

Meeting the challenges of transdisciplinary sustainability research

17.5.22

Josie Chambers

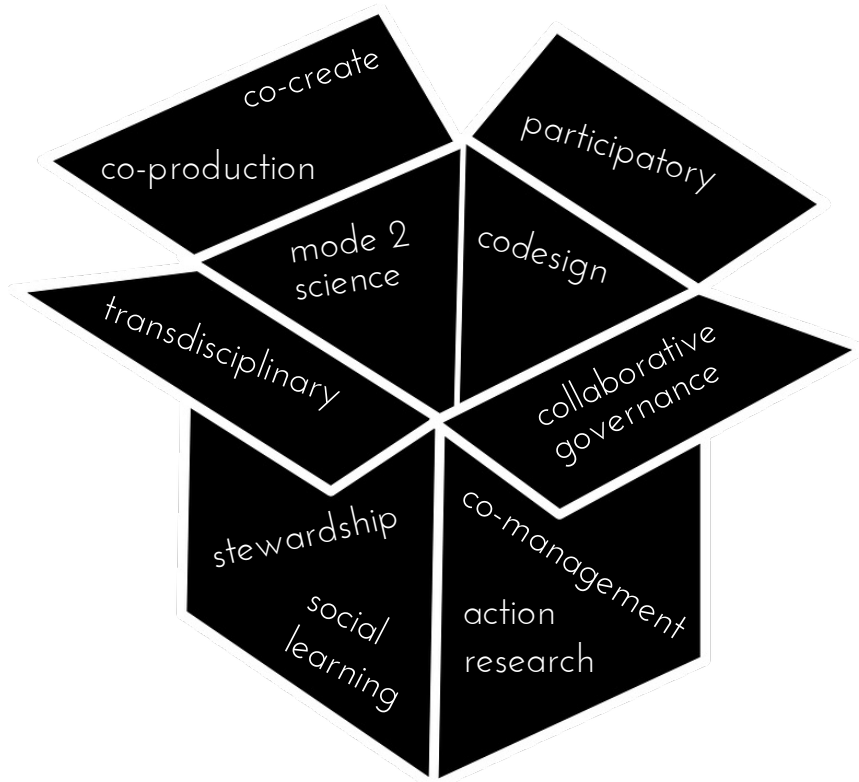
Urban Futures Studio | UU

Agenda

- Introductory presentations
 - What is 'transdisciplinary' research? (Josie)
 - A political perspective on knowledge and participation (Esther)
- What is our role as researchers?
 - What is your role? (poll & breakouts)
 - How can our roles hinder transformation? (role play)
- How can we do research differently?
 - Share & discuss challenges & best practices (breakouts)
 - Plenary discussion of key insights (plenary)

What is 'transdisciplinary' research?

Opening up the black box



Changes?

- knowledge
- values
- practices
- policies
- institutions
- ecosystems
- justice
- power

21 The Dark Side of Co-Creation and Co-Production

Seven Evils

*Trui Steen, Taco Brandsen and
Bram Verschuere*


Introduction

Co-production could go horribly wrong. Patients could die because of self-administered treatments. Self-appointed vigilantes could “co-produce” public safety by attacking strangers. In co-creating the developments of their neighbourhoods, the highly educated and wealthy may further press their already considerable advantages.

Whether all this will happen is an empirical question. Several literature reviews (e.g. Verschuere et al., 2012; Voorberg, Bekkers and Tummers, 2015) and several chapters in this volume have pointed out that research on effects is the least developed part of research in this area. Nonetheless, the overall literature on co-creation and co-production of public services is optimistic with respect to its presumed effects. Proponents claim that close collaboration between regular service providers and citizens provides opportunities for improving efficiency and quality of public service delivery, and for enhancing democratization and trust in government. Indeed, the terms themselves are skewed towards optimism. “Creation” and “production” are the glittering objectives of economic discourse.

The normative tendency towards optimism tends to mask a number of potential pitfalls. It is this dark side of co-creation and co-production that we address in this chapter. We will address seven potential evils: the deliberate rejection of responsibility, failing accountability, rising transaction costs, loss of democracy, reinforced inequalities, implicit demands and co-destruction. We argue that scholars should fully open up to these possibilities and make them part of the research agenda, because otherwise they risk damaging their own academic credibility.

The Dark Side of Transformation: Latent Risks in Contemporary Sustainability Discourse

Jessica Blythe 

*School of Environment, Resources and Sustainability, University of Waterloo, Waterloo,
ON, Canada;
jessicablythe@gmail.com*

Jennifer Silver

*College of Social and Applied Human Sciences, University of Guelph, Guelph,
ON, Canada*

Louisa Evans

College of Life and Environmental Sciences, University of Exeter, Exeter, UK

Derek Armitage

*School of Environment, Resources and Sustainability, University of Waterloo, Waterloo,
ON, Canada*

Nathan J. Bennett

*Institute for Resources, Environment and Sustainability, University of British Columbia,
Vancouver, BC, Canada*

University of Nice Sophia Antipolis, Nice, France

Center for Ocean Solutions, Stanford University, Monterey, CA, USA

Michele-Lee Moore

*Department of Geography, University of Victoria, Victoria, BC, Canada
Stockholm Resilience Centre, Stockholm University, Stockholm, Sweden*

Tiffany H. Morrison

*ARC Centre of Excellence for Coral Reef Studies, James Cook University, Townsville,
QLD, Australia*

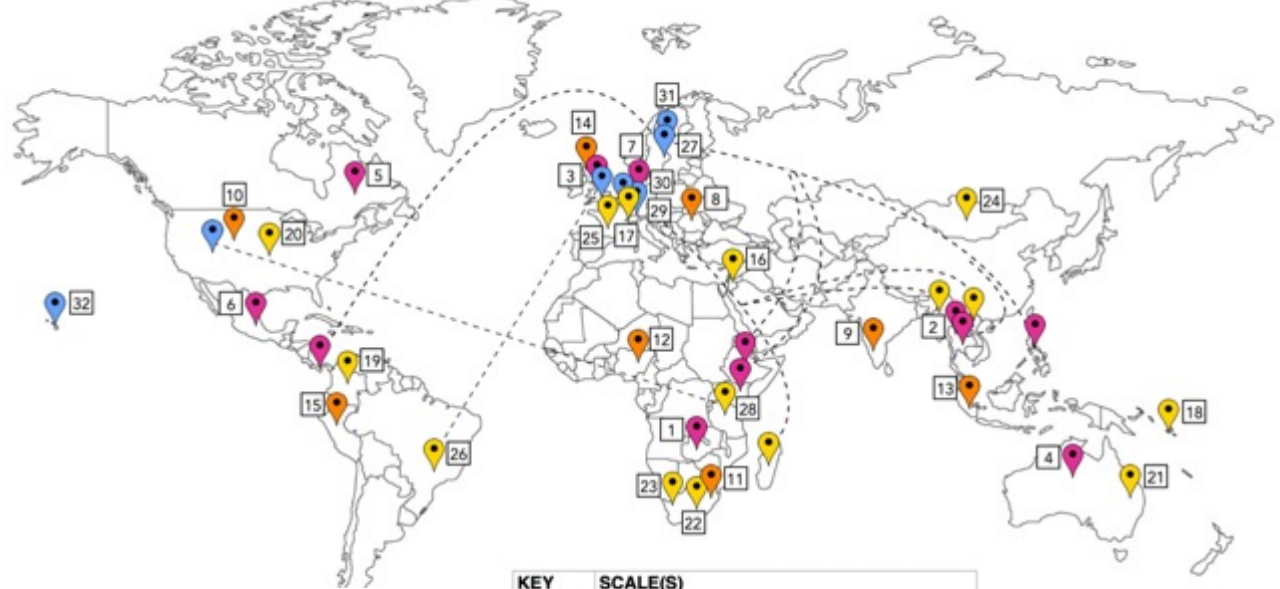
Katrina Brown

College of Life and Environmental Sciences, University of Exeter, Exeter, UK





Analysis of 32 cases of knowledge/action-making



Seeking to address ecosystem sustainability challenges...

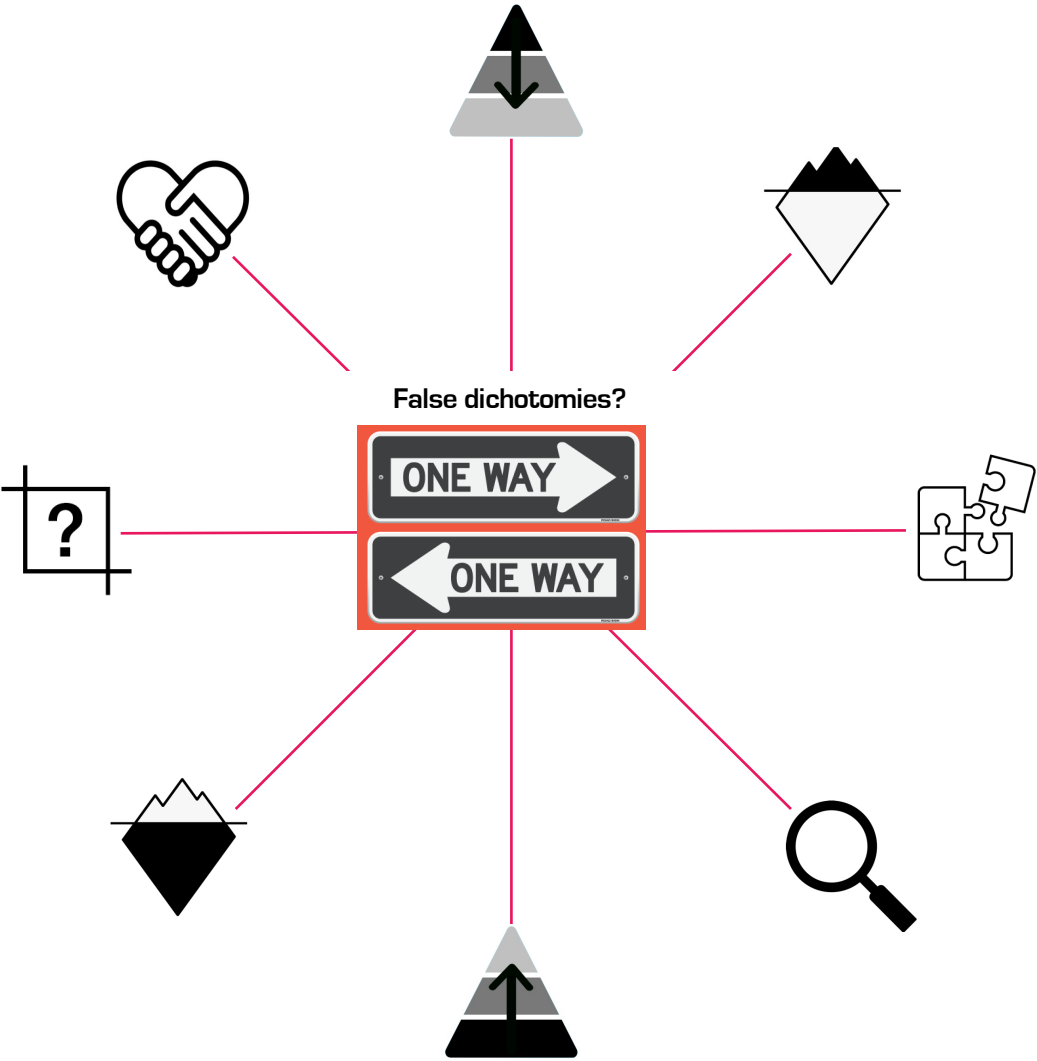


Most spanned 4+ disciplines
Most spanned 3+ sectors
2/3 led by >50% women

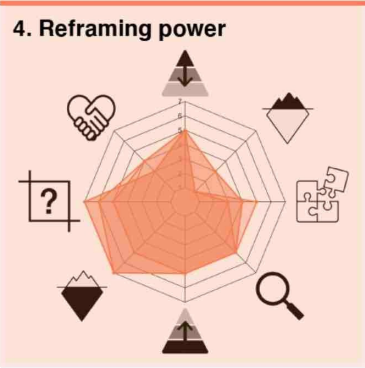
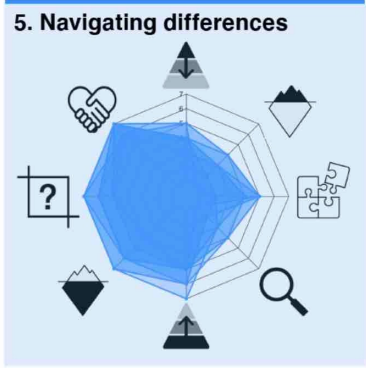
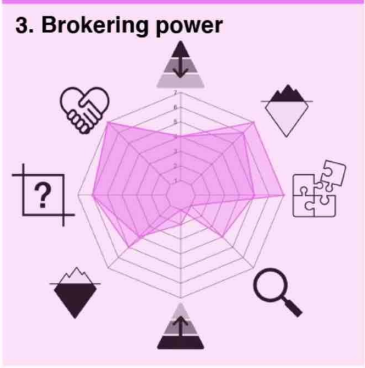
KEY	SCALE(S)
	Mostly local scale
	Sub-national and local scales
	(Trans)national, sub-national and local scales
	Global (and other) scales

Key dimensions of difference

- Purpose
- Power
- Politics
- Pathways



Six modes of co-production for sustainability



 Purpose	 Power	 Politics	 Pathways
 Solve problems	 Direct agency	 Influencing powerful	 Producing knowledge
 Reframe problems	 Systemic agency	 Empowering marginalized	 Relating together

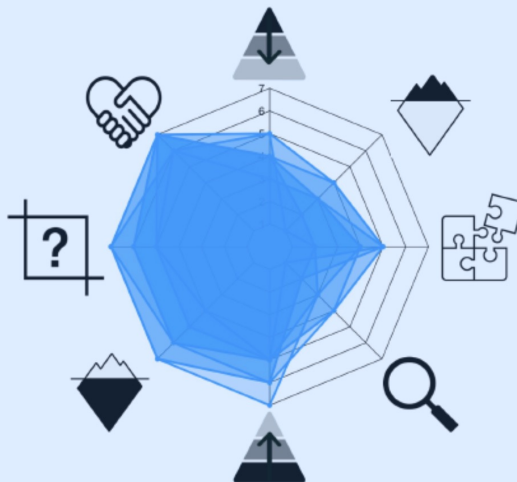
Different opportunities

6. Reframing agency



- ✔ Can fundamentally shift views to co-develop more creative and transformative possibilities

5. Navigating differences



- ✔ Can build legitimate and flexible processes to empower tangible changes to perspectives, networks, institutions, policies, and practices

1. Researching solutions



- ✔ Can produce and transfer knowledge to inform and justify policy changes that decision-makers already want to make

Different risks

6. Reframing agency



- ❗ May result in 'echo chambers' that fail to produce action, while external actors block progress

5. Navigating differences



- ❗ Positionality of researchers is extremely tricky, and powerful actors may hinder processes if not included in the appropriate way

1. Researching solutions

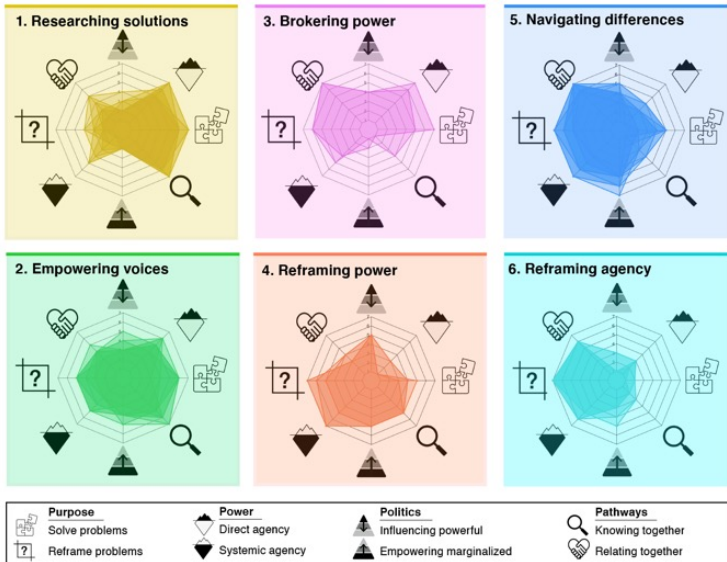


- ❗ May legitimize existing power relations and place blame on marginalized actors directly linked to sustainability problems

For more details, check out the papers...

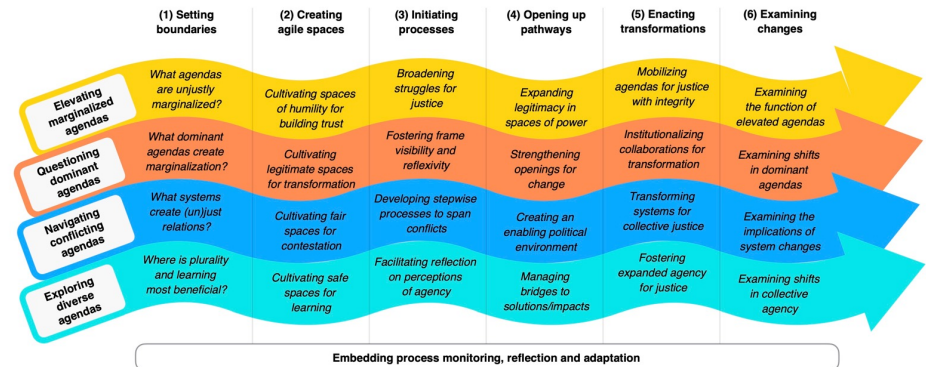
Six modes of co-production for sustainability *(Nature Sustainability)*

How is co-production practiced in distinct ways? What does this mean for outcomes and risks?



Co-productive agility and four collaborative pathways to sustainability transformations *(Global Environmental Change)*

How to navigate the tensions inherent to connecting diverse actors in pursuit of sustainability transformations?



What is our role as researchers?

Meet the four archetypal roles

Woodpecker

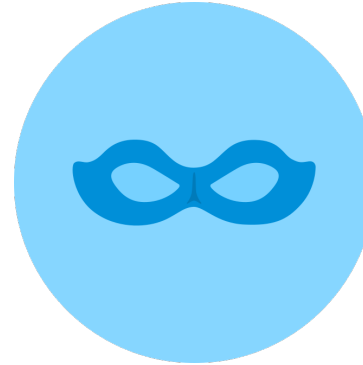
“That solution is not resolving (and even worsens) the REAL problem!”



Control

Hero

“I know what the problem is AND I can solve it!”



Reframing

Solutions

Host

“What does everyone think? All views are important, let’s all be friends!”



Yield control

Genie

“What do you need to succeed? At your service!”



Polls

- Which role is most similar to **your** approach to impact?
- Which role is **most** likely to create beneficial change?
- Which role is **least** likely to create beneficial change?

Woodpecker

"That solution is not resolving (and even worsens) the REAL problem!"



Hero

"I know what the problem is AND I can solve it!"



Host

"What does everyone think? All views are important, let's all be friends!"



Genie

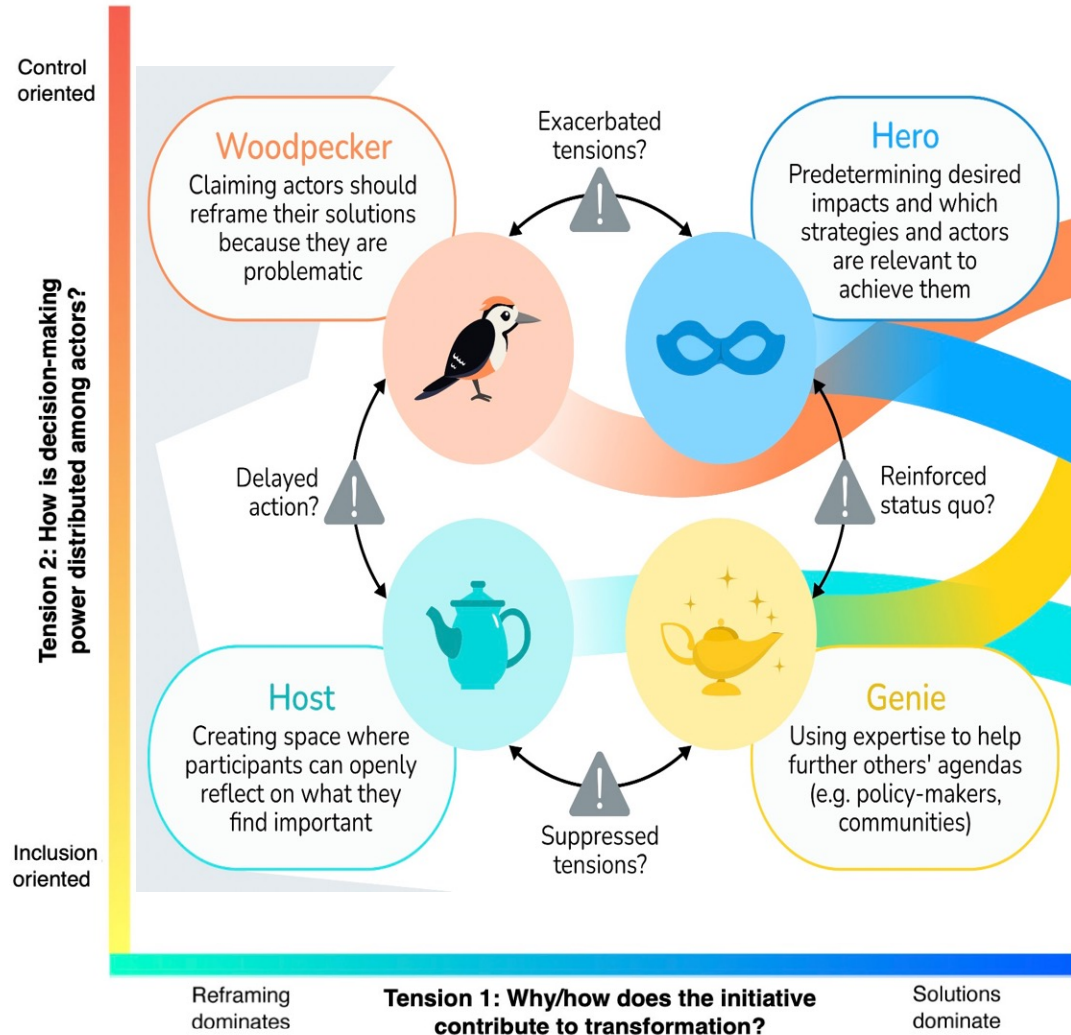
"What do you need to succeed? At your service!"



Discussion

(12 mins)

- Why did you each choose those archetypes?
- How might these four roles hinder or enable transformation?



Role play setting: Isle of Barra, Outer Hebrides, Scotland



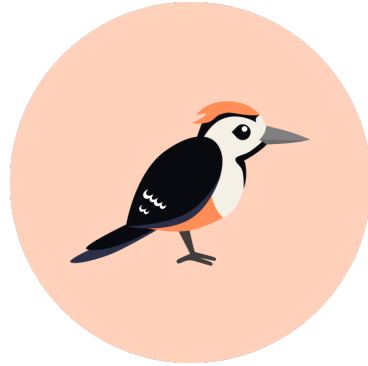
- Protected area is imposed by the state based on ecological values
- Local communities (historically marginalized & economically fragile) oppose this
- Heated dispute breaks out

Role play: four change agents

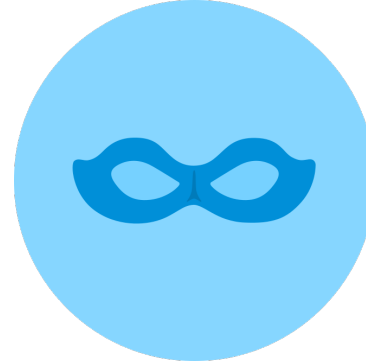
Critical social scientist

*“Both the conservation designation and ongoing local development are **HIGHLY** problematic”*

Woodpecker



Hero



State conservation agency

*“We **MUST** enforce the newly designated marine conservation areas to protect nature”*

PhD student

*“I want to bring different stakeholders together to **EXPLORE** different views”*

Host



Genie



Community scholar-activist

*“Let’s support our communities to develop how **THEY** want”*

Role play: the scenario

- 1 million Euros are available for a project in the area
- All four characters are in a meeting (allocate roles) where the grant holder (fifth person – under pressure to show impact) observes the process
- The characters participate in a process to try to develop a joint proposal for how to spend the money to create beneficial impacts (8 mins)
- The grant holder decides who/what to support and explains why (1 min)
- All discuss how the roles/process shaped tensions and outcomes (6 mins)

Plenary discussion

- What made this a ‘rigid’ situation? What are the **roots of ‘rigidity’**, related to roles and process?
- What are the **consequences** of this ‘rigidity’? How might it constrain or enable certain possibilities?

How can we do research differently?

What is co-productive agility?

Woodpecker

Control exacerbates tensions?



“That solution is not resolving (and even worsens) the REAL problem!”

Reframing delays action?

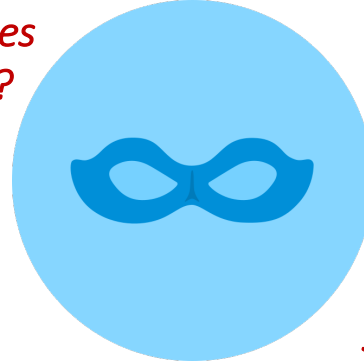
Host



“What does everyone think? All views are important, let’s all be friends!”

Yielding control suppresses tensions?

Hero



“I know what the problem is AND I can solve it!”

Solutions reinforces status quo?

Genie



“What do you need to succeed? At your service!”

Hindering transformative change?

"They found a bunch of gold, diamonds, and rare shit on the comet. So they're gonna let it hit the planet to make a bunch of rich people even more disgustingly rich."

THE WOODPECKER

POLARIZED TENSIONS

"When these treasures from heaven are claimed, poverty as we know it – social injustice, loss of biodiversity... all these multitude of problems are just going to become relics of the past."

THE HERO

DELAYED ACTION



"Yeah, this pin points both up *and* down because I think as a country we need to stop arguing and virtue signaling, and just get along."

THE HOST

SUPPRESSED TENSIONS

REINFORCED STATUS QUO

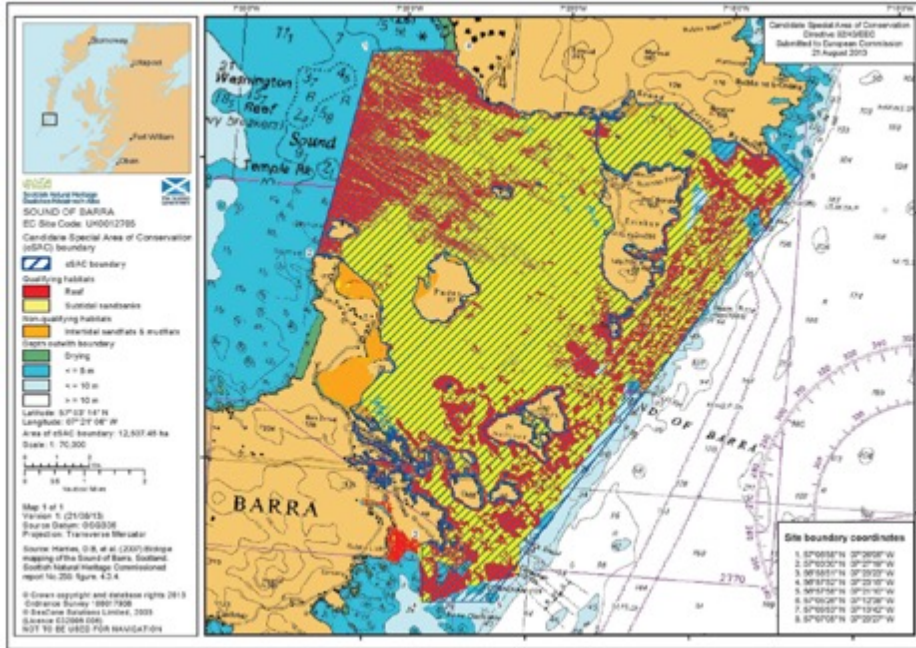


"I can assure you, our best and our brightest are on the job. I've seen the science on this plan and it is sound."

THE GENIE

Co-productive agility: the case of Barra island

Fostering collective willingness & ability to iteratively navigate emerging tensions



“My initial fieldwork revealed that the islanders I interviewed perceived the government as understanding conservation as **‘hands-off, keep out, draw a line around’** whereas the islanders understood conservation as **‘hands-on, use and develop wisely’**.”

“This led me to framing the problem as clashes between different values systems and worldviews.”

- Ruth Brennan

The messy agile middle

Between the Hero and Genie

*“My aim was NEVER to 'resolve' a conflict [i.e. HERO]... I entered the community as a scientist – this brought immediate suspicion. Some thought I was a [government agency] spy! When they realized I was not a spy, **they thought they could use me to advance their cause [i.e. GENIE]**. It was very difficult to not become an advocate for their cause... but to walk a line somewhere in between in order to find ways of opening up space for different narratives to emerge. Critical self-reflection was crucial”.*

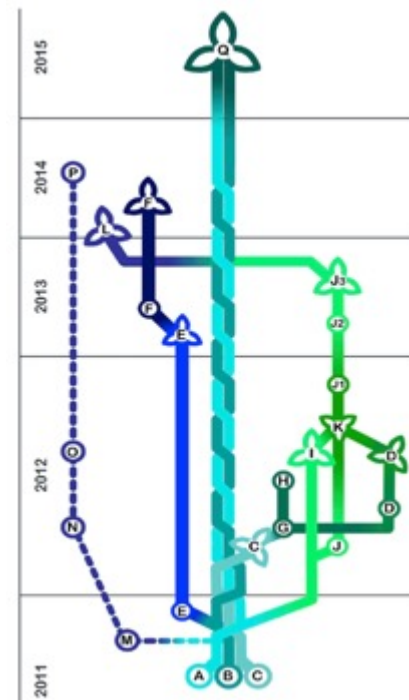
Between the Host and Woodpecker

Art science collaborations created “a space for islanders to articulate and value aspects of their bio-physical/cultural heritage to **open up possibilities for new narratives to emerge** within community-government marine protected area conflict”, which **sparked a co-management process, which is evolving and faces ongoing challenges.**



Co-productive agility: the case of Barra island

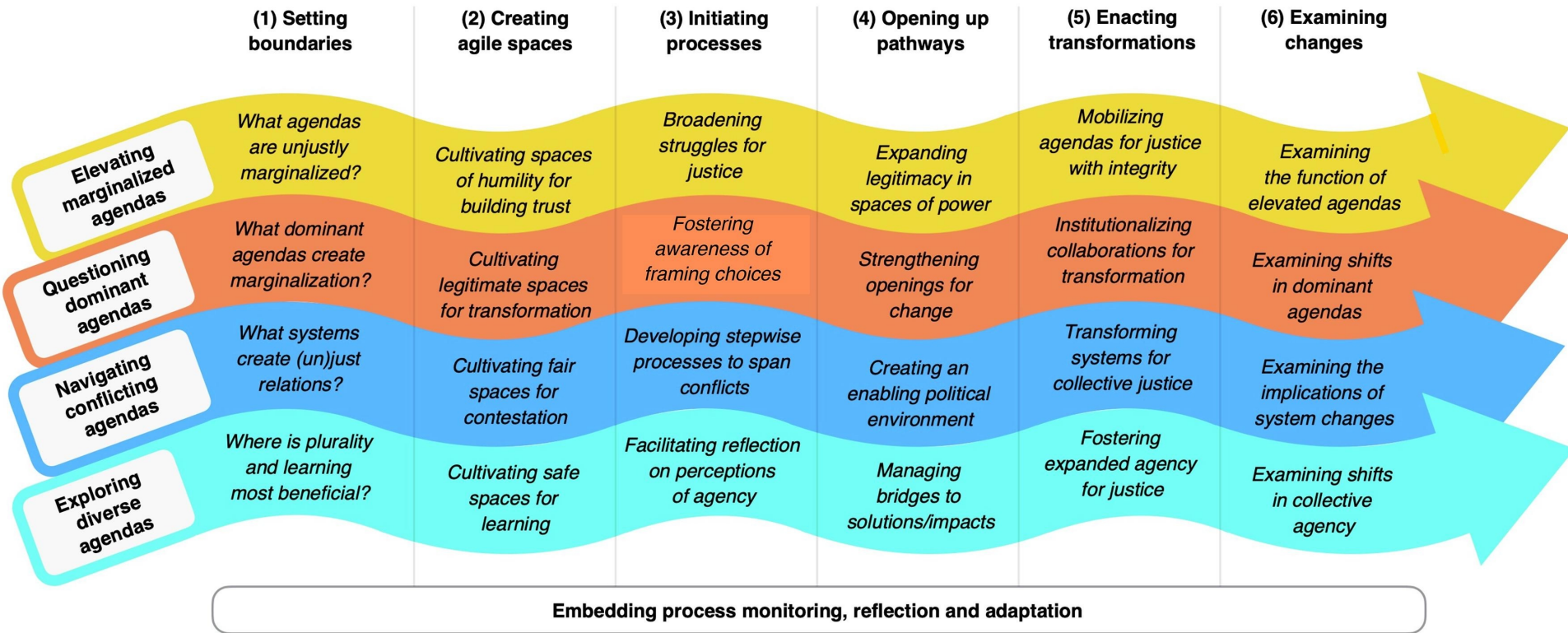
Fostering collective willingness & ability to iteratively navigate emerging tensions



Many overarching lessons

Analysis of 32 cases → four approaches to collaborative transformation

— — — Presented in order may most often appear in any single project, but often not linear!



Multiplicity of contexts & approaches

With globally powerful perspectives...
(e.g. case #31)



Prioritizing reframing...
(e.g. case #6)



Prioritizing shared practice...
(e.g. case #16)



With historically marginalized perspectives...
(e.g. case #27)

