



Faculty of Design

2013

Opening Plenary for the Relating Systems Thinking and Design 2013 Symposium Proceedings

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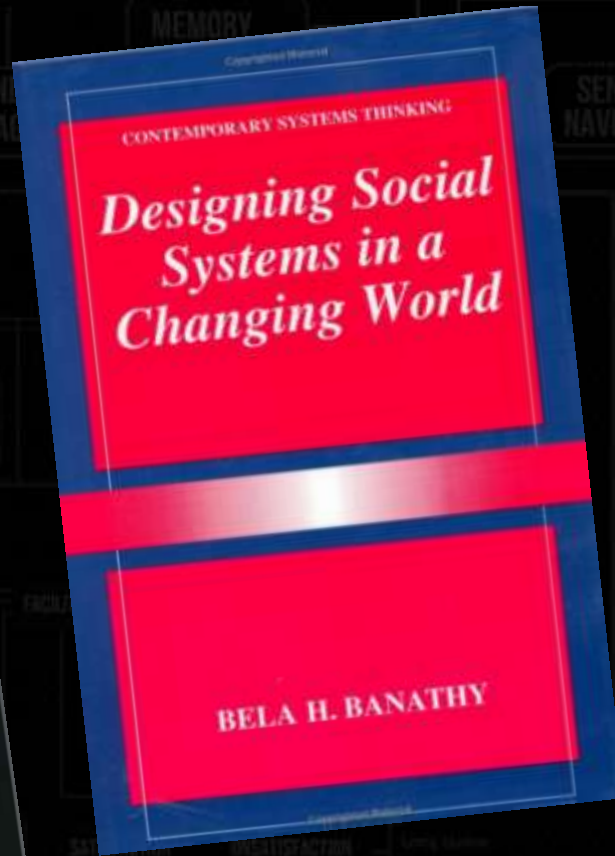
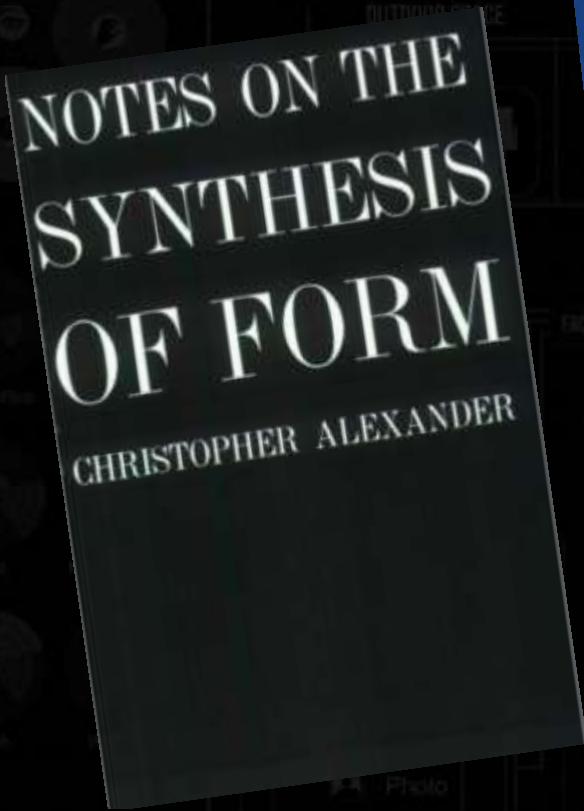
RSD2

Relating Systems Thinking and Design



A systems thinking renaissance?

- The emerging renaissance of systems thinking in design responds to the increasing complexity in all challenges faced by designers and transdisciplinary innovators.
- Our worlds have become too complex for linear and goal-driven management, resulting in hopelessly complicated social, economic, and political systems.
- The global demand for sustainability, democratic economies, and the emerging social arrangements for better education, employment, and development have become too complex for conventional thinking.



LESSONS LEARNED -- WHY THE FAILURE OF SYSTEMS THINKING SHOULD INFORM THE FUTURE OF DESIGN THINKING

BY: FRED COLLOPY



"You never learn by doing something right 'cause you already know how to do it. You only learn from making mistakes and correcting them."

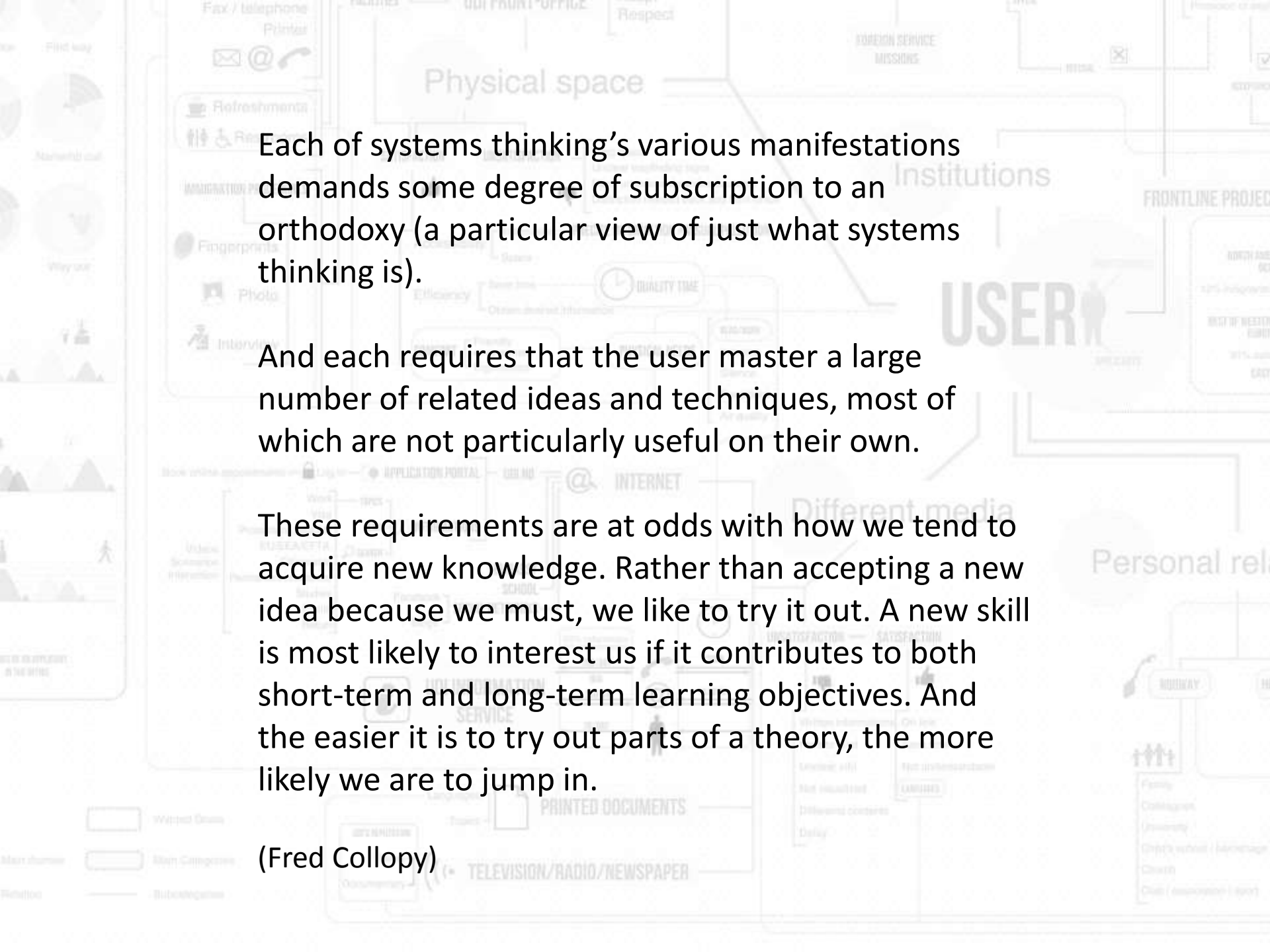
Russell Ackoff

Design and "design thinking" is gaining recognition as an important integrative concept in management practice and education. But it will fail to have a lasting impact, unless we learn from the mistakes of earlier, related ideas. For instance, "system thinking", which shares many of the conceptual foundations of "design thinking", promised to be a powerful guide to management practice, but it has never achieved the success its proponents hoped for. If systems thinking had been successful in gaining a foothold in management education over the last half of the 20th century, there would be no manage by designing movement, or calls for integrative or design thinking.

Why has systems thinking not been very successful in design?

Too technical
Too ethnographic
Too normative

Not designerly enough



Each of systems thinking's various manifestations demands some degree of subscription to an orthodoxy (a particular view of just what systems thinking is).

And each requires that the user master a large number of related ideas and techniques, most of which are not particularly useful on their own.

These requirements are at odds with how we tend to acquire new knowledge. Rather than accepting a new idea because we must, we like to try it out. A new skill is most likely to interest us if it contributes to both short-term and long-term learning objectives. And the easier it is to try out parts of a theory, the more likely we are to jump in.

(Fred Collopy)

RSD2: The current emerging dialogue

- What is there?
- What can we add and create?

Harold G. Nelson and Erik Stolterman

the design way

second edition

Intentional Change
in an Unpredictable World



INTERNATIONAL DIMENSION
PSYCHOLOGY
EFFECTIVE SIGNING

COLOUR

VISUAL COMFORT

Comprehensive Wayfinding

PROCESS

1. Determine
2. Determine
3. Develop from local (A->B)

MULTI-SENSORY PROCESS

1. Identify
2. Group
3. Linking - architectural - graphics

TECHNOLOGY

SENSORY NAVIGATION

PATHS

- Transition
- Travel corridors
- Landmarks
- Entrance/exit

MARKERS

NOTES

Elimination opportunities

AESTHETICS

SURFACE /TEXTURE

DURABILITY

- Identity
- Meaning

- Tactile experience
- Public response
- "Seamless" recognition

Indicate different zones

ELEMENT

LOGIC OF SEATING

elements

functions

- Work space
- Service space



elements

functions



EU/EEA

NON-EU

Product-Service System Design for Sustainability

Edited by
Carlo Vezzoli, Cindy Kohtala and Amrit Srinivasan
with JC Diehl, Sompit Moi Fusakul, Liu Xin and Deepta Sateesh



Learning Network on Sustainability

SYSTEMS ORIENTED DESIGN

OCEAN Design Research Association

- SOD news
- Information
- People
- Research
- RSD-seminar
- Projects
- GiGA-mapping
- Rich Design Space
- Rapid Learning
- Research Network
- Links
- SOD on FACEBOOK

Username

Password

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Adrian Paulsen at TEDx
 Tuesday 27th August 2013



Adrian Paulsen who is a designer at HALOGEN and a former student of Service Design and Systems Oriented Design at the Oslo School of Architecture and Design is giving a TEDx talk in Stavanger

Read more here >>>>



RSD2 Symposium Call for Participation

Tuesday 27th August 2013

Call for Participation

INSTITUTIONS AND PARTNERS

INSTITUTIONS

Mother institution:



Main research network:



DESIGN ORGANIZATIONS



RESEARCH PARTNERS

Systems Oriented Design at RSD2

Workshop with Halogen

Exhibition

Presentations by :

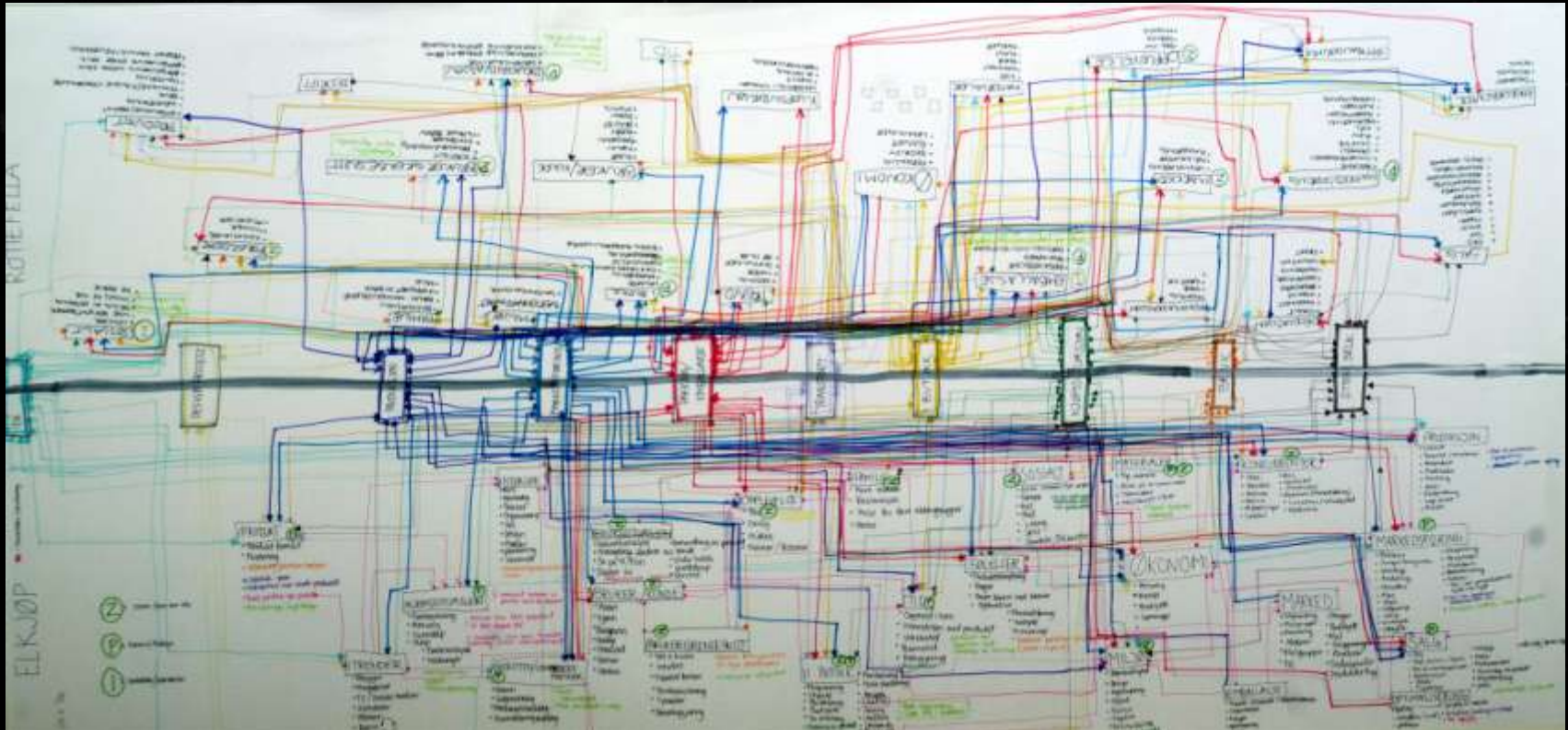
Sigrun Lurås and Kjetil Nordby

Benedicte Wildhagen, Knut Bang and Adrian Paulsen.

Manuela Aguirre and Josina Vink.

Linda Blåsvær

Systems thinking as designing



Interior Experience

SENSORY NAVIGATION

TECHNOLOGY

Digital
Analog

TACTILE COMFORT

AVOID DEPENDENCE ON SIGNAGE

OUTDOOR SPACE

NATURAL LIGHT

POINTS

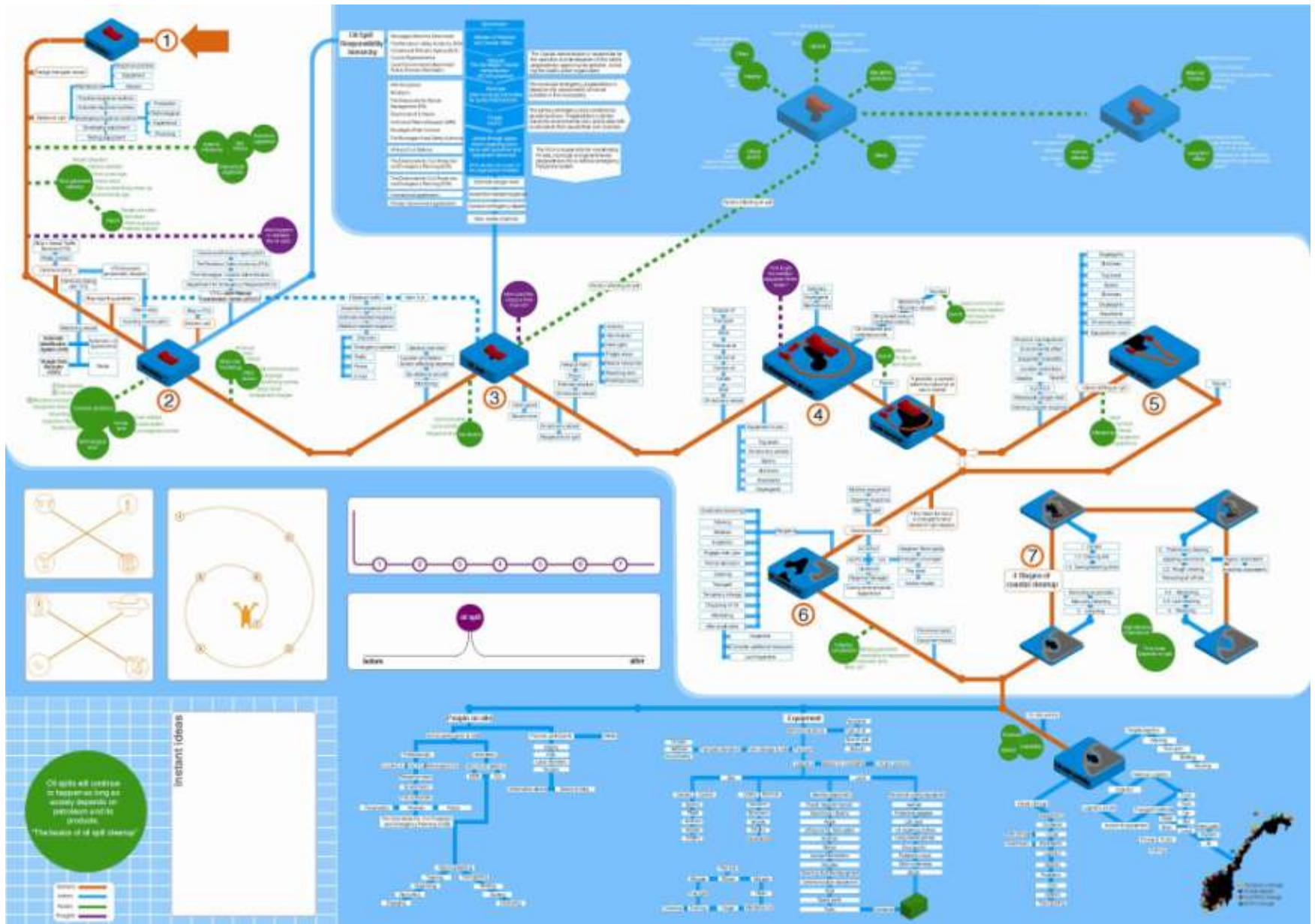
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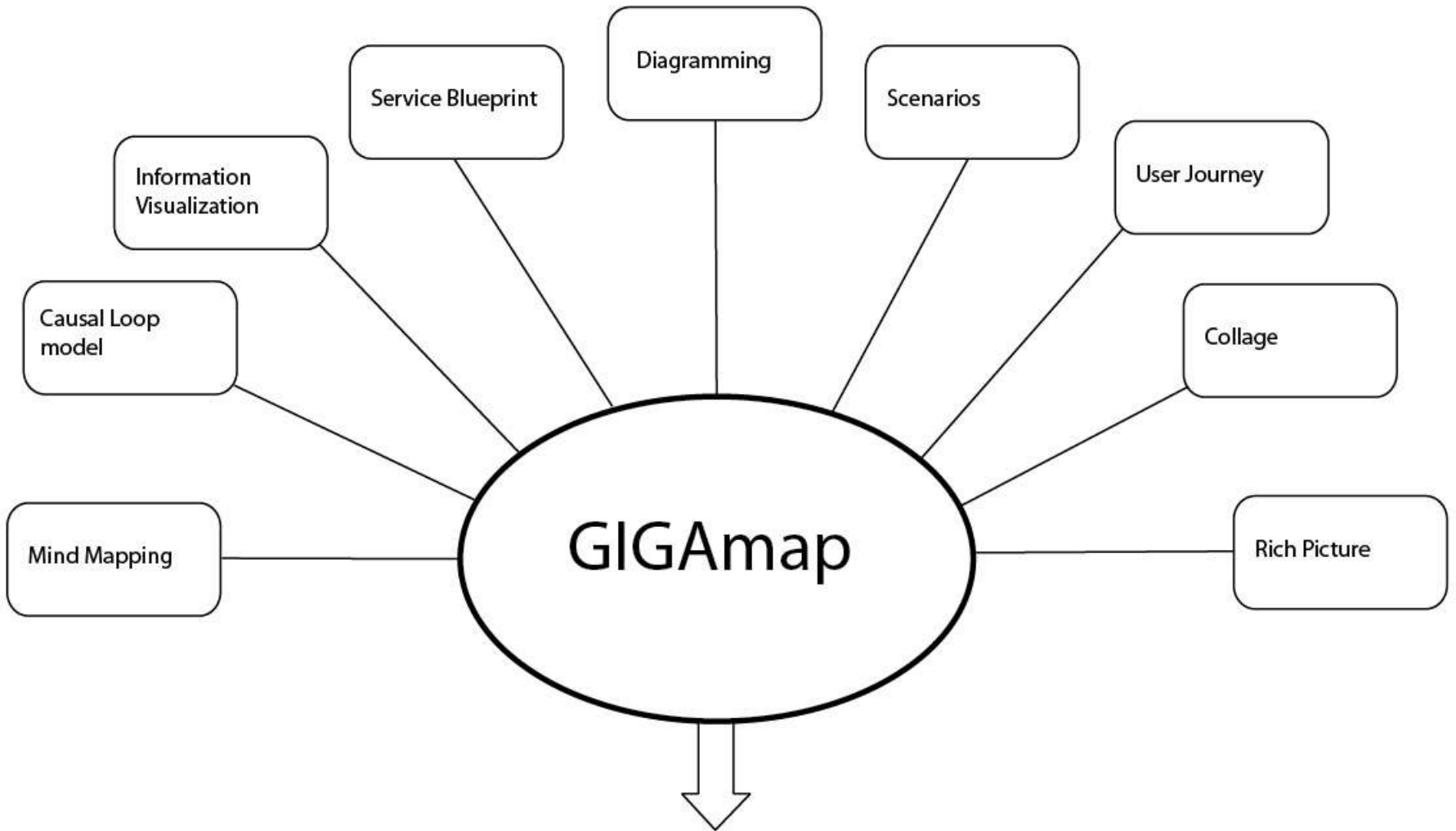
NOTES

Transition
Travel corridors
Landmarks
Entrance/text

NORWEGIAN GOV

The GIGA-map as design artifact





Rich Design Space, Scenarios, Co-design,
Process-maps, Implementation, Ideation
Systemic design intervention

GIGA-map Map

Features of SOD

GIGA-mapping

Timeline mapping

Integration of designing with systemsthinking

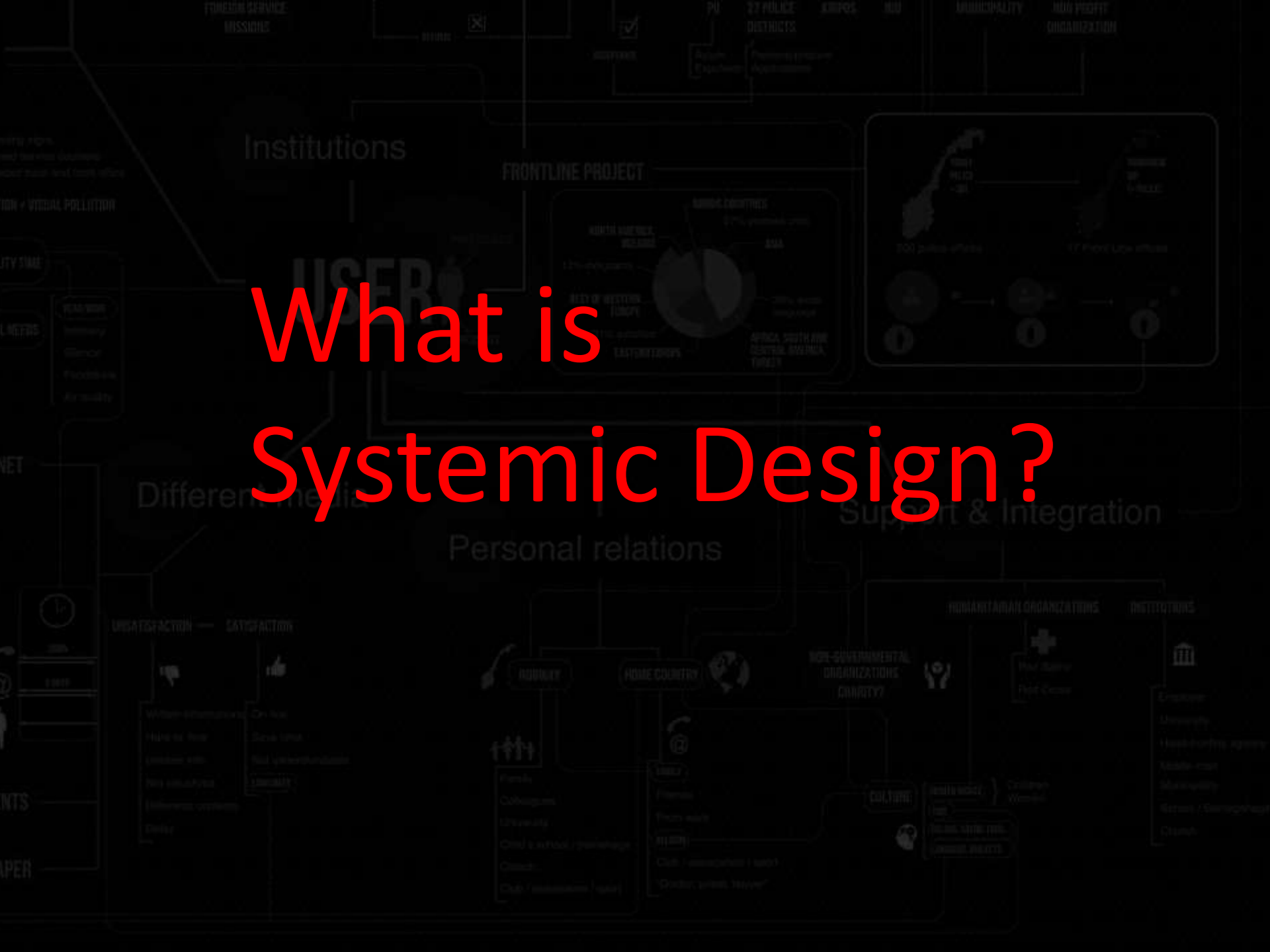
Very Rapid Learning Processes

The Rich Design Space

Projects spanning from Ship Bridge design
to design for Elderly homes

www.systemsorienteddesign.net

What is Systemic Design?



Alex Ryan

I conceive of systemic design as a synthesis of systems and design praxis. Through this synthesis, each interdiscipline compensates for weaknesses of the other to create a qualitatively more powerful approach to problematic situations, which is especially needed for (but not limited to) large scale organisational and societal challenges .

Systemics implies a multi-scale, multi-perspective, multi-dimensional, dynamical, and adaptive approach to making sense of and acting to improve situations. Designing implies a human-centered, collaborative, visual, synthetic, and generative approach to making new-to-the-world artifacts intended to create value. Systemic design is all of this, not through a concatenation of systems methods with design methods but through an integration of (Mindset, Methodology, and Methods) that is at once designerly and systemic. (Alex Ryan)

Harold Nelson

I had a lot of exposure to different systems domains—systems theory, systems thinking, systems approach, systems science, cybernetics, social systems design, whole systems design etc.—and it seemed to be more efficient to use the one term (systemics) rather than try to rattle off all the others when talking about systems and design.

Also when I started talking about the integration of systems and design it was easier to say 'systemics are the logics of design' than try to explain each related field and how it was integrated into design. In the end it also stopped people from assuming what you were talking about because systemics was usually a term different from their own background in systems. It provided an opportunity to introduce the concept of systemic design without distractions.

Peter Jones

Systemic design is distinguished from service or experience design in terms of scale, social complexity and integration. Systemic design is concerned with higher order systems that encompass multiple subsystems. By integrating systems thinking and its methods, systemic design brings human-centered design to complex, multi-stakeholder service systems as those found in industrial networks, transportation, medicine and healthcare.

Systemic design views design as an advanced practice of rigorous research and form-giving methods, practices of critical reasoning and creative making, and of sub-disciplines and deep skillsets.

A systemic design approach is an emerging extension of design practice that strategically adapts design methods for greater complexity and scale.

Peter Coughlan

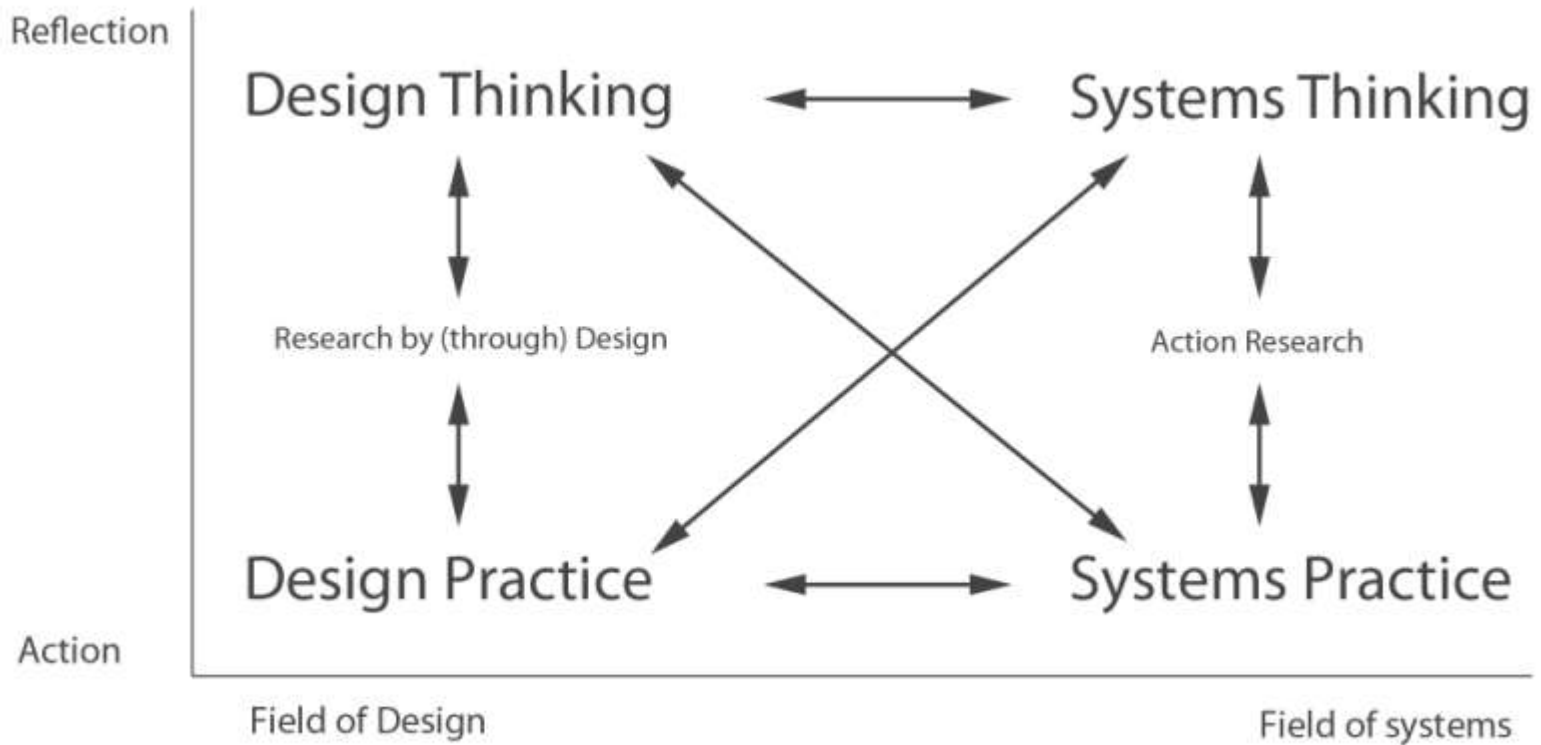
Systemic design is design informed by and shaped by the larger system in which it is found. Systemic design recognizes and accounts for the potential inter-relationships among all elements in a system, and systemic design solutions attempt to account for potential consequences resulting from this inter-connectedness.

Birger Sevaldson

Systemic Design is suggested as the term for an emerging field in design that strives to relate design more closely with systems thinking. It is both oriented towards thinking and practice.

The motivation trying to relate systems thinking and design more closely is on one side the recognition of the insufficiency of current design practices and design thinking with coping with complexity and on the other side the inability of current systems practices and systems thinking to make a substantial impact on management, innovation and design.

Systemic design is constituted by a handful of different approaches and is oriented rather towards the reinforcement of richness in the field than establishing normative consensus, recognizing that the interdisciplinarity and multitude of problematiqués found in the field requires approaches built on multiple perspectives.



Field of possibilities