Bridging The Gap

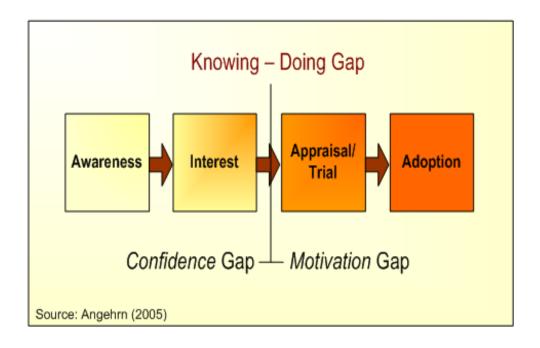
Why Its Important And How Resilience Thinking Can Help Us Get It Done

Mike Jones: Sand County Foundation and Resilience Alliance
Network

Resilience Alliance

What Gap Are We Talking About?

The "knowing-doing gap" (Pfeffer & Sutton, 2000) An unwillingness to adapt and change when the benefits of change are known.



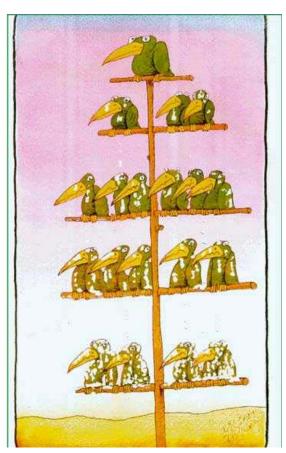
What Gap Are We Talking About?

The communication gap between those who have a good idea and those who need to know about it so that it is translated into action.

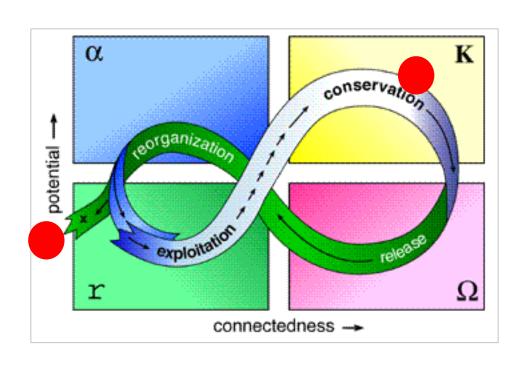
- The first rule of intelligent engagement: understand the other persons point of view before doing anything else.
- Related to Simon Levin's 8th Commandment for environmental management. In essence, observe the "Golden Rule".
- It builds the trust and social capital necessary for collaborative learning and doing: it builds resilience.

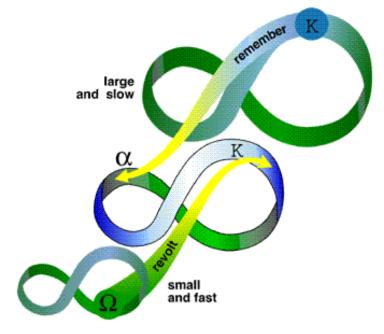
What Gap Are We Talking About?

The command and control gap in hierarchical management systems.



What is Resilience Thinking?





RATs: Resilience Adaptation and Transformation

Traps

Cross scale interactions

David Hoza: Utah

- Adaptation of dysfunctional land bill
- Transformation of a system trapped in conflict to a system of collaborative conservation

Todd Bryan: Northern California

- Transformation of a system that was locked in conflict into a system of collaboration.
- What "tipping point event" led to the transformation?
- Leadership that was provided to create and sustain the change process.
- What did the leaders do?

Elizabeth Ciuzio: New Jersey

- Critical fire management issues due to political gridlock over burning policy
- Loss of biodiversity suggesting the system is headed towards a poverty trap
- Collaborative conservation arose as a response to the threat

Urs Kreuter: Texas

- Habitat restoration for endangered species conservation at Ft. Hood.
- The Association demonstrated innovation and leadership to engage the military – maybe there is more?
- Created incentives for change through a restoration credit scheme.
- What were the ingredients of success in the collaboration between ranchers?
- What does Urs mean by a resilient partnership?

Why Bridging The Gap Is Important

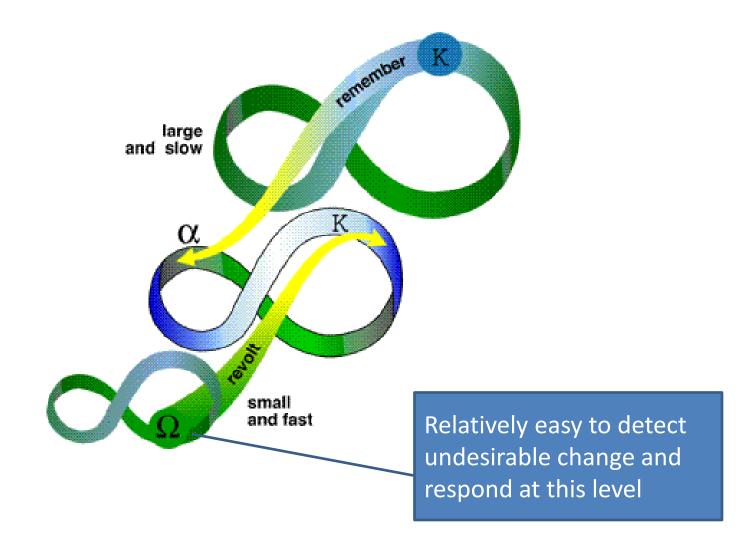


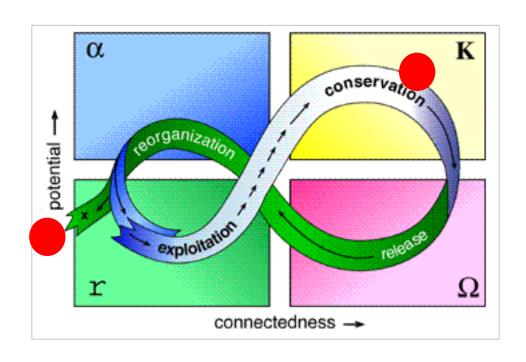
Detecting and averting undesirable change



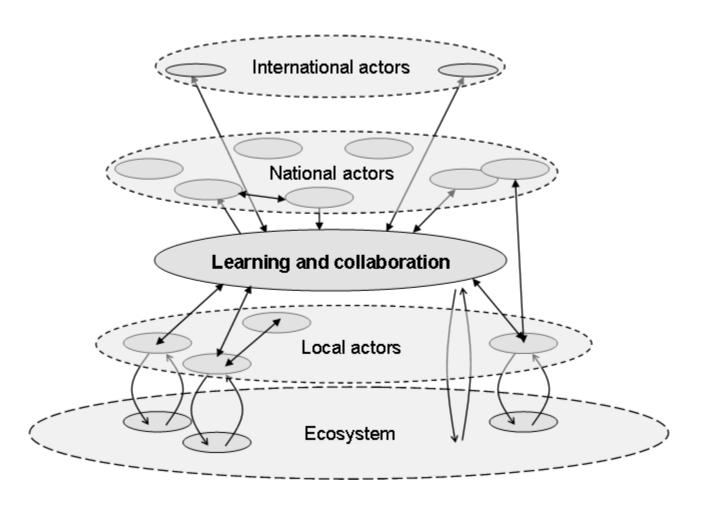


Why Bridging The Gap Is Important

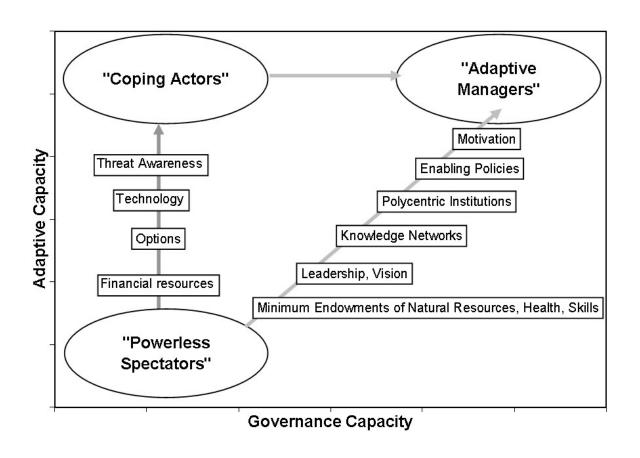




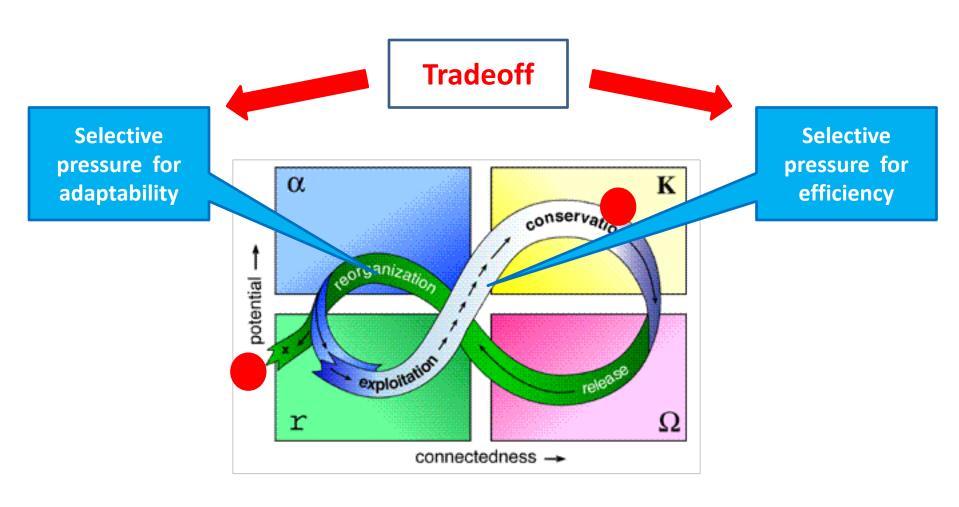
RATs: Resilience, Adaptation and Transformation Traps of rigidity and poverty



Schultz (2009) Actors in learning networks for adaptive co-management operating at multiple levels of scale



Schultz (2009) Transformation from powerless spectator to adaptive manager.



- 1. Promote and sustain diversity in all forms (biological, landscape, social, and economic).
- 2. Embrace ecological variability rather than control it.
- 3. Maintain a degree of modularity or disconnectedness.
- 4. Recognise the importance of slow variables like nutrient, carbon and water cycles.
- 5. Create tighter feedback loops between human actions and environmental outcomes.
- 6. Promote trust, well-developed social networks, and leadership.
- 7. Emphasise experimentation, learning, locally developed rules, and change.
- 8. Develop overlapping institutions to increase response diversity and flexibility to change.
- 9. Include all the un-priced ecosystem services in development proposals and assessments.

"All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts.

His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate. ...the land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively, land."
Aldo Leopold (1949) The Land Ethic

Adaptability is the essence of resilience and will define the balance between competition and cooperation within the land community

As crises loom large, many people and organisations will either deny the problem or apply another temporary fix based on partial understanding of complex systems.



Local leadership, collaboration, innovation and learning will build resilience and provide the raw material for adaptability and transformation

More Information on Resilience, The Resilience Alliance and Sand County Foundation

http://www.sandcounty.net

http://www.resalliance.org/1.php

http://www.ecologyandsociety.org/

http://www.stockholmresilience.org/

http://csid.asu.edu/

Some Recommended Reading

Armitage, D. Berkes, F. and Doubleday, N. 2007. Adaptive Co-Management: Collaboration, Learning and Multi-Level Governance. Vancouver: UBC Press

Homer-Dixon, T., 2006. The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization. Island Press

Holling, C.S., Gunderson, L.H. and D, Ludwig. 2002. In Quest of a Theory of Adaptive Change. In: Panarchy: Understanding Transformations in Human and Natural Systems. L.H. Gunderson & C.S. Holling Eds. Island Press: London. 3 – 22.

Rittel, H. and M. Webber. 1973. Dilemmas in a General Theory of Planning *Policy Sciences* **4**, Elsevier Scientific Publishing, Amsterdam, pp. 155-159.

Walker, B and Salt, D. 2006. Resilience Thinking: Sustaining Ecosystems and People in a Changing World. Island Press

Westley, F., Zimmerman, B., and M. Patton 2007. Getting to Maybe: How the World Is Changed by Frances Vintage, Toronto

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Anghern, A. (2004) Behind the EIS Simulation: An overview of models underlying the simulation dynamics. CALT Report

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Biggs, R., Carpenter, R.S., and A W Brock. 2009. Turning back from the brink: Detecting an impending regime shift in time to avert it. Proceedings of the National Academy of Sciences of the United States of America 106(3): 826-831

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Schultz, L. 2009. Nurturing Resilience in Social-ecological Systems: Lessons learned from Bridging Organisations

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