SEI STOCKHOLM ENVIRONMENT INSTITUTE

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Overcoming the Challenges of 'Doing Participation' in Environment and Development: Workshop Summary of Lessons Learned and Ways Forward

John Forrester and Åsa Gerger Swartling (eds)

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SEI STOCKHOLM ENVIRONMENT INSTITUTE

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CONTENTS

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Thanks are also due to the SEI communications team, in particular Sturle Hauge Simonsen for arranging web casts of workshop presentations, allowing the international community to share the workshop results and Tom Gill for editorial advice on this report. We also thank Rob Watt for his support and advice.

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PREFACE

These workshop proceedings are not so much a *primer* in participation but rather a *reader* in participation. It is for those who have already decided to pursue a participatory approach to environment and development, but want to dip in to something which will help them better understand the issues involved. Drawing on experience from different contexts within both developed and developing countries, these proceedings highlight a number of emerging issues and examples of good practice, as well as challenges of participatory initiatives. Readers may find it helpful to view some papers as a continuum, one end of which presents the more technical and academic aspects of participation, while the other considers empirical and practical experiences. Throughout, we try to show how some of these academic problems can be solved in practice. Alternatively, some papers can be 'paired', in that they consider technical/academic issues and practical/empirical issues around the same subject matter; for example, Larsen's and Plummer's two papers, which taken together present empirical and theoretical insights into adaptive co-management. Whatever way you use this report, we hope you will find it useful for your purposes.

The papers herein were all originally presented at the International Workshop on *Overcoming the challenges of 'doing' participation in the field of environment and development* held at the Stockholm Environment Institute and the Stockholm Resilience Centre, Stockholm on 28–29 May 2009. Participants in the workshop are listed in alphabetical order at the end of these proceedings. The workshop programme is presented below.

WORKSHOP THEME: OVERCOMING THE CHALLENGES OF 'DOING' PARTICIPATION IN THE FIELD OF ENVIRONMENT AND DEVELOPMENT

Programme for Thursday 28 May, 2009

Introduction
- Katarina Eckerberg

First conference address
- Susan Owens. *Publics, politics and participation: some reflections*

Session 1: Addressing the issues of 'doing' participation – why do we do it?
(Session chair/discussion facilitator: John Forrester. Session reporter: Lisen Schultz)

- Robert Hoppe. Keynote address: *Perplexities of mini-public deliberative and participatory designs in policy analysis*
- Rasmus Klocker Larsen. *Legitimacy and stakeholder alliances: instrumenting non-coercive approaches in integrated coastal management*
- Nilufar Matin. *Participation for the commons*
- Neil Powell. *Using soft systems methodologies to uncover stakeholding processes*

Session 2: Addressing the challenges of 'doing' participation: action in research – How do we do it?
(Session chair/discussion facilitator: Åsa Gerger Swartling. Session Reporter: Rasmus Klocker Larsen)

- Ilan Chabay. Keynote address: *Voices at the table – participation, collaboration and ownership in social-ecological issues*
- Claudia Carter. *The use of imaginative engagement as a participatory and learning tool*
- Sophie Kuppler. *Public interest in information and its significance for decision making*
- Jasber Singh. *Reflections from India: Towards re-imagining participation?*
- Louise Simonsson. *The use of Participatory-GIS as a planning tool in post-disaster communities – limitations and possibilities*

Programme: Friday 29 May, 2009

Second conference address
- Jim Woodhill. *The risks and consequences of participation failure*

Session 3: The future of 'doing' participation – how can we do it better?
Session chair/discussion facilitator: Beatrice Crona

- Ryan Plummer. Keynote address: *Looking forward from the Nexus of Research and Practice: learning from Issues Emerging with Adaptive Co-management*
- Eefje Cuppen. *Putting perspectives into participation: Constructive Conflict Methodology for stakeholder dialogues*

Final roundtable discussion (and session 3 continued): Reflections and ways forward
Session chair /discussion facilitator: Åsa Gerger Swartling

- Tom Wakeford. *Expertise, participation and action*
- John Forrester. *Summary and reflections*
- Kate Lonsdale, Anders Esselin, Lisen Schultz. *Reflections*
- Katarina Eckerberg. *Reflections and endnotes*

STAKEHOLDER PARTICIPATION AND THE WORK OF SEI: AN INTRODUCTION

Åsa Gerger Swartling and John Forrester

SEI has a 20-year tradition of practising stakeholder engagement in environment-related research and development, at all scales and worldwide. The Institute links science and policy and engages with people outside the research community. This is vital in making our work relevant to stakeholders, promoting empowerment of these groups and supporting improved policymaking. By focusing on the management of complex environmental, developmental and social issues, SEI research and practice adheres to the principle that creating realistic and effective solutions requires taking a multi-disciplinary approach – no single discipline has all the answers to the challenges that are facing the world, but all have a piece of the answer. In aiming to be practically useful, our research should also consider perspectives other than those of the scientific community, particularly of those who would be involved in implementing outcomes or who may be affected by them. Engaging with a range of stakeholder groups is thus a common feature of SEI's work.

There is, however, no single way to practice participation. There are many questions around the whys and hows of stakeholder participation and engagement in sustainable development efforts. What is, and what should be, the role of participatory approaches in environmental management and policymaking? Who is a participant? What is the role of stakeholder knowledge in management and policy processes? What works well? Further, what could be done to support more effective research on participatory processes and to ensure sustainable outcomes? How should knowledge from different participants from different epistemic backgrounds be brought together? Is double-loop learning – where actors can reflect on and change questions (see Forrester *et al*. 2008: 14) – always desirable? What is the role of boundary or bridging organizations within knowledge systems? Is a successful boundary actor (or an 'environmental champion' working across scales or sectors) more important to the outcome than stakeholder-led processes? These are some of the questions that are addressed day-to-day in SEI's work.

The international "participation" workshop on which these proceedings are based was supported by the Sida-supported project, *Learning from Engagement: Reflection from Participatory Work and Practice within SEI*. The project sets out to capture lessons on stakeholder engagement within SEI, and to share experiences with and learn from other organizations working with participatory approaches and the sustainability agenda (see further Forrester *et al*. 2008). The workshop took place on 28–29 May 2009 and was hosted by SEI and Stockholm Resilience Centre. For SEI it was a milestone in terms of promoting inter-organizational learning and collaboration in stakeholder participation. With these proceedings we hope to share the presentations and discussions of the workshop with a wider audience.

We would first like to place SEI's work in context. SEI's mission is to bridge science and policy on environment and development. To do this, SEI needs to engage stakeholders at all levels of gov-

ernance at which decisions are taken – local, regional, national, international, and global. We work with partners – from the public and private sector to local communities – to translate our knowledge into improved practice on the ground. Thus, any definition (or even definitions) of 'stakeholder' are often confused and confusing (cf. Forrester *et al*. 2009). A stakeholder can be any individual or group who 'can affect' or 'is affected by' (following Freeman 1984) environment and development. Consequently, we can understand stakeholder to mean a range of things, including: policy stakeholders (end users of scientific evidence); industry stakeholders (those that have to eventually implement many of the regulations or those who incur the costs of economic instruments used to achieve policy goals); and public stakeholders (*i.e.* the public – the assumed end beneficiaries of policies. The term stakeholder is also sometimes used to describe scientific practitioners and experts as well as other actors, therefore the potential array of stakeholders is very broad. Further, if a stakeholder is any individual of group who 'can affect' or 'is affected by' (following Freeman 1984) either environment or development, this leaves us a very wide remit indeed. Finally, while the concept of stakeholder engagement used here is rooted in the need to bridge the gap between scientific evidence and policymaking and policy implementation, it is important to remember that that gap itself is perceived differently depending on the stake and the perspective of the stakeholder.

SEI is fundamentally a scientific research organisation. We draw on partnerships with universities and research bodies around the world for input to our applied and integrated research. Thus participatory approaches are at the heart of our work, across levels and disciplines, and across science and policy domains (see Forrester et al. 2008: pp 3-4 for a distinction between using participatory methodologies and a participatory approach).

Stakeholder engagement is important because it brings people into the process. Papineau (1978) hypothesized that people "always perform those actions with the greatest expected desirability" but explains this by saying that it is "all the beliefs and desires which contribute to an action having the greatest expected desirability that make up the full cause of the action" (emphasis in original). Boyd (1986) deepens our understanding of this process by noting that decision making can be conceived of in four stages: Observation, Orientation, Decision and Action. Boyd tells us that Observation is where circumstances and interaction with the environment create an observation which is unique to each individual person. Similarly, Decision is also relatively simple (and instantaneous in time) while Action is the dependant output and as such cannot directly influence the decision. The most complex stage is Orientation, since it is influenced not only directly by the observation but also by the person's beliefs, previous experience, predisposition, analysis, and by new information. Thus, in order to understand why people make the decisions they do we need to understand their orientation, and the only way to change their orientation is to introduce new information or make a new argument – remembering of course that the person will analyse any new information in terms of their own beliefs, previous experience and predisposition. This raises the intriguing possibility that new information might be introduced differently in a way to synergise with people's orientation. Thus, in order to have an impact, you need to get to know those with whom you interact and to understand their orientation.

Also, we know that when dealing with evidence-informed (policy) decision making (Forrester et al. 2007), evidence needs to be scientifically reliable – that is, it needs to stand up to the beliefs, previous experience and predisposition of the scientific advisor; but it must also be politically robust knowledge – in other words, match the beliefs, previous experience and predisposition of the policy actors (Cinderby and Forrester 2005). Of course, it also needs to be observed by (i.e. communicated to) the policy actors and, further, a sufficiently common understanding of the problem needs to exist so that some agreement can be made on what is being 'observed' by both actors (ibid.). Participatory approaches are critical to achieve these ends.

However, Folke (2006) emphasizes "the needs for learning and flexibility in the social system when confronted with alternative and uncertain explanations of ecosystem change". This has been an important perspective within ecology and also within the emergent field of social-ecological research. Plummer and Armitage (2007a) note that "functional boundaries traditionally associated

with particular actors and agencies have blurred with the increasing focus on pluralistic knowledge creation, shared learning, and institutional flexibility. Vertical linkages across scales raise the prospect for co-management to contribute to resilience of social-ecological systems". Further, Plummer (this volume) notes that an adaptive co-management process goes through the stages of 'Observe, Analyse, Plan and Do' which more or less equates to Boyd's 'Observation, Orientation, Decision and Action'. Using 'horizontal knowledge networks' as a starting point, we can look at how social and political actors observe, analyze, plan and 'do' decision making with respect to environment and development issues. To deepen our insight we can strive to understand how individual actors process information and take decisions within the wider context of the expected desirability of outcomes.

Participation across multiple levels of governance

SEI has proposed a new rationale for multi-stakeholder engagement based on a holistic understanding of the governance process. Plans and policies on environment and development are made within a context of complexity. Thus, environmental governance becomes as much a governance problem as a science or science policy problem. And it requires multi-stakeholder engagement because "complex problems, *i.e.*, problems with many solutions that are quite different in execution and rankable in quality of outcome, may be solved better by a diverse team of competent individuals than by a [less diverse] team composed of the best individual problem solvers" (Carpenter *et al*. 2009).

At every level of governance and at every opportunity for stakeholder engagement, decisions should be transparent and based upon the best possible evidence. All sectors need to "understand the environmental ramifications of their strategies and activities" (Nilsson 2007) and stakeholders must be aware of the full consequences of their choices. Equally, the role of science and scientists as a stakeholder in the policy process needs to "expand (or at least clarify) the scope of choice for decision-making in way that allows for the decision-maker to reduce choice based on his or her own preferences and values" (Pielke 2007). Thus, engagement between those who produce evidence (research community) and those who make decisions – whether those decision are on policy (policy community) or on courses of action (end users) must be transparent.

Further, greater coherence and coordination between different levels of government will support the effective delivery of increasingly interdependent environmental and sustainable development objectives (Duit and Galaz 2008). New structures and better coordination mechanisms within organizations, greater resources and capacity, and improved mechanisms for information, decision-support and public participation can help delivery (Folke *et al*. 2005, Plummer and Armitage 2007a). In trying to identify opportunities to support policy integration it is valuable to consider how competencies are distributed between governance levels. This increases the need for stakeholder engagement in two ways: it highlights the need for engagement between decision-making and knowledge stakeholders operating at different levels of governance and also opens up new 'spaces' for citizen-stakeholder involvement.

There are rationales for citizen stakeholder inclusion that need to be brought to the fore, such as the 'democratic right' (Forrester 1999, Pateman 1970 in Forrester 1999, Wilsdon and Willis 2004). We argue that the citizen should have a democratic right to be a stakeholder in *all* levels of governance. This is not to say that the citizen's role will be the same at all levels: at some they may be contributor of knowledge, while in others they may be implementers, and the appropriate level of involvement depends on the context. Finding the right degree of engagement and a realistic approach to it is, however, always important.

Fiorino (1990) notes three rationales for stakeholder engagement: *normative* argument (where participation is a democratic right); *instrumental* (where engagement is purpose-driven towards specific predetermined ends); and *substantive* (where stakeholder engagement can lead towards better ends). Forrester (1999) has also cited three rationales for stakeholder engagement: democracy (akin to Fiorino's normative argument); economic (leading to more efficient public services); and improvements

to scientific knowledge. However, in light of available time and resources, it may not be as appealing to pursue stakeholder engagement in the short term. Nonetheless, it is contended – and supported in the literature – that stakeholder engagement can lead to *better* governance; what Fiorino (1990) and Stirling (2005) call the substantive rationale, and which is illustrated in the case of local governance of air quality, and manifested in terms of improvements to scientific knowledge (Cinderby and Forrester 2005, Gerger Swartling 2002). Stakeholders such as industry representatives and local residents have local knowledge of their own and this knowledge needs to be included in decision making. A common expert notion is that it is really only at the local levels of governance that citizens should be engaged. This is problematic for several reasons and studies over past decades have highlighted that the citizen has a democratic, instrumental and substantive input to all levels of governance (cf Schneider 1999, Blomgren Bingham *et al*., 2005).

When complexity enters the participatory processes become inherently 'messy', characterized by conflicting social and policy goals, and scientific disagreement and nonlinearity, thus, complexity makes the decision making process difficult in various ways. It is further complicated by the fact that arenas for decision making cut across scales. Decisions are taken about measures and policies within contexts layered within scales of governance: *i.e.* the local decision is taken within the context of the regional, national decision-making structure but the decision(s) on action on individual environmental issues are further taken within the wider policy making arena of the local area. By considering how local-level stakeholder engagement networks are nested within intermediate ones (operating at the regional level), and by considering how each level of knowledge processing and decision making network operates and importantly, how the actors who link those levels operate and how they function to link the levels, is a start to build up a picture of how boundary actors work. In this way we can begin to build a picture of how science policy issues work in the practice of messy reality. Further, we can build robust knowledge by a process of co-creation of knowledge with the participants, stakeholders and researchers involved. Thinking about how to do this helps us to understand how boundary actors work, and how decision making works in reality. It also helps us to learn more, in partnership with other actors.

The role of scientific knowledge

It is also important to consider the role of scientific knowledge in the environmental management and policy spheres. Should the role of scientific advisors and scientific experts in the policy process be different from other stakeholders, and, if so, why? From the perspective of the scientific expert the rationale for involvement is often purpose-driven, that is, instrumental (Fiorino, 1990; Stirling, 2005). However, from the policy actor's perspective the rationale is different. Here scientific knowledge must be weighed alongside other 'evidence' (Elliot Major 2000). Pielke (2007) cites Lord Robert May as saying that "[t]he role of the scientist is not to determine which risks are worth taking, or deciding what choices we should take, but the scientist must be involved in indicating what the possible choices, constraints and possibilities are ... The role of the scientist is not to decide between the possibilities but to determine what the possibilities are." Pielke elucidates: "Must scientists [thus] be at the mercy of politics? The answer is 'no,' but empowerment [of the role of science] depends on understanding the different options available for relating to policy and politics" (Pielke, *op.cit:* 11).

These arguments within a broadly conceived field of SSK (Sociology of Scientific Knowledge) and STS (Science and Technology Studies) are not new. Over the decades, science has been impelled to engage first with the policy community, then with 'the public'. Parallel to this, there has been a drive to [re]connect publics with policy decision making. Liberatore and Funtowicz (2003: 148) sum this up well:

> "At this point the issue of participation must be dealt with. If participation is limited to a few (most resourceful) actors, behind closed doors and without procedures for determining who is invited to the table and what is the nature of the involvement (ranging from consultation to co-regulation), then repre-

> sentative institutions are pre-empted from control as well as legislative functions. If, on the other hand, efforts are made to establish balance, transparency and procedure for accountability, such participation can usefully complement the role of representative institutions."

Funtowicz and Ravetz (1991) also made the case for 'extended peer review' where either there is much at stake or the levels of uncertainty are high. The papers within these workshop proceedings make the link between the democratic inclusion rationale, characterized by Liberatore and Funtowicz, and the technical knowledge rationale of extended peer review. The rationale of extended peer review has been broadened through the concepts of sustainability science (Kates *et al*. 2001) and more recently of resilience (Folke *et al*. 2005). Each new iteration of the underlying idea reinforced the concept that a wider knowledge base is necessary to solve complex environmental problems (*e.g.* see Carpenter *et al*., 2009).

The way forward

The approaches advocated in these workshop proceedings are largely pragmatic. They recognise the nature of policy and appreciate attempts to assess, analyze and overcome some of the barriers to effective stakeholder participation in the environment and development field that simply need not be there. Overall, this collection of papers advocates a holistic approach to stakeholder engagement within the 'whole' policy making milieu. However, it also recognizes that stakeholder engagement will continue separately in different segments of the policy sphere and at different levels of governance as well as at different stages in the 'policy cycle' (*i.e.* integration, translation, implementation and evaluation) (see Forrester *et al*. 2009). However, the participatory process must itself be influenced by the best available academic literature. For example, bringing together the *democratic right* argument for stakeholder engagement with the *extended peer review* rationale is one way to frame what we are doing.

Importantly, stakeholder engagement practitioners should not lose sight of the benefits of improving and deepening the engagement between science and decision- and policymakers. The best science in the world without communication, stakeholder engagement (including engagement with the policy process) is not going to make much difference. This works both ways: the best science cannot make a difference without communication and engagement; and, equally, stakeholder engagement on its own will not make the robust, informed decisions that are necessary without the best science.

Further, while the impacts of environmental problems, as well as suggestions for solutions to them, need to be packaged in a socio-economic context for decision makers, we must strive to better understand the social as well as simply the economic and the technical. Wider stakeholder engagement is one way to allow this to happen. Multi-stakeholder engagement is, we suggest, necessary for producing usable knowledge which is both scientifically reliable and socially as well as politically robust: it itself necessitates good communication. It must be open and meaningful to all stakeholders, not just those from science and policy.

Making regional-scale concerns and policymaking meaningful to 'local' citizens is more difficult than to do so for local issues, but we argue that is necessary. For SEI, participation involves not only social scientists but also natural and physical scientists looking for new ways to formalise social-ecological processes to facilitate information processing within policy arenas, while also maintaining the scientific robustness of evidence. We often do this by explicitly encouraging a process of 'double loop learning' (after Agyris and Schön 1978) – so that the project participants will be encouraged to think in new ways. This process – call it *post-normal science, sustainability science, complexity* or whatever – has been around for decades but not always explicitly named as such (*e.g.* see Funtowicz and Ravetz, 1991 who refer to what could now be considered 'complexity science' or 'post-normal' science).

Within the whole emerging field of sustainability science (see Kates *et al*. 2001) the idea of complexity is particularly central. This is firstly because the issues with which sustainability

science tries to grapple are 'big' issues which disciplinary science has shown itself to be unable or unwilling to solve, and secondly because the concept of sustainability is itself based upon the principle that lots of little actions have a bigger consequence. Thus to understand sustainability you need to understand complexity. However, within ecological sciences – while a lack of knowledge (and understanding) of the natural/physical processes has traditionally been assumed to be the predominant problem, there is a growing perception that this is not the primary bar to sustainable decision-making. The main reason is the lack of understanding of the social processes within which decisions are made (*e.g.* see Folke, 2006; Carpenter *et al.*, 2009). Also from this perspective, participation and a better understanding of participatory processes becomes critical for SEI's work.

Acknowledging realities on the ground and working within that social structure and its norms and values is important. Issues such as who has power, who has knowledge, and relationships between actors are important. Thus, the participatory process is critical to the output/outcome, so stakeholder engagement (that is, how those actors are brought together) must be *done well*, not just done. Awareness of and sensitivity to the social context within which the social-ecological process is taking place is as important as the ecological-ecosystemic issues.

PRACTICAL PROBLEMS IN DELIBERATIVE AND PARTICIPATORY POLICY ANALYTIC DESIGNS

Robert Hoppe

Abstract

Participation has become a mantra in all kinds of governance. Participation is expected to contribute to the legitimacy, deliberative quality and easy implementation of policy decisions, actions, and practices. Yet only preliminary efforts have been made to examine how participatory and deliberative designs are constructed in conditions of traditional representative democracy. The aim of this paper is to examine practical problems that rise time and again in running participatory and deliberative designs in doing policy analysis.

Introduction

In the EU, US and Canada and Australia there recently has been a lot of research on the design, running, outputs and outcomes of democratic experiments (a.o. Mayer, 1997: 231ff; Fung, 2003; Loeber, 2004: 261ff; Papadopoulos and Warin, 2007). In bringing some order in the discussion of typical problems, I will use Loeber's model of a mini-public deliberative project as research object.[1] The model grasps the dynamics of such projects in depicting it as deliberative interactions among a variety of actors trying to come to joint political judgment, distributed over time and in space. This allows ordering the discussion in simple terms of input (t_0-t_1), throughput (t_1-t_2), output (t_2) and outcome (t_2-tx). Input is the preparation stage of the project, before the actual deliberative process commences (t_1) and the frequently not so easily determinable moment when preparations seriously start (t_0). During the input stage, the project's aspirations, its problem framing(s) and the envisaged outputs

1 Loeber's descriptive model has been successfully applied in detailed comparative descriptions, analyses and evaluations of three cases: the Phosphate Forum on clean laundry and clean water, the Novel Protein Foods project on sustainable technology development, and the Gideon project on developing proposal on sustainable crop production for the Dutch Parliament.

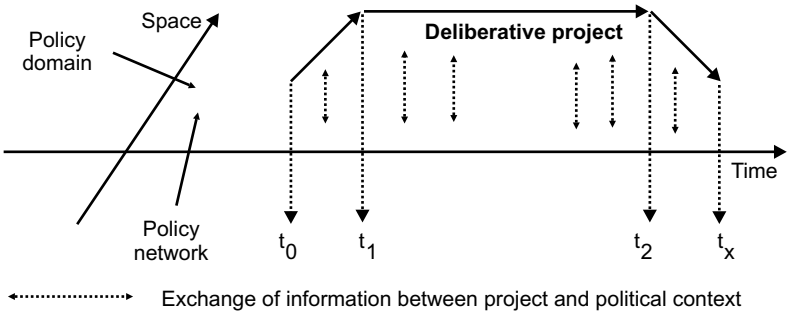


Figure 1: A mini public deliberative project as research object (taken from Loeber, 2004:89)

are formulated. The end or output of the project (t_2) supposedly coincides with the formulation of some end conclusion or advisory report, and its immediate 'selling' activities to key adressees. The impact or outcome of the project may be a multidimensional process continuing for quite some time, so that a clear end point usually cannot be given (t_x).

Input problems

In the input phase of a stakeholder variant of mini-public deliberative projects (M-PDPs) the same questions have to be answered as for any exercise in policy analysis, design and evaluation: who is to deliberate for whom on what, why, when, and how? (Lindblom and Woodhouse, 1993; Fung, 2003). As will be shown, these questions cohere and give rise to difficult choices when it comes to maximizing plurality and ensuring some power balance or equality in view of learning.

Institutional constraints of representative democracy usually mean that government itself, government agencies, or parliaments commission M-PDPs. The Dutch cabinet decided that as part of their deliberations on whether or not to allow further expansion of Schiphol Airport and the Rotterdam Harbor, M-PDPs had to be conducted. The Department of Housing, Spatial Planning and the Environment's directorate-general for environmental affairs, in conjunction with the Agency for Environmental and Nature Assessment, decided in favor of a large-scale M-PDP to list and evaluate options for long range climate policy. The Department of Transport and Water Management organized a number of M-PDP's under the label of 'future ateliers' in order to boost the creativity and out-of-the-box thinking of their own policy design on large-scale infrastructure. The Dutch Parliament decided that its own deliberations about genetically modified (GM) food policy ought to be simultaneously flanked by a large-scale societal debate on the same issue.

The examples given already show why such M-PDPs are organized: vested political bodies try to escape normal policymaking and decision making routines and create a temporary niche for 'fresh' thinking and frank, or open deliberation. This implies that the 'when'-question is answered by looking at politically opportune moments, or placement in the policy cycle, from the vantage point of regular players. This lends most of these exercises an *ad-hoc*, non-recurrent and non-formal character. The implications for the roles of both politicians and analysts/organizers in M-PDPs are profound. Politicians may have an interest in ordering a deliberative experiment, but not in participating in them. Rather, they have an interest in just waiting for the results, and only then deciding on whether or not to use them. In other words, they are perhaps interested in M-PDPs for better quality of deliberations feeding them with fresh ideas, but most certainly not for more democratic decisions. At best, they pledge to take the outputs of a M-PDP seriously; but almost never they promise to follow it completely or even partially. And, in the interest of frank and open deliberation, they even find a rationale not to participate themselves. Partly, there is merit in this argument. If the claims, concerns and issues of politicians come to dominate the deliberative process, freshness and openness may suffer. Also, there

are good reasons for scepticism about politicians' potential strategic and creative contributions to the debate (Bang, 2004:172-3; Sørensen and Torfing, 2005:215).

As for the policy analysts/organizers, their relation to the client commissioning the deliberative experiment is like professional civil servants or hired consultants. Of course, this fact will be perceived by the participants and thus influence their attitudes and conduct towards them. Also, most of the responsibility in answering the other questions on the design of the M-PDP falls to them. These questions are about the precise delineation of subject and scope of the deliberative process (what?), about participant recruitment and selection (who?, also why?), about prior alignment between commissioner, analyst (team) and participants about methodical aspects and closure of the deliberative process, including the analysts' role(s) itself (how?). Moreover, these questions are interrelated in many ways.

Substantive and participation closure in M-PDPs are highly interrelated. For instance, issue and scope determination is heavily influenced by balancing between two perspectives. One is substantive closure through loyalty to the claims, concerns and issues moving the commissioner in organizing a M-PDP. The other is to let closure be more pragmatically arrived at through participant recruitment and selection, which requires responsive focusing (Loeber, 2004: 289) by taking seriously the claims, concerns and issues of the (prospective) participants themselves. Inviting certain stakeholders to participate means inclusion or exclusion, highlighting or deemphasizing certain aspects of the issue. Delimiting the scope of the issue, especially in time or in institutionalized policy domain, includes or excludes or marginalizes certain participants. This chicken-and-egg problem between issue delimitation and participant recruitment affects the entire deliberation process and it closure. In truly responsive focusing, participants influence the borders drawn around an issue. But should new stakeholders be invited when the issue broadens, and some previously invited stakeholders leave the project if the issue becomes more narrowly circumscribed? Will commissioners still be interested in financing M-PDPs if they effectively have to fully respect the unstructured nature of issues by giving to participants every right to redefine and re-structure the issue?

How are the 'stakeholders' constructed by the initiators; what are the 'stakes' and who the 'holders', especially if the issue for deliberation is messy or wicked indeed? How to avoid the participation paradox, *i.e.* that those most likely to have contributions to make are those who will make themselves heard anyway in the normal venues of policymaking? How to deal with 'stakes' that are short term, but issues that are long range? How to find 'holders' if the 'stakes' are future generations of people, or nature? Should there be 'hot' deliberation between opinionated, maybe prejudiced participants with high stakes in the issue; or should one go for 'cold' deliberation between open minded participants with lower stakes in the issue? (Fung, 2003:345). Here the 'who?' spills over in the 'how best to deliberate' question.

Meanwhile, deliberative policy analysts have developed a rather well-stocked toolkit of methods. But key questions about the political biases of these methods, their propensities in eliciting or suppressing true pluralism of views (but see Hisschemöller, 2005), their catalytic functions for mutual learning, and their impact on the quality of debate between participants, have hardly drawn sufficient attention. Given that M-PDPs cost time and money and personnel, concerning the how-question there is a lot of implicit and unacknowledged influence by commissioners, who usually constrain all of the above. *E.g.*, although detailed studies show that 'ordinary' policy preparation processes on complex issues by civil servants from several departments take between two and four years, the time given for the completion of M-PDPs hardly ever surpasses six months to one year. In practice, this means that analysts/organizers have to pay more attention to project than to process management. This bears heavily on the issue of closure in deliberations. Novel ideas simply require time to emerge, participants need time to learn to understand each others' perspectives and ideas, and then to jointly elaborate new ideas into some state of 'joint construction' or maturity for serious political consideration. Given unrealistic time constraints, policy analysts/organizers have to use rather crude methods for bringing debates to closure (like the arbitrary time constraints mentioned above); or, alternatively, to avoid the issue of closure and yet, somehow, write

up some allegedly shared 'conclusions'. If stakeholders subsequently refrain from (publicly) endorsing them, politicians can hardly be expected to pay serious attention.

Another way in which the 'who' and 'how' questions interfere is in determining the purpose of the M-PDP. If only creativity and novelty of ideas matter, one would rather avoid participants with some relationship to the 'usual suspects' in the relevant policy network. But if analysts are at all possible to recruit truly visionary and creative participants from outside the well-known pools of expertise, 'outsider' participation will reduce the probability of up-take of the output of the deliberative exercise in normal policymaking. The other way round, maximizing chances for up-take by deliberate recruitment of participants with a clear reputation and stature with a 'constituency' of vested stakeholder groups may impair the quality and creativity of debate (Loeber, 2004: 226-7).

Throughput problems

In the actual process of deliberation the many 'how' questions loom large. There may be a well-stocked toolkit of methods for deliberative and frame reflective, participatory policy analysts. But by no means does this imply a well-developed, articulated consensus among analysts on the methodology for conducting M-PDPs. At best, one may speak of practitioners who discuss their experiences with peers in what may become an evolution toward a larger community of practice (see Abelson and Gauvin, 2006). In spite of this methodological indeterminacy, there are general ambitions and guidelines for sparking off responsible political judgment and learning in M-PDP's. Inspired by Loeber , I see three maxims to orient such deliberative processes:

- M-PDPs allow both *'spectator' and 'actor' perspectives* on unstructured problems: "Analysis that is intended to inform political judgment should adopt a hermeneutic approach to data collection which does not rule out the possibility or legitimacy of employing empirical-analytic methods to assess relevant facts, and which allows for a deliberative mode of exchanging information that results from such an assessment." (Loeber, 2004:63)
- M-PDPs foster not just a meeting of horizons, but make a serious effort at a *fusion of horizons*: "Analysis that is intended to inform political judgment should be organized as a participatory process, in which actors representing different perspectives on an issue participate in such a way that their 'particularities' and viewpoints are sufficiently acknowledged in the deliberation to bear on the resulting problem definition." (Loeber, 2004:65)
- M-PDPs are about *learning-about-action*: "Analysis that is intended to inform political judgment should be organized in such a way that it may induce learning on the part of the participants as a result of an exchange of information i) on the problem situation, ii) on the way others define the problem, and iii) on the particularities of the contexts in which these others operate, so as to make possible a reflection on their own interpretive frames, and to enable participants to [reflect on the conditions in the real world, under which they can] act in line with the new insights." (Loeber, 2004: 69)

In practice, these guidelines or maxims pose challenges to three interrelated problem clusters: fostering conditions for real learning, maintaining some sort of power balance between participants with sometimes very unequal resources in the real world, and the role(s) of the analyst/organizer.

The spectator/actor split in deliberation requires accommodation of quantitative and qualitative research and findings in M-PDPs. As many stakeholders are used to, and scientific experts are trained in quantitative research methods and findings, dealing with qualitative approaches is considered problematic – even though qualitative approaches are intrinsically more suitable for deliberative exercises. In addition, scientists operate in disciplinary 'tribes' of peers. In M-PDPs on unstructured problems they find themselves exposed to multidisciplinary contexts and highly unusual forms of peer review, extending even to non-scientists. For a lot of scientists it is very hard to unlearn to think and act through disciplinary paradigms, and become truly open to interdisciplinary collaboration and extended peer review. Analysts/organizers should be very careful to invite scientists with the requisite attitude and skills.

More often than not, scientists have a role to play in M-PDPs as experts or expert-advisors. To the extent that knowledge is power, their role vis-à-vis the non-scientific participants is ambivalent. On the one hand, it is argued that scientific information is unequally distributed; hence, for the sake of an equal power balance information deficits should be repaired through lectures, consultations and other means of making scientific information available. On the other hand, this invokes the deficit model in public understanding of science, which invites scientists to be teachers and all others to be students. Since deliberation, not education is the purpose of a M-PDP, the teacher – student roles may insert the very power imbalances they were intended to remedy.

Regarding the effort to go beyond a mere exchange of perspectives and effectuate some kind of fusion of horizons as closure in deliberation, analysts and participants suffer from ignorance and gaps in our knowledge. So far, insights in the impact of emotional dynamics, rhetoric, eloquence and charisma in M-PDPs on the power balance between participants and the quality of debate and deliberation is limited (Van Stokkom, 2005, 2006). Usually, it is doable to check for increases in instrumental or first-order learning among participants. But it is much harder to show second-order learning, *i.e.* a certain method's effectiveness in inducing serious reflection on their own interpretive frames among participants; let alone increased skills in coming to shared insights in constructive political judgments, or learning to learn (third-order learning) itself. Consequently, it proves very difficult to establish the quality level of a debate, and therefore the value-added of deliberation in M-PDPs compared to, say, debates among experienced politicians in parliamentary subcommittees (Pellizoni, 2001; Steiner *et al*., 2004).

All this impinges on the so-called expertise and role of the deliberative analyst or organizer of M-PDPs. It was already pointed out above that the usual institutional setting of a M-PDP forces the analyst/organizer in the role of public servant or hired consultant. Hence, the other participants ascribe to them an inherent interest in consensus creation and producing knowledge usable for their commissioner or principal. Even if the analyst/organizer were prepared to take some action in guarding the power balance among participants, this role ascription will impair such efforts. But apart from that, even if both commissioner and analyst are committed to real change in standing policies and political judgments and framings, what is the role of the analyst vis-à-vis the other participants? Facilitator, process manager, project manager, director of the show, counsellor to all parties, interpreter between all parties, change agent for the commissioner, servant for empowerment of the weaker parties?

Output and outcome problems

Path dependence theory suggests that the weight of the past may block serious policy change. Policy choices that are objects of deliberation in M-PDPs may be so locked in chains of past choices, that they are not easily unlocked. On top of that, the point with mini-public and stakeholder projects is that its output and outcome problems are quite comparable to those of non-routine, non-incremental administrative policymaking: finding a niche somewhere to think creatively, and engage in really serious deliberation; and, returning from the niche with some fresh and productive ideas, how to insert them into normal political power games and ongoing public opinion forming and social learning processes. After the deliberate suspension of power differentials, and lifting the constraints on deliberation and debate deriving from 'normal' political manoeuvring and strategizing, all the institutional constraints return in full force to test the robustness of a M-PDP's results. Goodin and Dryzek (2006) call this the problem of "macro-political up-take of mini-publics".

Such up-take depends, first of all, on the dissemination strategies of the M-PDP's direct output. As a matter of fact, in many cases a carefully elaborated trajectory for 'follow-up care' is considered an integral part of M-PDP. Potentially, there are many different types of adressees; and each one requires a different dissemination strategy. Igniting a large scale public debate is very different from briefing a department's policymaking officials who may be interested in using the M-PDP's ideas in there own policy proposals. In the former case, highly visible public figures may be recruited to present the

major messages to influential media in popularized ways. In the latter case, picking a reputable analyst to give oral presentations and run a workshop or small conference is more effective. Which dissemination strategies are most effective for which audiences, or in influencing important policymaking and political decision making processes, is an empirical matter. Another issue for more empirical research is the potential feed-forward between choice of methods during the deliberation process (the throughput phase) and dissemination strategy (output phase). There are cases where the commissioning party is willing to compromise the M-PDP's integrity as deliberative-interpretive project in the wrapping up of its conclusions and activities, in order to facilitate its dissemination and boost its persuasive power to relevant non-participating audiences and interests (Loeber, 2004: 277-8, 292).

More generally, dissemination is a balancing act between, on the one hand, safeguarding the integrity of the deliberative project in outputs that convey, if only vicariously, the experience of intense deliberation and the efforts spent in getting to meaningful, valid closure; and, on the other hand, giving in to the pressure of the media, politicians, and interest groups for sound-bite like summaries of the major message. Part of the dissemination efforts is for the sake of accountability of the commissioner and organizer to the public. Fung (2003: 346) writes that this is of particular relevance

> "if we do not take it for granted (…) that deliberation and negotiation between stakeholders necessarily yield outputs that are beneficial to the public interest. If this is uncertain, then participatory procedures must be all the more subject to … *ex post* control."

Also, the commissioner and organizer will desire to prevent others from selectively shopping or cherry-picking from the proposals resulting from a M-PDP's total output.

However, much like authors cannot prevent readers from producing their own interpretation of a text, so the disseminators of M-PDPs' outputs cannot control the longer term outcomes. Hopefully there is the ripple effect of throwing a pebble in the pond, but this is uncertain. Goodin and Dryzek (2006: 225-237) list several potentially beneficial effects of M-PDPs.2 Their outputs may in the near or longer future be taken up in normal policymaking and political decision making processes. Media coverage of M-PDPs' outputs, if sufficiently extensive, may inform larger publics and help in sparking off public debates. M-PDPs may function somewhat like focus groups in marketing strategies; they 'market test' particular policy ideas for feasibility and acceptability for key stakeholders in society. Because participant recruitment for M-PDPs is considered a rather open procedure, they resist the cooptive politics of bringing in (alleged) opponents of proposed policies in standard consultation processes. M-PDPs can function as legitimatory devices for policies in whose production they are a part. The above mentioned cases of expansion of Schiphol Airport and a second Rotterdam Harbor offer perfect examples.

Unfortunately, Goodin and Dryzek do not pay attention to other effects of M-PDPs, especially in relation to their embeddedness in an institutional setting of representative democracy. For example, following in the footsteps of Murray Edelman (1988), one may as well consider the market testing and legitimation effect of deliberative-cum-participatory exercises a mere symbolic ornament to the representative and corporatist modes of governance. The appearance of open participation in deliberative processes lends additional legitimacy to policies already considered, proposed and (almost) decided upon by the elites. The *ad-hoc* character of many M-PDPs may even lead one to hypothesize that they channel away urgent political issues from genuine public debate in agonistic political settings of political mobilization and agenda building. M-PDPs might be just one more instrument for depoliticization and agenda control.

Many civic associations and NGO's are deeply involved in developing alternative problem framings and alternatives to dominant opinions about solutions. Yet, they frequently refuse to participate

2 I have left out positive effects to be expected only from other than stakeholder-directed forms of deliberative projects, like popular oversight, confidence building, and political mobilization due to participation.

in M-PDPs on issues of their intense concern because they do not trust the intentions of the authorities that set them up. In the Dutch GM-food public debate, environmental groups and other associations walked out of the organized public debate because they felt cheated about their possibilities for influencing the agenda and focus of debate (Hage, 2002). More generally, they consider M-PDP's as PR-machines for manipulating public opinion. They see themselves as the legitimate problem owners; and much better representatives of a critical public opinion and a larger public than those invited by authorities to participate. In systems of representative democracy, authorities that initiate deliberative experiments on an *ad-hoc* basis, but fail to institutionalize relations between deliberative procedures, representative bodies and their normal processes of decision making, do indeed deserve suspicion. By keeping open the option for themselves to not even respond to the outputs and recommendations of M-PDPs, they give the impression of not taking seriously procedures they have themselves set in motion (Joly and Marris, 2003).

Conclusion

This paper discussed perplexities of mini-public deliberative and participatory designs in policy analysis. In spite of its modest aims – not all-out deliberative or participatory democracy, but creating more spaces for deliberative practices in the institutions and decision channels of representative democracy – I have interpreted practical problems in running exercises in deliberative and/or participatory policy analysis a related to inevitable resistance among political powers with a vested interest in the established political order. If adopted by these dominant political players themselves, deliberative and participatory designs are hardly more than optional add-ons to the normal venues and channels of decision making.

In the more detailed and practical discussion of problems and perplexities of actually conducting deliberative-cum-participatory policy exercises in the context of mixed representative democracy and governance practices, an important gap showed up. We like to think of the possibility of a gradual, but deliberate shift towards more deliberative democracy; given the delays of path dependence and the hyper-complexity of capitalist and democratic governance systems; *i.e.* gently but deliberately nudging the entire system to more deliberative modes through relatively unobtrusive strategies of alignment of different institutional arrangements. But this picture turns out to be too rosy. A politics of deliberation will always meet its limits in a politics of vision and/or power (Dauenhauer, 1986). Thus, an important conclusion of the argument in this paper is not to lose sight of the ironies of real power politics, and thereby safeguard realism and reflexivity in shaping deliberative and participatory policy analysis.

STAKEHOLDER DIALOGUE ON ENVIRONMENTAL ISSUES: STAKEHOLDER PERSPECTIVES AS THE BASIS FOR PARTICIPANT SELECTION

Eefje Cuppen

Stakeholder dialogue as problem structuring

Ecological and environmental problems are in general characterized by (scientific) uncertainties, and a diversity of (conflicting) values at stake. Actors often disagree on the question what the goal of policy should be, as well as what the relevant means are for achieving that goal (*e.g.* which policy measures). This type of policy problems has been referred to as 'unstructured' (Hisschemöller, 1993; Hisschemöller and Hoppe, 2001; and 'wicked' by Rittel and Webber, 1973, 'ill-structured' by Dunn, 1988; Mitroff and Sagasti, 1973; Simon, 1973, or 'messy' by Ackhoff, 1974). Unstructured problems require stakeholder participation in order to structure the

problem, *i.e.* to improve the understanding of how different stakeholders perceive and define the problem and its potential solutions.

Participation as problem structuring means that mutual learning is enhanced by generating, articulating and evaluating divergent knowledge claims and viewpoints. Hence, stakeholder dialogue should provide ample opportunity for scrutinizing conflicting viewpoints and knowledge claims. Rather than focusing on consensus, stakeholder dialogues should allow for diversity of perspectives, preferences, (policy) options and goals. Stakeholder dialogue should therefore take place in an atmosphere of *constructive conflict*. This means that participants jointly evaluate competing options and knowledge claims in order to get a better grasp of the problem and its potential solutions. A strong focus on reaching consensus should be avoided, as this may steer towards the adoption of invalid assumptions and/or inferior (policy) choices (Gregory *et al*., 2001; Janis, 1972; Mason and Mitroff, 1981). Group processes that are aimed at reaching a consensus often fail in capturing the diversity of perspectives (Stasser and Titus, 1985).

Constructive Conflict Methodology

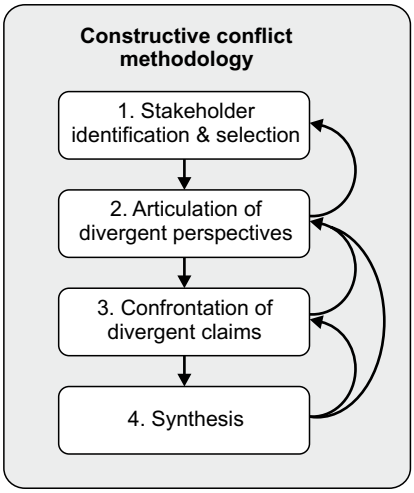
Constructive Conflict Methodology for stakeholder dialogues (Cuppen, 2009) is an overarching approach for the design of stakeholder dialogues on complex (ecological and environmental) problems. It consists of four steps and relies on the use of specific social science methods to support each of the steps within the methodology (see Figure).

A critical step within *Constructive Conflict Methodology* is stakeholder selection. After all, this is the step that sets the stage for constructive conflict by including a diversity of perspectives in the dialogue. When a stakeholder dialogue does not include the diversity of perspectives, problem structuring is problematic and there is a risk of 'type III' error: solving the wrong problem as a result of a limited problem perception (Mitroff, 1974; Raiffa, 1970: p264, cited in Dunn, 2001). Although many participatory methods exist for facilitating the process of participation, procedures for preparing such a process through stakeholder selection are generally not well documented.

Dialogue as problem structuring: implications for stakeholder selection

Two things are important for stakeholder selection for dialogues on unstructured problems. The first follows from the aim of such dialogues: learning about a problem through the articulation of different viewpoints on the problem in an interactive fashion. This means that ideally, a stakeholder selection procedure should be able to identify stakeholders on the basis of their perspectives rather than some kind of secondary proxy. Procedures that are based on the proxy of socio-demographic variables for example assume that by covering the range of age, income, socio-economic class, education etcetera, the range of perspectives has been covered as well. Rather than assuming this, the identification of stakeholders with divergent perspectives is an empirical question that needs to be addressed in order to select stakeholders accordingly. Stakeholder dialogues should be representative in terms of perspectives rather than in terms of socio-demographic characteristics, or other secondary variables. There is no reason to assume that representativity in terms of socio-demographic variables reflects representativity in terms of perspectives (Martin, 2008), neither does it guarantee representation in the electoral sense (Goodin and Dryzek, 2006; Huitema *et al*., 2007).

The second thing to take into account is that learning about the different problem perceptions depends on how the variety of perspectives is balanced in the process. It appears that balanced groups are more creative, and benefit more from their diversity by sharing more information that do unbalanced groups (Brodbeck *et al*., 2002). Furthermore, it can be argued that balanced groups are less susceptible to groupthink (Dryzek and Niemeyer, 2008) and biased information processing (Cuppen, 2009). The balanced inclusion of perspectives can be interpreted as a specific form of 'fairness', in that the broad range of perspectives, regardless of how many people share that perspective, are represented in the stakeholder dialogue and get an equal opportunity of contributing to the dialogue. Including divergent perspectives means that also marginal perspectives are included. This is impor-



tant as marginal viewpoints (or rarely mentioned hypotheses) are more likely to provide new insights than dominant viewpoints (hypotheses mentioned more frequently) (Dunn, 2001). Highly probable or predictable hypotheses do not challenge accepted knowledge claims (see also Brodbeck *et al*., 2002).

Participants in a stakeholder dialogue should therefore be selected in such a way that the variety of perspectives is included in a balanced way in the dialogue. Methods should be used that can support stakeholder selection; this concerns methods to empirically investigate the broad range of perspectives and that are able to empirically link stakeholders to the identified perspectives. One example of such a method is Q methodology.

Q methodology to select stakeholders for a stakeholder dialogue on bio-energy in the Netherlands

Q methodology was developed originally in the 1930s as an innovative way to study people's subjectivity (Stephenson, 1935; Brown, 1980). Since then, it has been applied in various fields of social science such as to identify views regarding citizenship, the public interest, environmental policy, and the quality of participation processes (Barry and Proops, 1999; Davies and Hodge, 2007; Swedeen, 2006; Webler *et al*., 2001; Wolsink, 2004). The merit of Q methodology is that it can uncover perspectives or positions in a debate, without imposing predefined categories. Hence, it is a bottom-up way of analyzing stakeholders' perspectives, without using proxies for perspectives.

The central element in Q methodology is the Q sorting task. Respondents are asked to rank a set of statements on a scale that represents significance or salience for respondents (Brown, 1980: p198), such as most agree to most disagree (usually normally distributed). These statements are selected in such a way as to reflect the broad range of ideas about the issue under study. Data from the Q sorts are factor analyzed, which results in clusters of Q sorts that are highly similar in their rankings of the statements (high correlation). These clusters can be interpreted as different perspectives on the issue under study. Q methodology allows for analyzing each respondent's position with regard the identified perspectives.

Q methodology was used in the preparation phase of the Biomass Dialogue, a stakeholder dialogue on energy options from biomass in the Netherlands (see Cuppen *et al*., 2009). Seventy five Dutch stakeholders were interviewed. In the interviews, respondents performed the Q sorting task. Respondents were selected as to reflect a broad range of perspectives; they covered a broad range of expertise, knowledge, background, interest and values.

The application of Q methodology resulted in six perspectives on energy from biomass (for a full description of these perspectives and the procedure that was used to identify these, see Cuppen *et al*., 2009):

- Keep all options open
  Focus on knowledge development; broad application (of biomass sources, applications, and scale); evaluation of sustainability of biomass options is case-specific; in favour of cascading (from high- to low-grade use of biomass) and biorefinery (refining biomass in order to use all valuable elements within the biomass)
- Hit the brakes
  Skeptical as regards the sustainability of biomass, mainly because of negative impacts that international biomass chains may have for developing countries; socio-ecological/developmental perspective; do not stimulate growth of energy crops
- Support small-scale innovative initiatives
  Focus on small-scale decentralized options in the Netherlands; in favour of market introduction/ implementation rather than (even more) knowledge development; critical about government and policy
- Security of supply with global, certified, second generation biomass
  Focus on large scale biomass chains; import of biomass to the Netherlands; sustainable biomass is second generation biomass (woody materials) and guaranteed through certification; biomass is needed for security of energy supply, as such it can replace fossil fuels
- Efficiency the aim: biomass a means?
  Efficiency is key; fairly critical about biomass options because of limited availability of biomass sources; use residuals and apply cascading (from high- to low-grade use of biomass); technology development of market introduction to make use of potentials
- Just do it, step by step
  Pragmatic and incremental perspective; do not wait for best solution, but act now with the knowledge there is; keep options open

The next step was to analyse to what extent each of the respondents adhered to each of the six perspectives. Q methodology allows for analysing to what extent each respondent loads on each of the perspectives. Some respondents showed pure loading on one perspective, others were a 'mixture' of perspectives. For each perspective an equal number of stakeholders was invited that, according to the data, identified with the respective perspective. In total, forty stakeholders were invited to take part in the Biomass Dialogue. As such, Q methodology allowed for a stakeholder selection based on empirically identified stakeholder perspectives, and enabled a balanced inclusion of the variety of perspectives. The perspectives and participants' positions with regard to the perspectives were presented in the first workshop. The perspectives were furthermore used to structure the dialogue (step 2 and 3 of *Constructive Conflict Methodology*, see figure, p15). For the articulation of perspectives, subgroups of 'like-minded' participants were formed that performed particular tasks throughout the workshops. For instance, these subgroups worked out their argumentation for the sustainability of specific biomass chains. Confrontation took place in heterogeneous subgroups, which reflected for instance on the argumentations of the 'like-minded' subgroups. Also in the synthesis reports, analyses were made in relation to the perspectives. It was for instance indicated on what issues participants with different perspectives agreed and disagreed, and when they took different reference situations for making judgments about the sustainability of biomass options. In this way, participants could make themselves familiar with the perspectives and consequently use them in their thinking about the complex biomass issue. It appeared from the (quantitative and qualitative) evaluation that the perspectives helped participants to better grasp the complexity of the biomass issue, *i.e.* to understand why other people draw other conclusions, or which presumptions they have when discussing biomass options (see Cuppen, 2009).

Conclusion

Stakeholder selection requires an extensive preparation phase. This has important implications in terms of planning a project. To take the Biomass Dialogue as an example, the preparation phase (including stakeholder identification, Q interviews, Q analysis, and stakeholder selection) lasted seven months, whereas the actual dialogue phase lasted five months. An extensive preparation may be problematic when only limited budget is available for the project. Stakeholder selection is however a critical step in the design of a stakeholder dialogue as it is decisive for the outcome. It should ensure a balanced inclusion of divergent perspectives and the inclusion of marginal perspectives. Social science methods can be used to identify stakeholder perspectives in a bottom-up fashion, as well as stakeholders' positions with regard to the perspectives. Q methodology is an example of such a method. For the Biomass Dialogue, Q methodology proved a useful method for stakeholder selection.

VOICES AT THE TABLE: PARTICIPATION, COLLABORATION, AND OWNERSHIP IN SOCIAL-ECOLOGICAL ISSUES

Ilan Chabay

Introduction

Pursuing the goal of a more democratic and inclusive process for governance of social-ecological systems through standing forums raises several practical questions. Who participates in the forum and why? Is participation in an on-going process contingent on the nature of feedback to participants about the impact or outcome of deliberations? What kind of procedures for dialogue and engagement support meaningful participation and a sense of ownership of outcomes by participants? Under what conditions does participation lead to collaboration?

These questions serve as the frame for our projects on the governance of the fisheries in the Baltic Sea. This paper draws upon our recent work with groups from the eight EU member states that form the Baltic Sea Regional Advisory Council (BS RAC), which was established to advise the European Commission on governance of the Baltic Sea fisheries. The first part of this paper sketches our work with the BS RAC and among fisheries stakeholders in Poland on their consensus building processes. This work on the Baltic Sea fisheries is the context for the second part, which consists of reflections on participation, collaboration, and ownership.

The Baltic Sea Regional Advisory Council

The BS RAC is charged with providing advice, preferably in statements of consensus, to the European Commission on governance of the Baltic Seas fisheries (Council, 2004). Over the past two years, we have been working with fishermen, scientists, and representatives of environmental organizations and government ministries in and associated with the BS RAC. Our goal was to understand the workings of the BS RAC in order to develop and introduce a more effective participatory process that would improve the likelihood of efficiently reaching consensus on at least some of the most critical issues.

During an initial process of observation, interviews, and building relationships with the members of the Baltic Sea RAC, we developed an understanding of the actors and issues in the RAC and around it. We gained information through interviews, observations, and written materials on the actors and their individual views on science relevant to the fisheries, on their relationship to other actors within and outside of the RAC itself, and on the process within the RAC. The body of information we acquired was essential for designing and carrying out interventions within the RAC and within one of the member states.

The European Commission's (EC) ostensible reason for establishment of the BS RAC was to legitimate and facilitate the generation of advice on fisheries governance for the EC. Motivations of the participants were broader. For some participants, the RAC meetings were more important as an opportunity for their own professional networking, building relationships, and gathering information than for any expectations of impact on the political decision-making at the European Commission. For some this reflects a degree of cynicism about participatory events as part of a political process, which they see as generally unresponsive to input from outside the bureaucracy. For others, the RAC meetings and contacts are but one of several routes to influence decisions on matters of interest to them - others being print and TV media and contact with EU ministers either through their national ministry or directly.

Most of the actual argumentation on specific issues takes place in the BS RAC working groups on sectors of the fisheries (pelagic, demersal, salmon) and in the Executive Committee (ExCom) meetings. There is considerable variation in the way that the individual meetings under different chairs actually operate and to what degree the participants in each are engaged and satisfied with the outcomes. It became clear that introducing techniques for addressing contested issues could play a constructive role in these meetings by providing a more structured process by focusing on finding common grounds, rather than only voicing strongly divergent views.

Workshop with the BS RAC

The first intervention involved the whole RAC. The need for improved understanding of the process of generating advice from the fisheries data was generally accepted among the RAC members. In response, we organized a "BS RAC science workshop" in May 2009 in close collaboration with the chairmen and key members of the RAC. The workshop was based on the topics of sources for and uncertainties in scientific data. This included the separate processes of technical and political interpretation of the data by the International Council on Exploration of the Seas (ICES), which provides its results to the RAC for the RAC's deliberations. The purpose of the workshop was to improve the members' awareness of and ability to use effective dialogue techniques to clarify issues under consideration and reach consensus more readily where possible.

Among the more than 50 participants were not only the members of the BS RAC, but also representatives of the European Commission, ICES, and national governments. The workshop opened with an overview by Christian Stöhr (Stöhr, Stepanova, and Chabay 2009) of the key results of research gleaned from interviews and observations of the BS RAC. Peter Adler, President of the Keystone Center in Colorado USA, then outlined strategies and methods for improved consensus formation among groups holding strongly divergent views. The first part of the workshop included an introduction to the methods and rationale for using question framing to establish a clear and common focus of discussion, joint fact finding to separate resolvable matters of common agreement from issues strongly bound to value judgements, and polling as an iterative process of indicating movement toward or away from consensus.

In the second part of the workshop on biological assessments and political advice, panel members presented divergent views on the biological assessment process and how it is introduced into the policy domain. This led to a wide-ranging discussion of the challenges that uncertainty in science creates for the BS RAC and the importance of strategies and methods to create a better consensus building process and a more informed dialogue in the BS RAC.

The difficulties of performing complex biological assessments, political intricacies in the EU framework, and differences among stakeholders in their degree of understanding of science and its interpretation for policy advice were identified as key challenges to reaching consensus. This is in addition to the difficulties stemming from the nature of the scientific process and its inherent uncertainties. The different perspectives of fishermen, NGOs, scientists and government, not to mention the range of cultures, histories, and politics of the eight countries around the table, as well as the needs of the EU and EC make any form of genuine participatory process demanding and time consuming.

Polish Fisheries Roundtable

Our second intervention initiated a new type of forum in Poland to address Baltic Sea fishing issues. The need for the facilitation of dialogues was identified as being especially high among the new European member states, with Poland as the most important of these in terms of their impact on the Baltic Sea fisheries. In Poland the lack of both an established forum and an effective mechanism for developing consensus on national interests for fisheries was noted by several people both within and outside of the RAC. In part these perceived deficits have their origin in the prior political and cultural history in Poland - top down political management and few opportunities or support for analytic discourse on practical matters. To address this, Ryszard Malik, a Polish RAC member and representative of the largest Polish fishermen's union (with about 25 per cent of Polish fishers as members) took the initiative and suggested that we jointly develop a facilitated consensus-building process within Poland.

After talks with Mr. Malik and Ewa Milewska, BS RAC vice chair and fisheries officer of the WWF in Poland, and meetings with the heads of several Polish fishermen's unions, we jointly organized an ongoing dialogue process, which has become known as the Polish Fisheries Roundtable (PFRT). Starting with our first meeting in January 2009 with fishermen, commercial fish producers, ship owners, environmentalists, scientists, and a national ministry representative, the participants agreed to form a core group that would organize a national forum. The core group then worked with gcPLUS to present a workshop in May 2009 in Gdynia, Poland, at which we introduced methods of mediated dialogues and participatory decision-making among the diverse groups in Poland concerned with fishing in the Baltic Sea (see Adler, 2002).

The core group organized a meeting in September 2009, by which time the interest in participating in the PFRT among stakeholders had grown considerably. An agreement in Polish was discussed, modified, and then signed by all present at the meeting. The agreement was based on a draft in English developed by the Keystone Center with input from gcPLUS that laid out a set of principles and rules for constructive dialogue (for example, see Adler and Birkhoff, 2000). The meetings are open to a wide range of stakeholders from many sectors with the proviso that those who choose to participate must agree that they will recognize and use the principles and rules set forth by the group. The agreement was referred to by Peter Adler as the basis for an "improbable alliance" between parties with strongly divergent views, but who share a need to develop effective paths to certain common goals.

An important driver of this newly initiated process of dialogue in Poland was the desire of many connected to the Polish fisheries sector to make their views known to the European Commission in the impending process of reforming the Common Fisheries Policy, due to be enacted in 2012. The participants in the PFRT recognized that their views might have a greater effect if they could identify those aspects for which they had convergent interests among themselves in Poland and focus their feedback to the European Commission on those matters. The number and complexity of issues coupled with the relatively short time frame in which to submit their views to the Commission imparted a (useful) sense of urgency to the process.

Reflections on Participation, Collaboration, and Ownership

Our experiences with the Baltic Sea RAC and the PFRT provided us with perspectives that are more generally applicable. These are about trust, social capital, language, moving from unresolved arguments to limited cooperation or even collaboration, and developing a sense of ownership of the process and outcomes of participation.

Accompanying the BS RAC development for almost two years from its inception allowed us to follow the development of the dialogue and communication among its members for a significant period of time. It became apparent, that whether facilitated or not, the dialogue became much more productive over time. That indicates the important of establishing trust between stakeholders, who often had met before in various battles, for example between the environmental NGOs and the fishing industry. The often heated discussions in the beginning made clear one party had little or no understanding of the frames of references used by the other party. Instead, the perception of the other was stereotyped

and prejudiced, which often resulted in shouting matches, rather than constructive dialogue. Consensus processes therefore need time to establish trust and a basic understanding of the ways of thinking and framing ideas used by the other participants in a forum. That can happen through formal or informal meetings and it can be facilitated by mediation and supportive techniques.

Establishing trust is an aspect of developing social capital. The importance of social - and political - capital was evident in the dynamics in meetings of the RAC and the PFRT. The term "social capital" has been used in the context of resource management (for examples see Pretty and Smith 2004, Bodin and Crona 2008, and references therein). I will use it here as an imprecise, but useful indicator of social standing and degree of acceptance as an articulate member of the group with useful fisheries knowledge - a status established over time and maintained by formal and informal contacts.

Social capital was gained and used to strengthen the impact of position statements in several types of interactions in the RAC and PFRT. One aspect was the acknowledgement and adherence to the norms of time and topic focus and directives of the chair of the meetings. Participants who made concise and focused comments or statements seemed to command greater attention, as well as tacit approval of the chair, than those who spoke with less clear focus, though sometimes more forcefully or longer. It was also clear that there was a level of reciprocal respect between certain members, even though they had opposing views, that was evident in their exchanges, but was absent in many other exchanges.

In the PFRT, the rules set forth in the agreement on which membership was conditioned were promoted as a structure for exchange. The rules and perhaps the process of collectively modifying and agreeing to them also evened out some of the disparities in social and political capital among the participants.

Facility with English was another component that affected the status and effectiveness of members of the BS RAC. Those who were able to express themselves most easily in English - the official language used in the RAC - were not only advantaged linguistically, but also were more likely to speak up and do so more effectively on topic and thus seemed to be perceived as contributing more to the proceedings. This resulted in their gaining social capital. In RAC meetings held in the East European member states, simultaneous translation to/from the host institution's language was generally used, resulting in increased participation for speakers from the host country, but not necessarily any apparent change in the speakers' social capital or effectiveness in the dialogue.

Two methods for facilitating dialogue and consensus formation serve to help move from argumentation to cooperation and perhaps collaboration. Question framing is important to make explicit and mutual the focus and scope of the dialogue. The use of joint fact-finding in the dialogue is designed to stabilize knowledge - *i.e.*, to reach agreement upon a set of information that is no longer contested by the participants (Adler 2002, Stöhr et. al. 2009). By stabilizing the knowledge in this way, the terms of the dialogue can be clarified and better focused on fewer points of contention and a greater chance for agreement on at least a part of the issues is produced. This may also serve to make clear to some participants the opportunities for collaboration - positive, joint action by two or more parties to move a process or idea forward - carved out of a broad area of contention.

Collaboration, even in some limited domain, and a positive feedback loop are crucial in establishing a sense of ownership of the process by the participants. The feedback is often the weak or missing link. In the case of the Baltic Sea RAC, the question that was raised by some concerned the vertical feedback loop with the European Commission. Absent timely and clear feedback on the advice provided by the RAC to the EC, the familiar problems of participant fatigue and cynicism become dominant. Clear and rapid feedback to the RAC members that includes a rationale for accepting, deferring, or rejecting advice offered by the RAC, would counter the fatigue and cynicism. At the same time, it would also be essential in furthering the avowed political goal of expanding the participatory basis for democratic governance of common resources.

LOOKING FORWARD FROM THE NEXUS OF RESEARCH AND PRACTICE: LEARNING FROM ISSUES EMERGING WITH ADAPTIVE CO-MANAGEMENT

Ryan Plummer

Introduction

Practitioners, researchers and policy makers concerned with the environment as well as development are confronted with complex and pervasive challenges such as climate change, non-point source pollution, land degradation and overharvesting. These challenges have immediate implications for the environment broadly, and resource and livelihood more specifically. The limitations of conventional environmental 'command and control' policies or government solutions to address these complex and uncertain challenges are established (Holling and Meffe 1996; Kettl 2002). At the same time, the benefits of broadening participation in making decisions and implementing actions, has led to an intense interest in different forms of and strategies for governance (Glasbergen 1998; Lemos and Agrawal 2006).

Adaptive co-management is a governance strategy being advanced to address resource concerns and environmental issues such as fisheries, forestry climate change, parks and protected areas and water resources (*e.g.* see Larsen, this volume for one example). It draws upon the approach of collaborative resources management, which emphasizes the need to connect or link the multiple actors in a deliberative and communicative process, as well as adaptive resource management, which emphasizes the need to consider policies as experiments and management as a continuous process of learning (Berkes *et al*. 2007; Plummer and Armitage 2007b). Adaptive co-management is thus understood as a "process by which institutional arrangements and ecological knowledge are tested and revised in a dynamic, ongoing, self-organized process of trial and error" (Folke *et al*. 2002: 20).

Concerted attention has been directed to understanding aspects of adaptive co-management in both theory and practice. In bringing together and building upon the two approaches outlined above, adaptive co-management is identified as distinct approach involving a network of heterogeneous actors (linked the vertically and horizontally) who collectively engage in an iterative process (with attributes of pluralism and communication, shared decision making and authority, linkages and autonomy, and learning, capacity building and adaptation) to address complex environmental issues (Colfer 2005; Folke *et al*. 2005; Berkes *et al*. 2007; Plummer and Armitage 2007b; Fennell *et al*. 2008; Armitage *et al*. 2009; Berkes 2009; Plummer and Fennell 2009; Schultz *et al*. 2009).

Experiences gained to date by adaptive co-management scholars and practitioners offer important insights to individuals engaging in participation. The purpose of this paper is to learn from pressing issues emerging with adaptive co-management. Issues presented and discussed include ethics, power and evaluation. Implications for the future of undertaking participatory approaches in environment and development are highlighted in the final reflections.

Learning from Emerging Issues with Adaptive Co-management

The trend towards participation in natural resources management has been increasing (Ferreyra 2006). Participatory action research or participatory engagement is the typical way to 'implement' or 'undertake' adaptive co-management as well as to study it. Berkes (2009) argues that intensive participation in decision-making and an accompanying institutional arrangement is a requirement for co-management. Researchers and development professionals may thus simultaneously engage in a single process, which is both adaptive co-management and participatory action research. Colfer (2005) captures this dualism in her reflections on the experiences of adaptive collaborative management with the Centre For International Forestry Research (CIFOR). Figure 1. which she refers to as 'the worm', illustrates the iterative cycles of deliberation/discussion, action and reflection which characterize adaptive co-management as well as its occurrence in practice.

Adaptive co-management is positioned at this rich nexus of research and practice. As experiences with studying and implementing adaptive co-management through participatory means have increased several pressing issues have emerged. In the following sections of this paper issues associated with ethics, power and evaluation are described and insights are offered to inform future considerations.

Learning from the issue of ethics

As signalled in the opening paragraph of this paper, considerable attention is being directed towards governance generally and novel strategies of governance specifically. The magnitude of the growing interest in governance was signalled in the declaration by Kofi Annan that, ''good governance is perhaps the single most important factor in eradicating poverty and promoting development'' (Graham *et al*., 2003: 1). Unsurprisingly, governance has been embraced by some international development agencies and scholars as being inherently 'good', with an emphasis on its characteristics of participation, accountability, justice and polycentrism (Saner and Wilson 2003; Lebel *et al*. 2006; Fennell *et al*. 2008). Adaptive co-management is considered a governance network and Berkes (2007) considers 'good governance' to be one of the seven faces of adaptive co-management. Despite this close association with 'good governance', Fennell *et al*. (2008) have posed and pursued the question: is adaptive co-management ethical?

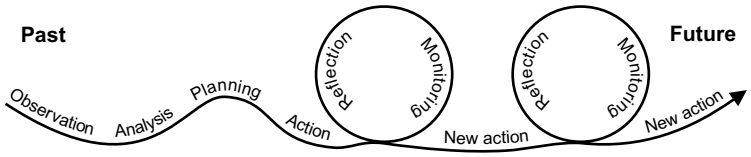


Figure 1. The Worm (adapted from: Colfer, 2005: 7)

Work by Fennell *et al*. (2008) has brought several important ethical considerations concerning adaptive co-management to the fore. Starting with complexity and uncertainty as the raison d'être for adaptive co-management, they point to several unresolved dilemmas including the circumstances and ways in which it is implemented or occurs (see also Ruitenbeek and Cartier 2001; Olsson *et al*. 2004), the social and cultural settings in which it is embedded (see also Nadasdy 2003; Natcher *et al*. 2005), and tensions between effectiveness, participation and legitimization (see also Folke *et al*. 2005). Ethics is a valuable lens to consider these dilemmas because it demands living with uncertainty.

Fennell *et al*. (2008) argue that if adaptive co-management is to embrace these and other uncertainties it must move beyond their identification and understanding to accept and navigate their uneasy tensions. To assist with this difficult task they offer a heuristic device of how ethics can be incorporated into adaptive co-management. As illustrated in Figure 2, it combines: the ethical triangulation perspective which considers and integrates deontological or non-consequentialist, teleological or virtue based, and existential or authentic ethical theories (see Fennell and Malloy 1995); nested moderators (external, organizational, issue-specific, individual) which intercede the ethical perspectives and influence the adaptive co-management process (see Malloy *et al*. 2000; Fennell 2006); and, the network of heterogeneous actors engaged in the process of adaptive co-management (see Carlsson and Berkes, 2005). In applying this lens to experiences with the approach in Cambodia, Fennell *et al*. (2008: 73) conclude that "adaptive co-management, without ethics, may simply be window dressing for well-established dilemmas of power and ultimately livelihoods".

Considering ethics in adaptive co-management is immensely powerful because it illustrates the myriad of uncertainties associated with approach and present when engaging in participation. Employing the lens described above (see figure 2) systematically to a situation make clear the potential pitfalls of adhering to a single ethical perspective as well as the need to understand the multitude of moderators which may exert influence on the participants. Most importantly, as Fennell *et al*. (2008: 73) point out,

"arriving at a proper (ethical) decision or action requires examining various perspectives and making an informed choice in light of the alternatives and situational circumstances". Adaptive co-management and other participatory approaches may act as mechanisms by which individuals consider these different viewpoints and gain awareness of their ambiguities.

Learning from the issue of embeddedness and power

Awareness of and sensitivity to the socio-ecological context in which adaptive co-management is embedded is an important issue. Edward and Steins (1999: 207) urge those in natural resource management to be explicit about contextual factors which they define as "…dynamic forces constituted in the user groups' social, cultural, economic, political, technological and institutional environment…". More recently, in association with complex adaptive systems thinking, the boundaries between such social contextual factors and ecological contextual factors are being understood as arbitrary and artificial – with the context being described in terms of social-ecological systems (see Berkes and Folke 1998; Berkes *et al*. 2003).

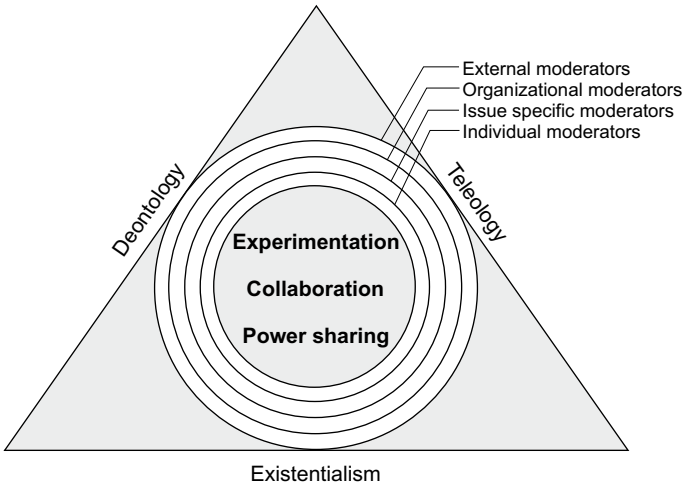


Figure 2: Incorporating Ethics into Adaptive Co-management (adapted from: Fennell *et al.*, 2008: 67).

While adaptive co-management is embedded within a social-ecological system and therefore requires both social and ecological knowledge, research and experience from adaptive co-management has made important contributions to understanding the social actors, structures, processes (and associated variables) that make it possible (*e.g.*, Olsson *et al*. 2004; Folke *et al*. 2005; Armitage *et al*. 2007; Schultz *et al*. 2007; Berkes 2009). One of the persistent and increasing issues garnering attention is the role of power in adaptive co-management (Doubleday 2007; Armitage *et al*. 2009). Manifestations of power in adaptive co-management may be overt as social actors exert influence over the processes by controlling information, defining deliberation, learning and success, and controlling how risk is shared (Armitage *et al*. 2009). Power may also be exercised through subtle means in co-management. For example, Paul Nadasdy (2003) draws attention to the notions of knowledge and property and illustrates how they may be incompatible with some cultures. More recently (see Nadasdy 2007), he challenges the 'gospel of resilience' and stresses the need to understand the socio-political and institutional context in which it is embedded.

Engaging in adaptive co-management is difficult and 'messy' because it is an interactive process imbued with overt and subtle expressions of human concerns. Individuals engaging in adaptive co-management or other participatory endeavours must be cognizant of the social-ecological context they are 'entering'. Experiences from adaptive co-management around issues of embeddedness and

power raises questions about the role of participation in social science research and underscores the amount of sensitivity and forethought that is required about how 'we' participate.

Participation and action in research have prompted paradigmatic controversies within qualitative research as positivist and post positivists often consider action a contamination of the research process, whereas interpretivisits view it as an integral part of the research process and as a meaningful outcome (Lincoln and Guba 2000). Consequently, the participatory paradigm or participatory action research is considered an alternative approach to conventional social science inquiry (Lincoln and Guba 2000; Greenwood and Levin 2000). It usually follows principles of 1) offering a critique; 2) occurring in practice and transforming practice; 3) expanding the boundary of 'interpersonal contextualized understanding'; 4) understanding the process itself will change; 5) embracing a plurality of structures; and, 6) having a dual responsibility to both theory and practice (Winter 1989). Individuals engaging in adaptive co-management and other participatory endeavours inherently link theory to praxis and concomitantly employ a planned change or intervention which results in a spiral or cyclical research process (Wadsworth 1998; Kemmis and McTaggart 2000). For example, Plummer and FitzGibbon (2007) used this approach to examine the elements of adaptive co-management and the relationships among process related variables (deliberation, social learning, social capital) in their study of multiple river corridors in Ontario, Canada. Ferreyra's (2006) work provides an excellent example of the implications of epistemological plurality, value of reflexivity and emerging debates about participatory action research in specific relation to environmental governance.

The question of how professionals (researchers and development workers) 'appropriately' engage in adaptive co-management and participation is critical. Insights from anthropologists concerning this issue provide a useful starting point. Clark and Cove (1998) document three major shifts in thinking about how engagement occurs in anthropology. They contend that in both sociology and social-cultural anthropology engagement was initially viewed as 'intrinsically emancipatory', with ties to elite and colonial interests speaking about and for indigenous peoples. This conformity with norms of the 'society which sponsors the scientific enterprise' changed after the second world war as with the emergence of pluralistic views and action anthropology led to an emphasis on 'others' understanding and constructing their own 'reality'. Clark and Cove (1998) note that the most recent shift in anthropology is towards facing difficult ethical questions and being confronted with problematic situations in which research and participation may not be appropriate. These difficult questions are being confronted by a host of other social science disciplines. Development sponsors, international organizations and research funding bodies routinely set 'codes of ethical conduct' to which individuals must adhere.

Experiences gained with adaptive co-management and participatory processes present unique challenges because they usually occur over long time-frames and often in cross-cultural settings. Being transparent about the nature of participation and responsive to how participation may change over time as individuals enter and exit the process is important. In a current three year initiative titled *First Nations and Source Waters: Understanding Vulnerabilities and Building Capacity for Governance*, we are attempting to use a 'living ethics' approach. McGinn *et al*. (2005) use the 'living ethics' motif to capture the deliberatively cultivated relational understanding among a team of researchers. In building upon the 'blueprint for other research collaborations' they offer, we are developing a draft set of principles for collaboration, ownership and participation in our initiative. These 'draft principles' will provide a starting point for discussion among the researchers, partner organizations, students and participants, who will modify them until they reach a mutual agreement. These principles will provide the basis for moving forward with the research, be revisited periodically throughout the duration of the project, and afford a mechanism for transparent communication with individuals as they join and leave the project. In this manner ethics becomes integrated into the cycle of reflection and action and part of participation.

Learning from the issue of evaluation

Questions pertaining to how adaptive co-management is to be evaluated, in light of complex adaptive systems thinking, are posing novel challenges to conventional assessments, metrics and time frames. Evaluation, in the broadest sense, involves the systematic assessment of the value of something (Guba and Lincoln 1989; Chess 2000). Guba and Lincoln (1989) have categorized the development of evaluation into four generations: first generation evaluation concentrated on measurement and technical aspects of capturing variables; second generation or formative evaluation stressed measurement in relation to stated objectives; third generation evaluation emphasized the role of the evaluator as judge; and, fourth generation or response constructivist approach stressed public participation in determining evaluative procedures and dialectic processes in constructing notions of reality. In the broad area of environmental planning and management the need for evaluation is increasingly being expressed (Chess, 2000; Bellamy *et al*., 2001; Frame *et al*., 2004) and coinciding closely with the response constructivist approaches to appraise recent attention on collaborative natural resource management (Conley and Moote 2003).

Carlsson and Berkes (2005: 72) observe that "…although ecosystems and institutional systems show a large diversity, our tools for conceptualizing and analyzing co-management are strikingly blunt, and more research needs to be done to refine these tools". In response to this identified need, Plummer and Armitage (2007c) recast evaluation in light of complex adaptive systems and advance a resilience-based framework for evaluating adaptive co-management. In so doing, they begin with sustainability as the instrumental rational for adaptive co-management. Sustainability here is understood in terms of resilience thinking and used to emphasize system dynamics, cross-scale interactions and linkages between social and ecological systems (Gunderson and Holling 2002; Berkes *et al*. 2003; Anderies *et al*. 2004). While noting numerous issues to keep in mind when considering a resilience based framework (*e.g.*, contextual basis, importance of scale), Plummer and Armitage (2007c) offer the following components for evaluating performance and facilitating cross-site comparisons.

Ecological component: adaptive co-management is a social process which responds to ecosystems concerns and conservation. Ecological outcomes are therefore necessary when considering the outcomes of such a process. Components, processes and characteristics of natural capital provide a solid starting point when considering environmental sustainability (see also Ekins *et al*. 2003) and resilience encourages specific attention to key dimensions of complexity and controlling variables of the system (see Cumming *et al*. 2005).

Livelihoods component: adaptive co-management is also concerned about the well-being of people. The sustainable livelihoods framework which emerged in the 1990s (see Chambers and Conway 1991; Scoones 1998) to better capture complexities and behavioral choices as an outcome of development interventions is a useful frame for monitoring and evaluation (Farington *et al*. 1999). Awareness of the issue of power in adaptive co-management builds upon and draws attention to the constructs of endowments and entitlements (Sen 1992; Leach *et al*. 1999). Recent work by Schultz *et al*. (2009) in the context of biosphere reserves found evidence in effectiveness of achieving social and economic development.

Process component: adaptive co-management must be distinguished from other management processes and/or governance strategies if it is to be meaningfully appraised. The co-operative natural resource management assessment framework (Plummer *et al*. 2006) is useful in this regard as well as for methodically considering contextual factors. Discerning the characteristics of adaptive co-management, presented earlier, are important parameters of concern. Since adaptive co-management is conceptualized as a communicative process the generic outcomes of evaluation (in addition to ecological sustainability and enhanced livelihoods) should encompass tangible (*e.g.*, resource management plan) and intangible (*e.g.*, social capital) results from the initiative, results which accrue beyond the boundaries of the project (a new cooperative undertaking), and longer term changes that occur over time (*e.g.*, enhanced adaptive capacity) (see also Innes and Booher 1999).

The rarity of evaluation in natural resource management generally (Bellamy *et al*. 2001; Conley and Moote 2003) and the very recent proposed framework for adaptive co-management (Plummer and Armitage 2007c) underscores the need to systematically incorporate evaluation into participation. Doing so is consistent with and paramount to the complex adaptive systems view as such mechanisms provide feedback and foster reflexivity required for learning and the process of adaptive co-management (Plummer and Armitage 2007c). Schultz *et al*. (2009: 18) argues that 'participation' as a management approach is probably too general to evaluate as positive or negative in terms of different outcomes". The framework set forth above and more specific parameters offered by Plummer and Armitage (2007c) provide an example of how participation can be specified. Freedman (1998: 28) writes that "the art of evaluating in the participatory mode entails treading a fine line between adopting procedures for systematically asking and recording the right kind of data and adapting these procedures to the capacities of non-scholarly participants". This is a substantial challenge. Adaptive co-management and participatory approaches within the complex adaptive systems view have the additional challenge of convincing international development agencies, funding bodies and resource mangers that evaluation is part of the direction setting process and results may take considerable time.

Implications for the future of participation

Adaptive co-management is a governance strategy receiving attention from scholars and practitioners seeking to understand processes to address complexity and uncertainty in relation to the environment and development. Participation is an integral part of adaptive co-management as well as a broader 'umbrella' concept under which several approaches and techniques reside. This paper sought to foster learning among those engaging in various participatory endevours by discussing and offering insights from experiences with adaptive co-management in relation to the issues of ethics, embeddedness and power and evaluation.

In pulling together the insights presented in this paper and attempting to look forward to the future of participation three key implications deserve mention. First, the search for absolute or definitive answers should be abandoned given the inherent uncertainties and dynamism of complex adaptive systems, multiple perspectives of what constitutes good, right or authentic behaviours and subjective notions of reality. Second, there is a pressing need to pose questions about challenging and sometimes uncomfortable issues. When is it not appropriate to undertake adaptive co-management? What are the subtle manifestations of power in undertaking participation? How can I as a researcher or practitioner engage in participation in a transparent and ethical way? Finally, as a deliberative and reflexive learning process, adaptive co-management may serve as a mechanism to navigate these types of vexing questions while concomitantly addressing concerns central to environment and development.

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RECONSTRUCTING THE POLICY PROBLEM OF INSTRUMENTING NON-COERCIVE APPROACHES IN PHILIPPINE INTEGRATED COASTAL MANAGEMENT[3]

Rasmus Klocker Larsen

The Philippines' Integrated Coastal Management (ICM) paradigm is today heralded for pioneering efforts in community-based coastal resource management converting open access into co-management regimes. However, severe over fishing and resource degradation has continued in many coastal stretches and in recent years the fisheries sector has declined more than 25 per cent in its contribution to GDP. Similarly, stakeholder participation in many programmes is low and expert-based planning retains prominence. This has led to an increasing questioning of instrumenting non-coercive approaches in the national ICM regime.

Citizens in the coastal stretches of Cagayan Province, northern Philippines, are widely affected by the degradation of the coastal environment and the depletion of its natural resources which form the basis for the livelihoods of most fisherfolks and coastal *barangays* (villages). Concern exists amongst conservationists regarding the increasing use of dynamite to collect scrap metal from ship wrecks, coinciding with the continuous practice of dynamite and cyanide fishing around the islands. A number of conservation projects have been implemented in recent years to investigate and monitor the whale stocks and other biodiversity in the islands and recommending the establishment of protected areas regulated by provincial and municipal ordinances. Many ordinances and action plans are however not implemented and outside interventions are often met with a general apprehension from the municipal elite who receive NGO or line agency intervention as a challenge of Local Government Unit (LGU) autonomy under the Local Government Code (LGC). Illegal resource exploitation is identified as the main problem by government agencies and offices on the mainland and in Calayan. However, Camiguin residents, who depend on a composite livelihood from forest products, back-yard farming and coastal resources, describe how the main challenges are the lack of other income sources outside the fishing and farming seasons, malfunctions in the legal systems, and problems of social service delivery including medical supplies and basic health services to the island. This yields a complex situation characterised by conflicting problem definitions and many contentious relationships and decreasing trust amongst the main stakeholders.

The challenge in addressing the procedural policy problem of stakeholder participation was examined in a stakeholder dialogue process carried out from November 2007 until May 2008 in the Babuyan group of islands in Cagayan Province. The aim of the project was to develop a conservation action plan for Camiguin Island, and, on the basis of the evidence, reflect on means by which stakeholder collaboration could be improved for more effective coastal resource management. The backbone of the planning process was a series of 15 planning workshops complemented by individual consultations with 34 key informants.

Through this dialogue, a new understanding emerged of the policy problem of instrumenting non-coercive policy approaches in the Philippine ICM paradigm. The most characteristic feature of Camiguin's coastal resource management is the conduct and contestation of 'illegal activities' amongst stakeholders. Stakeholders described how the catch of yellow fin tuna is highly priced and has triggered a widespread poaching in municipal waters mainly by Taiwanese fishing vessels. Localised offences are equally abundant, including encroaching on prohibited protected areas, use of illegal fishing equipment such as compressor diving, cyanide and dynamite, as well as pebble and shell collection and illegal logging (*kaingin*). Metal salvaging from ship wrecks started initially with walls and sidings but has now moved to main frames, which requires larger amounts of explosives. This leads to destruction of coral reefs and reduced near shore fish stocks, but despite the decline in fish stocks fish prices have remained unchanged whilst fuel

3 This paper has been produced on the basis of a research report (Larsen *et al*., forthcoming): the project was implemented in collaboration with a number of partners whose contributions are duly acknowledged in the report.

prices have been surging. Further, middlemen operate a credit system which mortgage farmers through an advance payment credit system in order to procure farming equipment and fertilisers. There is a lacking economic cohesion in the barangays of Camiguin and a general problem of income sources.

In the absence of an effective management regime, people and organizations respond by engaging in informal coalitions and alliances to enhance their access to and control over natural resources which can be converted into financial assets. Tuna fishing, which originated as a formal fishery in the Philippines in the 1960s, is one of the high income fisheries in Asia, and national and international investors are important indirect actors in the poaching in municipal waters. Taiwanese vessels recruit fisherfolk in Babuyan Islands to work for them as guides in the search for fish stocks. The growing tourism industry is also seen as an arena for competition between different alliances through seizing of executive posts in the tourism sector, ownership over accommodation, travel and infrastructure development, and coordination of promotional activities. Confusion regarding the guidelines for distinguishing between support to private and public initiatives make the use of financial and technical support from government ambiguous and there is a growing public questioning of the sharing of benefits. Other resource exploitation are also exposed to competition, such as the metal salvaging, where many island residents are hired to do the diving, financed by a small elite in the barangays and municipality.

In the coastal resource management, the definition of a problem of 'illegal activities' is logically extended to an improvement of the enforcement mechanisms, strengthening of the oversight work of enforcement staff, and information, communication and education activities to make fisherfolks aware of the natural endowment in their barangays. However, there is no Philippine Maritime Police representation in Camiguin and the Coast Guard is without basic equipment such as radio communication, patrol boat or binoculars. Local Government Units presence in Camiguin is limited, mainly communicating by mobile texts messages and mainland agencies rarely visit the islands due to their remoteness.

This has led to a societal system which works along the lines of patronage (a system formerly known as the 'big man' system' or 'strongmen') where competing factions employ tactics such as bribery, intimidation or threat to patronize people. The patronage operates at several levels, for example within the island or municipality. However, often local alliances are connected to other strongmen on the mainland. Agency staff commonly experience apprehended Taiwanese fishermen claiming protection by high ranking officers in the Philippine military. In the barangays, intruding fishermen from other barangays and municipalities use similar forms of namedropping to scare the *kagawads* (village councillors). Whilst the Philippine National Police is a national line agency/arm, in isolated localities such as Camiguin the national linkage can be weak and experiences exist how the staff may in effect be under the authority of the highest bidder.

Addressing this politicising of the coastal resources requires designing a stakeholder process which appreciates the absence of commonly accepted norms amongst stakeholder alliances regarding what can acceptably be discussed in public. The analysis shows how the policy problem regarding the implementation of non-coercive approaches is not simply a problem of instrumentation (*i.e.* procedure), but equally of establishing an arena for investigating cognitive and normative differences. Mainstream prescriptive policy instruments of law enforcement measures and information, education and communication, preferred by local executives, exacerbate this problem in seeking to enforce a single, but often ambiguous, perspective on what constitutes legitimate resource use. The challenge is not to revise the management 'paradigm' but to let go of a 'paradigmatic' view on illegal resource use which excludes normative realities and creates a void which compromise opportunities for stakeholder dialogue. Public dialogues, like the one in the present project, will however only make an effective contribution if anchored in the right level of locally 'legitimated' political ownership.

PUBLIC INTEREST IN INFORMATION AND ITS SIGNIFICANCE FOR DECISION MAKING[4]

Sophie Kuppler

Introduction

The primary goal of this paper is to look into the role scientific information plays for the public, especially in relation to environmental activists who aim at influencing political decision-making. In this, it aims to better understand how far information enables action (cf. Plummer Figure 1 in this volume). Scientific information has long been seen as complicated for lay people to understand. However, recent significant literature and research has shown that the public is able to understand scientific debates on their own terms (Lambert and Rose 1996; Gerger Swartling 2002; Yearley *et al*. 2001 and 2003).

With the Aarhus Convention and the related European Directive on Public Access to Information the need to make environmental information accessible to the public has been formalized. In the opening paragraphs of the directive it is stated that better access to information would lead to "more effective participation by the public in environmental decision-making" (European Council, 2003).

Due to the often-observed gap between knowledge and action with regards to environmental problems it can, though, be doubted that making more information available will simply and directly lead to an embeddedness of a particular problem. Social embeddedness is needed to achieve effective participation.

The case study

The citizen initiative "Bürgerinitiative Feinstaub" in Stuttgart, the capital of the southern German Bundesland Baden-Württemberg, has served as a case study to investigate the role scientific information for environmental activists aiming at influencing decision-making. In particular areas in Stuttgart the threshold level for particulate matter in the air is exceeded far more often than allowed. The proclaimed aim of the Bürgerinitiative Feinstaub is to get the municipality to act and take measures against high levels of air pollution. This suggests that there are active and – in a certain way – informed citizens present. As will be argued below (and elsewhere in this volume), public participation in decision making is an important tool in reaching sustainability. In this particular case parts of the public started to actively demand a cleaner environment due to a lack of engagement from the municipality's side.

Qualitative interviews were conducted with activists and non-activists living in the same area to answer the following research questions: what role does information play in the context of this group of people, and especially what role does it play in achieving embeddedness of a problem?

The need for participation and its link to information

Political decision-making in the environmental field is often complex, as many interests and sometimes contradicting factors need to be taken into account and trade-offs have to be made. This can lead to a perceived lack of legitimation for democratically elected policy-makers to take the decisions in question. Wynne (1996), for example, observed that people perceive politicians to have secret interests that are not communicated, but that influence decision-making to a considerable degree. Public participation in such decision-making can increase (perceived) legitimation of the decisions taken.

The public's local knowledge can add value to the scientific findings by embedding it in a local reality (Van Herzele 2004). Wynne (1996) further argued that the necessity of including the public's understanding stems from the fact that science is not value free, but based on certain assumptions about the

4 This paper is based on the author's MSc thesis (Kuppler 2008) written at the Department of Environmental, Social and Spatial Change at Roskilde University, Denmark.

social settings. It is these assumptions that should be open for contestation by the public. This implies that the public should be involved in the creation of knowledge instead of only its management (De Marchi 2003, Mayer 2003).

Participation is though sometimes misinterpreted as simply providing the public with information. It can be assumed that a person will be especially interested in a problem and engage in it if s/he feels directly affected or feels that s/he has a stake in this particular problem. Thus, to explain the link between information and social embeddedness it is important to understand for what reason people feel affected and what information is required.

In order to know about a problem a person has to be informed first. The information process generally takes place through formal and informal information channels (Masuda and Garvin 2006). Usually, it is the entity offering the information that decides which information it communicates. In the best case, the choice of information is adapted to the recipient to feed into her/his interests. In public environmental information systems (PEIS) this is usually not the case (Haklay 2003). The public is perceived as one entity with one single interest. In reality, different groups within the public look for different kinds of information.

The European Directive on Public Access to Information, however, defines environmental information in the senses of technocratic information (such as measuring data) the political responses in case that action is perceived to be needed; information on what is to be protected, namely human health and safety (EC 2003). The information that needs to be provided thus solely consists of information on the management of a problem and does not include the creation phase.

The type of information described in the European Directive introduced above is also the type of information that is made available by the city of Stuttgart on the air pollution problem. On the internet, measured data and air pollution maps can be found (state of the elements of the environment) as well as the before mentioned air pollution prevention plan (a policy – see www.stadtklima-stuttgart.de). Further, information meetings were held in which the measures taken by the city were presented, and the impacts on health discussed.

The activists' view on information

Despite the information on offer, this particular citizen activist group, "Bürgerinitiative Neckartor", formed under the premise that they were not provided with enough information. As every citizen has – and had – access to the air pollution prevention plan, the information meetings and measuring data, it appears that this was not perceived as sufficient.

When asked how they decided whether a piece of information was trustworthy or not most of the activists said that it was the source of information – if they trusted that then also the piece of information was trustworthy. This is not new, and has been recognised before (*e.g.* see Irwin *et al*. 1996). However, they further cited the discussions within the group as a major tool for scrutinizing information. Members would bring in different pieces of information, including scientific articles and information collected at university lectures. None complained that this kind of information was difficult to understand (cf. Yearley *et al*. 2001 and 2003). If there were questions, these were discussed in the group. This exchange of information was one of the factors leading to a broader perception of the problem, moving from too high levels in particulate matter to the question what can be expected from life in a city and what is a good standard of living. This can also be considered to show signs of 'double loop learning' discussed elsewhere in this volume.

Another factor was the verification of the existence of the problem and the related risk with the help of personal experiences (see also Irwin *et al*. 1999, Bickerstaff and Walker 1999). As particulate matter is not visible and does not smell bad, direct personal experience could not be used in order to decide whether the problem does in fact exist. Instead, experiences that can be linked with air pollution in general were cited when asked why they got interested in the problem. These ranged from congested streets and a lack of cycling lanes to smog and car fairs in the city centre. This finding parallels research carried out on urban air pollution in York and Sheffield in the UK where knowledge of cause and effect are held

in parallel by members of the public, rather than conceived of in a linear sequence way as in technical and policy making (Cinderby and Forrester 2005).

A third factor leading to the broadening of the problem was new members joining who were interested in the topic as such, but did not live in the affected area. They already had experience in working in other activist groups and brought new perspectives into the new group.

When asked if they trusted the local government to take the right decisions the activists said no. They had the perception that the local government took all decisions "behind closed doors" and only let the public have a say once all important decisions were already taken. There was a clear demand for being involved in knowledge creation instead of only information management. The lack of trust was mainly caused by a lack of information on why and how the proposed measures were supposed to better the local situation. A person's lack of trust in the authorities to react properly to the problem has major influence on risk perception. The authorities' legitimation to take decisions in the environmental field is often put in question by certain groups of citizens as they perceive those authorities as having hidden interests. These interests are perceived to hinder the authorities from taking the decision that serves the public's interest best (Bush *et al*. 2001, Bickerstaff 2004).

The activists' overall conclusion was that the local government was serving the local industry instead of the citizens and was thus not capable of reacting to the problem in an adequate manner. They came to this conclusion as they perceived the problem not only as one of levels of particulate matter, but of transport and city planning.

The activists were striving to understand what lies behind the problem and wanted to be enabled to take an informed decision on how best to deal with it. They were calling for 'democratizing' expertise. This implies that pluralistic advice should be given to public authorities and citizens, increasing the capacity for informed deliberation (Liberatore and Funtowicz 2003).

The non-activists' view on information

In contrast to the activists, the non-activists did not perceive that there was a lack of information. However, they agreed with the activists that the primary way by which to judge the trustworthiness of a piece of information was by judging its source. In their opinion, though, the local authorities did provide enough information and did take the right measures to combat the high levels of particulate matter in the air.

However, they were also aware of the relation between a high number of cars and air pollution, but they did not perceive it as a problem. Further, they less frequently mentioned personal experiences that could lead to the perception that air pollution levels were high. They trusted the politicians to take the right decisions. Due to this trust they were not interested in receiving more information than they already did. They further did not search for information or debate the problem with others.

It could be concluded that the non-activists did not perceive the local authorities to have a hidden agenda. Neither did they feel that cars are put first in the city or feel this was a problem. Thus they did not see any reason to doubt that the politicians interpreted the scientific and technocratic information at hand correctly. This indicates that the decision to become activist, or not, is more political than technical.

Conclusion

The difference in information needs between the activists and non-activists shows that perceiving the public as one entity with one single interest might lead to wrong conclusions on what kind of information is wanted in a particular case (see also Bush *et al*., 2001).

Usually, the providing side decides which information is made available. However, this 'information asymmetry' has been shown not to work in other field such as economics (see Ackerlof 1970; Stiglitz 2000). Existing methods and technologies are of course also a constraint, but finally it is the people in the information system that decide on which of the existing methods are used and how the system is built. In the best case, the choice of information would be adapted to the recipient to feed into her/his interests. In reality there are people that feel that they are not informed satisfyingly. This showed to be

particularly true for those who would like to understand what lies behind a problem and who are interested in being enabled to take an informed decision about how to best deal with it.

For participatory processes this means that the information made available needs to be much more far-reaching than usual. What is needed is not solely information on the technicalities of the problem and some proposed solutions, but information that allows understanding as to why these solutions are proposed and what implications they have for the individual citizen. This also demands that the problem at hand is not seen as an isolated environmental (or technical) problem, but as a problem embedded in a (local) political reality.

It is the interested public that produces the localized knowledge needed. It does this by collecting information, scrutinizing and relating it to their understanding of the local situation. It has to be expected that this exercise broadens and deepens the scope of the problem at hand. In Stuttgart it changed the focus of discussion from "What to do to keep to the limit values that were set at European level" to "How could we do transport planning differently to move from a car-centred city to a peoples-city". The new knowledge generated thus merged scientific and technocratic information with (perceived) political agendas. Thus, also the notion that the public is not interested in and not able to understand scientific knowledge has to be at least partially abandoned (cf Gerger Swartling 2002).

From this it can be concluded that it is important to understand why people feel affected or feel that they have a stake in a particular environmental problem (or not) in order to be able to meaningfully involve them in the participatory process. This further means that it needs to be understood what the different local realities look like.

This brings us back to an argument made in the beginning: One aim of any participatory process has to be to enable people to take informed decisions. If this is not the case, and people have choices put before them which they consider to have been taken behind closed doors, then no new knowledge on the problem will be created which could lead to creative solutions, and true participation cannot occur.

WORKSHOP REPORTS AND RESPONSES

Report from session 2: Addressing the challenges of 'doing' participation: action in research – how do we do it?

Rasmus Klocker Larsen

Two of the contributions from the five speakers in this session (Ilan Chabay, Claudia Carter, Sophie Kuppler, Jasber Singh, and Louise Simonsson) are reproduced in their individual papers. This session report focuses on the ensuing discussion and emerging insights from session 2. In so doing, particularly when writing in retrospect, it is impossible not to position these insights in the context of the whole workshop and instil it with some degree of personal reflection. As the second session in the workshop the exchange was characterised by a high degree of divergence in the perspectives, theories and assumptions of the participants and thus it seems appropriate in this report to try and capture the diversity of views expressed. A structuring device (mnemonic tool) is used called TWOCAGES (Transformation, Worldview, Owner, Client, Guardians, Environment, System (Checkland, 1999)) introduced in the workshop by Neil Powell in session 1 [http://sei-international.org/index.php/news-and-media/1567-putting-participation-in-perspective-neil-powell]. This tool is frequently applied in participatory stakeholder analyses or action research into problematic situations with high degrees of controversy and/or diversity of stakeholder perspectives. Here, it is used to organise some of the insights from the 21 researchers present and their exchange in session 2.

Transformation (how can we overcome the challenges of 'doing' participation in social-ecological research)

- Introduce more critical perspective on stakeholding as a political and not technical notion, including providing alternatives to 'tick-box' participation and reconstructing 'the public' with critical perspectives;
- Embed participation in resistance and politics of difference to avoid supporting neoliberal process and 'policy consumerism';
- Approach 'participation' as (one) lens to examine and intervene in how reality is constructed and by whom;
- Foster conducive institutions to appreciate learning amongst/within stakeholders and support groups to learn how to 'participate';
- Connect stakeholder processes and participation to the role of the state in sustainable changes;
- Clarify conceptual confusion in 'social learning theory' and highlight the learning which is individual;
- Improve the reflexivity of the researcher/facilitator and focus on how research benefits from participatory methodology;
- Rediscover that participation is about imagination and creative thinking through connecting with oneself, others, and the environment;
- Support the use of technologies in participatory manner to foster accepted outcomes for decision making;

Worldviews (basic assumptions of session participants)

- Despite a transdisciplinary 'birth pain' over 15 years, social-ecological science takes participation to new level;
- Different kinds of problems require different kinds of participation (*e.g.* are they 'simple' or 'wicked'?), and we must first structure the problems before we can decide on the 'right' kind of participation;
- People may be able to understand science, but they interpret it from their own political interest;
- Despite being technically well executed participation can disempower and marginalise people if it is not well embedded in the social context and structures (*e.g.* ethnicity, gender);
- We should support achieving 'full' participation and deliberative democracy;
- Participation is fundamentally about contested cooperation.

Environment (the context in which to 'do' participation)

- Participation is today manifest as one tool from a menu for decision makers;
- Decision makers and polity believe in 'solvable problems' which contradicts the underlying premise of participation;
- Widespread participation fatigue and rational/technical 'streamlining' of public fora;
- 'Mini-public' approaches are institutionalised in disillusionment over 'mass-public' approaches;
- An ambiguous rhetoric on participation has been established with which people try to cope as they best can;
- Participation is co-opted by elite groups.

Owners (who can sanction/counter the work of the participants)

- Decision makers in the academic incentive system (publishing, merit and career track criteria, project base etc.);
- Development banks and international promoters of the participation discourse;
- The community of social-ecological scientists;
- Colleagues who are criticising participatory researchers for not being 'scientific'.

Clients (who benefit/suffer from the 'doing' of participation)

- People who are becoming producers of data, consumers of policy etc.
- Researchers (livelihoods are at stake);
- The public and/or publics, and citizens in general.

Actors (who will bring about the transformation)

- Innovative alliances of communities of researchers who unite across disciplines and contexts;

Guardians (who monitor the effect of 'doing' participation)

- Researchers and practitioners such as the participants in the workshop?

Final reflections

This brief report highlights that the participants had quite disparate ideas of how to improve the 'challenge of doing participation', and indeed what this challenge implies. This is partly due to the difference in worldviews of the participants, for instance manifest in the variation of epistemologies and theoretical foundations. It also reflected the wide variety of contexts the participants are working in, and the different needs and tasks encountered. Tom Wakeford noted that during the first day of the workshop, at least ten different research traditions were surfacing, including: resilience science, political geography, participatory action research, political science, and community activism.

However, there was some convergence on the problems in the 'environment' in which to do participation and the multiple pitfalls embodied when participation is mainstreamed. Whilst there were ideas shared about who the clients are for 'doing' participation, there was perhaps least clarity on the question of 'actors' and 'guardians', *i.e.* who will take on these challenges highlighted and how, and who will monitor the effects on the clients. This is not surprising so early in a workshop which bridged a variety of perspectives and the session instead offered a rich picture of the opportunities for the remaining part of the workshop and potential post-workshop collaboration.

WORKSHOP REFLECTIONS

Lisen Schultz

I come to the field of participation mainly for pragmatic reasons. I am a systems ecologist, and am interested in how we can manage ecosystems so that they continue providing benefits for people, *i.e.* ecosystem services. In this context, participation becomes important for improving decision-making. Ecosystems are complex and adaptive, and they are nested across scales, and this means that no single perspective can give the full picture of what measures are needed. So we need the 'hidden experts' mentioned by one of the workshop participants, in order to know how to manage ecosystem services.

I would say that the fact that we need to engage with people if we are to understand and sustain the ecosystems we are interested in, is a fairly recent insight among 'pure' ecologists. We have not really reached the stage of participation fatigue, but rather, many researchers and civil servants working with for example biodiversity conservation, have yet to begin believing in and practicing participation. Therefore, my take on this has been to find out in what ways participation can actually lead to better decisions.

I learned a lot during these two days. I do not have a background in social sciences, and therefore the concepts and frameworks presented are of great help to me for analyzing what I see as a researcher. What has become increasingly clear is that participation processes are always bounded, framed and

manipulated to some extent by the initiators. Further, participants want to know where their investments of time and energy will lead and therefore the expectations of, and the rationales for, participatory processes need to be made clear from the start. But how do you then make room for the unexpected outcomes that are the very essence of successful participation?

In my mind, participation does not have to result in a compromise that makes everyone 'equally unhappy'. Ideally, participatory approaches lead to some kind of innovation that most people feel would improve their situation. Therefore, it is assets such as creativity, imagination, and innovation that need to be nurtured in participatory processes. I think this was beautifully illustrated by the talk on creative writing, and the talk about constructive conflicts. Because when innovation and triple-loop learning happen, participants may also change preferences, and then we move from negotiating from separate stand points, to actually learning something new together. But, if this is to happen, then the conveners, be it natural resource managers or national park directors, as well as the participants, need to truly believe, that 'the others' can actually contribute something previously unknown. All need to come with a genuine interest in each other, and a curiosity to find out where the process will lead. And how that happens, we still do not know.

FINAL ROUNDTABLE RESPONSE

Anders Esselin

Attending this workshop I choose to put on my nicest suit. It is my nicest suit, but also my only suit. Usually I do not walk around in these kinds of clothes on weekdays. This time I thought it was appropriate though, because it is a tribute to the sort of people who are attending this workshop. What you do and your writings are extremely important for me and my practice.

My background is this: I have a bachelor of science in biology and an interrupted PhD training in the field of aquatic eco-toxicology at Gothenburg University. I was then working as a journalist for ten years at the Swedish Television and also at different Swedish newspapers and magazines. The last eight years I have been working as a science communicator/communication strategist: firstly at the Swedish University for Agricultural Sciences (SLU) with a research program called the Mountain Mistra Program; then at the natural resource division at the County Administrative Board in the County of Västerbotten; and now I am back at SLU again, this time working with a research program called Future Forests.

Practical issues we have been concerned with have included natural resources and natural resource management, first in the mountains and now in the forests. My professional interest has more and more come to focus on how communication in a wide sense can be used strategically to reach vision and objectives. A foundation in this quest has been to create preconditions for collaborative learning between different groups involved in projects or processes. These different groups include researchers from different scientific disciplines and stakeholders from different organizations in society. Stakeholder engagement/public participation has in many ways been at the core of my work. My toolbox contains different means of communication: mechanical media (such as the web, newsletters, working reports and media) and oral communication (such as designing and facilitating of small and large groups interventions). This is why your work is so important to me. When I have the opportunity to read your articles, reports and books, and when I have the opportunity to listen to your presentations and discussions; it helps me to reflect over my own work and to refine and develop my practice. Occasionally I discover some really interesting ways of setting up an experiment, or running a workshop, or other approaches to engaging the public in artwork. Every now and then I stumble over brilliant formulations that I can quote or make use of in my own writings and presentations. For instance, the SEI report (Forrester *et al*. 2008) has already proven to be valuable to me in several ways.

However, I also have two more specific reflections after having attended this workshop. The first one is about the boundaries of your field of science: keep them wide, allowing and encompassing. My notion is that there is a variety of emerging scientific disciplines and theories such as environmental communication, human dimensions of wildlife, common pool resource theory, that touch upon the same issues that you do. But this is often done in different contexts and with a completely different vocabulary. For me it is no problem, rather handy actually, as I am a practitioner and as such feel free to borrow concepts from all over. I do think however that your field of expertise, as well as other scientific fields touching on the same matters, would gain from a more in-depth interaction and collaboration.

My second reflection is about the role of researchers versus consultants in this business. We have heard quite a lot about participatory action research during these two days and it seems quite clear to me that many researchers, consciously or not, are engaged in action research. The thing is that most researchers I have been working with are very skeptical when it comes to action research. Every now and then during these two days I have also been a bit confused about the role of the researcher in some of your projects. Is it research work that you have been engaged in or is it consultant work with a clear objective of pushing for change, or is it a mixture of the two? You people probably have it all figured out but I must admit that I am a bit puzzled or even lost here.

Anyhow, it is always exciting to listen and take part in discussions about these participation issues. I will surely continue to read your work and attend your conferences and meetings when I have the opportunity, because I am convinced that your knowledge is of uttermost importance to me. So, thanks for now and hopefully we will meet again soon.

FINAL REFLECTIONS: MAKING STAKEHOLDER ENGAGEMENT MORE PARTICIPATORY

John Forrester and Åsa Gerger Swartling

Preface – thinking aloud

The purpose of this workshop was to explore ideas, in particular to explore how to answer the questions which participation and participatory research present to science-based environment and development organizations. What follows are the authors' reflections on what took place in the discussions, so workshop participants are not responsible for the views expressed or the conclusions drawn here. Several of the participants' reflective inputs are, of course, included in this volume and many of the contributors' original presentations can also be viewed on the SEI website (http://sei-international.org/index.php/news-and-media/1563-putting-participation-in-perspective).

There were several questions in our minds before the workshop. We deliberately brought together a group of 25 participation specialists from organizations with whom SEI was currently collaborating, or had worked with in the past, or wanted to work with in the future: would they all see the same links between themselves that we perceived, and would they have that much in common professionally? In other words, is there a 'science' (*i.e.* discipline) of participation research which encompasses both those who are theoreticians of participation, and those who are practitioners of participatory approaches in different environments? The simple answer is yes, but the deeper answer is that there are still many differences in approach and terminology. Although we all share a practical and an academic interest in the same subject, in some cases our paths do not often cross, and in others do not cross at all. One reason for this is that we come from different traditions and disciplines and operate in different contexts, but also, and not least, we are simply different per-

sonalities. Our disciplines are often academic but they are also, in the case of SEI researchers, the separate traditions of academic STS/SSK (Science and Technology Studies/Sociology of Scientific Knowledge) on the one hand and development practice on the other. What should the links be between these traditions, and how can such links be exploited to the benefit of both traditions, as well as the participants themselves?

SEI practitioners practice stakeholder engagement at different levels of governance, from local and project level up to national, international and global levels. What should the links be between these different levels of stakeholder engagement? Are we doing participation in ecological-environmental policy making, or is it participatory research of ecological-environmental issues? Or do we need to do both, and thus need different types of participation and different participatory approaches? How can diverse stakeholder knowledge and perspectives be brought together in a meaningful way, and feed into environmental management and policy processes? There are other big questions, such as: does the emergence of ideas of social-ecological complexity help the 'cause' of participation? To our satisfaction all of these questions were touched on at the workshop and some were dealt with in great depth. However, there is much to do to achieve a unified understanding of participation within environment and development organizations. This workshop helps to start that process.

The issues, problems, and rationales

We must not repeat the mistakes of the past. There is too much at stake and the time is too short. If we are not grounded in our own disciplinary backgrounds and know where we come from, we run the risk of repeating mistakes and trying to reinventing the wheel. Furthermore, what one workshop participant alluded to as 'the PRA (Participatory Rural Appraisal) industry' might in some respects be considered as a form of neo-colonialism (although the practice has been indigenized in many countries). But participation can be a force for political change and empowerment (see Singh and Wakeford 2008; Pimbert and Wakeford 2001). However, to solve the challenging issues of environment and development it is necessary to think in new and creative ways, outside even the constraints of democratic empowerment.

As became clear in the workshop, there are different rationales for participation and stakeholder engagement. As highlighted in the introduction, these rationales fall under three overarching categories:

- **instrumental**, where engagement is purpose-driven
- **normative democratic**, where the participation is a democratic right, and
- **substantive**, where stakeholder engagement can lead towards mutually-agreed 'better' ends.

However, in practice, things are often more complex, and it can be difficult to categorise so simply the rationales of different actors. In the same process one actor may have a normative rationale while another holds a substantive or instrumental rationale. Indeed, within the same organisation, different researchers may have different rationales when working on the same project. It is a challenge is to bring together the diverse perspectives and different knowledge into a coherent assessment for development, research and policy support.

The purpose

We need to recognize (*i.e.* admit to ourselves and to our partners) our true purpose in carrying out participatory work. If we are seeking to make our work more inclusive then we may not wish to be representative of society at large but rather to be inclusive of the disempowered, the disenfranchised and those whose voices are not heard. However, if we are seeking to be representative, then the discourse of empowerment may not help us. Whichever we are seeking to do, we do need to be aware of power brokers. These may be community leaders, they may be NGOs, or they may be

the researchers themselves. Importantly, whatever our acknowledged purpose, we also need to be aware of, identify, and seek out the 'hidden experts'.

Crucially, participants need to believe that coming to the table can teach them something or be of benefit. This is reciprocal, and researchers need to believe that, by being more participatory (*i.e.* not just using participatory methods but using a more participatory approach to research and development – see Forrester *et al*. 2008: 3ff), they will also learn and benefit. Participatory processes are always bounded by those who organise them. If researchers or practitioners believe in the value of using approaches that are more participatory in nature and in design alongside using participatory methodologies, then the whole process will become more participatory.

This figure shows the range of 'purpose' allowed to researchers. Purpose may be anywhere along the horizontal continuum, from simply using non-participatory engagement methods (such as for data extraction) through to fully participatory action research (PAR. For definition see Forrester *et al*. 2008: 4). The goals along the vertical continuum, in terms of sought-for outcome, may range from instrumental at one extreme (*e.g.* researcher's agenda) to normative or substantive goals at the other. Thus, even if practitioners appear to be following the same approach or using the same methods, their purpose may differ so significantly that it becomes difficult for them to work together in a meaningful way.

Of course, we should certainly not be carrying out research which falls in the bottom left quadrant alone: here neither the nature nor purposes of the initiatives are participatory, nor are the sought-for outcomes democratic or effective, or designed to improve stakeholders' knowledge. In the top right quadrant lies one participatory 'ideal': the purposes are democratic and leading to better ends for participants, and the methods and processes are participatory. Significantly, it can be argued that the two remaining quadrants would be improved by making them more participatory. In the top left, practice could move towards being more participatory (*i.e.* in terms of using participatory methods) while in the bottom right, goals could be made more inclusive of participants' knowledge and views and lead to qualities such as increased empowerment, trust building, learning and collaboration. However, any solution which acknowledges – and ideally combines – normative, instrumental and substantive goals can be deemed very satisfactory.

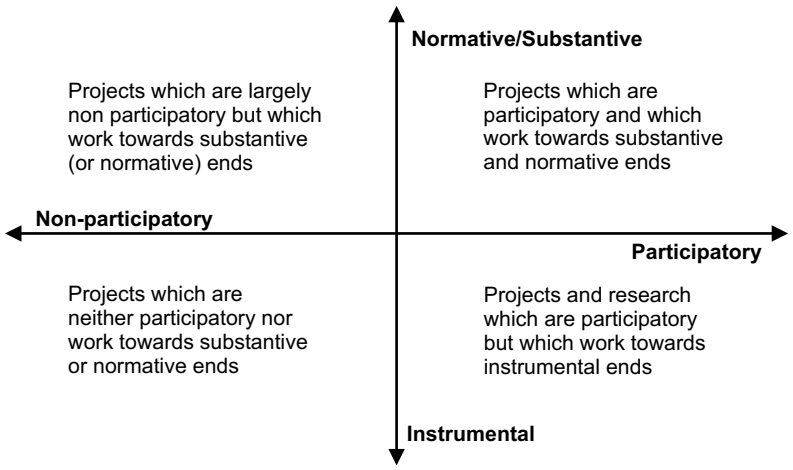
Whatever our purpose, we need to realize that knowledge itself is an agent in the process. We need to distinguish between facilitator-based knowledge and that which is held in the local community and by the stakeholders participating in the project. Further, if we are seeking change, we need to differentiate between change which is the researchers' goal, and change which is engendered by participants and grounded in their lives, experience and knowledge. This is particularly difficult when communicating the apparently objective knowledge produced by science. Participation is not just an add-on to representative democracy – it can be a way of engaging in post-normal ('complexity') science. Stakeholder participation is needed for extended peer review and local knowledge is necessary to complement and contextualize science.

The practice

Participation needs to be structured and participants need to be informed of the implications of (their) choices. Participants also should be empowered so that they are not simply choosing between pre-selected options. For example the use of scenarios to inform participants is good: the use of participants to simply choose between scenario options is less so. Further, using participants' own knowledge to ground and inform scenarios is even better.

The temporal aspect is also important: when participation takes place can affect the output and/or the outcome. Further, what happens after the process is also important. Overall, participation practitioners must take what one workshop contributor described as a 'nuanced approach' to social and cultural issues and take in local cultural realities, including politics, gender and ethnicity.

The political context in social-ecological systems is critical and cannot be ignored. A strong political system is not necessarily an adaptive one. However, a confounding point is that for SEI, natural science



helps to define the boundaries of sustainable ecosystems and helps us determine how to achieve sustainable ecosystems. Although we are seeking adaptive social-ecological systems we must be clear about when we are trying to influence or change the natural ecosystem and when we are trying to influence or change the social system – or when we need to do both and make both the natural and the social systems more adaptive.

Publics tend to get created anew for each project and each specific engagement. This is not helpful because 'the public' is probably more constant than much of our research. We should avoid one-off exercises as much as possible: they are simply not sustainable and do not normally result in knowledge building and sharing, let alone behavioural change. The ethics of stakeholder engagement is important, as is the evaluation of processes of engagement. To be legitimate, the process should be evaluated by the participants in a process of "embedded evaluation" (Claudia Carter, workshop presentation: The use of imaginative engagement as a participatory and learning tool).

The role of the researcher/facilitator is important in participatory exercises. Whether or not they are internal or external to the research project can make a difference. Also, transparency is key to participatory initiatives. Informing participants about what they can and cannot expect from being involved, what the purpose is and how the results will be used should be anchored with and accepted by participants at the outset. Discussing with all participants what we mean by the word participation and what they might understand by it is an important part of the process. Raising what appear to be, or even what might become, contentious issues may lead to what one workshop participant called "contested cooperation" (Nilufar Matin, workshop presentation "Participation for the Commons"). Counterintuitively, Matin argues that this can strengthen participatory approaches and outcomes. We often look for consensus in our project outputs, but we need to be aware that our participants may not. Consensus is not necessarily the best way forward nor is it a typical phenomenon within social systems.

For us, stakeholder engagement is intrinsic to what can only be called science communication: we need to show stakeholders that science and scientific research is based in their reality and thus relevant to their lives. We need to increase scientific literacy. However, a corollary applies: to successfully run participatory processes we may need to persuade scientists that their research is based in the lives of real people and those people have a normative right to be involved notwithstanding any substantive rationale for their inclusion.

In the policy sphere we also need to introduce "vertical feedback" (Ilan Chabay, workshop paper: Voices at the Table: Participation, collaboration, and ownership in social-ecological issues): we need to become aware how participation influences issues at different levels of governance. At the local level people have sometimes become "disconnected from their own environments" (Claudia Carter, *op.cit.*). This is true not only of natural but also of social environments, and participation is one way of overcoming that disconnect.

The role of scientific information is important in its own right (see Kuppler, this volume). Information is power, as they say, and certainly scientific information itself can be a powerful tool in the hands of skilled actors – it can make things happen. However, dwelling on scientific information cannot hide the fact that development is a human rights issue as much as an environmental issue. What passes for participation is often little more than citizen involvement in top-down politics. Grass-roots participation, on the other hand, facilitates a different sort of politics. As gatekeepers of participatory processes we need to ensure that the participation in which we are engaging does not legitimise bad politics or bad science. This point is reminiscent of a EASST (European Association for the Study of Science and Technology) conference in which an author had just given a paper on an SEI attempt to actually 'do' *Mode 2 Knowledge Production* (after Gibbons *et al*. 1994) and produce more socially-robust, but still scientifically reliable, knowledge about local air pollution. The author had made the point that to not include local views was simply poor politics. Helga Nowotny – one of the authors of the concept – who was in the audience replied that it was also simply "bad science".

The way forward, the future and the solutions

Most of us believe that our perspectives are important, but it is arguably not until we as participants or investigators realize our own relative inconsequentiality that we become empowered to make significant change and to participate in complex adaptive processes. This insight ties in with the proposal made during the workshop (though it only emerged afterwards) that participants must realize that the risk of failure by trying to 'go it alone' is too great (Jim Woodhill, workshop presentation: The Risks and Consequences of Participation Failure). This is not an easy lesson for academics in particular, nor for politicians.

There is no doubt that we need to think more about the processes of participation and participatory research. One important lesson is that there is probably no alternative to participation to make the world more sustainable (Woodhill, *op.cit.*). However, in the meantime and at a pragmatic level, and as Ryan Plummer put it (conference paper Looking Forward from the Nexus of Research and Practice: Learning from Issues Emerging with Adaptive Co-management):

- we need to stop searching for absolute answers
- we need to start asking questions about challenging issues, and
- we need to start engaging in deliberative processes.

Our preferred outcomes may be social-ecological resilience, but what are our working outcome indicators? Do these indicators refer simply to outcomes (in which case, whose?) or to processes (and if so how are processes evaluated?). To be positive, social-ecological participatory research must bring process and outcome together.

Another central lesson is that participation is about communication. There are actually two lessons here. Firstly, many of the practitioners in the field, although drawing heavily upon theories of participation, view themselves as communication specialists. However, these practitioners of participation and communication also need to be communicated to. Practitioners must engage with a multiplicity of research areas (adaptive co-management; public participation; stakeholder engagement; science communication) and while academics are talking about the same issues we are often doing so using different terminologies. This tends not to be helpful to practitioners, as Anders Esselin's workshop reflections illustrate. We need to communicate theoretical developments clearly to practitioners so that they may be efficiently implemented, tested, and if necessary refined.

Secondly, the role of knowledge institutions is critical, as is social learning within them. Putting together what we now know about complex adaptive systems (see Plummer, this report) with what we know about social and political systems gives us a new rationale for participatory stakeholder engagement: there are no tenable alternatives than bringing people together to work to solve the problems of environment and development. Multiple stakeholder engagement processes involve multiple values, both institutional values ('social norms') and the values of individuals. If understandings and values are not shared then co-

learning cannot happen. It may be that, in order to foster sustainable complex adaptive social and ecological systems, we need to think more in terms of how we should facilitate shared learning processes rather than carrying out participation.

In these proceedings, we have tried to outline some of the processes through which these changes could start to happen, and more generally address conceptual and practical issues that confront participation researchers and practitioners in their everyday work. But investment, time, commitment, and understanding, is required from all those involved. This needs to be communicated to funding organizations and our own institutions and research organizations.

These proceedings highlight emerging issues and examples of good practice as well as practical attempts to address challenges to participatory initiatives. The SEI/SRC-hosted workshop on 28–29 May 2009 was a milestone in terms of promoting inter- and intra-organizational learning and collaboration for stakeholder participation for sustainability. We wish to share these workshop proceedings with a wider audience – with theorist and practitioner alike – and invite comment and assistance on the road ahead.

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