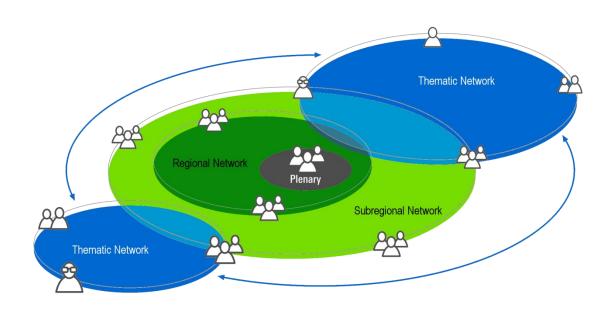
INTERNATIONAL WORKSHOP

Nested Networks: Between wishful thinking, empirical evidence and practical relevance

May 22nd – 24th 2013, Leipzig, Helmholtz Centre for Environmental Research – UFZ



- Report -





Content

I.	Nested Networks: An Overview				
II.	Goals and Outline of the Workshop				
III.	Works	Workshop Agenda			
IV.	Report	:: Wednesday May 22 nd Overview of Themes & Cases	6		
	a.	Introduction to the Workshop	6		
	b.	State of the Art on the IPCC, the MA, and the IPBES	6		
	c.	The Conceptual Framework	7		
V.	Report	:: Thursday, May 23 rd Examining Crosscutting Themes	8		
	a.	Breakout group on Bridging Scales	8		
	b.	Breakout group on Representation	8		
	c.	Breakout group on Polycentric Governance	9		
	d.	Breakout group on Public Engagement	11		
	e.	Concluding Plenary Discussion	13		
VI.	Report: Friday, May 24 th Identifying core Results & Future Activities				
	a.	Introduction to the Day	14		
	b.	Breakout group on the Leipzig Recommendations III	14		
	c.	Breakout group on Manifesto	15		
	d.	Final Discussion & Results	16		
VII.	Appendix				
	a.	List of Participants	17		
	b.	References	18		

Nested Networks: An Overview

The objective of this workshop was to take stock of the discussion on nested networks (NesNet). It draws on two international workshops previously held in Leipzig.

- In October 2006, the **IMoSeb workshop** has gathered a group of highly experienced scientists and practitioners to open up and deepen the discussion on science policy interfaces. The *Leipzig Recommendations* resulting from this workshop called for a turn away from a monolithic, centralized and hierarchical epistemic community to more pluralistic, decentralized and heterogeneous ways of interaction that they have called *nested networks*. These *recommendations* constitute a major milestone in the consultations setting up a science-policy platform on biodiversity and ecosystem services.¹
- In May 2011, a second international workshop continued the discussion on how to design nested networks and how to bring these insights into the establishment of the International Platform on Biodiversity and Ecosystem Services (IPBES).²

These workshops have also contributed to further research activities at the UFZ:

- Since 2009, the research project Nested Networks was funded by the German Ministry for Education and Research.³ The concept of nested networks is developed as a heuristic tool for integrating insights from different scientific disciplines like geography, science & technology studies and political science. The framework was then also used to conduct case studies on the governance of transnational organizations (IPCC, MA, IPBES) and to evaluate their findings in a comparative way.
- This research project has contributed to a variety of practical attempts to translate and integrate
 insights into recent research and stakeholder activities, including recent intergovernmental
 negotiations on the IPCC reform process, the establishment of the IPBES and the
 BiodiversityKnowledge network.⁴

Goals and Outline of the Workshop

Given that the research project NesNet will end in September 2013, the core aim of the workshop was to discuss the major results of the project, to draw lessons and explore future research avenues. The UFZ team therefore presented the conceptual framework and empirical findings from case studies on the *Intergovernmental Panel on Climate Change* (IPCC), *Millennium Ecosystem Assessment* (MA), the *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (IPBES)

¹ https://www.ufz.de/index.php?en=10436.

http://www.ufz.de/index.php?en=21365; see also (Hulme M. et al. 2011; NesNet Workshop 2011)

http://www.ufz.de/index.php?en=19865.

⁴ KNEU – Developing a knowledge network for European expertise on biodiversity and ecosystem services to inform policy making and economic sectors (www.biodiversityknowledge.eu); Spiral – Science-policy-interfaces for Biodiversity: Research, Action and Learning (www.spiral-project.eu).

and practical experiences from different attempts of putting the concept into practice, e.g. within projects like *LEGATO*.⁵

Since its creation at the first workshop in 2006, the NesNet concept has travelled over boundaries; it has been diffused through academic and policy making circles, and been re-adapted and (con-)tested in many ways. The 2013 workshop aimed to collect experiences from these journeys and to discuss the analytical coherence and originality, the empirical evidence and the political relevance and legitimacy of the concept. Similar to the former workshops, it therefore brought together practitioners such as scientists participating in transnational assessments, representatives from 'user institutions' (UNEP, national governments, stakeholder and civil society organizations) and outstanding researchers from different disciplines (see list of participants in the Appendix).

⁵ LEGATO stands for 'Land-use intensity and Ecological Engineering – Assessment Tools for risks and Opportunities in irrigated rice based production systems' see http://www.legato-project.net/. For information on *BiodiversityKnowledge* see http://www.biodiversityknowledge.eu/.

ednesday, May	22 nd
14:00-14:30	Welcome & Introduction
14:30-16:00	State of the Art: Report on recent developments inside environmen assessments
	 Arthur Petersen: Intergovernmental Panel on Climate Change (IPCC) Clark Miller: Millennium Ecosystem Assessment (MA) Carsten Neßhöver: Intergovernmental Platform on Biodiversity a Ecosystem Services (IPBES)
16:00-16:30	Coffee break
16:30-17:00	Silke Beck: Introduction to the conceptual framework
17:00-17:30	Discussion & Questions on conceptual framework and cases;
19:00	Dinner
ursday, May 23	th
9:00-10:30	NesNet Team: Introduction to the central workshop themes
10:30-11:00	Coffee break
11:00-12:30	Parallel Breakout Group Session I
	A. Detlef Müller-Mahn: Bridging Scales
	B. Esther Turnhout: Representation
12:30-13:00	Plenary: Maud Borie & Tahani Nadim report from the breakout groups
13:00-14:00	Lunch
14:00-15:30	Parallel Breakout Group Session II
	C. Eva Lövbrand: Polycentric Governance.
15.20 15.45	D. Jason Chilvers: Public Engagement
15:30-15:45 16:15-16:45	Coffee Break Planary: Sahina Wailand & Eleftharia Vasilaiaday raport from the breaks
10:15-10:45	Plenary: Sabine Weiland & Eleftheria Vasileiadou report from the breakd
16:45-17:30	groups Plenary: The Helicopter Perspective: The Plenary decided on two themes
10.45-17.50	be discussed in the breakout groups for the next day
19:00	Dinner in town
day, May 24 th	
09:00-09:30	Plenary: Nesting across scales and levels
09:30-11:00	Parallel Breakout Group Sessions
	 Recommendation for IPBES & IPCC Publication projects: An Interpretive Manifesto
11:00-11:15	Coffee break
11:15-12:00	Plenary: Lisa Marquard and Alejandro Esguerra report from the breako
11.15 12.00	groups followed by a general discussion
12:00-12:15	Final Statements & Feedback
22	
12:15	Lunch & End of Workshop

Wednesday May 22nd

Introduction to the Workshop

Christoph Görg (head of *Department for Environmental Politics at UFZ*) opened the workshop. He shortly introduced into the background of the UFZ, and outlined the development of the NesNet project. Christoph Görg highlighted that over the last years a 'science-policy expert group' has been established at the UFZ. This interdisciplinary group aims at contributing to analyze and reflect the design of and to play an active part in the translation and integration of research into decision-making processes. It supports the development of platforms for linking research and politics in the field of biodiversity and adaptation to climate change. As for the workshop most importantly the *Network Forum for Biodiversity* (Nefo)⁶ is directly involved in the negotiation process of the IPBES. After this welcome and short introduction to the workshop an interactive round of getting to know each other followed that was led by **Alejandro Esguerra** (*UFZ*, researcher at NesNet).

State of the Art on the IPCC, the MA and the IPBES

The session begun with a talk by Arthur C. Petersen (IVM Amsterdam, PBL Netherlands) titled The IPCC as Parliament of Things. Arthur Petersen has published extensively on the IPCC, and he also participated as a member and leader of the Dutch delegation at several IPCC sessions. After providing a general overview of the IPCC, Petersen showed that the exact wording of the IPCC Summary for Policymakers is the result of intense and hybrid negotiations in which the way how uncertainties are represented became also contested. Based on the evaluation by the PBL Netherlands Environmental Assessment Agency of the 2007 IPCC Assessment Report of Working Group II, Petersen argued that the most common weaknesses he and his group found were insufficiently transparent expert judgments. He pointed out why authors and assessment practitioners should become more aware of the inevitable role of 'expert judgment', in which experts make an assessment despite high degrees of uncertainty. He concluded that those judgments should be made more transparent. Furthermore, in order to become more reflective of different views, assessment methodology should incorporate a procedure of 'open assessment', for example by inviting 'outsiders' to participate in the quality control process.⁷ In the subsequent discussion it was discussed whether or not the IPCC is ready to opening up its assessment process to 'outsiders' (including scientific observers to study the making of the reports)

Clark Miller, *Consortium for Science*, *Policy & Outcomes*, *from the Arizona State University*, gave an overview of the historical development and the governance structure of the **MA**. He characterized the MA design as 'IPCC +' Model. The '+' indicates features that differ from the IPCC model. According to Miller the innovations are:

- Active governance by international organizations, NGOs, civil society groups, indigenous groups, and the private sector (states were not downplayed but distanced)
- Explicit balancing of rich and poor leadership and intellectual work
- Major outreach and engagement efforts
- Addition of multi-scale approach, especially with regard to sub-global assessments and user forums.

⁶ http://www.biodiversity.de/.

⁷ http://www.pbl.nl/en/publications/opening-up-scientific-assessments-for-policy-the-importance-of-transparency-in-expert-judgements.

Given the importance of the local scale, the MA was set up as a multi-scale assessment. Miller argued that the MA had to develop a common conceptual framework in the first step because biodiversity research is more divers and fragmented than climate research that is integrated around models. With regard to the multi-scale assessment Miller highlighted that different research projects could apply to become part of the MA. Consequently, the assessment varied extremely in unit and scope. It included an assessment of a city park in Sweden as well as an assessment of the biodiversity landscape in India. In the subsequent discussion, Miller stressed that in the sub-global assessments of the MA there was a lively involvement of social scientists and indigenous people.

Carsten Nesshöver (Nefo, UFZ) introduced the newly established IPBES to the participants of the workshop. Having been actively involved in the negotiation process of the IPBES, Nesshöver first sketched the current governance structure and the future tasks of the organization. The IPBES mimics the IPCC in the sense that it also has a Plenary as the main decision-making body with state delegates being the only members. The task of the IPBES will be broader: In contrast to IPCC, IPBES will have not only undertake assessments but also engage in capacity-building, knowledge-generation, and policy-support. According to Nesshöver, IPBES is currently in a critical phase since the scientific body of the organization (the Multidisciplinary Expert Panel) develops a conceptual framework and a work programme that will structure the future work of the organization. Also, one of the questions the NEFO team works on is the development of a Stakeholder Engagement Strategy (SES) for IPBES (See also input by Katja Heubach in the session on public engagement).

The conceptual framework

As the project leader of the Nested Networks research project, Silke Beck (UFZ) introduced into the history of the NesNet idea and the conceptual framework for the workshop that is used to analyze and compare empirical findings from single case studies on the IPCC, MA and IPBES. Beck highlighted the particular challenges facing expert panels operating at the interface between science and policy at transnational level. She then discussed where and why questions of governance and politics of expertise matter and explored the added value and potential contributions of these discussions to both, academic conceptions of and ongoing negotiations inside the IPCC and IPBES. The conceptual framework is mainly based on scholarly work on boundary organizations and co-production (Jasanoff 1990; Guston 2001; Keller 2010; Miller 2001). At the same time, the NesNet team tried to combine these approaches focusing on 'micro-politics' inside expert panels with political science approaches on global governance to discuss them into their broader political context. It then tried to apply it on hybrid governance structures and hybrid rulemaking at the global level. Finally, she discussed the lessons learnt and the implications of these findings for the governance of international expert cooperation and advice and identified open questions that require further discussion. These are bridging scales, polycentric governance, representation & public engagement (see the input talks for a further discussion on these themes).

Thursday, May 23rd

The morning session started with a short outline on the four cross-cutting themes by Christoph Görg, Silke Beck and Alejandro Esguerra who sketched content and boundaries of the themes before the group split into parallel break out groups.

Breakout group on Bridging Scales⁸

The breakout groups were kicked off by short input talks that set the stage for the group discussion.

For the group on *Bridging scales* **Detlef Müller-Mahn** (*University of Bonn*) elaborated on the question of how we understand the local. His empirical research focuses among other issues on how local communities frame climate change in Eastern Africa. Based on his research, Müller-Mahn argued that the scalar category of the local is a relational category that is constructed by various relationships. Defining something as local implies both, engaging in a classificatory exercise and constructing power hierarchies. Müller-Mahn highlighted that categories such as the 'local' are not stable or given but 'travel' and are thereby translated continuously. Consider the Doha conference on Climate change, a very local event where mainstreaming adaptation to climate change was agreed upon. These policy devices traveled from Doha to, for instance, a local community in Sub-Sahara Africa. In order to reconstruct translational processes Müller-Mahn suggested to take advantage of multi-sited ethnography, and to follow the actors/actants in a Latourian sense. He concluded that adaptation policies are negotiated between actors in a multi-scalar network, and that they are mediated and transformed on their way traveling between different contexts and scales.

In the discussion participants underlined the notion that scale is something which is powerfully constructed by institutions and their framing of problems. It is especially important to research how the circulation of knowledge operates across scales to investigate how and where knowledge is produced and retranslated in different (local, regional, global) contexts. This perspective also allows focusing on the various knowledge-holders and knowledges and the ways how they gain epistemic authority. From here the discussion moved to question of how scale matters in the three cases. An important aspect in the discussion was the notion of hybridity: Since IPBES or IPCC are neither purely scientific nor purely political but hybrid bodies, they coproduce scales and levels. In the case of IPBES many delegates and stakeholder call for regionalized structures thereby following different political and scientific motives. Scales can be defined and organized according to political entities (such as national states) or scientific units as those set up by ecologists.

Breakout group on Representation9

Esther Turnhout, *Wageningen University*, provided a talk about *Rethinking Representation*. She reflected on the parallels between *how scientific experts represent nature*, *and how participatory processes represent publics*. She drew on the work of Mark Brown (2009) arguing that representation is thought of in terms of either a *mirror* or a *spokesperson*. According to Turnhout both dimensions are actually linked leading to the complex question of what and who exactly should be mirrored, and for whom is somebody speaking for? One of the presumptions is that there is an a priori identification of the 'difference that makes a difference' in the sense that it warrants representation. Categories might be gender, class, political ideology, species, habitats etc. Turnhout parallelized the

⁸ The following text is based on notes taken by Maud Borie who was the rapporteur for this session.

⁹ The following text is based on notes taken by Tahani Nadim who was the rapporteur for this session.

representation of publics with the practice of representation in the sciences where representation takes places in form of maps, models or diagrams (Lynch and Woolgar 1990). Maps, however, do not perfectly represent the society they depict. And, they are not mirrors of the world. Rather, maps remake the reality they depicted in their image (Scott 1998). Every act of representation involves the creation of the very thing it aims to represent and it also constitutes the object of governance (Gupta et al. 2012).

Turnhout turned to the case of the IPBES. She argued that the particular discursive constellation in which IPBES reproduces a linear technocratic model of expertise where science is the privileged source of knowledge and where policy-relevant categories are primarily understood as economically relevant. Other knowledges (whether other ways of knowing or other perceptions of what is relevant to whom) are excluded.

Turnhout explained how and why the world that is performed by our representations of it is increasingly seen as the world itself. At the same time, the ways in which both reality and representation converge is unpredictable rather than determined. There is always room for surprises and agency since representations are incomplete, different representations may coexist and compete and the way we act upon them is situated in practice and contingent (Waterton). Even in highly scripted participatory processes, participants are able to improvise and to shape their roles and identities in the context of participation with intended and unintended consequences. Standards and monitoring and reporting systems become the site of politics involving renegotiation of the categories. Turnhout ended her input note by pondering about the option to combine more structuralist accounts with this notion of unpredictability: She came back to Latour's notion of 'circulating references' that go back and forth between those who are represented and those who are doing the representing (Latour 1999). Circulating references is process of continuous translation and negotiation in which there is always room for overflows and surprise.

The lively subsequent discussion centered mainly on the question, pointed out by Eva Lövbrand, of how institutional arrangements enable and facilitate 'circulating references.' Werner Krauss, pushed the argument further by asking how to *not* institutionalize something that we want to represent. He referred to the 'occupy movement' as a group of people as example of non-institutional politics. This movement acted in a situationist way of performative politics rather than trying to mainstream and institutionalize their policies. It was also argued that even in non-institutionalized settings there are forms of institutional devices such as the 'human mic' in the 'occupy movement' that enables circulation (A. Esguerra). For instance, Jason Chilvers argued that certain forms of standardization might be inevitable but it could be performed in a more reflexive way, taking into account potential exclusions. Instead of running with a singular framework one could (in the case of IPBES for instance) draw on different and competing framing parameters to enable a diversity of interventions. Arthur Petersen drew the attention to the importance of the scoping to increase engagement without necessarily changing the rules and the institutional arrangement.

Breakout group on *Polycentric Governance*¹⁰

Eva Lövbrand (*Linköping University*) gave an input for the afternoon session on 'Climate fragmentation, experimentation and poly-centricity'. According to Lövbrand the UN Climate conference in Copenhagen 2009 was a watershed in the study and practice of international climate politics. The dream of a universal and legally post-Kyoto agreement was abandoned. These

¹⁰ This text is based on notes taken by Sabine Weiland who was the rapporteur for this session. It also draws on the slides prepared by Eva Lövbrand.

transformations in the international landscape are partly reflected by the emergency of 'new' terminologies.

- There is the notion of fragmented climate governance (Biermann et al. 2009) according to this
 climate governance is marked by a patchwork of international institutions that are different in
 their character, constituencies, spatial scope, and subject matter.
- Another account is given by Keohane and Victor (2011) who use the term regime complex for climate change to argue that climate change is just one arena among a number of arenas in which actors interact.
- Lövbrand referred further to Hoffman's notion of *transnational governance experiments* with alternate means of responding to climate change. Experiments are independent from the Kyoto process or national regulatory measures, are engaged in making rules that shape how communities respond to climate change and cross jurisdictional boundaries.
- Ostrom's (2010) concept of polycentric governance is based on the experience that collective
 action problems can be solved without regulation by a central authority (e.g. UNFCCC).
 Polycentric systems are characterized by multiple governing authorities at differing scales rather
 than a monocentric unit. These decentralized units of decision-making may be relatively
 independent, but become a system when they function in coherence (i.e. cooperative
 fragmentation).

All these approaches share the assumption that governance is increasingly dispersed, multi-scalar and a multi-actor phenomenon. The center of gravity is shifting from the multilateral treaty-making process to diverse activities beyond the formal negotiation halls. However, there are also some normative assumptions underlying this analysis. Climate change is a 'problem complex' for which there is no silver bullet (e.g. energy access, human security, development, justice). Decentralized governance systems better suited to address the multiple problems of climate change than global treaty-making. Poly-centric responses foster experimentation, innovation, collective trust and learning. UN climate diplomacy is not redundant, but less important in a fragmented architecture. Lövbrand ended by addressing a series of important questions that refer to implications of the new order for the IPCC. For instance, how can an *intergovernmental* expert body speak to a fragmented climate governance order? Can or should the IPCC inform transnational policy experimentation? Will states remain the governors of the IPCC in the post-Copenhagen era? What would a transnational or polycentric panel in climate change entail?

In the breakout group discussion the question came up, what is really new and special about polycentricity? Whether or not are these 'new' concepts referring to new empirical findings and a changing political landscape or whether they are only new terms for 'old' finding? Are we actually experience a new phenomenon or just readjust our empirical and theoretical lenses? The group came to the conclusion that we can discern a trend towards more poly-centric orders in both climate policy and in biodiversity policy. In the discussion the participants compared the field of climate with the one on biodiversity governance. Biodiversity has been very fragmented from its inception. The Convention on Biodiversity (CBD) had partly the function to create a shared definition of what biodiversity could mean. A new expert body in the field of biodiversity is often expected to promote integration and representation across scales and contexts. These trends lead to the following questions: How can we capture diversity in climate governance? How does the various governance arrangements function? If we recognize the poly-centric character of the governance structure, what does it imply for the IPCC? The IPCC framed climate change as global and universal risk which

required global solution and multi-lateral cooperation. Yet, the situation has changed a lot. Adaptation to climate change also requires regional assessment and local planning processes. Can the IPCC address changing information needs of decision makers at different levels? The same is Participants argued that the same is true for IPBES in the sense that IPBES shows attempts to operate on different scales, and with more functions than IPCC has performed. It seeks to generate and provide knowledge on various levels and in different contexts to address the specific biodiversity problems. Are the global frame and the unitary framework still fit for purpose? Or, has purely global framing be replaced or complement by multi-scale and transnational approaches?

Breakout Group on *Public Engagement*¹¹

The second parallel breakout group session of the afternoon focused on the guiding question of why, where and how does public engagement matter in designing an assessment? The session offered two input-statements: **Katja Heubach** (*UFZ, Nefo*) provided an overview of current attempts by IPBES and stakeholders to develop a so called Stakeholder Engagement Strategy (SES). *Jason Chilvers* (*University of East Anglia*) gave a theoretical account of public engagement.

Katja Heubach outlined the history of the SES within the negotiation process of the IPBES. The notion of stakeholders has always been present in the process since the entire project IPBES started as a multi-stakeholder initiative. However, at the latest plenary meeting of IPBES in Bonn stakeholders summarized at their meeting that despite their importance for IPBES, 'their key roles are not yet fully reflected in the proposed rules, procedures and structures of the platform.' Central claims are to develop a stakeholder strategy, to allow observers to nominate experts for the Multidisciplinary Expert Panel (MEP) of IPBES, and to involve stakeholders into the development of a conceptual framework. So far, IPBES invites stakeholders only to participate in the *implementation* of the various tasks. Heubach gave an illuminating account of how currently the SES is been negotiated among various stakeholders: The first draft provided mainly by ICSU and IUCN is currently in a consultation phase in which stakeholders from around the world may suggest changes. Taken together, the comments submitted mainly reflected the more inclusive role of stakeholders in the platform and the opening up of their role, but also the need to leave issues open and flexible. In contrast, the first draft rather closed down and clearly delineates the stakeholders and their role. In addition, central questions to the present day remain unsolved such as the difference between knowledge-holders and right-holders, or the issue of implementing and financing the strategy.

In his talk titled *Public engagement and transnational expert panels: dreaming the impossible*? Jason Chilvers made two overarching point: There is a continuous reference to deliberation and participation even at the transnational level. Yet, it remains unclear how public engagement can be configured in transnational settings. Chilvers offered first a mapping of public engagement by elaborating on four practices of engagement:

- Starting out with the notion that *publics are already engaged*. IPCC operates with somewhat imagined publics when doing its work.
- There are a number of participatory assessments and appraisals, or large integrated assessment exercises. The increase of citizen science, for instance, is an indicator for this kind of assessments.

¹¹ This text is based on notes taken by Eleftheria Vasileiadou who was the rapporteur for this session. It also draws on the slides prepared by Katja Heubach and Jason Chilvers.

- Institutions also operate with *invited participation or deliberation*. Worldwide Views is an example for this.
- Finally, there are also forms of *distributed or uninvited participation*. This category is useful to keep in mind to recognize that there always is an engaged public that may become engaged even if institutions have no interest in that. The blogger scene and the IPCC serve here as good examples of how a public speaks unlimitedly.

After this mapping exercise Chilvers offered three theoretical accounts of how public engagement has been researched:

- The classic *Public Understanding of Science* (PUS) model thinks of engagement as one-way communication. Publics are thought of as having a deficit on knowledge.
- Engagement as deliberative interactive procedure: Publics are theorized as being knowledgeable, and we need to listen to them. This approach would emphasis procedures and optimum design participation. Often, participation is then linked with credibility, legitimacy, and effectiveness).
- A last perspective Chilvers introduced, runs under the heading of *Critical Public Engagement*. Key
 to this perspective is that engagement is thought of as constructed and emergent. A public
 doesn't exist out there but is constructed and produced. What counts as good engagement is
 normatively pre-given in advance(Chilvers 2008; Lezaun and Soneryd 2007; Callon, Lascoumes,
 and Barthe 2009).

Jason concluded his input stressing that any attempt of participation will be partial and subject to criticism. There is no reference to a universal mode of participation. Given this situation, we need to think about reflexive practices that open up the meaning of participation and allow for diverse entry points into participation. In addition, it is also a challenge to think of participation that is uninvited. Participation could be thought of and practiced as a collective experimentation by being playful and creative, and acknowledging the diversity in transnational contexts.

After the two input talks, the participants argued that it would be important for the organizations to reflect on the question of why they are interested in participatory approaches. There are different answers to the question, and depending on the needs the ways in which the public may participate varies. For instance, is the aim to include a number of knowledge holders to integrate their knowledge? Or is the idea that just governance requires deliberation? Both approaches require very different model of public engagement. It would helpful for the IPBES strategy if they were clear about what they want to achieve.

Another theme that emerged during the discussion plays around with the notion of listening as organizational practice: Instead of designing the best institutional devices an organization could try to listen with humility, and not trying to be assimilating the noise. This would imply to shift the focus of attention away from specific stakeholders that once determined are in some sense part of the organization towards the broader notion of 'the public'. An organization such as IPBES with little resources needs to learn to deal with uncertainty and to engage in practices of listening to the various networks that already exist. Once started it may actually be surprised how much knowledge and governance already exist. In other words, it should stop drawing the boundaries of 'making stakeholders' and operate with the uncertainty.

Concluding Plenary Discussion

In the concluding plenary sessions the rapporteurs reported the main themes back to the Plenary. The discussion then focused on possible results from this workshop. Three main ideas circulated in the room.

- First, an input statement into IPBES is a timely exercise and a relevant input since the MEP currently works on the conceptual framework and the stakeholder engagement strategy is in the making.
- Second, the idea of a 'non-paper' was debated that explores the novel challenges that the IPCC and IPBES face. The IPCC will publish its Fifth assessment reports (AR5) over the next year. They will confirm the main message. Thus, the panel has its original mission to provide scientific evidence for political action already accomplished. Much has changed since the late 1980s when the IPCC was designed, notably the nature of assessment practices and its interactions with the public. This situation offers a welcome opportunity for re-thinking. This situation raises the following question: What is the value and political relevance of a purely global assessment? What is actually the problem that global assessments seek to respond to? It was discussed whether or not IPCC and IPBES face similar challenges with regard to the regionalization of assessments and whether or not there is evidence for convergence. In addition, the group highlighted the importance of framing: Here, a main argument was to stress the importance of opening up the processes to the public.
- Third, participants exchanged views on the future tasks and activity of the NesNet project and
 further networking activities. Clark Miller stressed the need for comparative analysis of multinational research on global expert organizations to establish a state of the art reflection on
 expert organizations. Participants were also excited about establishing a network that would
 meet in future to collectively undertake this kind of research.

Friday, May 24th

Introduction to the Day

Silke Beck gave a structuring input talk that took stock of Thursday's discussion, and laid out the agenda for the day. She stressed that the workshop itself is an experiment to bring together different communities and voices on the issue of global assessments. She encouraged the participants to move beyond questions of function and design and to further reflect on themes such collective experimentation, responsiveness and institutional learning. She also suggested to may be come up with something like Leipzig recommendations III. In the subsequent discussion the participants decided to work on two products: A comment or recommendation that could be published in a journal, and a larger publication project. The participants split accordingly into two breakout groups.

Breakout group on Leipzig Recommendations III¹²

The group decided to push the notions of collective experimentation, responsiveness and institutional learning as the umbrella for their take-messages. Among other issues the participants came up with three lessons that would need further refinement:

First, *Mission accomplished*: much has changed since the late 1980s when the IPCC was designed to fit particular circumstances, notably the task, scope and expectation of assessment practices and its interactions with the publics. The current situation is different, the context and expectations have changed, and hence the IPCC has to respond to these new challenges. Despite these achievements, some fundamental changes to the process and the management structure are essential to ensure its continued success: to provide knowledge on adaptation policies, for instance, or to find new ways of dealing with invited and uninvited public engagement (see Chilver's input).

Second, participants stressed the importance of framing. The new situation also calls for a much deeper exercises in re-framing the very purpose. In order to create truly innovative and appropriate mechanisms one may ask a couple of questions that exemplify the importance of framing: For instance, what is actually the problem of climate change? What are the kinds of knowledges that are needed? Who are the users for whom knowledge is generated? How is the public invited? And last but not least, how do we deal with competing or alternative ways of framing?

A third and final lesson addressed the notion of institutional reflexivity. As already mentioned above, expert panels are embedded in an ever changing and dynamic environment. Hence, organizations such as IPCC and IPBES may learn through unsettlements and public scrutiny (e.g. climategate). Or, they may develop internal mechanisms for catalyzing adaptive capacities. IPBES, for instance, seeks to set up an institutionalized external evaluation process. Finally, participants stressed the importance of expert organizations being able to respond to external and monitoring by third parties. This ranges from the skeptics and the blogosphere, to the role of critical social scientists and other commentators holding the IPCC and IPBES to account. As already debated the notion of listening as an institutional practice was highlighted once more. An editorial team agreed to further elaborate on these recommendations.

¹² This text is based on notes taken by Lisa Marquard and Christoph Aicher. It also draws on the 1st draft of the Leipzig recommendations currently prepared.

Breakout group on the Manifesto¹³: Bringing the Anthropocene into the world

After a first round of general reflections the group decided that the most appropriate form would be a manifesto targeted at the Global Environmental Change research community. There have been projects in the past that could help to frame the proposal (Jasanoff and Martello 2004; Latour 2008; Nordhaus and Shellenberger 2007; Cornell et al. 2013).

The main storyline of the manifesto could be as follows: Many participants highlighted that there is a return of Malthusian discourse. Major events or powerful discourses such as the notion of the *Anthropocene*, or the Future Earth Programme, or the *Planet under Pressure* conference come with a certain understanding of what nature is and of what the problem might be. Often, social scientists simply adopt the problem framing for a variety of reasons. Yet, it is time to reflect upon alternatives. The group represents a scholarship that thinks differently about these frames, and these alternative frames should be brought into the debate in a productive fashion. Interpretive or reflexive scholars are particular good at examining how the problem framing of the 'environmental crisis' is deeply embedded in various cultural layers. Given this embeddedness respond options need to be translated into the local context to become meaningful. The effects of climate change vary tremendously worldwide, and are in some contexts important while they may be neglectable in others.

The manifesto addresses questions as follows:

- What do we think is the role of the critical-interpretative or reflexive social sciences and humanities in contemporary environmental research? How can we contribute?
- What do we mean by the critical-interpretative or reflexive social sciences or humanities? Who are we?
- How are our research questions and agendas different? What are alternative framings and frameworks? Why are our questions important, relevant, and necessary?

The text will draw upon the legacy of critical-interpretative and reflexive social research to

- scrutinize the ontologies of nature and society underpinning global environmental research initiatives such as Future Earth,
- to reflect upon the political effects of orchestrating research and producing integrated, unified and global environmental knowledge, and
- To offer an alternative reading of the Anthropocene crisis based on the intellectual virtues of difference, dissensus and unsettlement.

Against this background a writing team will outline a set of alternative research questions that can complement and help to redirect initiatives such as Future Earth in constructive ways. If the manifesto project resonates with a broader research community, one may envisage in a second step a special issue that would explicate the calls made in the manifesto.

¹³ This text is based on notes taken by Alejandro Esguerra.

Final Discussion & Results

The final discussion was mainly devoted to inform each other about the debates in the two groups, and to discuss the follow up process.

The core results of the workshop are threefold:

- First, participants decided to write the Leipzig recommendation III, focusing on the challenges
 and future role of the IPCC and the IPBES (see report from the breakout group on
 recommendations).
- Second, participants will write a manifesto that explores the role and potential contributions of
 interpretive or reflexive social science and humanities to the global environmental change
 research (see report from the breakout group on manifesto).
- Third, there was a great interest to establish a network that will continuously meet to discuss transnational expert organizations. The publication projects and the set-up of a homepage serve as first steps.



Participants of the workshop Nested Networks

Appendix

List of participants

	Nar	ne	Affiliation	Contact
1.	Aicher	Christoph	UFZ	christoph.aicher@ufz.de
2.	Balian	Estelle	Belgian Biodiversity Platform- Royal Belgian Institute of Natural Sciences	estelle.balian@gmail.com
3.	Beck	Silke	UFZ	silke.beck@ufz.de
4.	Borie	Maud	University of East Anglia	m.borie@uea.ac.uk
5.	Bojanowski	Axel	Der Spiegel	
6.	Chilvers	Jason	University of East Anglia	jason.chilvers@uea.ac.uk
7.	Esguerra	Alejandro	UFZ	alejandro.esguerra@ufz.de
8.	Gramels- berger	Gabriele	Free University Berlin	gab@zedat.fu-berlin.de
9.	Görg	Christoph	UFZ	christoph.goerg@ufz.de
10	Heubach	Katja	UFZ	katja.heubach@ufz.de
11	Hulme	Mike	University of East Anglia	m.hulme@uea.ac.uk
12	Krauss	Werner	Helmholtz Zentrum Geesthacht, Institute of Coastal	werner.krauss@gmail.com
13	Lidskog	Rolf	Örebro University	rolf.lidskog@oru.se
14	Lövbrand	Eva	Center for Climate Science and Policy Research, Linköping University	eva.lovbrand@liu.se
15	Vandewalle	Marie	UFZ	marie.vandewalle@ufz.de
16	Marquard	Lisa	UFZ	lisa.marquard@ufz.de
17	Miller	Clark	Consortium for Science, Policy & Outcomes, Arizona State University	clark.Miller@asu.edu
18	Müller- Mahn	Detlef	University of Bayreuth	muellermahn@uni- bayreuth.de
19	Nadim	Tahani	Museum für Naturkunde Berlin	tahani.nadim@mfn-berlin.de
20	Neßhöver	Carsten	UFZ	carsten.nesshoever@ufz.de
21	Paulsch	Axel	Institute for Biodiversity	paulsch@biodiv.de
22	Petersen	Arthur	IVI Amsterdam/ PBL PCC	arthur.Petersen@pbl.nl
23	Pregerning	Michael	University of Freiburg	michael.pregernig@ifp.uni- freiburg.de
24	Moynihan	Ruby	UFZ	ruby.moynihan@ufz.de>
25	Settele	Josef	UFZ Halle	josef.settele@ufz.de
26	Swarnakar	Pradip	UFZ	pradip.swanarkar@ufz.de
27	Turnhout	Esther	Wageningen University	esther.turnhout@wur.nl
28	Vasileiadou	Eleftheria	IVM Amsterdam	eleftheria.vasileiadou@vu.nl
29	Weiland	Sabine	UFZ	sabine.weiland@ufz.de
30	Winter	Marten	iDiv	marten.winter@idiv- biodiversity.de

References

- Biermann, Frank, Philipp Pattberg, Harro Van Asselt, and Fariborz Zelli. 2009. "The Fragmentation of Global Governance Architectures: A Framework for Analysis." *Global Environmental Politics* 9 (4): 14–40.
- Brown, Mark B. 2009. *Science in Democracy: Expertise, Institutions, and Representation*. The MIT Press.
- Callon, Michel, Pierre Lascoumes, and Yannick Barthe. 2009. *Acting in an Uncertain World: An Essay on Technical Democracy*. The MIT Press.
- Chilvers, Jason. 2008. "Deliberating Competence: Theoretical and Practitioner Perspectives on Effective Participatory Appraisal Practice." *Science, Technology, & Human Values* 33 (2): 155–185. /z-wcorg/.
- Cornell, Sarah, Frans Berkhout, Willemijn Tuinstra, J. David Tàbara, Jill Jäger, Ilan Chabay, Bert de Wit, Richard Langlais, David Mills, and Peter Moll. 2013. "Opening up Knowledge Systems for Better Responses to Global Environmental Change." *Environmental Science & Policy*.
- Gupta, Aarti, Eva Lövbrand, Esther Turnhout, and Marjanneke J. Vijge. 2012. "In Pursuit of Carbon Accountability: The Politics of REDD+ Measuring, Reporting and Verification Systems." Current Opinion in Environmental Sustainability 4 (6): 726–73.
- Hulme M., Mahony M., Silke Beck, Christoph Görg, Hansjurgens B., Hauck J., Carsten Neßhöver, et al. 2011. "Science-policy Interface: Beyond Assessments." *Science* 333 (6043): 697–698.
- Jasanoff, Sheila, and Marybeth Long Martello, ed. 2004. *Earthly Politics: Local and Global in Environmental Governance*. MIT Press.
- Keohane, Robert O., and David G. Victor. 2011. "The Regime Complex for Climate Change." *Perspectives on Politics* 9 (01): 7–23.
- Latour, Bruno. 1999. *Pandora's Hope : Essays on the Reality of Science Studies*. Cambridge, MA.: Harvard University Press.
- ———. 2008. "«It's Development, Stupid!» or How to Modernize Modernization?" Revue Électronique Des Sciences Humaines et Sociales.
 http://www.espacestemps.net/en/articles/itrsquos-development-stupid-or-how-to-modernize-modernization-en/.
- Lezaun, Javier, and Linda Soneryd. 2007. "Consulting Citizens: Technologies of Elicitation and the Mobility of Publics." *Public Understanding of Science* 16 (3): 279–297.
- Lynch, Michael, and Steve Woolgar, ed. 1990. *Representation in Scientific Practice*. Cambridge: MIT Press.
- NesNet Workshop. 2011. "Making a Difference with IPBES: Leipzig Consideration Derived from an Expert Workshop on Science-Policy Interfaces and Nested Networks, Held in Leipzig, Germany, on 11-13 May 2011." http://www.ipbes.net/views.html?start=5.
- Nordhaus, Ted, and Michael Shellenberger. 2007. *Break through: From the Death of Environmentalism to the Politics of Possibility*. Houghton Mifflin Harcourt.
- Ostrom, Elinor. 2010. "Polycentric Systems for Coping with Collective Action and Global Environmental Change." *Global Environmental Change* 20 (4): 550–557.
- Scott, James C. 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven; London: Yale University Press.