

## Communicate or Perish – How to improve the social engagement of science?

#### **Dr. Cornelia E. Nauen**

Mundus maris Sciences and Arts for Sustainability asbl

ZMT, Bremen, 22/10/2014

## **Structure of the talk**

- Late lessons from early warnings
- Why?
- Connecting concepts to communication and engagement practices to cope with change

## Let's get started

- Late lessons from early warnings
- Why?
- Connecting concepts to communication and engagement practices to cope with change

## Late Lessons...

"There is something profoundly wrong with the way we are living today. There are **corrosive pathologies of inequality all around us** ... These are reinforced by short-term political actions and a **socially divisive language** based on the adulation of wealth.

A progressive response will require not only greater knowledge about the state of the planet and its resources, ... We will need a more ethical form of public decisionmaking based on a language in which our moral instincts and concerns can be better expressed."

## Late Lessons...?

"There has been a massive breakdown of trust: trust in the financial system, trust in bankers, trust in business and business leaders, trust in politicians, trust in the media, trust in the whole process of globalisation — all have been severely damaged, in rich countries and poor countries alike." <u>S. Green</u> (2009) in 'Good value: reflections on money, morality, and an uncertain world'

The scientific elites are also slowly losing public support – e.g. instances of misplaced certainty about the absence of harm, despite evidence to the contrary. **This has delayed preventive action**. <u>Wilkinson and Pickett</u> (2009, 2010) '*The Spirit Level. Why Equality is Better for Everyone*'.

## From early warnings

Among the few certain and enduring truths in the different sciences one comes from the work of **Elinor Ostrom**, who showed from her work on managing fisheries and ecosystems that complex problems can be solved, if there is transparent and respectful dialogue, visions are shared, trust is high and communities are activated to work from the **bottom-up as well as from the top down**.

As we navigate the Anthropocene, we will need to encourage more people to become involved. If we are to respond more responsibly to the early warning signals, we need to **re-design our style of governance to one which reflects a future defined by the local and specific,** but aware of the global and the "average".

## **Structure of the talk**

- Late lessons from early warnings
- Why?
- Connecting concepts to communication and engagement practices to cope with change

## Assessing risks and the cost of inaction

The rate of technological innovation and change is high, while most research still focuses on further validation of much studied topics and is not even publicly available.

Risks get too narrowly defined and assessments typically fail to address systemic features and complexities of real life.

This undermines applying the precautionary principle and creates much avoidable damage to people, ecosystems and other commons.

#### Why else are early warnings ignored?

Silos of epistomologies and disciplines

Weak or absent citizen involvement in agenda setting

Short-term nature of most political and financial horizons

Delaying strategies of companies by casting doubt on evidence of harm, --> +injustice by forcing victims to pursue their cases through civil compensation claims, if at all possible.

#### Grounding decisions, but seeking to understand global trends

Most of us optimise their decision in relation to a local context or, in any event, some reference points within our reach. It's human nature to compare ourselves with peers, here and now, not in the past and far-flung places.

That impregnates how we experience our world.

A.E. **Kahn** (1966) spoke in this context of the "Tyranny of small decisions" - nobody decided to ruin the world, but it's happening anyway – unexpected consequences of the cumulative effects of small actions in a complex world.

#### The "facts" don't speak

We underestimate the time it takes to contextualise specialist knowledge and break general scientific knowledge down to the level where operational capabilities are – locally/nationally.

Contextualisation means grasping the specialist knowledge and subjecting it to scrutiny from different angles and trials. That's more a social than a scientific process.

When citizens, the impact specialists, are associated with research in critically engaged ways, that process is helped. We saw in practice an accelerated uptake and use. It's also an escape route to the "Tyranny".

## **Structure of the talk**

- Late lessons from early warnings
- Why?
- Connecting concepts to communication and engagement practices to cope with change

## **Connecting concepts and practice (1)**

We distinguish – following Michael Fullan (2002) – several principles / concepts associated with successful change processes:

- Moral purpose closing the gap between high and lower performing schools, social groups, teams in companies
- 2. Understanding the process of change Innovate selectively seeking coherence Appreciate that all change is bumpy early-on Reculturing: to make desired change stick, people need to change what they value and cooperate to make that happen

## **Connecting concepts and practice (2)**

#### **3. Improve relationships**

- \* Developing emotional intelligence is crucial
- \* Trying to be empathetic towards others try to put yourself in the shoes of others, particularly those belonging to other cultures and who may thus experience the situation in different ways.
- \* Good relationships are crucial for personal wellbeing, success in work, the ability to get things done and cope with change

#### 4 Creating knowledge

- \* Acquiring knowledge works best through sharing
- \* Practice creates deep knowledge. Continuous practice and learning is the 'real work'
- \* Action research methods.

## **Connecting concepts and practice (3)**

#### **5 Sharing and coherence making**

- Keeping a sense of purpose and coherence is essential in a complex world with its many nonlinear developments
- Being open to experience from elsewhere to feed the learning process and embrace different ways to approach the challenge, yet remaining focused on the goal(s)
- Aligning diversity towards the goal(s)
- Sharing responsibilities and foster leadership at all levels to ensure continuity and continuous evolution of the organisation, research centre, school, company, public adminstration
- Art of Hosting Conversations that Matter

#### Story telling for sustainable futures (1)

"We need new narratives that connect with peoples' deepest motivations and promote more radical action. Stories engage people at every level - not just in their minds but in their emotions, values and imaginations, which are the drivers of real change. So if we want to transform society, we must learn to tell - and listen to - a new set of stories about the world we want to create."

Simon Hodges, Storyteller

## Story telling for sustainable futures (2)



Fish rulers as teaching aids for more active learning in (almost) real life situations, here a market

Demonstration to the fish mongers is not enough; they suggest government endorsement and dialogue

## Story telling for sustainable futures (3)



Give experienced community leaders a voice, putting a human face on the numbers and conceptual knowledge in the sciences;

Connect such local experience to larger trends;

Oppose manipulation, e.g. posturing as 'science' to neutralise people's willingness to act by faking controversy.

## Story telling for sustainable futures (4)

A recent confrontation of catch reconstructions with the results of sociological and ethnographic research produced a richer picture for interpreting observed data and looking for alternative courses of action (MARE Conference, June 2013):





## Story telling for sustainable futures (5)

The International Roundtable "Spaceship Earth":

- Diversity in the room: scientists, artists, practitioners
- Appreciative Inquiry
- What we already know about the challenges mind maps and identifying the big issues
- Which levers to address these? Learning journeys
- Pro-Action Café and committing to do.





## For more ...

## http://www.mundusmaris.org

We encourage and welcome cooperation for the exploration of new avenues of critically engaged sustainability research in combination with experimental work and practice, creating also as many opportunities for young people as possible

#### I'm still a baby, let me live and grow



# **Thanks!**

#### info@mundusmaris.org