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Understanding effectiveness in its broader context: methodologies for evaluating collaborative conservation governance

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ISSRM 2018

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What is meant by 'effectiveness' in conservation?

- Ideally, achieving objectives and improving environmental (&/or socio-economic outcomes)

- Effectiveness tends to be evaluated on **policies** (is it the right mix of policies); **institutions** (are the required institutions and resources in place); or **compliance** (are parties abiding by the established norms and rules)

- Tendency to focus on outputs rather than outcomes.

Does collaboration increase conservation effectiveness?

- Often said to, through **improving socio-ecological fit** (Young 2002, Folke et al. 2007, Armitage, de Loë, and Plummer 2012)

- Also posited to provide **flexibility, adaptive capacity, redundancy, conditions and new networks for experimentation and learning** required for effective conservation (refer, essentially, to most of the AG literature).

- **Pre-conditions**: 'soft' infrastructure, generate a shared vision, increase scale of action, bolster resources, reduce conflict (sometimes…)
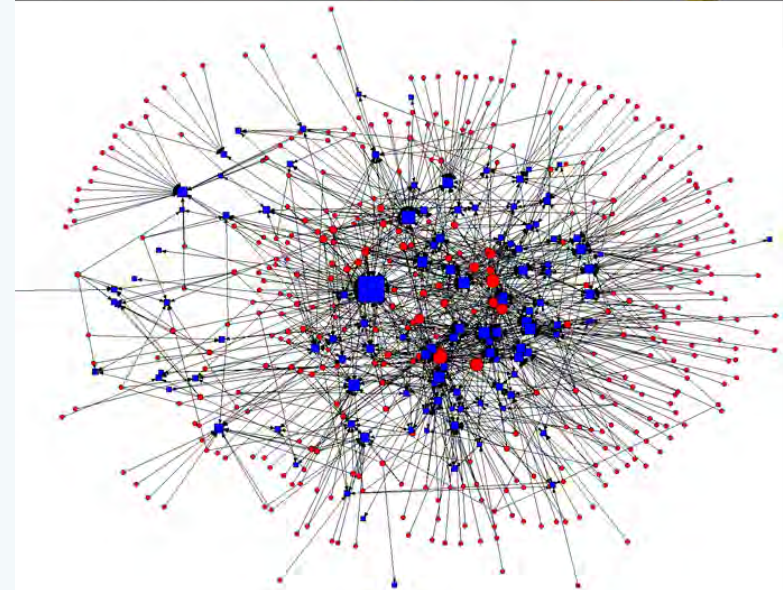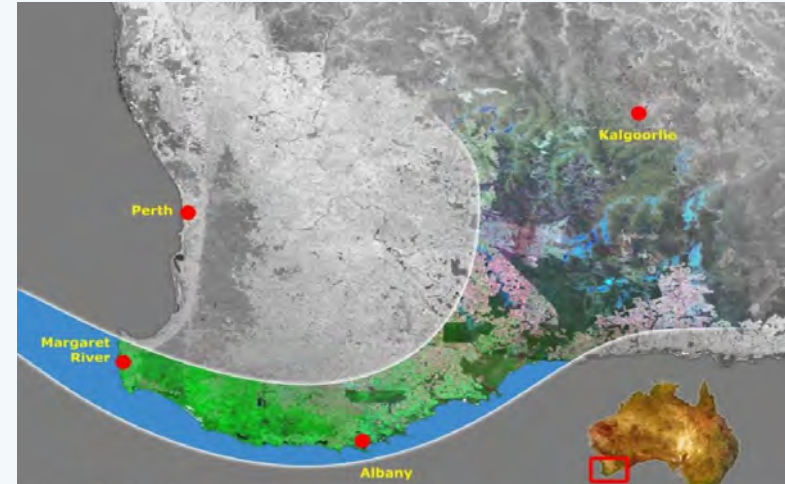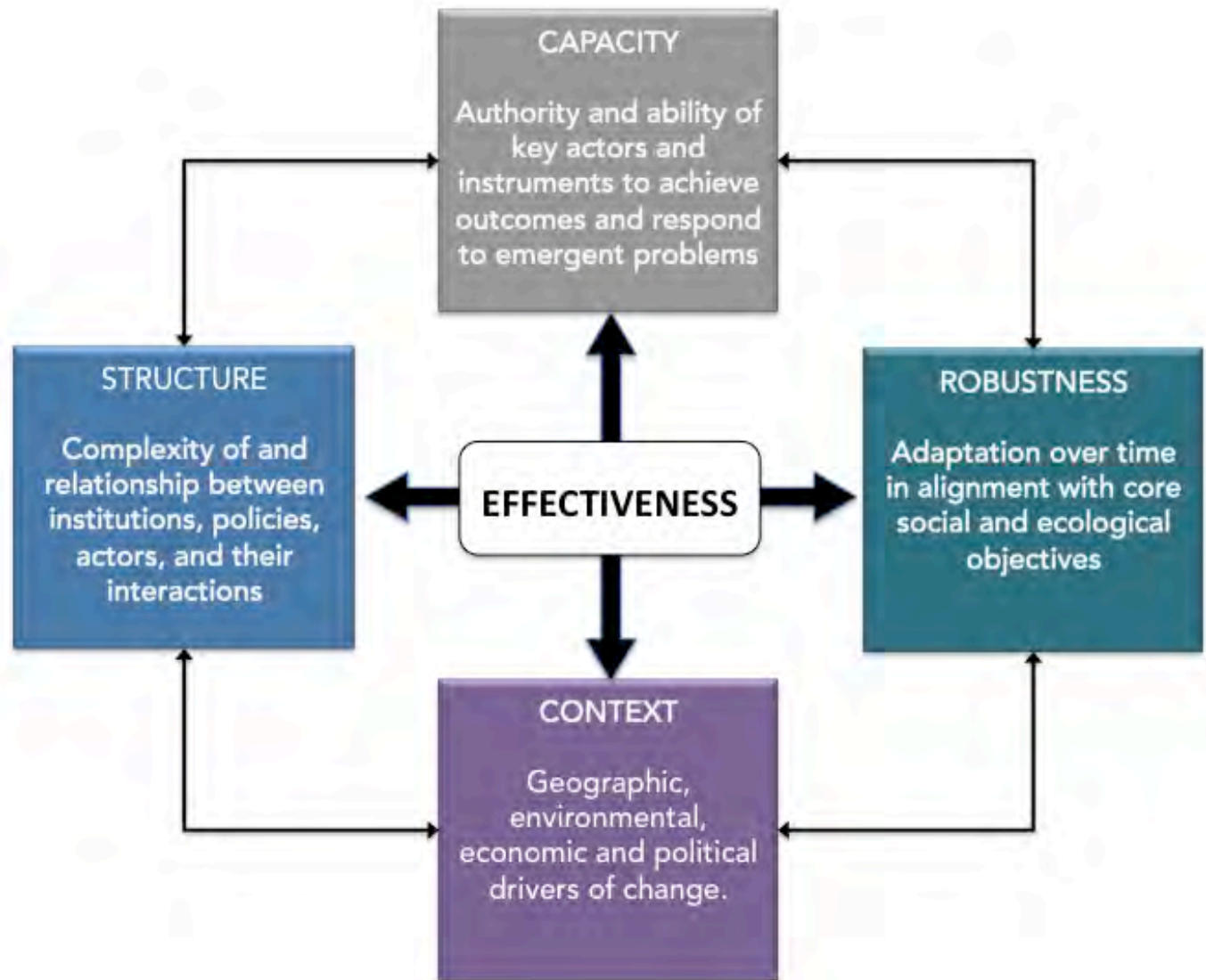
BUT...

- Merits are often focused more on **process**

- Level of collaboration should fit problem.

- Increases complexity & procedural challenges

- Very little robust research on how it improves **outcomes** (usually problems of causality, etc.)

- Very few, specific aspects of CG linked to improved outcomes, but based on **perceptions** or aggregation of a large number of case studies & tend to neglect **context** and wider **institutional attributes.**

And also: how do we evaluate effectiveness?

- Little has been said about which methods are 'best'.

    ✦ Quasi-experimental designs hold promise, but range of issues (e.g. methods, expensive, political challenges causal factors still difficult to isolate)

    ✦ Systematic review, but usually very limited attributes and focus on governance mode

- Our focus was on evaluating common methods to see how they perform.

- Range of existing frameworks, but define effectiveness variously and often process/output-oriented. Also frequently neglect context.

Conceptual Framework - adapted from Morrison 2017

Framework component	Criteria
Robustness	To what extent does the method provide an understanding of: • Longitudinal change/adaptation • Longitudinal stability • How stability and change align with social and ecological objectives
Context	To what extent does the method provide a way to interrogate and/or understanding: • Geographic and environmental drivers of change • Economic drivers of change • Social and political drivers of change
Structure	To what extent does the method provide an understanding of: • Structural attributes that facilitate actors addressing different governance challenges (e.g. co-management of shared ecosystems, ecological connectivity) • Relationship between institutions, policies, and actors
Capacity	To what extent does the method provide an understanding of: • Authority of key actors to achieve regime goals • General and adaptive capacity of key actors to achieve outcomes and respond to emergent problems • Alignment/fit of institutions and policies with social and ecological objectives

Methods evaluated

Approach	Specific methods	Case Studies
Social-ecological network analysis	• Semi-structured interviews • Online survey • Social network analysis • Exponential random graph models	Connectivity Conservation Initiative: Gondwana Link in Australia
Action research	• Semi-structured in-depth interviews • Document analysis • Participant observation	Connectivity Conservation Initiatives: Habitat 141° in Australia

Methods evaluated

Methodological Approach	Specific methods	Case Studies
Institutional Diagnosis	• Semi-structured in-depth interviews • Focus groups • Document analysis • Institutional Grammar Tool (Ostrom 2005) • Secondary data analysis of social and ecological data	Landscape-scale Conservation Governance: Tasmanian Midlands and Australian Alps
SES-based Scenario Planning	• Resilience Assessment • SES modeling • Scenario planning workshops • Expert interviews • Secondary data analysis of social and ecological data	Landscape-scale Conservation Governance: Tasmanian Midlands and Australian Alps

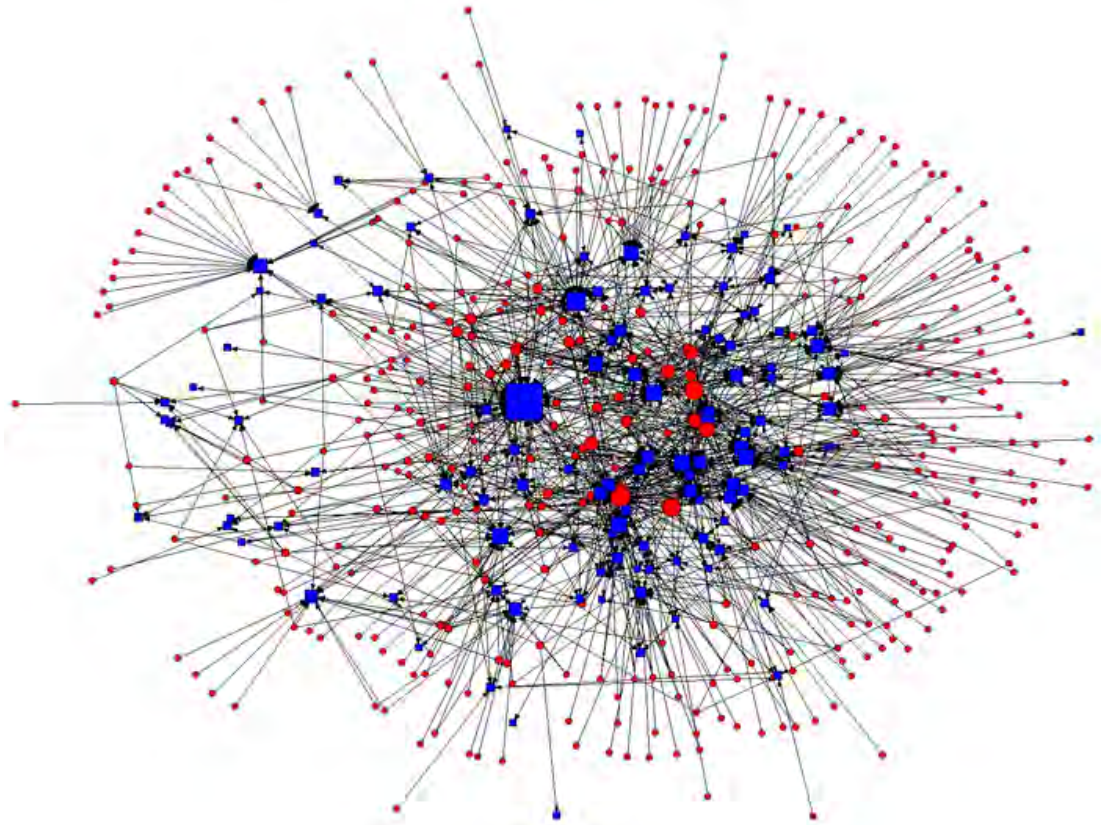# Social-ecological network analysis: Gondwana Link

Image: Courtesy of Gondwana Link.org

Social-ecological network analysis: Gondwana Link

- Multi-actor
- Cross-sectoral
- Cross-scale

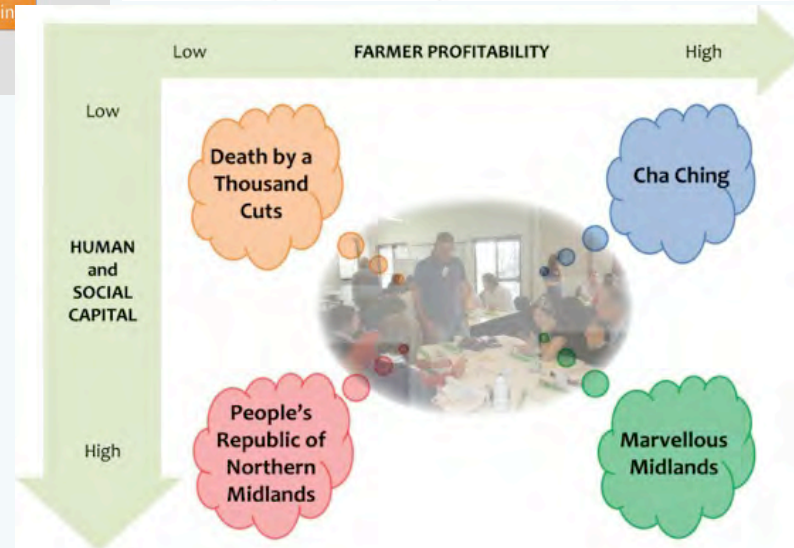**What are the network structures that facilitate or constrain effective management?**
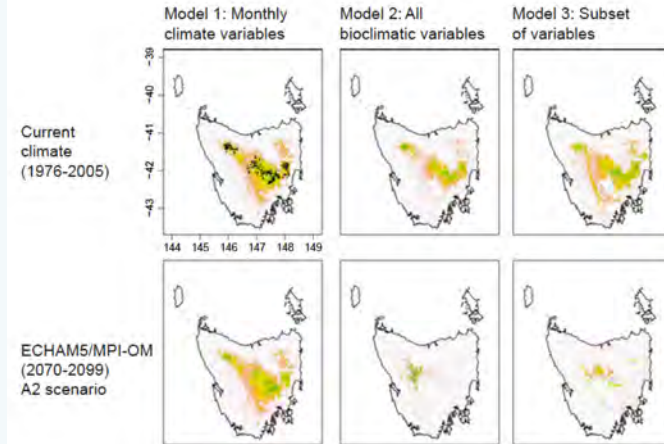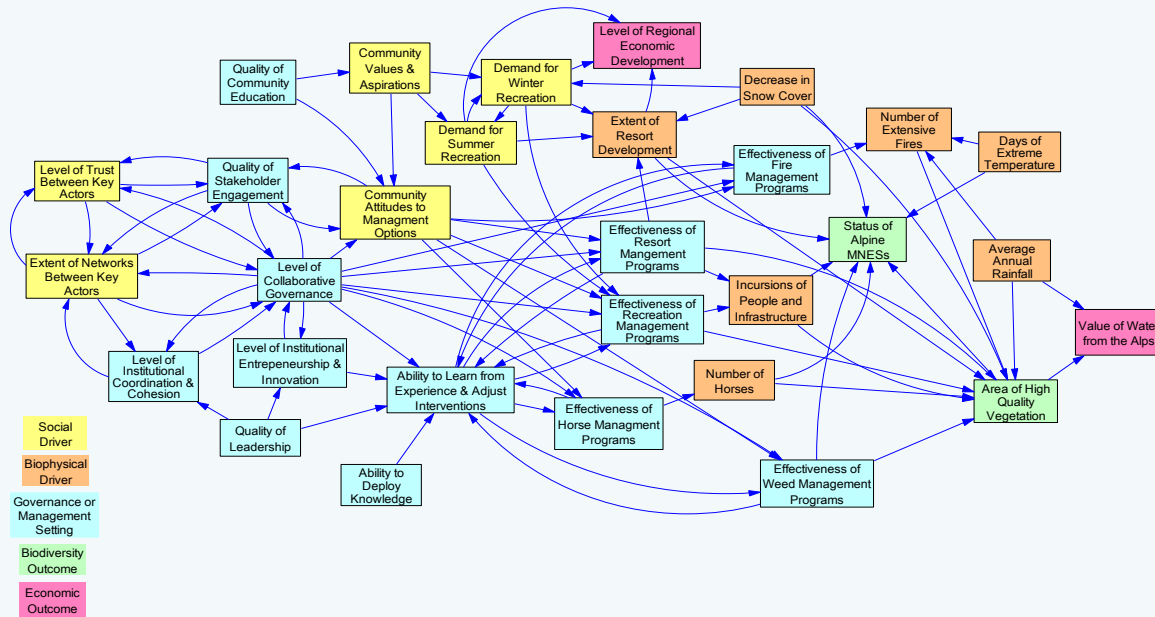
Action Research: Habitat 141

Institutional diagnosis & SES scenario planning

Tasmanian Midlands

Institutional diagnosis & SES scenario planning

Australian Alps

Results

Framework component	Social-ecological network analysis	Action research	Institutional diagnostic	SES-based scenario planning
Robustness				
Context				
Structure				
Capacity				

Key points

- **Social-ecological network** approach provides rigorous data on structure and a moderate amount of data on robustness and capacity, but provides limited data on context.

- **Action research** approach provided deep insights into context, capacity, and robustness over several years, but it was weaker in terms of understanding structure and maintaining those deep insights over time.

- **Institutional diagnosis** provides in-depth understanding about context and capacity, and a moderate amount of detail on robustness, but it only provided limited, qualitative insights into structure.

- **Scenario planning** approach provided limited detail on structure, but provided moderate detail on the other elements and a novel way of understanding how specific governance drivers and collaborative processes might affect outcomes.

Conclusions

- None of the methods excelled across all framework elements.

- Powerful combinations of methods, but require a wide range of expertise (e.g. combining diagnosis with scenario modelling and planning increases understanding of capacity and context).

- Many of the methods *can* do more, but need to incorporate them all explicitly. Mostly, pragmatic reasons for not researching them, especially longitudinal understanding of robustness.

- Influence of specific conceptual frameworks used, and philosophy underpinning methods.

- None fully deal with issues of causality, even when using social-ecological data and modelling.

Thank you

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https://www.researchgate.net/profile/Sarah_Clement

All publications from the SES scenario planning and diagnosis are at lifeatlarge.edu.au.

Email me or my co-authors if you would like any articles published for each project!