Learning to be sustainable (?)

Julian Barg
julian@jbarg.net

Ivey Business School

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Thank Lauren–prep helpful for me.

Last time around...

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There is 4.
1.Indicates I am also not quite there yet on empirics.
4. What data do I need to make an argument?

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Why learning?

Sustainability & Learning

Data

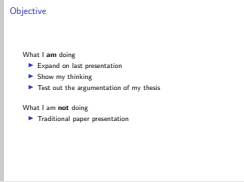
Objective

What I **am** doing

- Expand on last presentation
- Show my thinking
- Test out the argumentation of my thesis

What I am **not** doing

- Traditional paper presentation



- Mention Mark, Lee & Wren here
- Mention extensive reading sustainability lit

Invitation to conversation!

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Why learning?

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Definitions[1]

1. Reliability: is the learning outcome public, stable, and shared

Humor me, please suppress your own idea of what these terms mean and work with my definition of the terms for the length of this presentation. Join me on this journey.

[1]March et al. (1991)

Definitions[1]
1. Reliability: is the learning outcome public, stable, and shared
2. Validity: does learning aid in understanding, prediction, and control
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Learning & Sustainability I

Valid learning

Creation of quantitative/mental models that inform in advance or lead to desirable states.

- Robust climate models (Manabe & Wetherald, 1967; Forster, 2017)

  vs. invalid learning

- Surprising, unpredicted arctic ice loss (Guarino et al., 2020)

Learning & Sustainability I
Valid learning
Creation of quantitative/mental models that inform in advance or lead to desirable states.
- Robust climate models (Manabe & Wetherald, 1967; Forster, 2017)
vs. invalid learning
- Surprising, unpredicted arctic ice loss (Guarino et al., 2020)

Purpose is to convince audience that reliability & validity are relevant to sustainability.

Valid in what it covers, environmental impact dimension not defined.

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Learning & Sustainability II

Reliable learning

Developing a mental or formal model that is widely accepted.

- Collective learning process (Wright & Nyberg, 2017)
- Bridging epistemic communities (Aronczyk & Espinoza, 2019)

  vs. unreliable learning

- Unintentional or deliberate rejection of learning (Hermwille & Sanderink, 2019; Koontz & Thomas, 2018)
- Persistent resistance or ignorance (Boudet et al., 2020)

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Technology, pigs, real-time observation.

What keeps valid knowledge from being reliable?

Think about reliablity & validity as a two-by-two.
What prevents the joint optimization of both?

Learning & Sustainability III

Example of conflicts

- Biases (e.g., Makov & Newman, 2016)
- After building coalition, validity of knowledge in doubt (e.g., Aronczyk & Espinoza, 2019; Wright & Nyberg, 2017)
- Entrenched invalid learning (e.g., Boudet et al., 2020)
- Knowledge gap between layman and (relative) experts (e.g., Camilleri et al., 2019)
- Self-interest (Rerup & Zbaracki, 2021)

Learning & Sustainability III
Example of conflicts
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- Self-interest (Rerup & Zbaracki, 2021)

- "Economic Gains Stimulate Negative Evaluations of Corporate Sustainability Initiatives" (Makov & Newman, 2016)
- "Event Attribution and Partisanship Shape Local Discussion of Climate Change after Extreme Weather" (Boudet et al., 2020)

Example I

Maguire and Hardy (2009)

1. # Summarize MH using their language

Example I
Maguire and Hardy (2009)
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Let me show you how we think this works.
Acknowledge that this is deliberately using their language.

Examples

Examples
MH Figure 1
Pipeline figure 1

Example II

Pipeline industry

1. # Summarize pipeline industry using my language

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Pipeline industry
1. # Summarize pipeline industry using my language

- You can see how the concepts are useful?
- Useful concepts to describe phenomena in sustainability.
- The interaction of physical & social world makes them important here.

  Great insights into pollution and climate change

  Limited dissemination

The first thing I am working on is to explore reliability & validity by its own right. Without focus on pipeline data.

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An analysis of sustainability, using the language of learning, reliability & validity.

Why should we (sustainability researchers) care about reliability & validity?

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The sustainability literature, read with attention to learning, reliability & validity.

Implicit model of learning in the literature.

- "A Natural-Resource-Based View of the Firm" (Hart, 1995)
- "Limits to Anthropocentrism: Toward an Ecocentric Organization Paradigm?" (Purser et al., 1995)
- "Who Sustains Whose Development? Sustainable Development and the Reinvention of Nature" (Banerjee, 2003)
- "Evolving Sustainably: A Longitudinal Study of Corporate Sustainable Development" (Bansal, 2005)
- "Business Sustainability: It Is about Time" (Bansal & DesJardine, 2014)
- "Institutional Theory and the Natural Environment: Research in (and on) the Anthropocene" (Hoffman & Jennings, 2015)
- "(Un)Sustainability and Organization Studies: Towards a Radical Engagement" (Ergene et al., 2020)

Sustainability theory I

Validity–
Environmental management

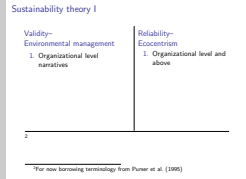
1. Organizational level narratives

Reliability–
Ecocentrism

1. Organizational level and above

2

[2] For now borrowing terminology from Purser et al. (1995)



4. Counterforce is power, organizations learning how to live with the rules, e.g., Wright and Nyberg (2017).

Sustainability theory I

Validity–
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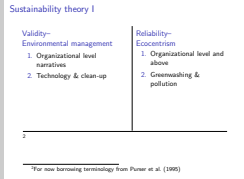

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2. Technology & clean-up	2. Greenwashing & pollution
3. Rationality & bounded rationality	3. Social constructivism

2

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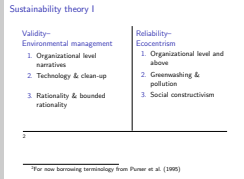

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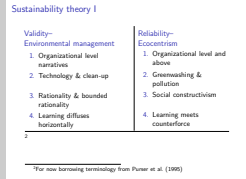

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2

⇒ Underlying models of change & collective learning

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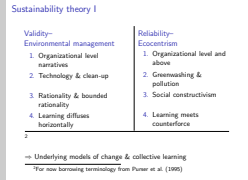

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How models on dissemination of learning, models of the world influence research and the findings that we look for.

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See empirically how reliability & validity play out.
Examples, context where competing ideas are pushed, valid knowledge is suppressed, reliability cannot be achieved etc.

Exemplary phenomena
1. Industry-driven deregulation in Texas/Louisiana

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Exemplary phenomena

1. Industry-driven deregulation in Texas/Louisiana
2. Pipeline spill into Houston River 94'
3. Public/private differences

Show existence of epistemic community, how they affect the direction taken. Reliability dimension in addition to validity dimension. Also "Validity strikes back" when an interest group gets its interest and a disaster (like in Texas last month) occurs.

Thanks!

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