliberative genre means that such an assessment had to be distilled by Corr Willbourn from the flow of conversation, rather than being a decisive collective speech act. Whereas in a citizens' conference the participants would normally write their own report to pass on to the next stage in the process, with the NBD this was written by Corr Willbourn. It is interesting that two of the NBD groups asked if they could write a letter to the Prime Minister, suggesting that to some extent at least they wanted to represent *themselves*, in a political sense. But the overall logic of the focus group genre is closer to that of the scientific experiment than that of the political meeting: what the participants pass forward in the overall process is not a political mandate, but data about how the public think, to be analysed and synthesised. This places far much more emphasis on the hermeneutic skills and judgement of the mediators to interpret the proceedings.

5.4 GM Nation – a conclusion

The final act of mediation that took place in GM Nation – not counting the way that its findings were interpreted and represented by the media, government, industry, NGOs and public – was of course the writing of the final report (GM Nation PDSB 2003). The PDSB met only twice to consider the findings of the process, and was not able to draw on a wider team of social scientists for the task. This was partly to do with the lack of adequate government funding for the process, but also to do with the fact that the government wanted GM Nation to report before the results of the FSEs were announced. A professional science writer was commissioned to analyse the data and correspondence, and write the report; as Horlick-Jones *et al.* remark, 'it is a credit to the writer that the final report … is such a comprehensive and well-written document (2007: 138). Nevertheless, any act of final

redaction based on such heterogeneous materials has to depend on interpretive skills and judgements which cannot be reduced to formal algorithms or statistical levels of significance.

But the overall quality of GM Nation does not rest on the final report. The baroque structure of GM Nation clearly had both advantages and disadvantages. On the one hand, it can be argued that huge controversial issues like the commercial release of GM crops into the environment warrant large and diverse events in order to ensure that all aspects and viewpoints are aired. That GM Nation was large-scale, multi-scalar and multi-modal, that it elicited different modes of publicness, and different qualities of knowledge, helped to maximise its claim to represent public opinion. The combination of open debate with more controlled debates helped to counterbalance any problems of legitimacy that either form alone may have suffered. On the other hand, the construction of such a baroque process requires the building of conduits between different locations and modes, and as pointed out by Horlick-Jones *et al.* it is on the quality of these conduits that the legitimacy of the process mainly depends. Mediation does not in itself create a legitimacy crisis; it is more that it creates a legitimacy *vulnerability*, in terms of the strengths of any claim grounded in the deliberative process, and particularly in the case of multi-modal, multi-scalar events.

One implication of this to draw from the lesson of GM nation is that such events should be better funded and resourced; that they should be given more time, and allowed to unfold at a slower pace, rather than the pace being determined by external political exigencies; more time, slower; that there should be more transparency through peer-review; and that there should be more feedback loops before the results of any given stage are passed on to the next one. However, it is clear that the concept of 'translation quality' developed by Horlick-Jones *et al.* has itself to be supplemented by evaluative ideas based on the choice of deliberative genre. It is not enough to look at how information and discourse is passed from one deliberative event to another, or towards the final public representation of the process and its outcomes. One also has to look at the way that different fora elicit different kinds of discourse, and imply different political theories about the public and their role in decision making.

6 Conclusions: a deliberative approach to risk governance

Methods for generating qualitative deliberations among citizens have the capacity to mobilise different kinds of publics. The methods change as they travel from one organisation to another and are adopted for different reasons and with different rationales for inviting the public in deliberations on a given topic. Methods like the consensus conference, focus groups,

or public hearings can be adopted within hybrid structures, thus invoking or enrolling different modes of publicness, within the same process.

The variety in constructed publics that we can discern from our examination of four selected methods and the GM Nation case are connected to different assumptions about citizens and about what can be achieved by involving them in deliberations. They differ whether they make an epistemic distinction between “experts” and “lay people” or between “advocates” and “neutral” participants and positions; whether there is an emphasise on collective deliberations or individual reflections or not; and whether they reflect assumptions about the participants ability to tap into a wider sense of community or the idea that participants are isolated individuals with predefined interests and attitudes.

Publics may be defined as an idealised citizenry with a common-sense vantage point, because of their lack of predefined interests and non-engagement in a given issue, as in the citizens’ jury and the consensus conference. Similarly, because of their lack of predefined interests, to citizens may be attributed the ability to tap into a wider sense-community, and assumed to be more capable of generating discussions of the common good, than experts that are assumed to be advocates for certain interests and positions, as in the Danish-style consensus conference. Citizens may be involved in discussions about risk, as experts among other experts, aiming to work out concrete action plans, which may include ideas about technology developments as part of such plans, like in the scenario workshop. In these examples citizens are involved in discussions aiming to generate decisions and to give recommendations to decision-makers.

Citizens may be involved in experiment-like situations, aiming to find out what a real public would say, when focus group methodology is used to simulate ‘natural conversations’ among citizens about risk issues. In this case citizens are involved in discussions mainly aiming to generate attitudes and opinions. When the focus group methodology was used in the GM Nation case, it had the function of creating a purified, more abstract public as opposed to the engaged, so called “ issue publics”, involved in the debate. The method had the same function when CSEC used focus group methodology as a way to counteract simplified and abstract publics conceived in public opinion research, although the kind of conceptualisation of the public, it wanted to counteract was very different.

Publics are constructed through framing conditions even when the ambition by the organiser is to be neutral and avoid biases. Various devices are used in public participation methods in order to construct neutrality, such as selection criteria, stimulus material and facilitation. During the reporting and translation processes different techniques can be used in

order to avoid accusations of bias. The epistemic distinction between experts and lay people in the citizens' jury and the consensus conference is dependent on the active construction of neutrality through such devices. Compared to these methods, there is a different kind of neutrality that is constructed through the use of focus groups in the GM Nation case. Similar to the other methods, citizens were selected on the basis of their lack of prior engagement in the issue, but they were not exposed to expert witnesses explicitly speaking from a certain standpoint, as the participants in a citizens' panel are. The function of the focus groups in GM Nation more acted as a 'neutral' counterweight to members of the public who were articulated as advocates, and experts who were not explicitly defined as either advocates or neutral. Rather than using deliberations as a way to find out about the credibility of experts, the aim was to find out about the public. This made the GM Nation debate a mixture between being a research exercise and a deliberative event. We also saw how GM Nation illustrates the way that complex, hybrid, multi-scalar dialogue processes pose particular challenges regarding the maintenance of adequate 'translation quality' between their different elements and stages.

Given that the mediation of public concerns is unavoidable – the public or parts of the public cannot speak for themselves, they are always spoken for, in one way or the other – the question of what kind of publics are constructed, how, by whom, and for what reasons are crucial. The use of one conception of the public to counterbalance another can be used for political purposes, aiming to show that the public is supportive or rejects a certain technology or policy. This however may lead to mistrust among citizens towards the act of mediation itself, and scepticism against the value of deliberative fora. For this reason it is important to examine in what ways different conceptions of the public are used and for what reasons, as well as the value of employing a certain conception over another.

For instance, the substantive value of inclusive public deliberations can motivate both an abstract, purified public, such as those assembled in the citizens' jury or consensus conference, and engaged/issue publics, of the 'self-selecting' character that the GM Nation open meetings mobilised. Stirling (2005) makes a distinction between two types of substantive motivations. One is related to the substantive input in terms of the breadth and depth of knowledge, that can be generated within a broader inclusive approach. From that standpoint the involvement of citizens' panels, local residents as well as environmental NGOs can contribute with knowledge on environmental conditions as well as on the institutional dimensions of expert knowledge. The other idea about substantive input is based on the assumption that broader inclusive processes can generate decisions that is of higher quality in terms of protecting the environment and human health. The involvement of 'mini-publics' as

well as environmental NGOs can be motivated by such aims, though even if the study by Dryzek et al (2007a) points to the fact that citizens assembled in citizens' panels are more precautionary than governing elites, we cannot assume that this will always be the case (cf. Whiteside 2006:123).

6.1 Reflections on an integrative approach to the governance of risk

There are also aspects that we want to highlight that are not specifically related to a participatory deliberative approach but which could be cross-cutting issues and equally relevant for both analytical and participatory approaches. The use of positive technology assessment, as in the case of scenario workshops, draw attention away from 'precautionary publics' and 'Promethean' elites, and instead gather decision-makers and citizens in joint discussions over a problem, with the task of working out concrete plans for how to deal with certain scenarios of the future. Whether risk-based decision making, a precautionary approach and a deliberative approach are used in order to deal with risks connected to already existing technology, or whether they are applied to possible future problems (such as climate change) to start thinking about technology developments to deal with the problem, can be one cross-cutting issue.

Another aspect, pointed out by Stirling (2005), that is not directly related to a participatory deliberative approach is the distinction between approaches aiming to opening up, expand and enrich the scope of the debate, or closing down issues and policy options. The consensus conference in the Danish context aims to open up discussions over technology and enrich the political debate, and sometimes this works, when issues dealt with in a consensus conference are taken up in discussions in the parliament, for example. The same opening up approach can be used in the US-style consensus conferences, which is less participatory and inclusive. Focus groups can also be used in either opening-up or closing-down approaches, depending on how the results are presented and fed into a debate.

There are many potential gains with approaches that combine risk-informed decision making, precaution and public deliberation. In a combined approach, public deliberations could contribute with a reflection over the framing conditions of technical approaches to risk. Exposing technological elites to discussion with publics can enlarge their thinking and make them reflect on the limitations of their methods, what aspects of an issue that they cover and what aspects they leave out. Participatory deliberations on risk related issues could be used to open up issues for debate, in order to decide in what direction (and when) they should be closed down.

The barriers to deliberative approaches to risk governance should not be neglected. Kerry Whiteside (2006) points out that democracies today are more pluralist than deliberative, Even though this may be more prevalent in the United States than in Europe, pluralist aspects of democracy can counteract deliberative qualities, also within European countries. While a deliberative approach would be based on an ethos of seeking the common good and the better argument, a pluralist society is based on trade-offs among interest groups: it is “short-term electoral advantage [that] comes to the fore in pluralist decision-making, not the long-term environmental consequences. Political mobilization usually occurs around visible problems affecting clearly identifiable victims, seldom around invisible, slowly accumulating dangers” (Whiteside 2006:132f). Whiteside argues that pluralist democracies can combine some aspects of deliberation and precaution, for example by encouraging wider rather than narrower participation, and to create legal structures that supports preventive policies. Similar to Dryzek et al (2007a) he points to the importance of institutions for participatory technology assessment, like the Danish Technology Board, and elsewhere in Europe.

Existing institutions for participatory technology assessment, depending on organisational factors, resources etc., differ in their capacity to combine different approaches to risk. For example, at the same time as the Danish Technology Board and its methods are held up as successful examples internationally, its resources are currently cut down. What Dryzek et al. (2007) emphasise as crucial for successful (‘successful’ in terms of its ability to produce more legitimate and informed decision) public deliberations on risk is the prevailing discourse on how to balance between economic growth and environmental protection. In societies in which environmental protection and economic growth are seen as mutually reinforcing (and Dryzek et al. identify Denmark as such a country) as opposed to the tendency that economic concerns override ecological concerns, the conditions for combined approaches are better than when this is not the case.

Notes

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[1] This was pointed out in a presentation by Robin Grove-White, emeritus professor, Lancaster University, at *People Power? A workshop on science, participation and politics*, Demos, London 20 November 2007.

[2] The term 'analytic-deliberative' was coined to describe processes able to reconcile technocratic and citizen-centric approaches to risk. 'Analytic' refers to scientific and technological data/methods of risk assessment and 'deliberation' refers to inclusive participatory communication processes (Stern and Fineberg 1996, in Burgess et al 2007:300).

[3] The authors argue for keeping an analytical distinction between different approaches but at the same time argue that in practice there is always a mix between them. The term "cooperative discourse", connotes an approach which combines all the three models of discourse and risk management strategies (see Renn 1999).

[4] Klinke and Renn also identify activities that are not deliberative, and that are those connected to what they call "simple risk issues" managed by routine operation, and which involve agency staff tasked with risk management only.

[5] Ecological modernisation is based on the idea that environmental protection and economic growth can be mutually reinforcing. The precautionary principle is an important aspect of this reasoning, and when the economic promises of new technologies are uncertain, there is no reason to accept the risks associated to them.

[6] www.jefferson-center.org (accessed 2 November 2007)

[7] Ibid.

[8] Phone interview, Ned Crosby, 5 November 2007.

[9] Interview Crosby

[10] Interview Crosby

[11] Interview Naomi Newman, IPPR, 21 November 2007.

[12] Philip Webster "Brown poaches opposition MPs to provide advice for ministers", The Times, 4 September, 2007.

[13] "Gordon Brown has promised 'a new type of politics'", 24dash.com, 3 September 2007, www.24dash.com/printNews/57/26996.htm

[14] For instance, shadow work and pensions secretary Chris Grayling "accused the government of 'always launching public consultations'" and stated that there is "a real danger that this whole exercise will be a complete farce" "Brown defends new citizen juries", BBC News, 6 September, 2007. http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/politics/6980747.stm

[15] Interview Newman

[16] www.hhs.gov/news/press/1996pres/961206.html (Accessed 5 November)

[17] Interview, Bo Carstens, 31 October 2007.

[18] Interview Carstens.

[19] Interview Carstens.

[20] Interview Carstens.

[21] Interview Carstens.

[22] http://www.tekno.dk/subpage.php3?page=statisk/uk_about_us.php3&language=uk&toppic=aboutus (Accessed 5 November , 2007)

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[23] http://www.loka.org/TrackingConsensus.html (Accessed 5 November 2007)

[24] Interview 31 October 2007, Ida-Elisabeth Andersen, DBT

[25] Interview 12 September 2007, Ida-Elisabeth Andersen, DBT.

[26] http://cordis.europa.eu/aoi/article.cfm?article=257 (Accessed 6 November 2007)

[27] Interview 31 October, Andersen.

[28] Interview Robin Grove-White, 21 November 2007.

[29] Interview Grove-White.

[30] Interview Grove-White.

[31] Interview Grove-White.

[32] Citizens Jury Handbook 2004: 6

[33] Ibid: 32-33

[34] ibid:38

[35] Ibid: 66-67

[36] Ibid:10

[37] Ibid: 66-67

[38] Ibid: 10

[39] Ibid: 41

[40] http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk (Accessed 6 November 2007)

[41] Interview, 12 September 2007, Andersen.

[42] http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk (Accessed 6 November)

[43] Interview, 12 September 2007, Andersen.

[44] Interview, 12 September 2007, Andersen.

[45] Interview, 12 September 2007, Andersen.

[46] As expressed by the interviewee Ida-Elisbeth Andersen, DBT, in a published article (Andersen and Jaeger 1999:338)

[47] Interview Carstens

[48] The aim with public participation exercises are often expressed in vague terms, sometimes the aim may not be clear even to the organisers, which may also be an explanation to why they may in practice include several and perhaps contradictory aims simultaneously.

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