

FRIENDS OR FOES?

**Theory of Change,
Systemic Design (Thinking),
Systems Changes Learning**

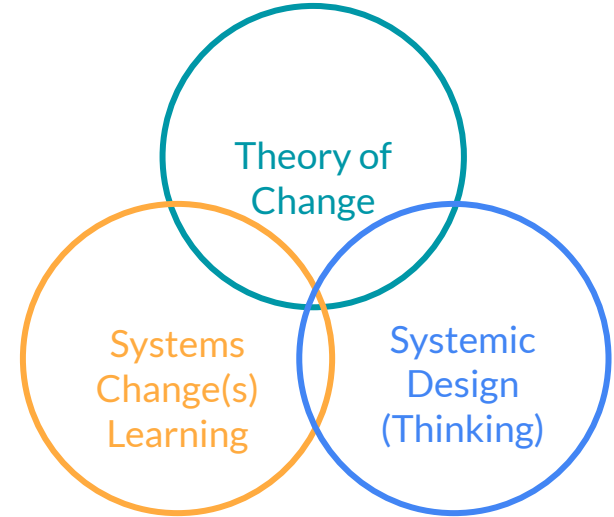
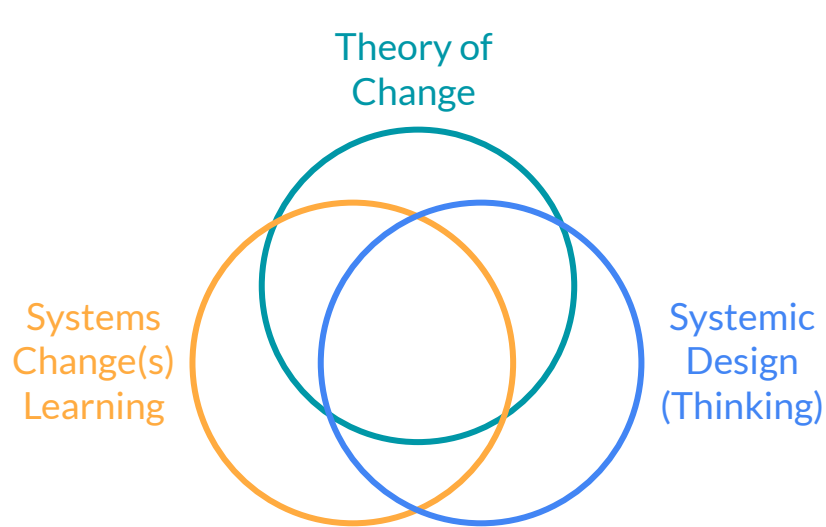
Relating Systems Thinking & Design (RSD) #10

Friday, November 5, 2021 | 6:30pm Netherlands / 1:30pm Toronto
Zaid Khan, David Ing

Today, we'll discuss:

Do ToC, SDT and SCL overlap to a greater or less extent?

Can or should that overlap see further integration or separation?



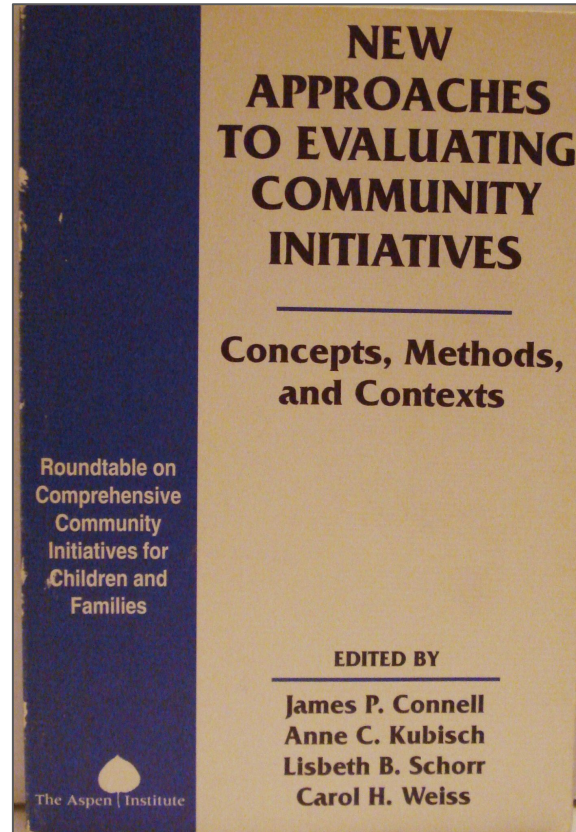
To situate the dialogue, we provide some (very limited) setup info per approach:

- Context
- Examples
- Discussions

Theory of Change

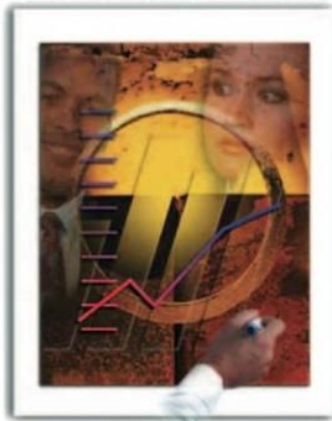
Theory of Change

Origins in modelling and
evaluating community initiatives

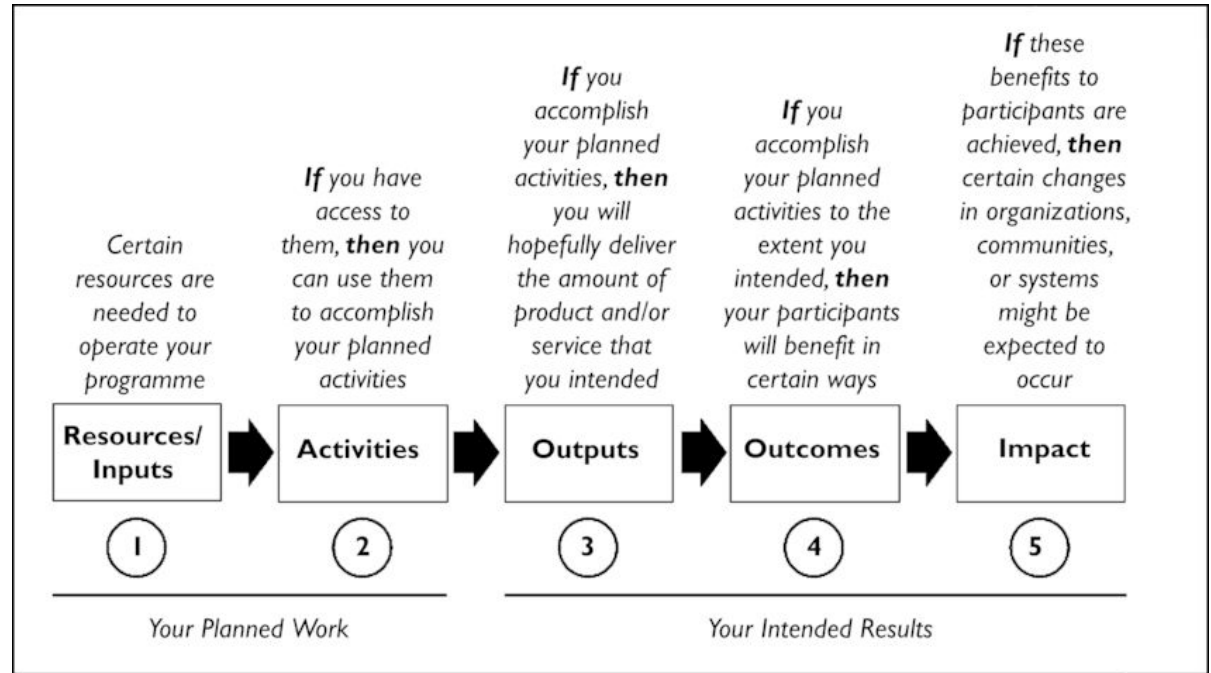


Theory of Change

Framework for evaluation,
sequential logic



*W.K. Kellogg Foundation
Evaluation Handbook*



Theory of Change

Uptake in social sector

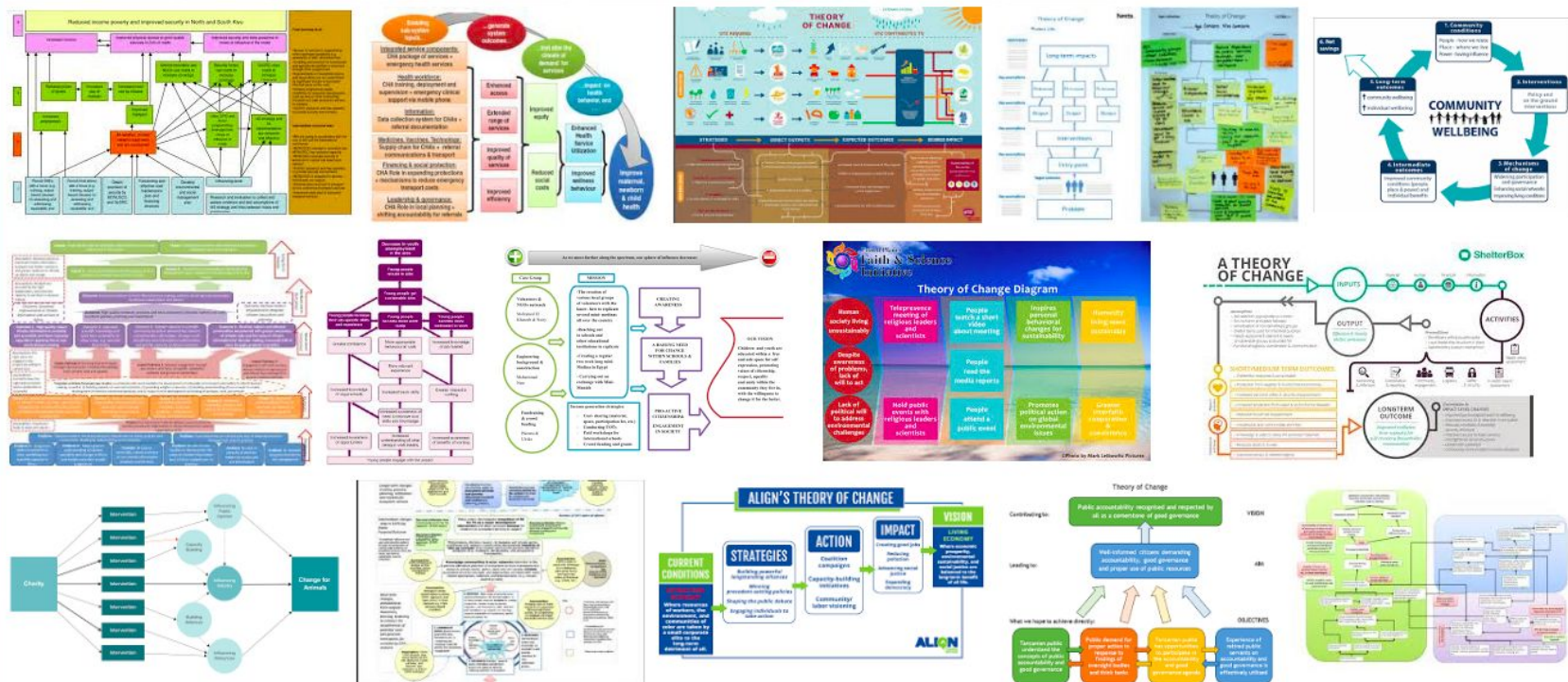
(non-profits, philanthropy, foundations, gov't, etc.)



Theory of Change

Logic models

Literally, 1000s of variations of visual representations....



Theory of Change

The Field

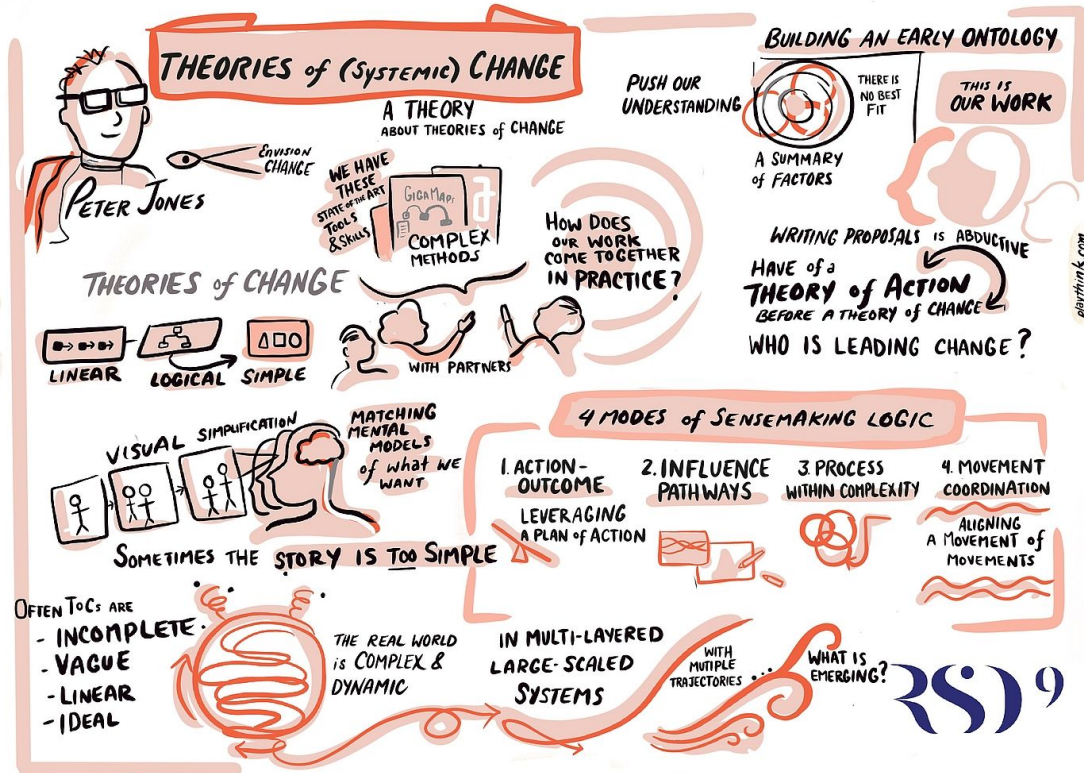


+ 100s more orgs, has become ubiquitous across social impact sector



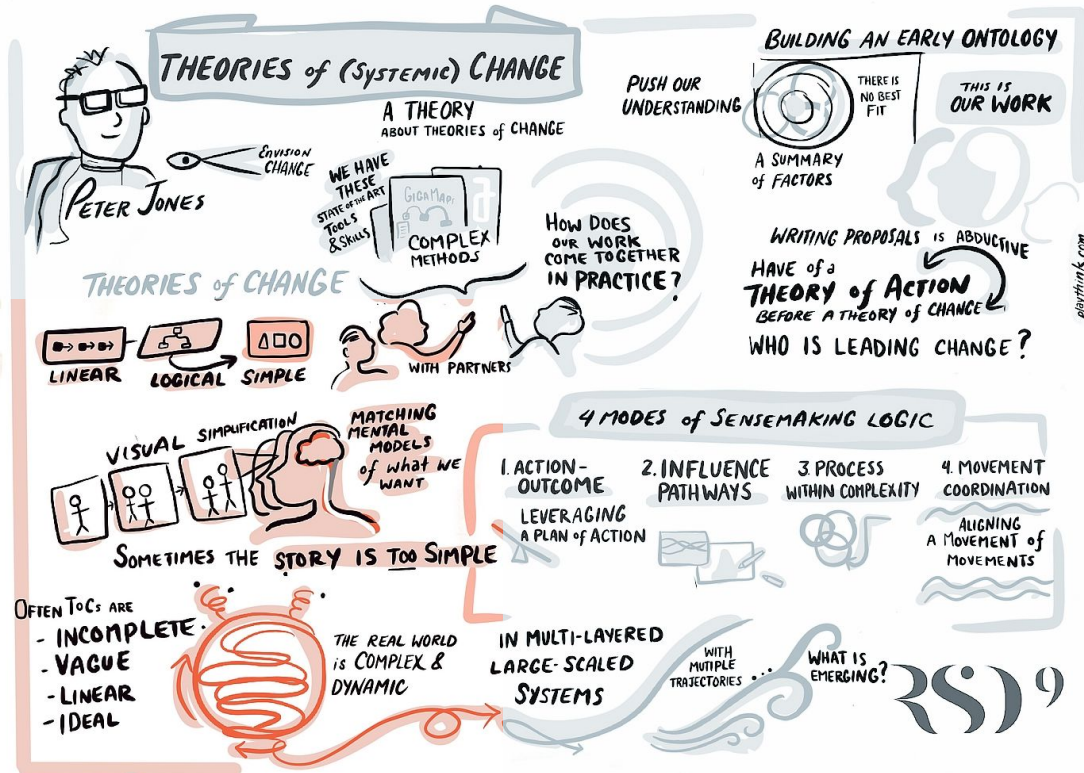
Theory of Change

Discussion



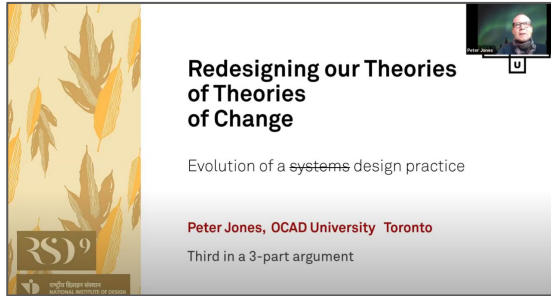
Theory of Change

Discussion



Theory of Change

Discussion



“We have all used “theories of change” to argue for the process by which envisioned change programs might achieve their goals, whether we call them so or not. [...] Looking back at the proceedings, I see that RSD has rarely used this language and we do not have many if any, talks dealing with the theory of change.

*The RSD community has a responsibility to **better understand the framing, theory, and proposals entailed in systems change**, even if only to better collaborate as designers working with the social change community.”*
(Jones, 2020)

Systemic Design

Systemic Design

Definitions revolve around integration of
systems thinking and design thinking/methods

SYSTEMIC
DESIGN
ASSOCIATION

SYSTEMIC DESIGN

noun / si-'ste-mik di-'zīn /

: an interdisciplinary that joins systems thinking to design methodology

Systemic Design

Definitions revolve around integration of systems thinking and design thinking/methods

RSD6 Relating Systems Thinking and Design 2017 working paper. www.systemic-design.net

Designing more democratically, deliberating more systemically: A conversation between systemic design and democratic deliberation

Working Paper

David Kahane
Professor of Political Science
University of Alberta

Alex Ryan
VP of Systems Innovation and Program Director
MaRS Solutions Lab

Introduction

This working paper explores complementarities and tensions between systemic design and deliberative democracy, drawing on an ongoing conversation between David Kahane (a political theorist of deliberative democracy) and Alex Ryan (a systemic designer). We believe that our two fields have much to learn from each other, and offer this working paper as a contribution to a dialogue that we hope will draw in others.

Systemic design and deliberative democracy: definitions

Systemic design is a practice for innovating in extremely complex situations. Systemic design integrates the mindsets and toolsets of systems thinking and design thinking to understand and intervene in complex situations (Ryan 2014). By systems thinking, we mean a way of looking at, modelling, and intervening in the world as if it is composed of open, purposeful, complex wholes. By design thinking, we mean a normative, user-centred, iterative approach to innovation that extends the application of design beyond the design of symbols, objects, and interactions. Systemic design helps diverse groups rapidly make sense of complexity, and experiment and learn together about how to make positive change.

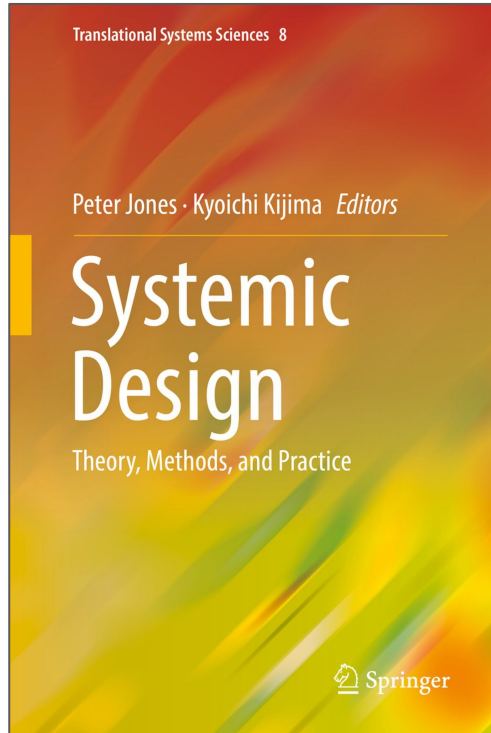


Figure 1. Systemic design integrates systems thinking and design thinking to understand and intervene in complex situations.

“Systemic design **integrates** the mindsets and toolsets of **systems thinking** and **design thinking** to understand and intervene in complex situations.” (Ryan, 2014).

Systemic Design

Definitions revolve around integration of systems thinking and design thinking/methods

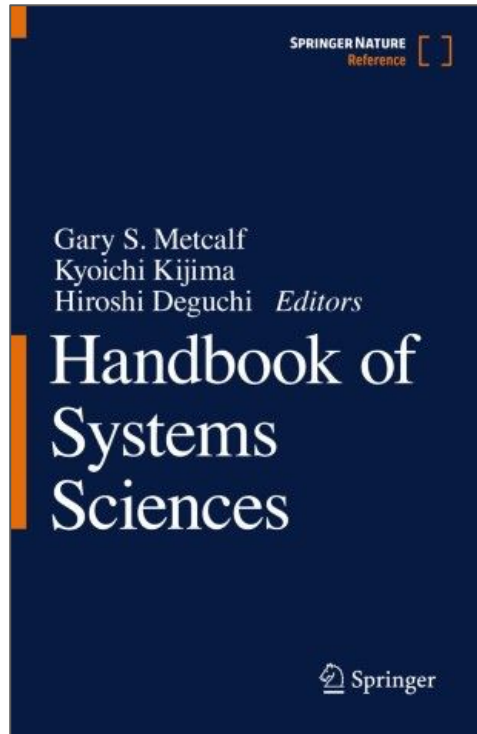


*“By **integrating systems thinking** and its methods, systemic design brings **human-centred design** to complex, multi-stakeholder service systems. It adapts from known design competencies – form and process reasoning, social and generative research methods, and sketching and visualization practices – to de-scribe, map, propose and reconfigure complex social systems.”*

(Jones, 2018).

Systemic Design

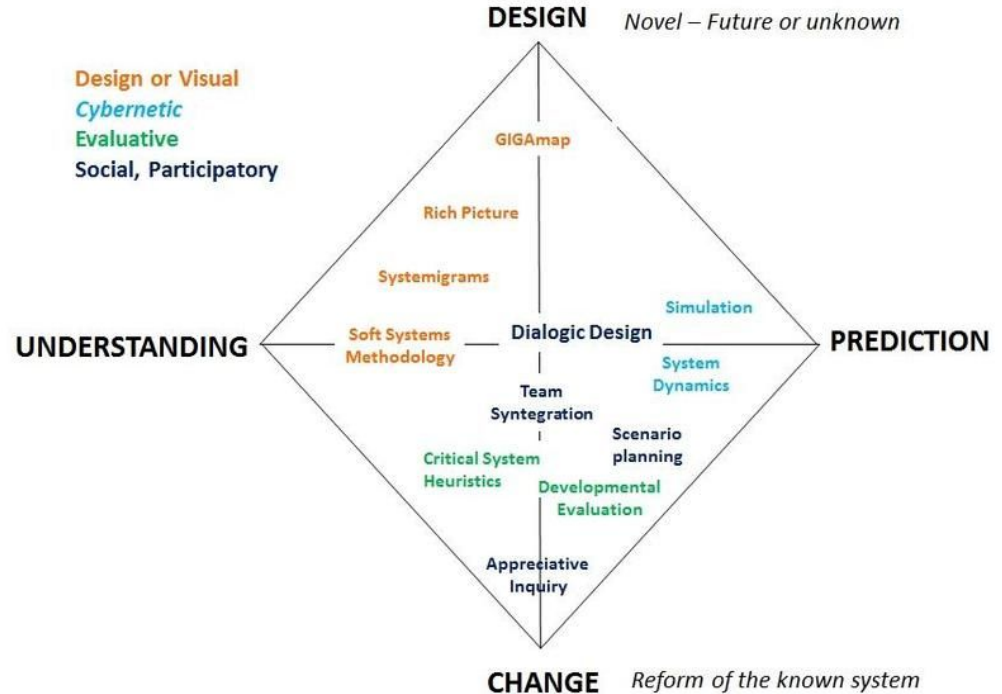
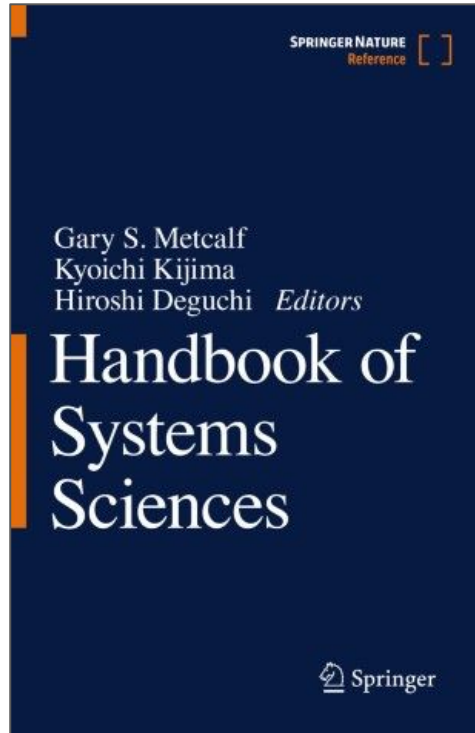
Principles shared between systems and design



1. **Idealization** is an ideal state or set of conditions that compels action toward a desirable outcome or signifies the value of a future system or practice.
2. **Appreciating complexity** acknowledges the dynamic complexity of multi-causal (wicked) problems and the cognitive factors involved in understanding the relationships within the problem's complexity.
3. **Purpose finding** defines a process of iterative purpose seeking, recognizing that purposes are constructed interdependently with stakeholders in language and can be determined by agreement, and designed or redesigned.
4. **Boundary framing** is the principle of determining the most effective fit between a concept and its target environment, considered as both concept framing and boundary critique.
5. **Requisite variety** in design proposes that, whether in a social system or information system, the functional complexity of a given design must be calibrated to and provide sufficient options for interacting with the known and potential factors of its target environment complexity.
6. **Feedback coordination** describes the identification of critical feedback relationships (first- n order) in social and technological systems for coordinating the dynamic fit to environmental and contextual functions.
7. **System ordering** defines the function of design as a process of coordinated formation of options, including information, assets, organizations, and social systems, in meaningful ways by human custodians. Designers define humanly useful structures that enable visibility and salience within complex situations.
8. **Generative emergence** describes the selection of emergent manifestations for design signification. *Compositional* emergence manifests in design activity as an outcome of *ordering*, from artificial microsystems that adapt an artifact to environments. *Created* emergence manifests from *organizing* systems, which include physical connections, designed forms, organizing processes, and the synergies that emerge from among these functions.
9. **Continuous adaptation** is maintaining through adaptation a preferred system purpose and objectives (or desiderata) throughout the lifecycle of conformance to environmental demands and related system changes.
10. **Self-organizing** in design enables actions that increase awareness, incentives, and social motivations to accelerate organizing behaviors.

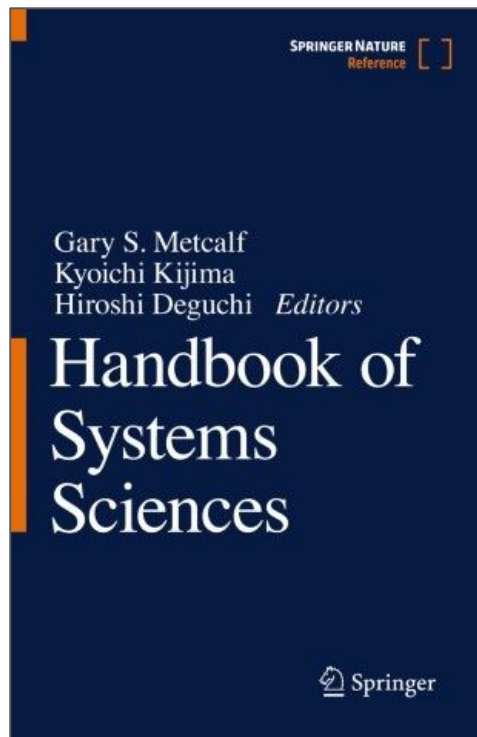
Systemic Design

Context: methods



Systemic Design

Context: methods (cont'd)



Planning and Analytical Methods

- Stakeholder analysis
- Transition planning (Geels 2005)
- Scenario planning

Visual and Conceptual Methods

- Gigamaps (Sevaldson 2008)
- Synthesis maps (Jones and Bowes 2017)
- Rich picture (Checkland 2000)
- Modeling (Visual models)
- System mapping (Blair et al. 2007)
- Soft systems methodology (Checkland 2000)
- Three horizons (Curry and Hodgson 2008)

Simulation and Gaming

- Games
- Network centrality analysis (Murphy and Jones 2019)
- Agent-based models
- System dynamics (Forrester 1994)

Critical and Evaluative Methods

- Activity theory (Kaptelinin and Nardi 2006)
- Boundary critique, critical heuristics (Ulrich 1983)
- Developmental evaluation (Patton 1994)

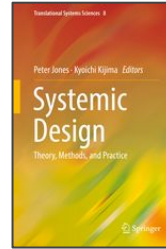
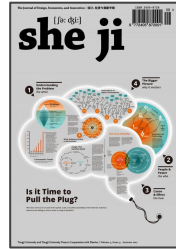
Participatory and Cocreative Methods

- Generative workshops (Sanders and Stappers 2013)
- Dialogic design (Christakis and Bausch 2006)
- Team synteegration (Beer 1994)
- Appreciative inquiry (Cooperrider and Srivastava 1987)

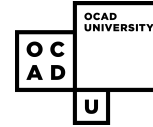
Systemic Design

The Field

SYSTEMIC
DESIGN
ASSOCIATION



राष्ट्रीय डिज़ाइन संस्थान
NATIONAL INSTITUTE OF DESIGN



IIT Institute of Design



Arkitektur- og designhøgskolen i Oslo
The Oslo School of Architecture and Design



Design
and Architecture
Norway



New solutions
for thriving societies



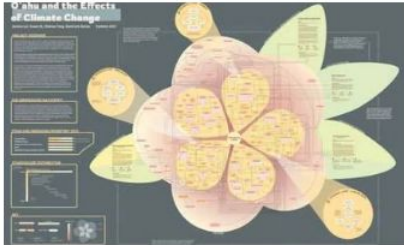
Systemic Design In Action



Systemic Design

Artefacts: Maps

RSD10 SYSTEMS MAPS (17) | USE ARROWS TO SCROLL



O'AHU AND THE EFFECTS OF CLIMATE CHANGE



PLASTIC WAVE – PLASTIC POLLUTION IS A RESULT OF WHO WE ARE



SYNERGETIC LANDSCAPE



THE FUTURE OF WORK-LIFE BALANCE IN THE TECH SECTOR

Systemic Design

Recent Frameworks

Design
Council

SIX PRINCIPLES FOR SYSTEMIC DESIGN

Our set of six principles aims to guide activity. They can be used to help people to develop or adapt new design methods and tools from their own practice:

PEOPLE AND PLANET CENTRED

Focusing on the shared benefits of all living things

ZOOMING IN AND OUT

From the micro to macro, from root cause to hopeful vision, from the present to the future, from the personal to the wider system

TESTING AND GROWING IDEAS

Making things to see how they work and help more things emerge

INCLUSIVE AND WELCOMING DIFFERENCE

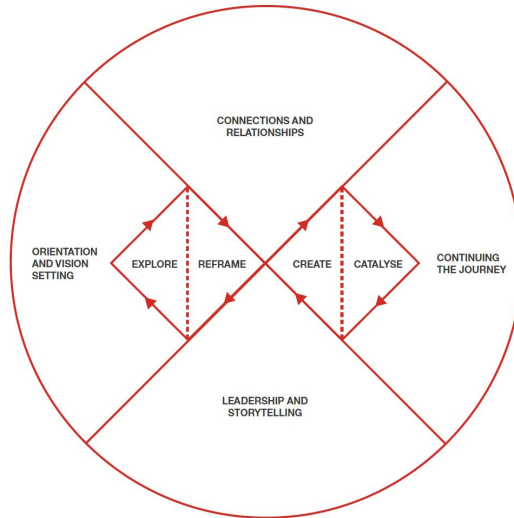
Creating safe, shared spaces and language to bring in multiple and marginalised perspectives

COLLABORATING AND CONNECTING

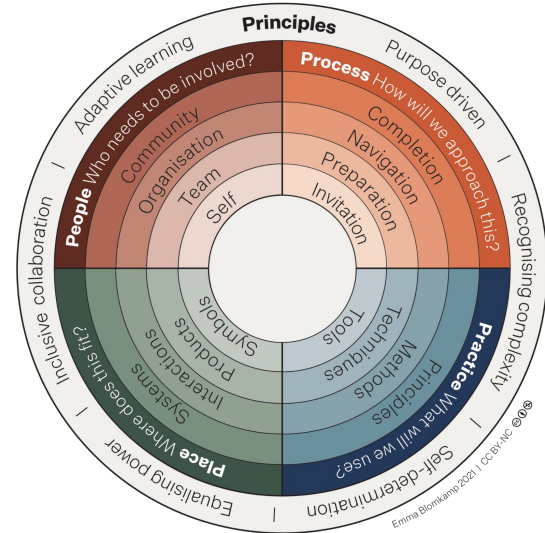
Seeing a project as one element in a wider movement for change

CIRCULAR AND REGENERATIVE

focus on existing assets – physical and social – and how we can re-use, nurture and grow these



The Systemic Design Practice Wheel



(Blomkamp, 2021)

Systemic Design

Recent Discussions

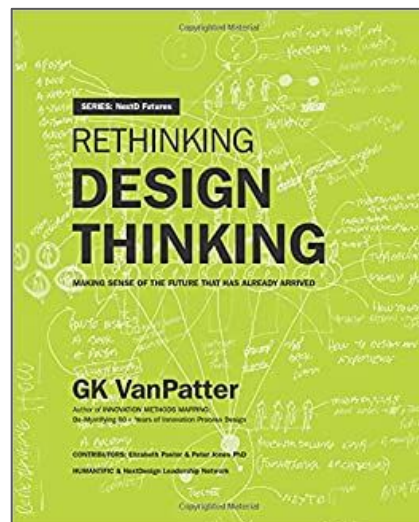
06-28-21

The most popular design thinking strategy is BS

The 'How might we' design prompt is insidious, and it's time to bury it.

TOUCHPOINT VOL. 12 NO. 2 - APRIL 2021

The Systems Turn in Service Design



Systemic Design

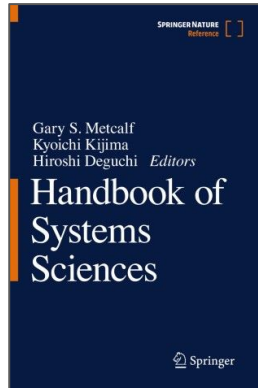
Recent Discussions

23- Systemic Design as a Hegemonic Force

FORMAT: WORKSHOPS, RSD10, TOPIC: METHODS & METHODOLOGY

THURS 04 | 13-14:30hr. Alberto Soriano, Josina Vink and Shivani Prakash

cancelled?



*“The current field of systemic design practice and study recognizes the **lack of broad recognition or acceptance of the field**, and **many projects of real complexity remain in the prototype stages**. Yet, an expanding discourse community and a flourishing literature has demonstrated the sustainable value of this emerging field of theory, practice, and study.”*

(Jones, 2021)

Systems Changes Learning

Systems Changes Learning

Distinction to make, between “Systems Change” as emerging field and practise, and “Systems Changes Learning” as a methodology and reorientation



Illuminate: Cultivating the field of systems change practice

ILLUMINATE

THE
SYSTEMS
SANCTUARY



SCHOOL
OF SYSTEM
CHANGE



CoCreative



ISC
Institute for
Strategic
Clarity

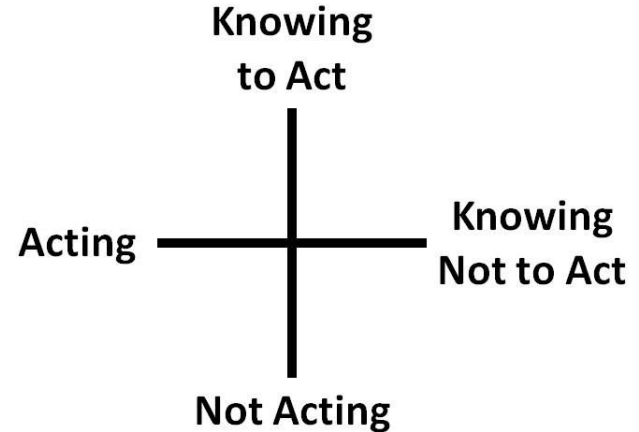


Academy for Systems Change

Lankelly
Chase

McConnell

Systems Changes Learning takes post-colonial orientation that de-centers the human's ability to enact change via *Wei* and *Wu Wei*

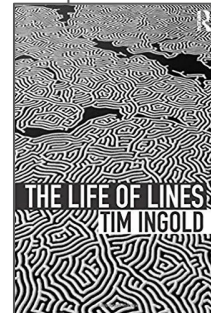
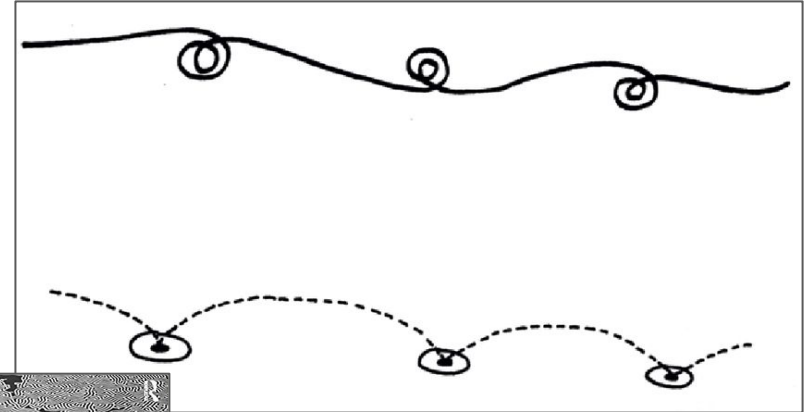


Systems Changes Learning

Shift in worldview from static-mechanistic view
to processual-living view



Systems Changes Learning emphasizes a processual
view that considers viewpoint “...over time”



Systems Changes Learning

Integrates philosophies from both orientations

Linear-Sequential Logical Positivism

Intention
Problem -> Solution

Human Will
Mechanical, Linear causation

Dynamic Equilibria
Engineering resilience

Scaling Technocracy
Lawful order

Freeze-Change-Unfreeze
Behavioural Change

Schools of Philosophy

Which
(phenomena, perception)

What?
(ontos, becoming)

Why?
(ontos, becoming)

Whom, when, where?
(phronesis, situated action)

How?
(techne, skills + tools)

Systems Changes Learning

Attending/Attention
Wicked Messes

Living Beings
Fluid course of nature

Regime Shifts
Ecological Resilience

Practical Wisdom
Negotiated Order

Social Practice
Affordances

Systems Changes Learning

Inquiry goes beyond science -> as search for better answers,
with philosophy -> *as search for better questions*

(1) Learning **Which**
shifts matter

(2) Learning **What**
rhythmic disorders prevail

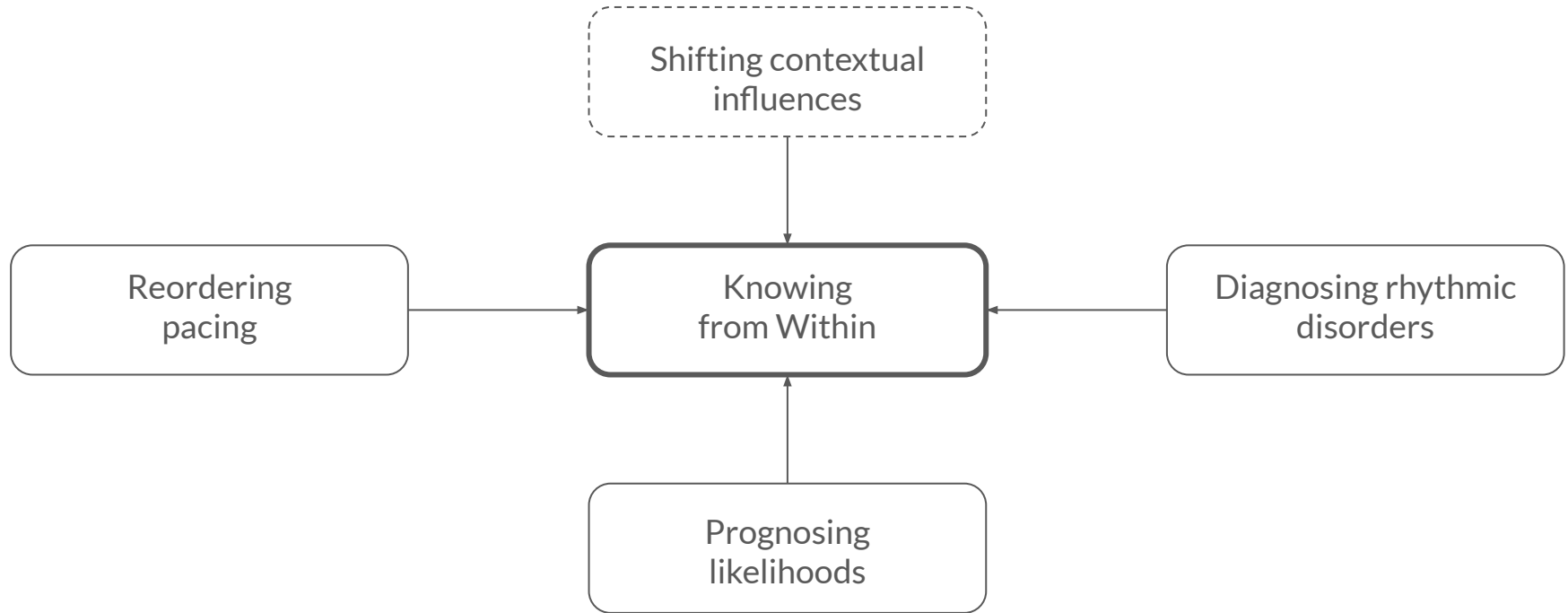
(3) Learning **Why**
a prognosis is preferred

(4) Learning **Whom-When-Where**
resets are valued or disfavoured

(5) Learning **How**
new ways become everyday practice

Systems Changes Learning

“Learning” here appreciates “*knowing from within*”



Summary:

Theory of Change -- linear, logic model to map actions to outcome, uptake & popularity in social sector and grantmaking/funding

Systemic Design -- integrates systems thinking & design for complex problems, design artefacts show utility, emerging real-world case studies and results tbd

Systems Changes Learning -- processual view of change via post-colonial orientation, looks at systems changes over time, to “learn from within” the systems about its **nature** and inactions or actions to take towards different states of balance

Let's discuss:

- **What are your experiences with these tools / practices / fields?**
- **What similarities have you found between them?**
- **What differences are most discerning to you?**
- **Can or should these see further integration or separation?**

