Mixed Ontologies and Epistemologies in Resilience. Addressing Some of the Criticisms About Resilience

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This panel session seeks to investigate the underlying reasons for the following issues raised in the literature, from either an ontological or epistemological basis.

Resilience is presented as a trans-disciplinary science spanning the ecological and social sciences. An overarching assumption is that the ecological and social domains of the social-ecological systems can be addressed in a common conceptual, theoretical and modeling framework and philosophical framework. “You think that because you understand “one” that you therefore understand “two” because one and one make two. But you forget that you must also understand “and” (Sufi teaching story)”. Interdisciplinary thinking is often considered key to solving environmental problems, but it is unclear what this thinking is or would be and how it might be progressed in future. Mixing ontology and epistemology in the one research project as in the social-ecological system has proven to be difficult. A key issue impacting on the success of interdisciplinary research projects is the difficulty in developing a mutual understanding between not only disciplinary researchers but also interdisciplinary researchers coming from different perspectives and working in different contexts. And so it is with resilience, not only do ecological scientists have to understand each other but ecological and social scientists have to understand as well as understanding the “and” between all factors. It is quite understandable then that a review of the literature reveals a number of issues of philosophy, empiricism and application which I have distilled to four main ideas for discussion:

1. Is resilience a desirable outcome for social-ecological systems? ;
2. Empirical evidence. Can we identify case studies that clearly follow the theory of the resilience, including the adaptive cycle;
3. Translation to policy. How can resilience concepts aid in policy design and policy implementation; and
4. Deductive reasoning rests on the defined premises. Some argue that the premises are largely based on cultural origin.

These issues raise questions of philosophy, in particular ontology and epistemology between the different domains of science as well as the cognition of the scientists involved. Personality and temperament may play as much a role as the knowledge base both in
understanding the context and accepting and acknowledging alternative perspectives.

This panel will investigate these aspects of resilience in research and application.

Panel participants and papers:

Helen Allison – “Is resilience a desirable outcome for social-ecological systems?”

Fridolan Brand – “Empirical evidence. Can we identify case studies that clearly follow the theory of resilience, including the adaptive cycle?”

Richard Stoffle – “Sustainability, Resilience and the Use of Quality of Life Indicators As a Sustainability Assessment Measure”

Thomas Kirchhoff – “Defined premises of deductive reasoning. Are they largely based on cultural origin?”