

WCRP Conference for
Latin America and the Caribbean:
Developing, linking and applying climate knowledge



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*Integrating climate into decision making and
planning: a systems view*

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OUTLINE

1. Setting the scene: the problem-situation
2. Relating knowledge to practice/implementation
3. Enhancing the connections between science, policy and implementation

INITIAL REMARKS



1. Decision makers and planners need guidance in making non-trivial decisions today under uncertain climate events and risks of tomorrow
2. Approaches based on linear thinking may be very limited to enhance the connectivity between science, policy and decision makers
3. "Efforts for enhancing science-policy-practice connections require second-order processes of learning and engagement"
4. Unused knowledge is not "the problem"; the main problem relates to the way knowledge is understood and used (Ison et al., 2011)



Of central concern:
the relationship research-
policy-implementation

'How can we explain the gap between science and policy-making?'

The origins of the difficulty: conflicting domains of human thinking and action?

Climate Science

- *natural systems*
 - “tame” problems
 - one findable solution
 - behaviour is predictable

Decision Making (policy)

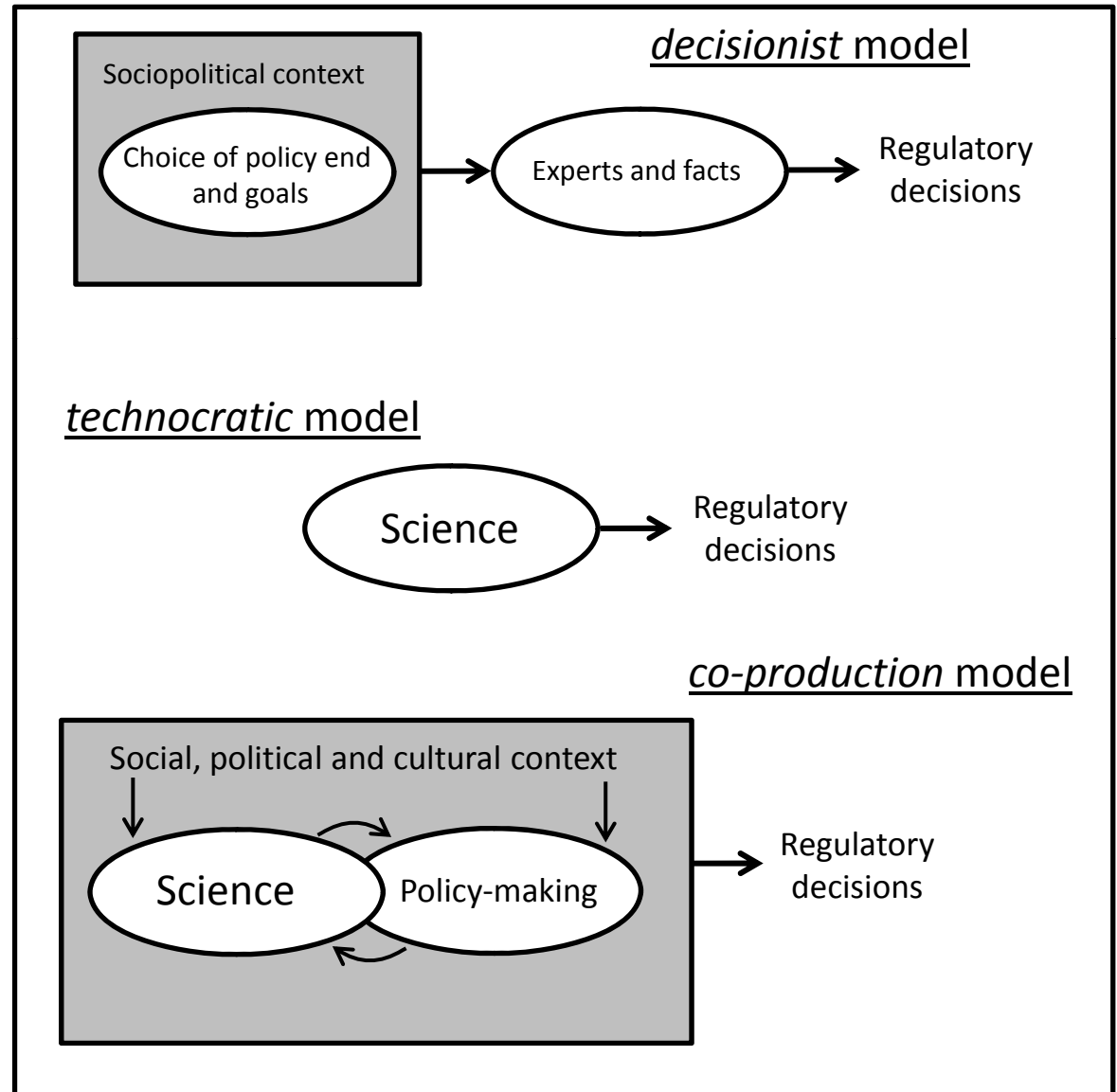
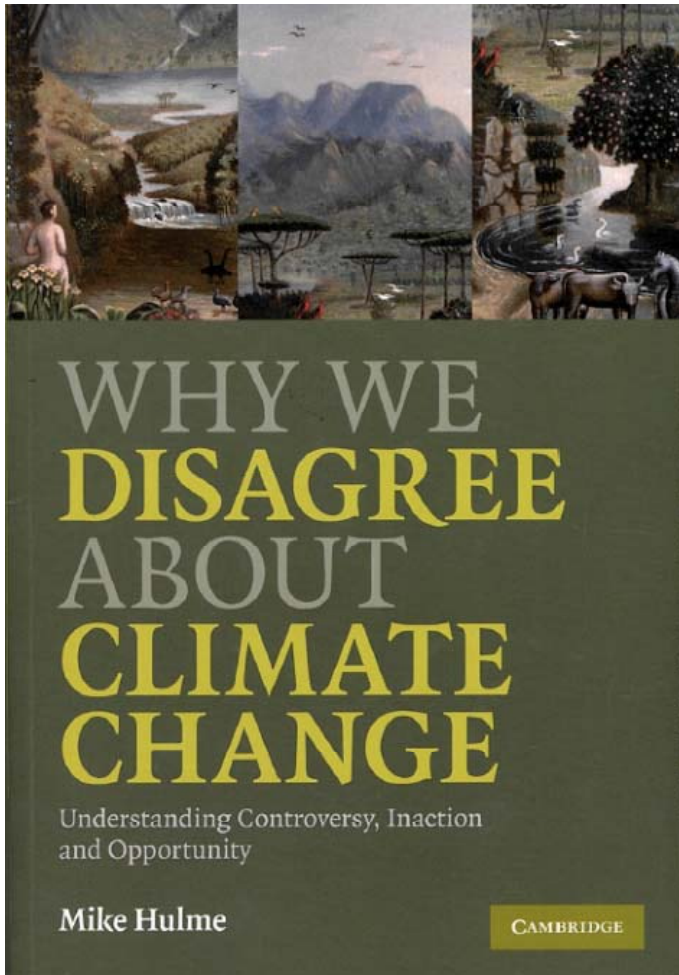
- *social systems*
 - “wicked” problems
 - many possible solutions;
 - behaviour is unpredictable
 - higher levels of uncertainty
-

Science and policy:



a *dualism* (either/or choice) or a
duality (an integrated whole)?

Science-policy models →



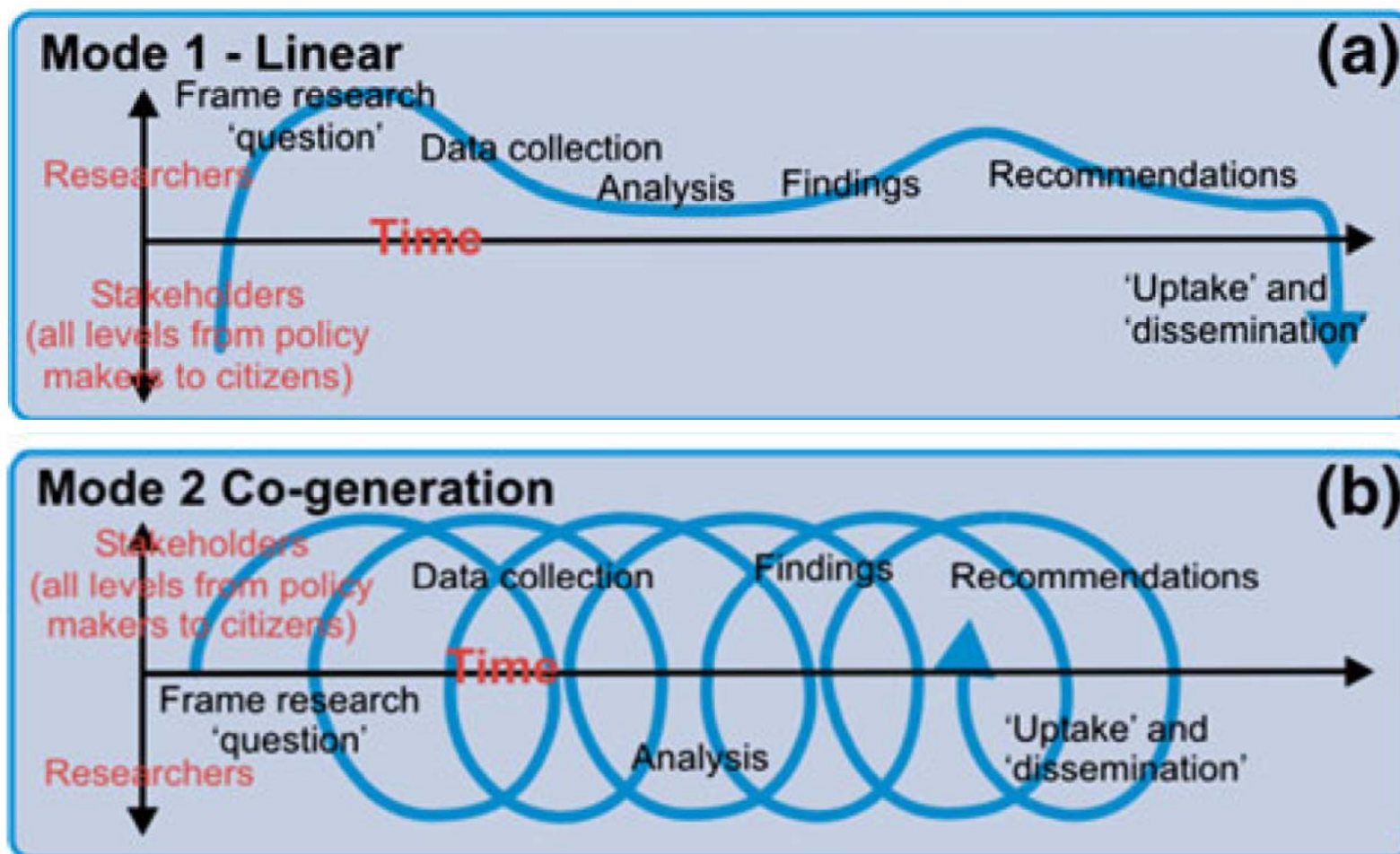
How (existing) knowledge can be related to practice?

The Received View: A role for context



- ❑ KNOWLEDGE IS APPLIED IN PRACTICE
- ❑ PRACTICE IS CONSTRAINED BY THE CONTEXT

Approaches to knowledge generation



How to enhance the connectivity between science and implementation?



Detail from *Arcone con le Sibille* (Raffaello)

What do we need/want?

- *Regarding climate knowledge and its integration into decision making and planning, what would be/is desirable? Who decides?*

Research initiatives

- ☐ Development of heuristic devices/mediating objects
- ☐ New types of conversations - Development of mutual understandings and opportunities for collaborative action
- ☐ Policy makers and researches need to be able to deliberate the formulation of research questions (relevant questions to policy and researchable to the scientist - the design of systemic action research)
- ☐ Institutional innovations



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FINAL REMARK

The research challenge we need to face is to develop messages capable of informing systemic action for innovative socio-ecological [climate] governance

"Act always so as to increase the number of choices"
Heinz von Förster – The Ethical Imperative

