

# Transforming the Culture of Environmental Decision-Making

*“Creating space for a transdisciplinary dialogue amongst those working on understanding and promoting transformative changes in environmental decision-making.”*



A summary report from a ‘T-Labs’ workshop on 29th August 2017, preceding “Transformations 2017: Transformations in Practice”, hosted by the Centre for Environmental Change and Human Resilience (CECHR) Dundee, Scotland, UK



<http://www.transformations2017.org>

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## Rationale for workshop

Many have argued that environmental management needs to become more participatory, adaptive and systemic. This entails transformative changes in decision-making processes: however, achieving this is easier said than done. A particular problem seems to be changing the culture or framings which shape environmental management. Such pre-existing ways of working and thinking often prove very 'sticky' as they interact to resist change.

This workshop aimed to tackle this challenge head on, by bringing together academics and practitioners who already have experience of study or involvement in initiatives attempting to change environmental decision-making. The workshop was advertised and was promoted as part of the Transformations 2017 conference, which it preceded; and was open to anyone interested in attending. The workshop agenda and of the 20 participants are provided as annexes to this report. Attendees' roles ranged from consultants to academics, together with staff from public agency and NGOs.

This workshop had the following aim: "To enable a transdisciplinary dialogue amongst those working to understand and enable transformative changes in environmental decision-making. To share and deepen understanding of how to transform the culture of environmental decision-making." The tangible outputs were an oral report made to the main conference plenary convened by Per Olsson on 30<sup>th</sup> August 2017, and this report.



## What is our vision for "transformed" environmental decision-making?

After an introduction to the workshop and each other, participants worked in 3 small groups to discuss and explore if we shared a general "vision" or "ethos" for a transformed culture of decision-making. The workshop had been advertised with the statement that such decision-making should be adaptive, participatory and holistic. This was generally agreed amongst participants to be needed across venues and scales ranging from individual choices to international policy.

This transformed culture of decision-making should be built on respect for others, 'genuine engagement' that openly and transparently considers all concerns and issues from an early stage, is informed by multiple forms and sources of evidence (e.g. not just science). This likely entails the use of a neutral broker to manage the inevitable power dynamics and the process should 'open up' to consider multiple potential pathways or solutions, before 'closing down' to focus ideas and make choices.

It is important to note that such decision-making processes will not necessarily result in a consensus. Nor may the existing views and priorities of environmentalists always prevail (though we agreed that avoiding environmental harm is a required outcome). Indeed, part of the transformed culture will often require those

with fixed views to better listen to the views and perspectives of other, and to accept forms of evidence other than science. A culture of humility is needed.

There is not always a distinct difference between the goal we wish to achieve and the techniques and processes that we believe can achieve it (e.g. the ends versus the means). For example, actively encouraging a diversity of stakeholder groups to be represented in deliberation was discussed as something that can help decision-making processes and outcomes to better reflect more interests and topics, but can also be seen as a goal in itself.

## Examples of initiatives to transform environmental decision-making

Prior to the meeting, participants were asked to share an example based on their experiences of studying or involvement in initiatives that aimed to change environmental decision-making. Fifteen examples were shared in advance, and two more on the day. Based on these examples, the facilitators prepared a presentation which briefly summarised their range, and the most common barriers and enabling factors that had been reported across the group.

These examples were diverse, representing a range of locations across the world (from Guyana to New Zealand or Scotland), and illustrated initiatives operating at a range of scales or levels (from pan-EU water policy through to organisation change or forestry site management). Natural resources and topics that were the focus of the interventions ranged from catchment management through to endangered species protection, and the installation of green infrastructure.

In no particular order, the examples include:

- 1) Fostering collaboration to address multiple challenges to the Xochimilco wetland of Mexico City
- 2) The EKLIPSE approach to providing knowledge to inform policy decision-making
- 3) Mainstreaming climate change within a Dutch development organisation.
- 4) Supporting development and implementation of European freshwater policy
- 5) Using a Civic Council process to deliberate the future of regional development in Western Austria
- 6) Developing plans to transition to a 'Green Economy' in Guyana.
- 7) The influence on governance arising from Marine Spatial Planning
- 8) Knowledge use in green infrastructure decision-making
- 9) Engaging & empowering Scottish communities and stakeholders in rural land use and management
- 10) Changing the internal work culture of an international environmental NGO
- 11) Assessment & tool development to facilitate future decision-making about Scottish wildlife conflict
- 12) Revising regional natural resource management plans by Australian regional statutory agencies
- 13) Developing participatory deliberative initiatives to develop a collaborative water resource management in New Zealand
- 14) Encouraging agricultural innovation using legumes to support sustainable food systems
- 15) Changing the internal work culture of a statutory agency for conservation.
- 16) Introducing new priorities for restoration of plantations within ancient woodlands.
- 17) Introducing innovation to improve the resilience of rain-fed agriculture in Sub-Saharan Africa

These examples were shared between participants prior to the workshop.

## Barriers to transforming the culture of environmental-decision making

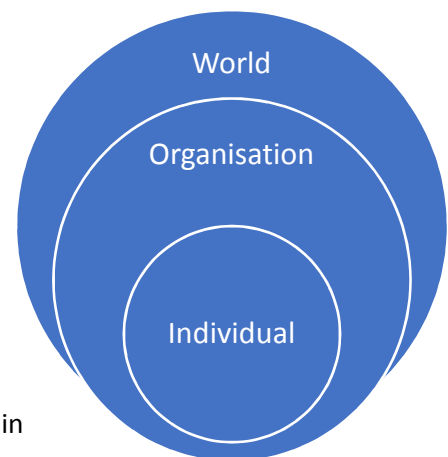
We discussed, in two small groups, the barriers as summarised by the facilitators to establish: (i) Are any barriers missing? (ii) What are the most important themes? (iii) Why do they occur and how do they play out across the decision-making process? The resulting list of barriers to change was compiled:

- )] Perception that new approaches are too expensive or too slow
- )] Perceived lack of evidence for the value of new approaches to decision-making
- )] Lack of understanding of how socio-ecological systems function, and how to change them
  
- )] Diverse language, interpretations, concepts, framings & worldviews
- )] Insufficient attention to values and culture
- )] Non-acknowledgement of loss involved in making change
- )] Lack of imagination about each other and the future
- )] Lack of appreciation of individual agency
  
- )] A desire or pressure to communicate simple messages and provide simple solutions
- )] Reactive decision-making, and pressure for short-term fixes
- )] Lack of transparency about decision-making and past change processes
  
- )] Institutions (government and other e.g. NGO) unsuited to enabling governance and collaboration
- )] Technical 'lock in'
- )] Economic 'lock in'
  
- )] Attitudes to (new) risks compounded by lack of leadership support
- )] Organisational inertia resisting change
- )] Organisational 'churn' causing staff turnover and loss of skills and knowledge
- )] Lack of skills or wrong skills are valued



### Structuring how we think about barriers

The facilitators presented a simple way of thinking about the challenges to making change that they had derived from previous work on the Ecosystem Approach. This uses the idea of three types of interacting 'sticking point' that arise from previous ways of working, thinking and managing the environment<sup>1</sup>. Sticking points are similar to the idea of lock-in, but slightly less deterministic. Whilst the group could relate to these sticking points, they also thought that it disguised the role of the individual, and that technical and economic constraints on change need to be more explicit. Barriers to change were considered to arise from all 3 levels in the diagram on the right, with nested circles being affected by the constraints and opportunities provided by the outer circles. There are other structures that may help to think through the possible barriers to change – for example the process of considering Knowledge, Rules and Values (knowing what to do, knowing how to do it, and knowing what we want to do), all of which need to come together to allow the possibility of change<sup>2</sup>.



<sup>1</sup> Waylen & Blackstock 2015 <https://www.ecologyandsociety.org/vol20/iss2/art21/> and in summary [http://www.hutton.ac.uk/sites/default/files/files/projects/Sticking\\_points\\_Research\\_summary.pdf](http://www.hutton.ac.uk/sites/default/files/files/projects/Sticking_points_Research_summary.pdf)

<sup>2</sup> Goddard et al 2016 <http://www.sciencedirect.com/science/article/pii/S1462901115301210>

## Enablers for transforming the culture of environmental-decision making

After discussing the barriers, we turned our attention to potential enablers of change that could help us achieve a transformed culture of decision-making. Before lunch everyone was invited to brainstorm ideas – based on their experiences and what they had just heard about the barriers that needed to be tackled. These were then grouped over lunch, and formed the basis of the afternoon’s discussion.



After the post-it notes had been loosely grouped, it became apparent that they spanned a range of ideas from how to initially interest and engage people in the need for transformation, through to monitoring and evaluating a process designed to achieve transformation. However, it is important to recognise that this should be an iterative process (i.e. a cycle, not a one-way process with a final endpoint) and that feedback and interventions can occur into any part of this cycle. The steps and principles

identified included:

- ) Raise awareness of the need for change
  - o Influence education systems
  - o Work both to shape influential top-down drivers, but also work bottom-up
  - o Use any windows of opportunity provided by social-political changes or environmental crises
- ) Follow principles of good stakeholder engagement to set up a change process
  - o Carry out stakeholder analysis – i.e. scope all the groups needed
  - o Engage stakeholders early (i.e. to define agendas, not just to solve a preset problem)
  - o Establish shared values, language, meaning and concepts
  - o Use facilitators trusted and able to allow a fair and equitable process for joint working
  - o Allow for dissonance, and disagreement
- ) Provide appropriate resources to support these processes
  - o Provides resources and training for facilitation
  - o Foster leadership and champions
  - o Allow space and time for disagreement, failure or slow process
  - o Consider techniques such as scenario-planning
- ) Consider implementing specific tools and techniques
  - o Collect information, evidence, compile databases on existing practices and examples that may inform the current process
  - o E.g. institutional hacks (and many more)
  - o Consider policy, economic and technical changes to current institutional systems
- ) Carry out monitoring and evaluation and use the results for learning
  - o ‘Sell the sizzle’ – focus on what communicating and celebrating what works
  - o Horizontally network across initiatives to share ideas and learning.
  - o Use peer pressure - benchmark across organisations.

Participants discussed the items that they found most intriguing and wished to work with further. Some of the listed items were combined to form the following list of most ‘intriguing’ issues that were discussed in a ‘carousel’ format:

### i. Building capacity and enabling leadership

Discussion on this point noted that different styles of leadership should be recognised and encouraged (e.g. facilitator, visionary, agent of change). To some extent the reliance on leaders or champions reflects limitations in our current systems – relying on them runs the risk of burnout or capture when leaders have too much power over the process. Leadership-networking could help to

support and improve the capacity of champions, and establishing processes that encourage diversity could help to avoid the over-dominance by – or over-reliance on – individual leaders.

ii. Allowing for dissonance, disagreement and difference

Processes will often not be able to reach a consensus, and should not promise this: it is important to manage expectations from an early stage. This should establish that differences are entirely reasonable, but this does not mean that it is okay to act badly (e.g. it is okay to disagree, but not to be disagreeable). Building a shared understanding of a problem at an early stage, and role-playing, can both help participants to be more willing to expect and accept differences.

iii. Creating fair and equitable processes

Fairness and equity is a goal in itself, as well as a means to improve buy-in and support for the other outcomes of a change. Although it is important to consider a diversity of voices and interests, it is a mistake to assume that local participation will always equate with more fair processes, as sometimes occurs. Therefore it is important that a neutral intermediary is always used to organise any process. Set criteria for planning and assessing fair and equitable processes (i.e. those derived from principles of good governance) could help. These scores could be externally- or self-assessed (there are pros and cons to each approach) but should be published and shared across initiatives and with those who fund or enable such processes.

iv. Communication and awareness raising

It is possible that our past approaches to communication and awareness raising have not been very efficient, so we should learn from the effects of these before risking money on significant new approaches. Whilst a wealth of communication tools exist – and probably all must be used - we must go beyond these to consider the deeper issues of how to engage with people's existing framings. It is important to use existing priorities and problems as 'hooks' to draw them into conversations about the need for sustainability, and where possible to use a positive framing that focuses on individual's agency and potential, with using threats or messages of blame.

v. Tools and techniques for enabling change

A wide range of tools and techniques exist, so it is important to carefully assess and consider what might be appropriate for a particular process. Different tools serve different purposes: bringing people together, to eliciting values and meaning, then embracing and managing conflict, acknowledging and dealing with uncertainty, and looking to the future. Therefore, different tool(s) will probably be appropriate at different stages of the process. Choosing and using tools within agreed frameworks (e.g. Socio-ecological systems, ecosystem approach, values-rules-knowledge) can help to ensure the choice is clearly thought through.

## Provocateur comment, and final comments

Anna Wesselink (see here for more [information](#)) had been invited to reflect on these issues and to highlight if any important questions might need more attention. Anna's presentation pointed out that environmental professionals had been trying to achieve influence on society for a long time, using concepts like 'Post Normal Science' 'Transdisciplinarity', 'Sustainability Science' – thus it was unclear if Transformation Science would achieve much change over these previous initiatives. Anna noted that environmental scientists' political engagement goes against hegemonic interests that shape how agendas are set, and how problems are defined and governed. Scientists often do not recognise these processes, which limits their success in influencing them. Furthermore, their attempts to influence the debates, by providing information that reduces uncertainty about a problem or how to tackle it, ignores the fact that there are disagreement about many problems and/or how to address them. The processes of defining and agreeing problems (called 'powering') are ultimately often more important to action than the processes of understanding problems

(‘puzzling’)<sup>3</sup>. Both processes require knowledge, but different types of knowledge. If we wish to achieve more success in influencing societies’ priorities and achieving transformation, it is important that we build more understanding of issues such as coalition strategies, the personal consequences of different options for decision-makers, mapping of beliefs in relation to topics, etc. We need to work with and within the constraints of existing processes and problem-framings.

The intervention stimulated a round of further discussion. Many agreed these were not new conversations but there was a new context associated with global connectivity and awareness of earth science drivers that are influencing the desire and need for engagement. Ironically, although these drivers are often global e.g. via the United Nations, the group often think that the local level has been, and remains, the test ground for innovation and change. We discussed why some governments (e.g. within Scotland) were advocating empowerment and transformation. This led onto a discussion about windows of opportunity and understanding the political settings in which we work; and also the fact that environmental scientists are political actors in a system where outcomes from knowledge production processes are emergent and can’t be controlled or predicted. There was also a debate about whether our current institutions, like governments, were able to change. Some argued that they are ‘stranded assets’ and true change will come from social movements that focus on individual choices to adopt new ideologies, philosophies and cultures, to trigger creative destruction of our institutional barriers. This can lead to depletion and loss, but also provide space for new ideas. There was enthusiasm for the ideas of contagion via networks focussed on long-term and open-ended outcomes. Although the issues are daunting – we talked about the need for change in social systems, economic systems and mainstreaming the environment across all policy sectors - there was hope. Change is happening.

Participants were invited to share resources and ideas to continue the discussion. They were also invited to leave individual commitments for changes they may make as a result of this meeting, to be emailed back to them in a few months to remind them. These pledges ranged from examining one’s organisation in terms of the ‘sticking points’, to communicating about these issues with colleagues, students and contacts. More than one pledge made a commitment to give more careful consideration of stakeholder views, and missing voice(s), and/or to use their current priorities and projects as a starting point for introducing ideas and action needed for transformation towards sustainability. These changes reflect the discussions in how they balance identifying action for self and as well as others, and in influencing individuals as well as organisations and higher-level institutions.

## Postscript: Reflections on the day by the facilitators

Very often our discussions noted that individuals or small-scale initiatives are limited by the rules or opportunities created by larger-scale organisations and processes, i.e. by their priorities for resource allocation. However, achieving change by larger-scale institutions was often felt to be virtually impossible, or at least too slow for the scale of changes we need to see to achieve transformation.

Understanding ourselves – whatever our roles – as political actors will help us to better understand our individual agency. This will help us not only to understand the potential ‘windows of opportunity’ that may allow us to influence large-scale institutions, but also the changes that we can make by working at smaller-scales; in ourselves, with colleagues and in our local communities. Communication technology then allows us to network these initiatives horizontally, to share ideas, spark learning and offer solidarity; these can also be used to coordinate lobbying and communication with larger-scale bodies.

As was observed during the day, some of the themes discussed – both barriers and enablers to transforming decision-making – have been discussed before, albeit sometimes in connection with other concepts such as sustainability. Are the challenges we consider now a case of “old wine in new bottles”? Although revisiting issues confirms that we are focused on important challenges, this can also risk the feeling that our

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<sup>3</sup> Wesselink & Hoppe 2011 <http://journals.sagepub.com/doi/10.1177/0162243910385786>

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conversations are repetitive and that progress is dauntingly slow or difficult. In future, a good starting point for further discussion will be to explore what we can learn from issues that recur (a 'frustration forum'?).

Many of these themes – about the importance of individual agency, emotion and mental models, the risks and challenges of institutional reform, the opportunities offered by networks, and the new skills needed for transformative scientists, were features of the Transformations Conference. The following three days offered further spaces to explore and deepen these ideas.



## Annex I - Workshop Agenda

<b>09:10 – 09:30</b>	<b>Registration and refreshments</b>
09:30 – 10:00	Welcome & Aims of Workshop Personal introductions
10:00 – 10:30	“A transformed culture of Environmental Decision-Making” – What would this look like? Small group discussion and quick feedback
10.30 – 11.05	Facilitator presentation summarising experiences shared before meeting Plenary discussion to share additional experiences and comments
<b>11:05– 11:20</b>	<b>Break and refreshments</b>
11.20 – 12.15	Recap main points from our shared experiences – exploring and structuring common barriers Group and plenary discussion
12:15 – 12:30	What can enable us to overcome barriers? Brainstorm using sticky notes
<b>12:30 – 13:30</b>	<b>Lunch (downstairs in Dalhousie)</b>
13:30 – 13:55	Recap morning & synthesise results of pre-lunch brainstorm
13:55 – 14:55	Carousel discussion on enabling factors
<b>14:55 – 15:10</b>	<b>Break and refreshments</b>
15:10 – 15:20	Provocateur comment – Anna Wesselink
15.20– 16:15	Plenary discussion
16:15 –16:30	Summary – key messages and next steps
<b>16:30</b>	<b>Close</b>

## Annex II - Workshop Participants

Anna Wesselink	Senior Researcher, Department of Integrated Water Systems and Governance, IHE Delft
Brian Harding	Climate change adaptation consultant
Carla-Leanne Washbourne	Lecturer in Environmental Science and Policy, Department of Science, Technology, Engineering and Public Policy at University College London (UCL STEaPP)
Chris Leakey	Policy and Advice Officer, Scottish Natural Heritage (SNH)
Daniel Oppold	Research Associate and Academic Officer in Organisational Development, Institute for Advanced Sustainability Studies (IASS), Potsdam
Diana Pound	Director, ‘Dialogue Matters’
Emily Elsner (Adams)	Elsner Research and Consulting
Galiné Yanon	Research Scientist at Walker Institute, University of Reading
Josselin Rouillard	Fellow, Ecologic Institute, Berlin
Juliette Young	Biodiversity Policy Researcher, Centre for Ecology and Hydrology (CEH)
Katherine Irvine	Senior Researcher in Environment, Wellbeing and Sustainable Behaviour, Social, Economic and Geographical Sciences, James Hutton Institute
Kerry Waylen	Senior researcher in Environmental Governance, Social, Economic and Geographical Sciences, James Hutton Institute
Kirsty Blackstock	Work Package Coordinator for Sustainable and Integrated Management of Natural Assets, Social, Economic and Geographical Sciences, James Hutton

	Institute
Lakshmi Charli Joseph	PhD student, National Laboratory of Sustainability Sciences, Institute of Ecology, National Autonomous University of Mexico
Lucy Greenhill	PhD student, Scottish Association for the Marine Sciences (SAMS)
Nicholas Warren	Consultant to A Rocha
Paul Ryan	Principal, Interface NRM
Pete lanetta	Plant Biologist and Ecologist, James Hutton Institute
Reinmar Seidler	Lecturer in Biology, College of Science and Mathematics, University of Massachusetts
Shona Russell	Senior Lecturer in Knowledge and Practice, University of St Andrews