Democratizing Expertise in Theory and Practice: Exploring Knowledge Gaps and New Research Ideas

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The Centre for Climate Science and Policy Research is a joint venture between Linköping University and the Swedish Meteorological and Hydrological Institute. We conduct interdisciplinary research on the consequences of climate change as well as measures to mitigate emissions of greenhouse gases and ways to adapt society to a changing climate. Producing effective climate strategies presupposes that the climate issue is studied in its context with other measures for sustainable development, therefore the Centre also undertakes research on related environmental and resource issues. Our research spans international and global as well as Swedish conditions.

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1. Introduction

This CSPR briefing report is a summary of an international workshop hosted by the Centre for Climate Science and Policy Research and Department of Thematic Studies: Water and Environmental Studies, Linköping University in Norrköping on 21 November 2011. The workshop brought together some 20 scholars interested in the role of science in democratic societies. In the following report we present the analytical aim, setup and outcomes of the workshop. We also reflect upon promising ideas for future research that were discussed during the workshop deliberations. With this brief summary we would like to thank all participants for their thoughtful input to the workshop theme. While the report is intended to reflect the rich and vibrant debate that took place in the CSPR conference room this sunny November day, it is of course difficult to fully represent the diversity of views and perspectives presented by our workshop participants. Hence, any arguments (and mistakes) forwarded in this briefing remain those of the authors. Finally, we would also like to acknowledge the workshop support provided by the Centre for Climate Science and Policy Research and the Department of Thematic Studies: Water and Environmental Studies. By positioning our research environment in an ongoing scholarly debate and by identifying promising project ideas for spring 2012, we hope that time and money was well spent.

Workshop aim

The role of science in democratic societies has been widely debated in recent years. In an age of food scares such as the BSE crisis in the UK and environmental mega-risks such as nuclear disasters and anthropogenic climate change, scholars and practitioners alike have suggested that scientific experts need to test the validity of their knowledge claims outside the laboratory in order to gain public trust and legitimacy. The aim of this workshop is to take stock of this scholarly debate by discussing its theoretical foundations and practical implications. We use climate change as our main empirical case, although the debate extends well beyond this policy domain. What do calls for more democratic modes of climate science and expertise entail? What ideals of democracy do they rest upon? What can we learn from practical efforts to engage publics and stakeholders in the making and interpretation of climate science? By bringing together scholars at the intersection of science and technology studies, environmental studies and democratic theory the workshop sets out to identify promising ideas for future research that may advance the science and democracy research agenda.
2. Workshop programme

09.30-10.00 Coffee/tea
10.00-10.15 Welcome
   Eva Lövbrand & Anna Jonsson, Linköping University

Theme I: Expert democratization in theory

10.15-10.35 Democratising risk governance: inroads to the theoretical debate
   Rolf Lidskog, Örebro University

10.35-10.55 A democracy paradox in studies of science and technology
   Eva Lövbrand, CSPR, Linköping university

10.55-11.15 Deliberative democracy and science and technology studies: tensions and synergies
   Tim Forsyth, London School of Economics

11.15-11.30 Comments by Karin Bäckstrand, Lund University

11.30-12.00 Discussion moderated by Silke Beck, Helmholtz Centre for Environmental Research

12.00-13.15 Lunch

Theme II: Expert democratization in practice

13.15-13.35 Co-producing climate knowledge - reflections on practical dilemmas
   Anna Jonsson, CSPR, Linköping university

13.35-13.55 Model-assisted dialogues as a platform for stakeholder involvement
   Lotta Andersson, Swedish Meteorological Hydrological Institute and the CSPR

13.55-14.10 Comments by Roger Pielke Jr, University of Colorado

14.10-14.40 Discussion
   Moderated by Karin Bäckstrand, Lund university

14.40-15.00 Coffee/tea

Knowledge gaps and new research ideas at the intersection of theory and practice

15.00-16.00 Discussion moderated by Silke Beck
3. Abstracts

Democratising risk governance: inroads to the theoretical debate
Rolf Lidskog, Örebro University

This presentation takes as point of departure the current discussion on the need for reconfiguring new relation between science-policy-citizens. It starts by giving a broad view of changes within risk regulation; from risk analysis to risk governance. Risk governance is not restricted to developing ways to measure and manage (technically defined) risk, but includes also how stakeholders view regulatory organizations’ capacity and accountability for handling risk. Thereafter attention is turned to the field of science studies, in particular its discussion on how to reconfigure expert-public relations, and international relations, in particular its discussion on how to understand the role of science in international environmental governance. The presentation concludes by giving emphasis on the need of further elaboration – both theoretically and empirically – on the dynamics of science-policy-citizen interactions. It emphasizes that science and policy is co-produced, but that through stage management this co-production is often presented as separated activities. Furthermore, it also emphasizes that frames configure what is seen as legitimate science-policy-citizen relations. Lastly, it emphasizes that a central contribution from citizens to international environmental governance is the public evaluation and questioning of frames that are in work in defining issue and shaping policy.

A democracy paradox in studies of science and technology
Eva Lövbrand, Linköping University; Roger Pielke Jr, University of Colorado; Silke Beck, Helmholtz Centre for Environmental Research

Many scholars of science and technology advocate that citizens should be involved in expert deliberations on subjects ranging from technological innovation and environmental risk management to the setting of academic research priorities. This emphasis on public deliberation has gained attraction in many practical settings, especially in the European Union, and is justified in terms of holding the promise of more legitimate governance of science and technology. In this paper we examine how these efforts to ‘democratise’ scientific expertise are linked to deliberative conceptions of legitimacy. Our analysis is based on a review of the STS literature and identifies a tension between the universal criteria for legitimate rule advanced by many deliberative democrats and the celebration of diversity and dissent in many studies of science and technology. Preoccupied with the dynamic and contextual nature of deliberative encounters, scholars in this field seem to reject any objective standard against which legitimate expert practices can be evaluated. While this inconsistency suggests that the legitimacy of deliberative governance arrangements is justified on empirical rather than normative grounds, it remains an open question whether studies of science and technology offer enough empirical support for such a justification. If calls for more democratic forms of expertise neither are based on prescriptive criteria for legitimate rule, nor on rigorous empirical findings, how do we know that they are more legitimate than those they seek to counter?
Deliberative democracy and science and technology studies: what are the tensions and synergies?
Tim Forsyth, London School of Economics

This paper presents a constructive critique of some of the themes raised by Lövbrand, Pielke and Beck (2011), who argue that recent debates in science and technology studies (STS) have claimed to justify the democratization of science without elaborating what model of democracy to use, or justifying why democratization is needed. This paper instead argues that Lövbrand et al’s paper tends to evaluate deliberative democracy based on the well-established Habermasian vision of legitimacy based on inclusive procedure, whereas STS instead owes more of its purpose to a Foucauldian analysis of the content of democratic discussion, which focuses also on how facts and norms have emerged with whose participation. Consequently, the paper agrees on the need for deliberative democracy; yet argues that deliberation should also include the nature of truth claims, the accountability of scientific networks, and on who gets to participate in shaping facts and norms. The paper uses examples of current 'problem-driven' science in developing countries, such as relating to climate change, to indicate that scientific uncertainty and resistance to science-based policies are widely recorded, and where greater deliberation of scientific truth claims can be achieved by widening social participation in shaping the framings and findings of scientific research.

Co-producing climate knowledge - reflections and practical dilemmas
Anna Jonsson, Linköping University

The paper presents findings from three participatory research projects concerned with eutrophication in a small Swedish catchment, water prosperity in an Indian village and climate vulnerability assessments in two Swedish municipalities. All projects involved specific local stakeholders groups (rather than citizens) in co-production processes aiming at opening up expert dominated knowledge production to include other communities of practice. Final outcomes included stakeholder proofed policy documents and/or user friendly tools for continuing knowledge accumulation at various levels. Thus, the usability and relevance of research results for problem solution weighed heavier than the ambition to democratize its knowledge production, although these often may go hand in hand. One way of assessing the legitimacy of the processes (apart from written evaluations and debriefings) was by observing stakeholders “voting with their feet”, i.e. choosing to participate or not, and thus, a central challenge was to frame the issue and design the process in a way that made participants willing to participate. Successful framing would ensure that the process made a difference concerning an issue that made a difference to stakeholders, and design issues
involved developing boundary objects and identifying boundary spanners assisting in articulating different knowledges. Examples of such employed in all three projects were given, i.e. matrixes, maps and local champions. Questions that could be raised in relation to the workshop theme is whether the notions of “deliberative democracy” and “democratizing expertise” are relevant in the contexts of these cases bearing in mind their instrumental ambition of producing “better knowledge”. However, if these theoretical ideals were operationalized, they would certainly inform practical framing and design decisions in similar participatory research set-ups.

**Model-assisted dialogues as a platform for stakeholder involvement**

Lotta Andersson, SMHI and Linköping University

Experiences from two model-facilitated projects were presented. The first project aimed to formulate a locally proposed remedy plan to reduce nitrogen and phosphorus loads in local lakes and the coastal zone. In the second project, a similar process was used to formulate local adaptation strategies to climate change impacts on water allocation, farming and the environment. The usefulness of hydrological scenario modelling was not attributed to the provision of “solutions”, but to facilitate dialogues between experts, different stakeholder groups and decision makers. Consequently, modellers need to rethink of their role from “solution providers” to “process facilitators”. A model-assisted participatory process is greatly facilitated if based on the involvement of local champions and existing local networks. The time and effort needed to build trust and confidence should not be underestimated. It is recommended to ensure that models are transparent and include stakeholders in all stages of the modelling process in order to improve model outputs and ensure avoidance of disappointment by stakeholders who are the local experts on prevailing environmental conditions and hydrological processes. It is also necessary to understand and respect the fact that participants have different and sometimes conflicting interests. Participatory modelling provides information as content to a dialogue where different views can be shared to increase understanding and cooperation. The local action plans did also include the participant’s identification of obstacles on the local, but also on higher policy levels that needed to be overcome in order to facilitate the implementation of the suggested action plans, which, if forwarded to those concerned, could be seen as a way to give the local level a “voice” into the policy process. In research-driven projects, however, it is crucial that there is a transparency about where the researcher´s agenda ends and the policy agenda begins. The democracy component of cooperation between researchers and stakeholders in formulation of strategies or action-plans is not self-evident, but has to be critically analysed in each specific application.
4. Summary of workshop deliberations: exploring knowledge gaps and new research ideas

In this section we reflect upon the outcome of the workshop deliberations. In order to sort the diversity of comments offered by the participants during the workshop, we have organized the summary around the three themes in the workshop programme; 1) expert democratization in theory, 2) expert democratization in practice, 3) research ideas at the intersection of theory and practice

**Expert democratization in theory - deliberative ideals, subjects and institutions**

The first round of presentations outlined some of the issues at stake in scholarly debates on expert democratization in the risk governance and science and technology studies literatures. Rolf Lidskog (Örebro University) reflected upon the role of citizens in risk regulation, and noted that public engagement exercises allow regulators to anticipate public mistrust in, and critique of, risk governance arrangements. However, who to involve in such exercises (all citizens, well-educated people, affected groups) and how to perform them in order to avoid asymmetric influence remain open questions. Lidskog also suggested that such encounters always are subject to ‘stage management’; i.e. they are framed in different ways, for different purposes. Eva Lövbrand (Linköping University) continued by asking how legitimate efforts to open up scientific expertise to public scrutiny and debate really are. Which democratic ideals support scholarly efforts to establish new forms of deliberative expertise in fields such as risk governance? Lövbrand identified a tension between the deliberative expert ideals invoked in the science and technology studies literature, and the procedural accounts of legitimacy developed by many deliberative democratic theorists. In response to Lövbrand et al., Tim Forsyth (London School of Economics) noted that there are different deliberative ideals that can inform efforts to open up expert deliberations to members of the public. Whereas there may be a tension between the Habermasian ‘ideal speech act’ and new expert ideals in the science and technology studies literature, post-structuralist accounts of deliberation (e.g. Ernesto Laclau’s and Chantalle Mouffe’s radical democracy) can help to nuance the understanding of legitimate expertise.

From the presentations above and ensuing discussions three central themes emerge that we think may provide fertile ground for future research. Firstly, which normative ideals inform scholarly and practical efforts to ‘democratise expertise’? Following the debate between Lövbrand et al. and Forsyth, it seems as though a closer engagement with democratic theory would both help to clarify the aim and strengthen the normative promise of new modes of expertise. Outlining what expert democratization entails under Habermasian vs radical
versions of deliberative democracy could be a first step in that direction. What are the ontological and political differences between the two accounts of expert democratization? What ideal procedures for legitimate rule do they prescribe? By specifying the model of democracy that informs the contemporary rethinking of expert practices, several workshop participants noted that the claims to legitimacy will become more forceful and convincing.

Secondly, such engagement with democratic theory will also help to clarify who the deliberating subjects are and should be. For most deliberative democrats the citizen remains the agent of democratic renewal and authenticity. While scholars of science and technology often refer to the knowledgeable citizen as the subject of expert democratization (e.g. citizen science), the stakeholder concept is also commonly invoked in this literature. However, it remains unclear how these subjectivities are mobilized and what democratic purpose they are asked to fulfill. Does the stakeholder, acting as a representative of organized interests, complement or compromise the role of the deliberating citizen? We may also need to clarify who the counterparts in citizen/stakeholder deliberations are? Are we primarily asking natural science or technical experts to justify their knowledge claims in the public sphere, or does expert democratization also imply a rethinking of the social scientist as societal expert? By developing the normative promise of different expert subjectivities, the workshop participants noted that we may both advance the theoretical understanding of expert democratization and better inform practical experimentation with these concepts.

Finally, the workshop participants raised questions about the institutional context for expert deliberations. Which political institutions should host these deliberative arrangements and what institutional design is best suited to inform decision-making? Karin Bäckstrand (Lund University) suggested that the study of expert democratization would benefit from closer links to comparative politics. By making comparative case studies we may better understand why some political cultures and polities are more susceptible to deliberation than others. Such comparisons would help us to interrogate how expert deliberations may play out within liberal democracies. However, the study of expert democratization could also be better linked to international relations and scholarly debates on global democracy. What role and shape can expert citizenship take in the international or transnational realm, beyond the territorial domains of the democratic citizenry? What are the institutional prospects for expert democratization ‘beyond the state’ and how can we resolve questions of inclusion, representativeness, and accountability? By engaging with the institutional context for expert deliberations, we may be able to identify different modes of expert democratization and better specify where and when certain institutional designs make sense.
Expert democratization in practice – “if democratization is the answer, what is the question?”

The second round of presentations was primarily focused on the design of participatory research processes. The deliberative quality of such processes was approached as one of several design criteria of importance for effective and legitimate outcomes. Anna Jonsson (Linköping University) reflected upon which actors to involve in the co-production of locally embedded research results and identified the stakeholder as a key agent. However, reporting from three participatory research projects in Sweden and India, she also identified a tension between participatory research processes that effectively engage particular stakeholder groups and transparent and inclusive processes that seek to foster cooperation between a diversity of interests and actors. Lotta Andersson (SMHI and Linköping University) continued by discussing how to foster open and inclusive deliberations between researchers and stakeholders involved in participatory research processes. Andersson presented two cases, from Sweden and South Africa, in which Swedish climate modelers acted as ‘process facilitators’ in the co-production of local environmental action plans and locally embedded policy advice. In both cases transparency emerged as a key procedural value for legitimate and effective outcomes.

The ensuing workshop discussion was focused on the normative rationales for and democratic implications of participatory research exercises. Two themes emerged from the debate. Firstly, several commentators noted that efforts to involve stakeholder in the making and interpretation of science oftentimes are informed by other rationales than those underpinning the expert democratization debate. The production of locally relevant knowledge and decision support can be one reason for developing participatory research practices. Science education and public awareness-raising may be another. With this in mind, several workshop participants noted that there is no procedural template that fits all participatory research exercises. The design of the process cannot be separated from its aim. The involvement of organized stakeholder groups may make sense if the aim of the exercise is to co-produce useful and effective decisions support. However, if the aim of the exercise is to democratize the research process and empower knowledgable citizens, the facilitators need to think more closely about procedural values (e.g. inclusiveness, representation, accountability). In the latter case, the involvement of powerful stakeholder groups may even result in the marginalization of less vocal actors. As suggested by one workshop participant, facilitators need to be attentive to the power dynamics of their exercises and critically ask ‘who wins and who loses’.

Secondly, the workshop participants raised questions about the democratic potential of participatory research practices in other cultural contexts. Can researchers hope to foster more democratic modes of science and expertise by facilitating participatory research beyond their national contexts? To what extent can Northern scientists act as democratic agents in new democracies or even autocratic settings in the global South? Which ideals of
democracy can inform such efforts? Although participatory research exercises in countries such as South Africa or India may serve to empower local village participants, several workshop participants noted that their democratic implications are not clear cut and must be assessed in their particular social and political settings.

“If democratization is the answer, what is the question?” is a question that was raised in the workshop discussions and that effectively sums up this second session. Before attending to the practical design of participatory research exercises we need to be sure of their aim. Ideal deliberative procedures could indeed help to inform the set-up of such exercises in cases where the facilitators have democratic ambitions. However, far from all participatory research practices seek to translate the expert democratization debate into practice. In fact, several of the cases introduced during this session were more concerned with the production of useful and locally embedded decision support. Can deliberative democratic theory at all help us to evaluate the effectiveness and legitimacy of such cases?

Research ideas at the intersection of theory and practice

The workshop ended with a discussion on how to link theory and practice in this field. How can deliberative democratic theory inform practical efforts to involve stakeholder and citizen groups in the making and interpretation of science? And how can practical experiences with local co-production processes help us to advance the understanding of expert democratization as theoretical ideal? Though the discussion did not result in any elaborated project proposals, a number of ideas were discussed. Below follows a summary of some of the suggestions that surfaced in the debate:

- Strengthening the links between democratic theory and science and technology studies. In order to foster conceptual clarity in this field, several workshop participants suggested that it could be worthwhile to explore what expert democratization entails under different ideals of democratic deliberation. Which procedural values are prescribed by critical (Habermas), liberal (Rawls) and radical (Laclau and Mouffe) theories of deliberation? What do these theories tell us about the institutional design for participatory exercises (e.g. which actors to invite, which procedures to follow, criteria for evaluation)? By clarifying differences between deliberative ideals, we may overcome the ‘democracy paradox’ identified by Lövbrand et al. and get a better sense of how the normative promise(s) attached to ‘expert democratisation’ can be translated into practice.

- Comparative studies of national expert cultures. Considering the increasing number of practical experiences with participatory research and deliberative expert arrangements, several workshop participants suggested that it may be timely to make cross-national
comparisons. By examining how expert arrangements have been designed and institutionalized in different liberal democratic settings, we may on the one hand be able to draw conclusions about which political institutions that are most fit to host deliberative exercises and which institutional designs have proved most successful. On the other hand, we may also get a better sense of how expert cultures play out in different socio-political settings and why some political cultures are more conducive to deliberation than others. The institutionalization of climate (adaptation) expertise surfaced as an interesting empirical case in this context. However, in the wake of the Euro crisis, economic expertise was also discussed.

- Expert democratization in the transnational sphere. Finally a number of workshop participants suggested that it could be interesting to explore how to design and institutionalize democratic expert practices ‘beyond the state’. Which ideals of democracy should inform such expert arrangements? What do deliberative theories prescribe? The Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) surfaced as interesting empirical examples of expert cultures in the transnational sphere. How could their procedures be designed to foster more democratic forms of expertise? To whom should such expert institutions be held accountable (e.g. national governments, a transnational civic sphere, to scientific peers)?
5. List of participants

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