Context and effectiveness
Overview

- Effective arguments for biodiversity:
  - Bruce covered types of arguments
  - Eeva will discuss effectiveness
  - I’ll focus on role of context

- Links across FP7 projects
  - SPIRAL: effective science policy interfaces
  - BESAFE (and BIOMOT): effective arguments
  - OPERAs (and OpenNESS): effective tools and instruments
SPIRAL ‘Story’ (1)

- Science Institute for the Dutch Ministry of Water Management
- Integrated water management c.1988
- Nature: no clear figures
  - ships need 30m; farmers need X m3...
- Forty flagship species
  - spider/radar chart (‘amoeba’)
Policy question: what if Rhine cleaned up by 50% of heavy metal pollution?
  ◦ Answer: little impact! 90%+ needed.

“Bad message”: $$$ spent for little benefit!
  ◦ Must add chemical, biological, fisheries measures.
  ◦ Other Ministries (inc. Nature) resist interference.

Water ministry response: OK, forget it, focus on sewage and water quality, drop the ecosystem stuff.
Minister heard of the diagram
- Opened a conference with it
- “Ecological Dow Jones index of the North Sea”
- Insisted it must be in third water management plan

Why am I talking about this?
- Context: same arguments, different effects
- Other Ministries: They’re encroaching on our patch!
- Water Ministry: Political trouble: heads down.
- Scientist: Keep quiet? Publish? Dangerous territory!
- Minister: Hmmm, I could use this...
Climate expert Clive Spash 'heavied' by CSIRO management

NICOLA BERKOVIC  THE AUSTRALIAN  NOVEMBER 03, 2009  12:00AM

A CSIRO economist whose research criticising emissions trading schemes was banned from publication said last night he had been subjected to harassment by the senior agency management.

Clive Spash also accused the agency of hindering public debate and trampling on his civil liberties by preventing the research being published in British journal New Political Economy.

Dr Spash defended the paper, The Brave New World of Carbon Trading, saying it was a dispassionate analysis of ETS policies and was not politically partisan.

He was told in February he could publish the work if it were peer reviewed. But in July, CSIRO management said it could not be published after it was cleared for publication.

This month, he was informed he could not publish it even in his private capacity, because it was "politically sensitive". Within 24 hours, he also received a letter outlining a list of trivial instances in which he was accused of breaching CSIRO policy, for example not completing a leave form properly.
Context: stakeholders

- Sleeping Giant
  - Influential
  - Passive
  - Backer

- Saviour
  - Influential
  - Active
  - Backer

- Friend
  - Influential
  - Active
  - Backer

- Terrorist
  - Influential
  - Active
  - Blocker

- Irritant
  - Insignificant
  - Active
  - Blocker

- Trip Wire
  - Insignificant
  - Passive
  - Blocker

- Time Bomb
  - Influential
  - Passive
  - Blocker

- Acquaintance
  - Insignificant
  - Passive
  - Backer
<table>
<thead>
<tr>
<th>Interest</th>
<th>Perspective</th>
<th>Power</th>
<th>Understanding</th>
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</thead>
<tbody>
<tr>
<td>Politicians</td>
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<tr>
<td>Policy makers (environmental)</td>
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<tr>
<td>Policy makers (other sector)</td>
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<td>Government agencies (executive)</td>
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<td>NGOs</td>
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<td>Academic</td>
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<tr>
<td>Consultancy</td>
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<td>Private industry</td>
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<tr>
<td>Land managers, farmers, foresters etc.</td>
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<tr>
<td>Land owners</td>
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<tr>
<td>Property owners and residents</td>
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<tr>
<td>Users groups (hunters, anglers, tourists etc.)</td>
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<td>Media</td>
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<tr>
<td>General public</td>
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<tr>
<td>Other (explain)</td>
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</table>
“Scientists tend to be very matter of fact. It’s all facts so they present it as facts and then it’s...just not accessible.

And they think “well, why is it not accessible?”

Because ... that’s not how people really communicate.”
Which one would you open a conference with?
# Frame of reference

<table>
<thead>
<tr>
<th>Feeling of entitlement: I’m paying for this service!</th>
<th>Concern for others</th>
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<tbody>
<tr>
<td>Transfer of blame</td>
<td>Responsibility for own actions</td>
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<tr>
<td>Distrust of motives</td>
<td>Acceptance of external conditions</td>
</tr>
</tbody>
</table>

The choice of framing can influence arguments used and their effectiveness

“While payments may strengthen community relations and simplify action for environmental care, they may also introduce a purely instrumental logic and in some cases worsen the environmental status by crowding out environmental virtues.” (Vatn 2010 “An institutional analysis of payments for environmental services”, Ecological Economics, 69:6)
## Decision context

<table>
<thead>
<tr>
<th>Primary Issue</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Protected areas</td>
<td>Designation, management, agreements etc. relating to formally designated protected areas</td>
</tr>
<tr>
<td>Resource management</td>
<td>Agriculture, forestry, fisheries, water, energy, hunting...</td>
</tr>
<tr>
<td>Restoration</td>
<td>Habitat creation, restoration, clean-up</td>
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<tr>
<td>Species management</td>
<td>Invasive species, alien species, wildlife, reintroductions, endangered species plans</td>
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<tr>
<td>Development</td>
<td>Impact assessment, consideration of negative impacts on biodiversity from development</td>
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<tr>
<td>Reducing human impacts on biodiversity</td>
<td>Pollution control, climate change regulation/mitigation...contexts aimed at controlling or reducing negative impacts of humans on nature</td>
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<tr>
<td>Biodiversity impacts on human activity</td>
<td>Enhancing biodiversity for, or recognising, its impacts on humans – flood control, recreation, aesthetics, health benefits...</td>
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<tr>
<td>Other general conservation</td>
<td>Priority setting, biodiversity action plans, corridors/connectivity, adapting to climate change</td>
</tr>
<tr>
<td>Other (explain)</td>
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</tbody>
</table>
## Policy drivers

| Implementation of policy or legal obligation |
| Impact assessment, policy appraisal          |
| Attempt to influence policy or opinion       |
| Setting targets, prices, limits             |
| Focus on enhancing ecosystem services       |
| Focus on biodiversity/conservation gain     |
| Other (explain)                             |
Cognitive dissonance

Human Trait of Consistency
- Thought
- Emotion
- Behavior

Challenging Information
- Denial
- Confirmation Bias
- Dissonance

I take actions based on my beliefs
I adopt beliefs about the world
I draw conclusions
I make assumptions based on the meanings I added
I add meanings (cultural and personal)
I select "data" from what I observe
Observable "data" and experiences (as a videocassette recorder might capture it)

The reflexive loop (our beliefs affect what data we select next time)
DOUBLE FACEPALM

FOR WHEN ONE FACEPALM DOESN'T CUT IT
CRELE: content, context, process

- **Credibility**: perceived quality, validity and scientific adequacy of the people, processes and knowledge exchanged;
- **Relevance**: salience and responsiveness of the SPI and knowledge to policy and societal needs;
- **Legitimacy**: perceived fairness and balance of the SPI processes;
- **Iterativity**: proposed as additional criterion in SPIRAL research.
# SPI Features

<table>
<thead>
<tr>
<th>Goal Features</th>
<th>Structural Features</th>
<th>Outcome Features</th>
<th>What to assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td></td>
<td>Social learning</td>
<td>Do SPI participants, audiences, wider public learn and change their thinking about biodiversity?</td>
</tr>
<tr>
<td>Output Features</td>
<td></td>
<td>Behavioural impact</td>
<td>Do SPI participants, audiences, wider public change behaviour as a result of learning?</td>
</tr>
<tr>
<td>Relevant outputs</td>
<td>Timely in respect accessible, comprehend efficient dissemination</td>
<td>Policy impact</td>
<td>Do SPI information, learning, and associated changes in policy-maker behaviour lead to changes in policy?</td>
</tr>
<tr>
<td>Quality assessment</td>
<td>Processes to ensure comprehensiveness robustness, and uncertainty</td>
<td>Biodiversity impact</td>
<td>Do the above changes lead to changes drivers and pressures threatening biodiversity, societal responses and the state of biodiversity?</td>
</tr>
<tr>
<td>Translation</td>
<td>Efforts to convey different domains and making the message for various audiences</td>
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