

When Unfreeze-Move-Refreeze Isn't Working: Doing, Thinking and Making via Systems Changes Learning

David Ing

Creative Systemic Research Platform Institute
(Ticino, Switzerland)

Systems Changes Learning Circle
(Toronto, Canada)

SCiO - Systems and Complexity in Organisations
Virtual Open Meeting, July 2022

Image CC-BY Mike Cassano (2009) Most Interesting Pothole



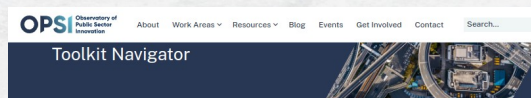
systemschanges.com, 2022

Agenda

- A. What if Systems Changes aren't Unfreeze-Move-Refreeze?
- B. Doing: Briefing, then hub + 4 spokes in workshop
- C. Thinking: Action learning for facilitators
- D. Making: Systematic methods via multiparadigm inquiry
- E. Co-learning with the 10-year journey

A. What if Systems Changes aren't Unfreeze-Move-Refreeze? ...

Which is/are system(s) change(s) c.f. *not* system(s) change(s)?



Systems Change

Systems thinking is an interdisciplinary approach to understanding how different parts of the systems relate to each other, how systems work and evolve over time and what outcomes they produce. Systems change is an application of that thinking to real world situations.

At its core systems thinking requires a shift in mindset from linear thinking to embracing complexity and interconnectedness. Systems change requires working across organisational boundaries and scales. By applying a systems lens to complex problems, one can help map the dynamics of the surrounding system, explore the ways in which the relationships between the systems components affects its functioning, and ascertain which interventions can lead to better results.

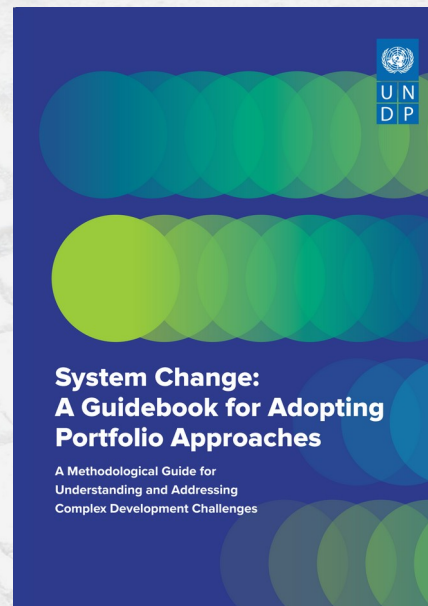
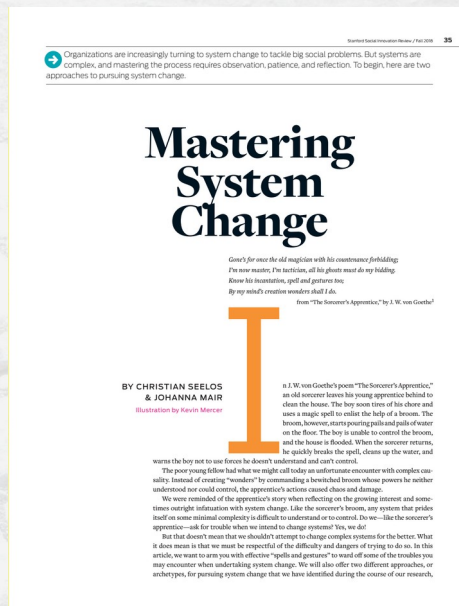
Basic principles

Systems approach deals with complex problems involving:

- Multiple stakeholders

Systems Change toolkits

View all toolkits for Systems Change



OECD Observatory of Public Sector Innovation

“... (rare) use” by governments of systems approaches towards making public services more effective and resilient”
(Cook & Tönurist, 2017, p. 4).

Stanford Social Innovation Review

... a way for “policymakers, foundations, NGOs, and social enterprises tackling issues like poverty, preventable disease and poor education” to “solve the root causes” of these intractable problems (Seelos & Mair, 2018, p. 35).

United Nations Development Programme

... a three phase methodology: (i) sense and frame; (ii) engage and position; and (iii) transform (Wellsch, 2022, p. 1)

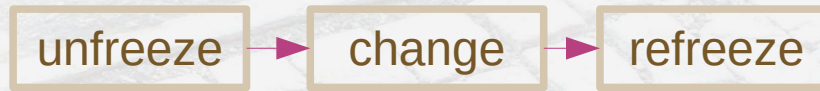
Forum for the Future + McConnell Foundation

“What is systems change?”
“... asked people attending and unable to attend to offer their definitions of systems change” (Birney & Riddell, 2018, p. 5)

A. What if Systems Changes aren't Unfreeze-Move-Refreeze? ...

“Change as Three Steps” as attributed to Kurt Lewin is a “largely post-hoc reconstruction”; he never wrote “refreeze”

[Change as Three Steps] has come to be **regarded** both as an **objective self-evident truth** and an idea with a **noble provenance** [p. 3]



Lewin never wrote ‘refreezing’ anywhere.

As far as we can ascertain, the **re-phrasing of Lewin’s freezing to ‘refreezing’** happened first in a 1950 conference paper by **Lewin’s former student Leon Festinger**

(Festinger and Coyle, 1950; reprinted in Festinger, 1980: 14).

Festinger said that: ‘To Lewin, life was not static; it was changing, dynamic, fluid. Lewin’s unfreezing-stabilizing-refreezing concept of change continues to be highly relevant today’.

It is worth noting that Festinger’s first sentence seems to **contradict** the second, or at least to contradict later interpretations of Lewin as the developer of a model that deals in static, or at least clearly delineated, steps.

Furthermore, Festinger **misrepresents** other elements; **Lewin’s ‘moving’ is transposed into ‘stabilizing’**, which shows how open to interpretation Lewin’s nascent thinking was in this ‘preparadigmatic’ period (Becher and Trowler, 2001: 33). [p. 5]



Unfreezing change as three steps
| Sage Publishing | Youtube

human relations
The SAGE JOURNAL

Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management

Stephen Cummings
Victoria University of Wellington, New Zealand

Todd Bridgman
Victoria University of Wellington, New Zealand

Kenneth G Brown
University of Iowa, USA

Abstract
Kurt Lewin's 'changing as three steps' (unfreezing → changing → refreezing) is regarded by many as the classic or fundamental approach to managing change. Lewin has been criticized by scholars for over-simplifying the change process and has been defended by others against such charges. However, what has remained unquestioned is the model's foundational significance. It is sometimes traced (if it is traced at all) to the first article ever published in *Human Relations*. Based on a comparison of what Lewin wrote about changing as three steps with how this is presented in later works, we argue that he never developed such a model and it took form after his death. We investigate how and why 'changing as three steps' came to be understood as the foundation of the fledgling subfield of change management and to influence change theory and practice to this day, and how questioning this supposed foundation can encourage innovation.

Keywords
CATS, changing as three steps, change management, Kurt Lewin, management history, Michel Foucault

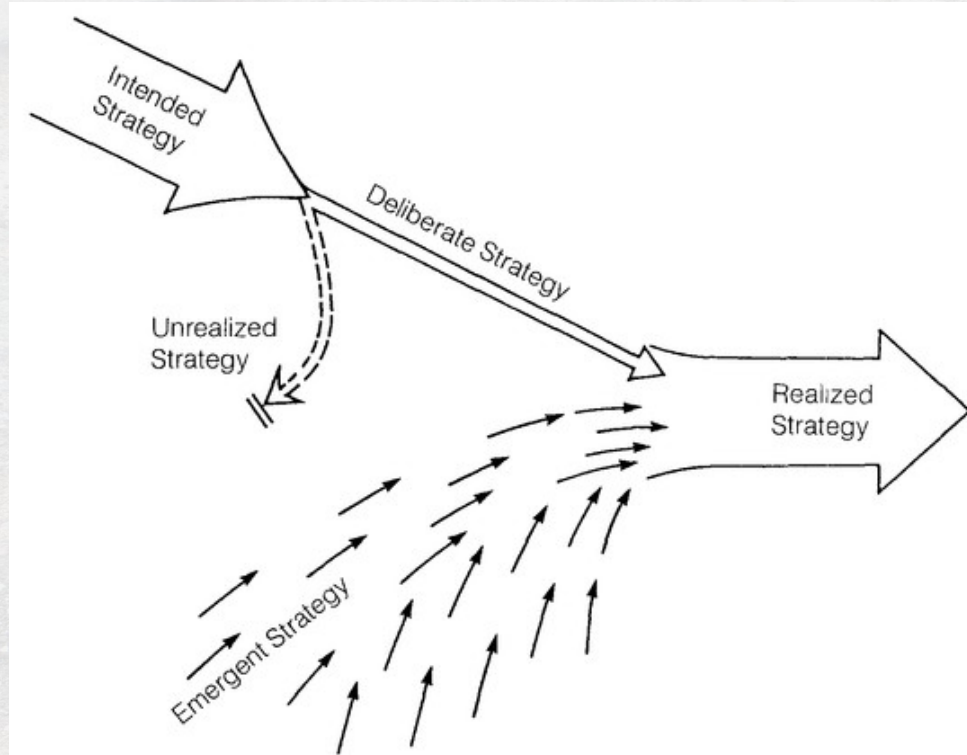
Corresponding author:
Stephen Cummings, Victoria Business School, Victoria University of Wellington, Wellington, New Zealand.
Email: stephen.cummings@vuw.ac.nz

Downloaded from hcr.sagepub.com at Victoria Univ of Wellington on September 30, 2015

Cummings, Stephen, Todd Bridgman, and Kenneth G Brown. 2016. “Unfreezing Change as Three Steps: Rethinking Kurt Lewin’s Legacy for Change Management.” *Human Relations* 69 (1): 33–60. <https://doi.org/10.1177/0018726715577707>.

A. Rising Interest in System(s) Change(s) ...

In contrast to strategy as *plan*, strategy as *pattern* in a stream of actions is defined by consistency in behavior, whether or not intended



To paraphrase Hume, strategies may result **from human actions**, but **not human designs**.

If we label the first definition **intended strategy** and the second **realized strategy**, as shown in Figure 1, then we can distinguish between

deliberate strategies, where intentions that exists previously were realized, from **emergent strategies**, where patterns developed in the absence of intentions, or despite them (which went **unrealized**).

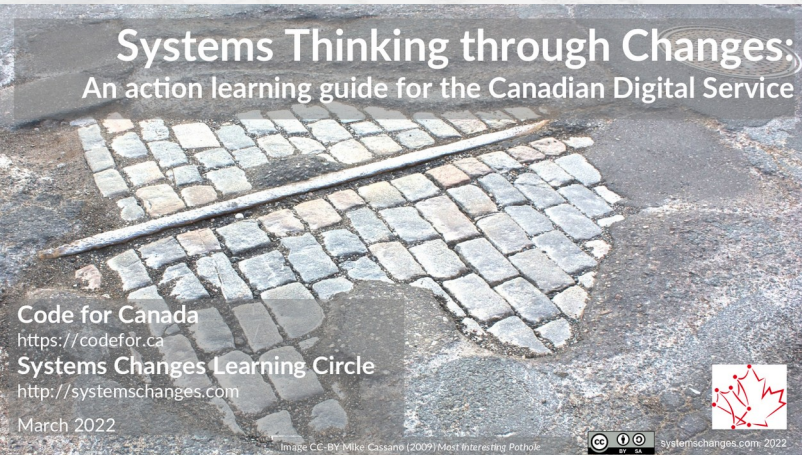
Mintzberg, Henry. 1987. "The Strategy Concept I: Five Ps For Strategy." *California Management Review* 30 (1): 11–24. <https://doi.org/10.2307/41165263> .

A. What if Systems Changes aren't Unfreeze-Move-Refreeze? ...

Three works in 2022 reflect the current (i) doing, (ii) thinking, + (iii) making, in year 4 of 10 for the Systems Changes Learning Circle

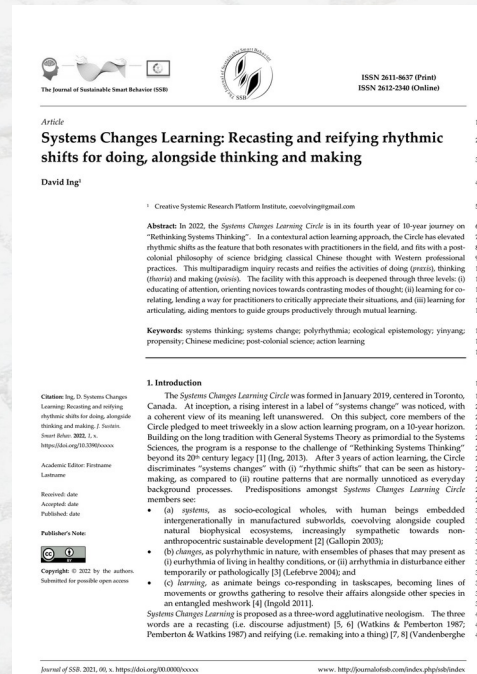
<http://systemschanges.com/online/presentations>

<http://coevolving.com/commons/publications>



http://systemschanges.com/online/presentations/20220304_cfc

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<http://coevolving.com/commons/2022-07-recasting-and-reifying-rhythmic-shifts>

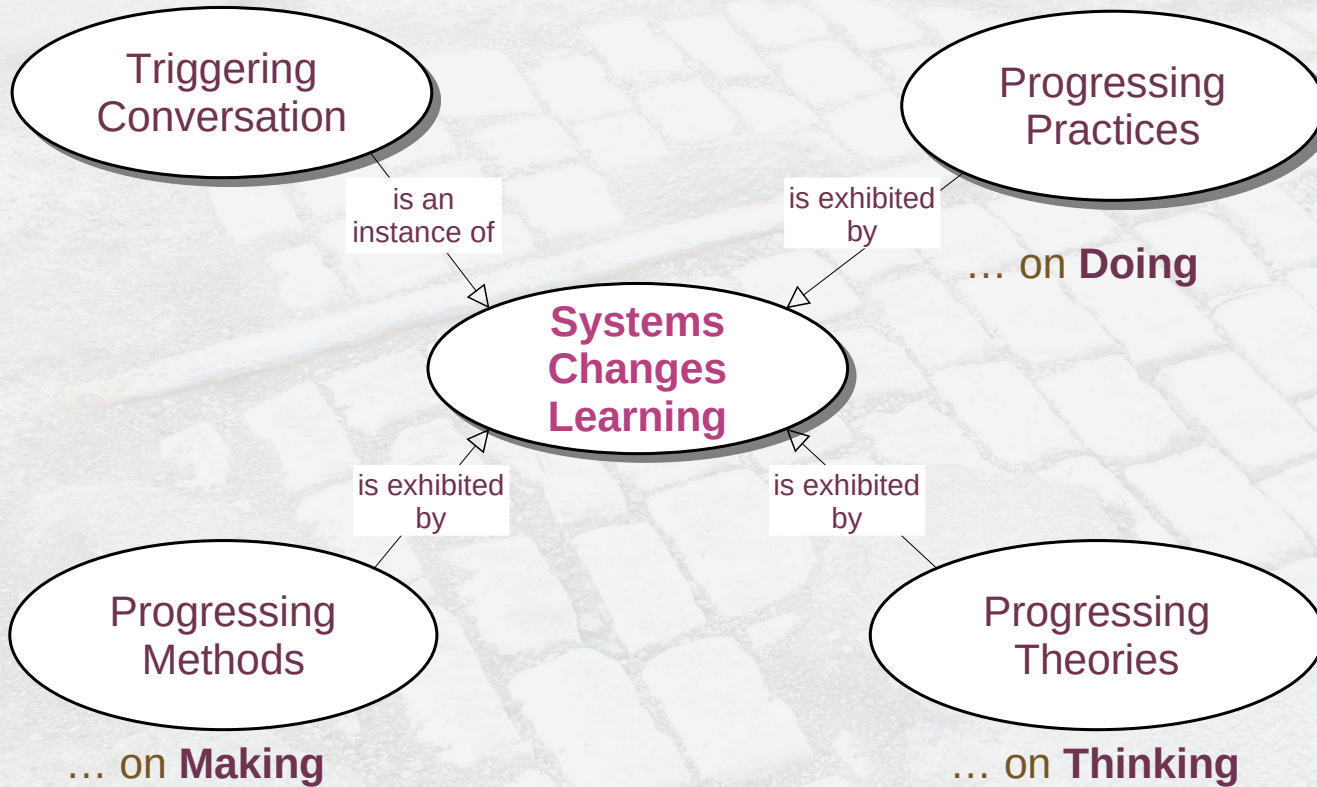


<http://coevolving.com/commons/2022-07-08-appreciating-systems-changes>

A. What if Systems Changes aren't Unfreeze-Move-Refreeze? ...

Systems Changes Learning initiated with Triggering Conversation exhibits

(i) Doing (practices), (ii) Thinking (theories), + (iii) Making (methods)





Object Process Language

- Systems Changes Learning is physical and systemic.
- Triggering Conversation is physical and systemic.
- Triggering Conversation is instance of Systems Changes Learning,
- Systems Changes Learning exhibits Progressing Practices, Progressing Theories, and Progressing Methods.
- Progressing Practices is physical and systemic.
- Progressing Theories is informational and systemic.
- Progressing Methods is informational and systemic.

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Session Agenda for Canadian Digital Service

:60	:60	:80	:10	:60	:30
I. Presentation		II. Workshop		III. Workshop	IV. Read-outs
<ul style="list-style-type: none"> Welcome <i>Systems Thinking as Systems Changes Learning</i> Action learning practices as a hub + 4 spokes 		<ul style="list-style-type: none"> Reforming as groups :10 Knowing from within :20 Contextural influences :20 Diagnosing rhythmic disorders :30 		<ul style="list-style-type: none"> Prognosing likelihoods :20 Reordering pacing :20 Reflecting on progress + process (pre-retrospective) :20 	<ul style="list-style-type: none"> Show and tell (:10 per team)
D. Post-workshop retrospective (homework) <ul style="list-style-type: none"> Summary (1 page) of paths considered and not taken, actions to be negotiated 					

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Favoring 3 groups of systems thinkers, we add new contributors

Early cybernetics

Gregory Bateson (1904-1980)
Norbert Wiener (1894-1964)
Warren McCulloch (1898-1969)
Margaret Mead (1901-1978)
W. Ross Ashby (1903-1972)

General systems theory

Ludwig von Bertalanffy (1901-72)
Kenneth Boulding (1910-1993)
Geoffrey Vickers (1894-1983)
Howard Odum (1924-2002)

System dynamics

Jay Forrester (1918-2016)
Donella Meadow (1941-2001)
Peter Senge (1947-)

Soft & critical systems

C. West Churchman (1913-2004)
Russell Ackoff (1919-2009)
Peter Checkland (1930-)
Werner Ulrich (1948-)
Michael C. Jackson (1951-)

Later cybernetics

Heinz von Foerster (1911-2002)
Stafford Beer (1926-2002)
Humberto Maturana (1928-)
Niklas Luhmann (1927-1998)
Paul Watzlawick (1921-2007)

Complexity theory

Ilya Prigogine (1917-2003)
Stuart Kauffman (1939-)
James Lovelock (1919-)

Learning systems

Kurt Lewin (1890-1947)
Eric Trist (1911-1993)
Chris Argyris (1923-2013)
Donald Schön (1930-1997)
Mary Catherine Bateson (1939-)

Practice theory

Hubert Dreyfus (1929-2017)
C. Fernando Flores (1943-)
Étienne Wenger (1952-)

Ecological anthropology

J.J. Gibson (1904-1979)
Tim Ingold (1948-)

Postcolonial & Chinese philosophy of science

Keekok Lee (1938-)
François Jullien (1951-)
John Law (1946-)

Service science

Richard Normann (1953-2003)
James C. Spohrer (1956-)
Gary S. Metcalf (1957-)

Systemic design

Harold G. Nelson (1943-)
Birger Sevaldson (1953-)
Peter H. Jones (1957-)

Source: Ramage, Magnus, and Karen Shipp. 2020. "Introduction to the First Edition." In *Systems Thinkers*, edited by Magnus Ramage and Karen Shipp, xiii–xx. Springer London. <https://doi.org/10.1007/978-1-4471-7475-2>, p. xvii

B. Doing: Briefing, then hub + 4 spokes in workshop ...

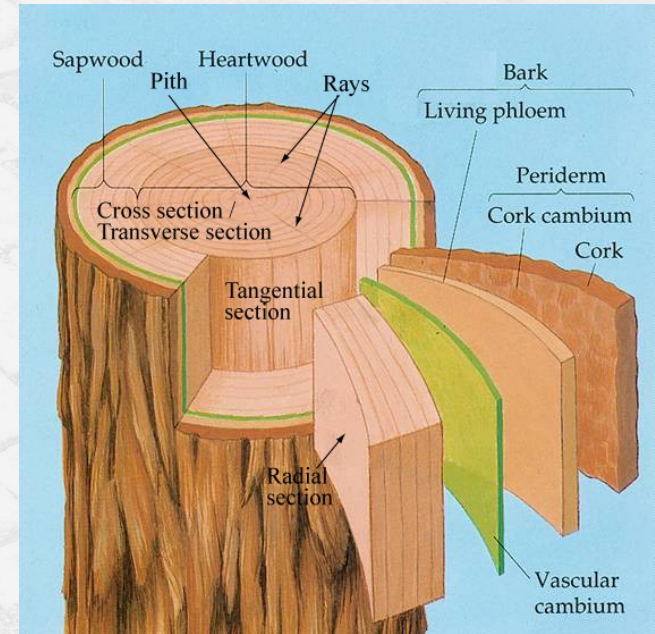
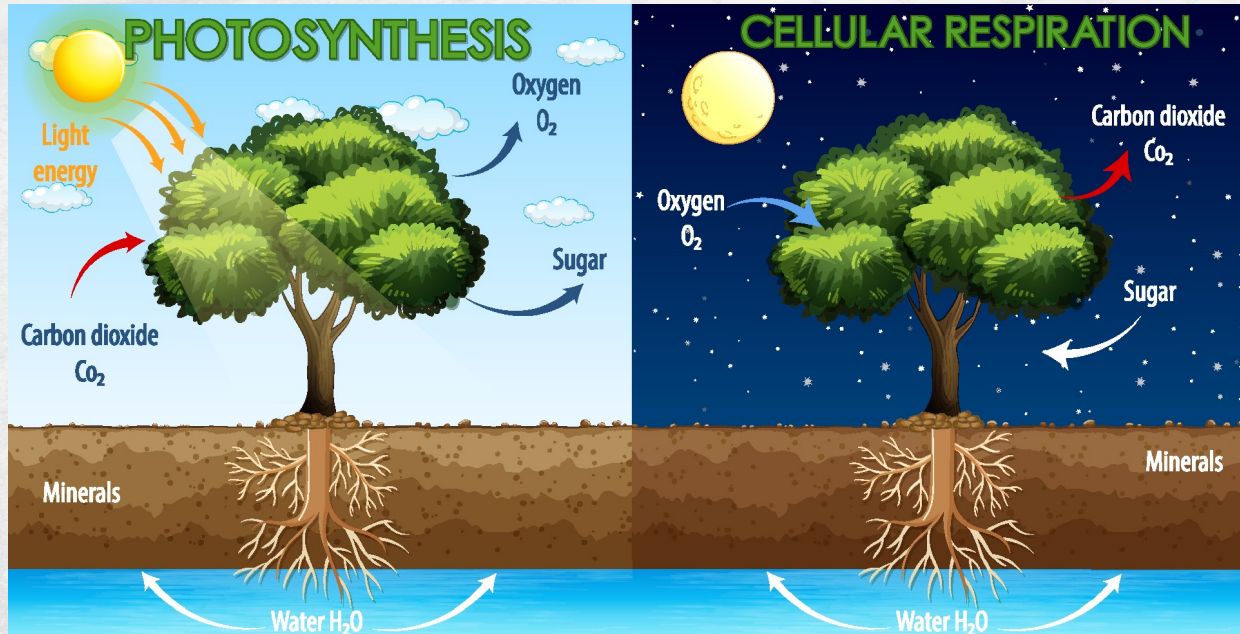
With authentic systems thinking, synthesis precedes analysis

Thinking *synthetically*

- Placing together parts into wholes

Thinking *analytically*

- Loosening from wholes into parts



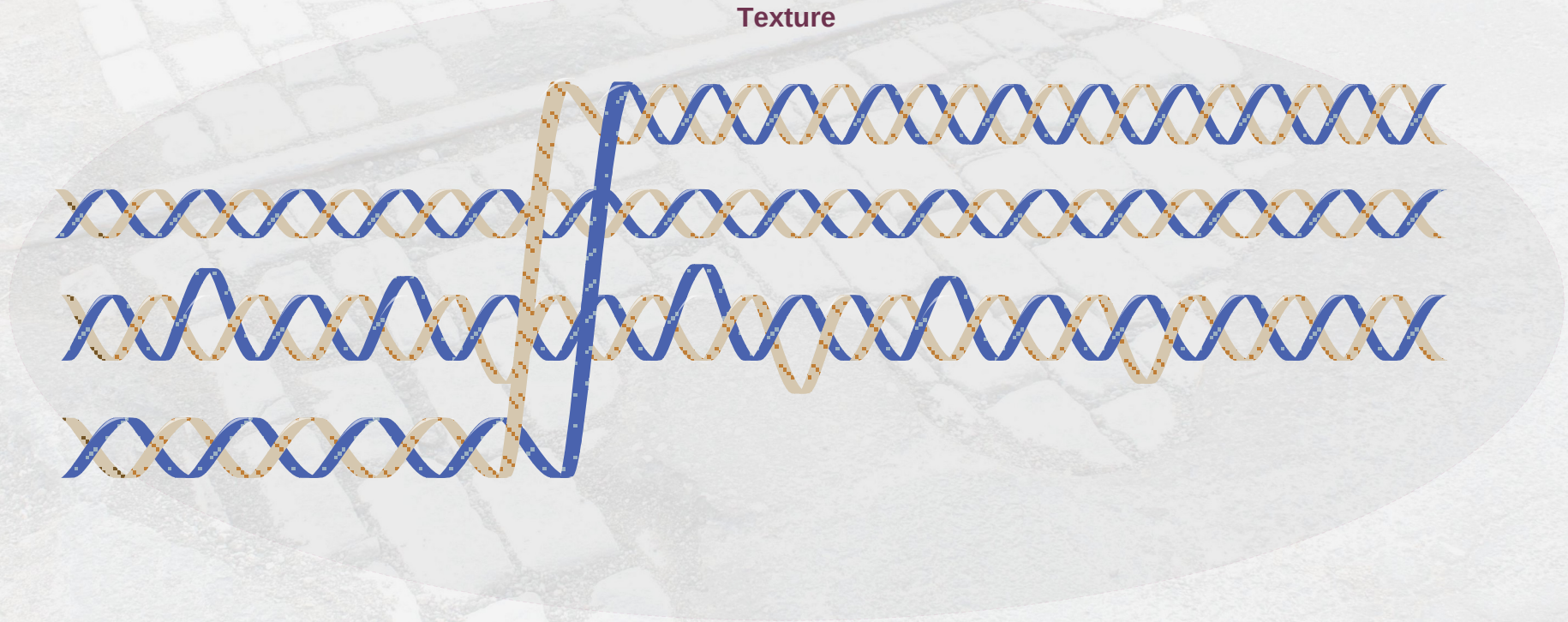
"A cut-through of a tree trunk" CC-BY-NC-SA
University of Cambridge 2004

Systems Changes Learning adds ... thinking *dyadically* ... over time

- e.g. the sun *waxing* (increasing in strength) and *waning* (decreasing in strength)
- Dyadic (yinyang waxing and waning) is not dualistic (e.g. sun, no sun)

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Our attention is drawn to rhythmic shift(s) in the texture, as the line of the system of interest crosses over co-related systems of influence

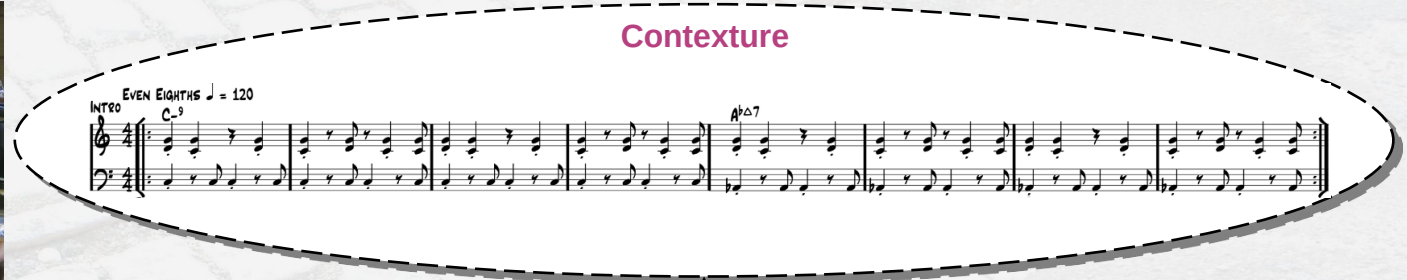


B. Doing: Briefing, then hub + 4 spokes in workshop

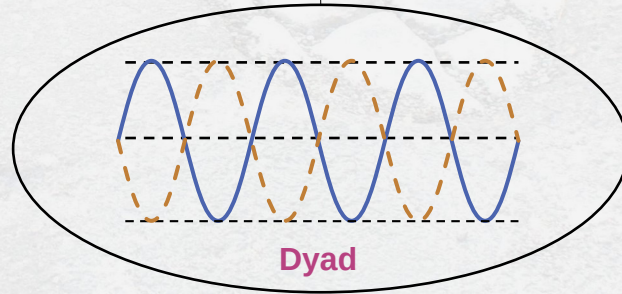
Rhythms of a living system of interest weave into a contexture of co-related systems of influence



"Giom Perret at The Redeemer",
CC-BY David Ing 2018



consists of
(has)



Dyad



"David Occhipinti + Mike Murley at
The Drake", CC-BY David Ing 2008

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Mechanisms \Rightarrow causality in conditions. Living systems \Rightarrow propensity in conditions

Water skiing, motion via causality

- Motorboat towing

"Water Skier – Ibiza" CC-BY Mark Wordy (2018)



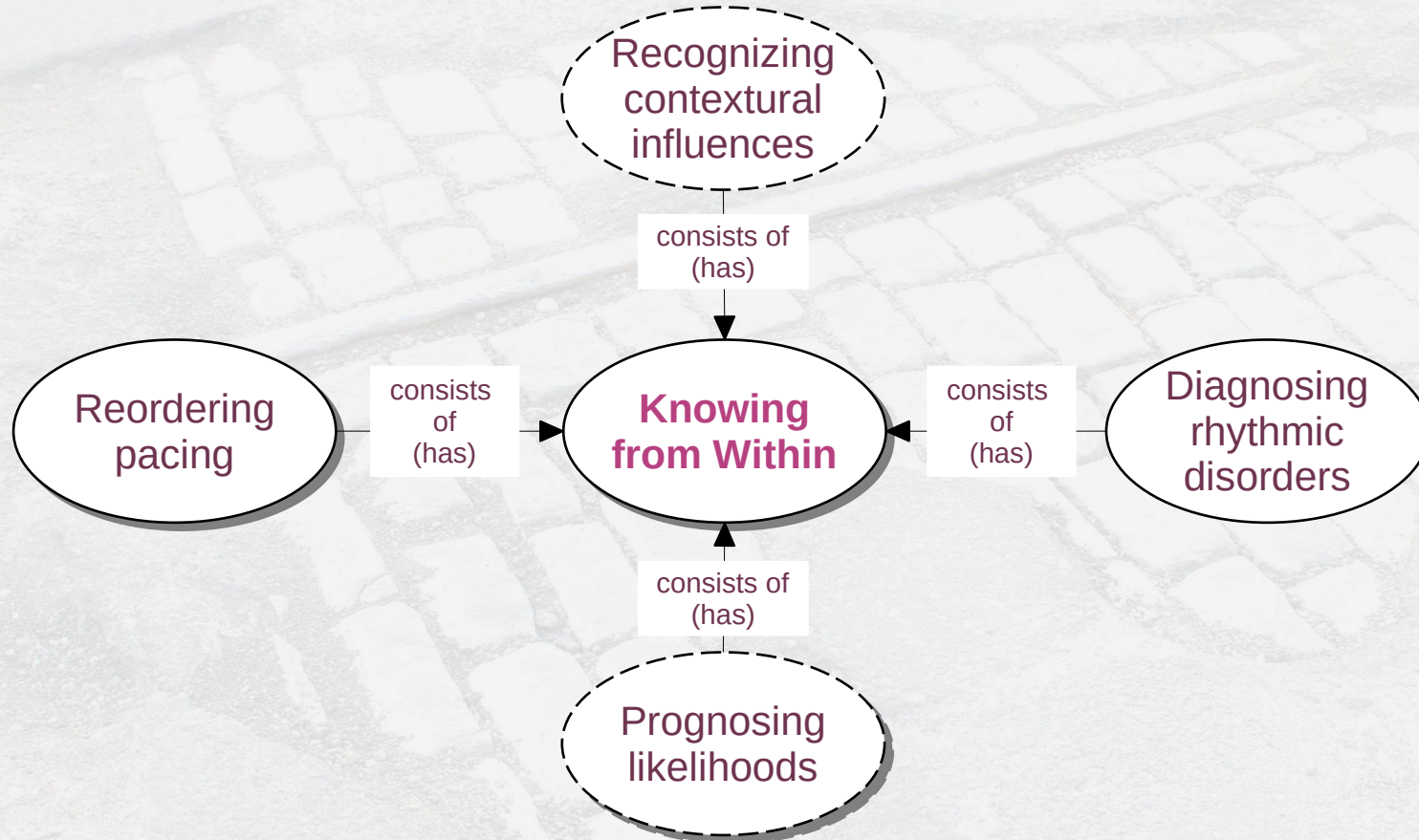
"Jax Beach Pier Surfers" CC-BY Ron Bixby (2012)

Surfing, motion via propensity

- Waves in the ocean
- Surfer on the board

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Systems Changes Learning centers on a hub of *knowing from within*, appreciated through a cycle of learning along four spokes



Legend:
Object Process
Methodology

Essence
Physical;
Origin
Systemic

Essence
Informational;
Origin
Systemic

Essence
Physical;
Origin
Environmental

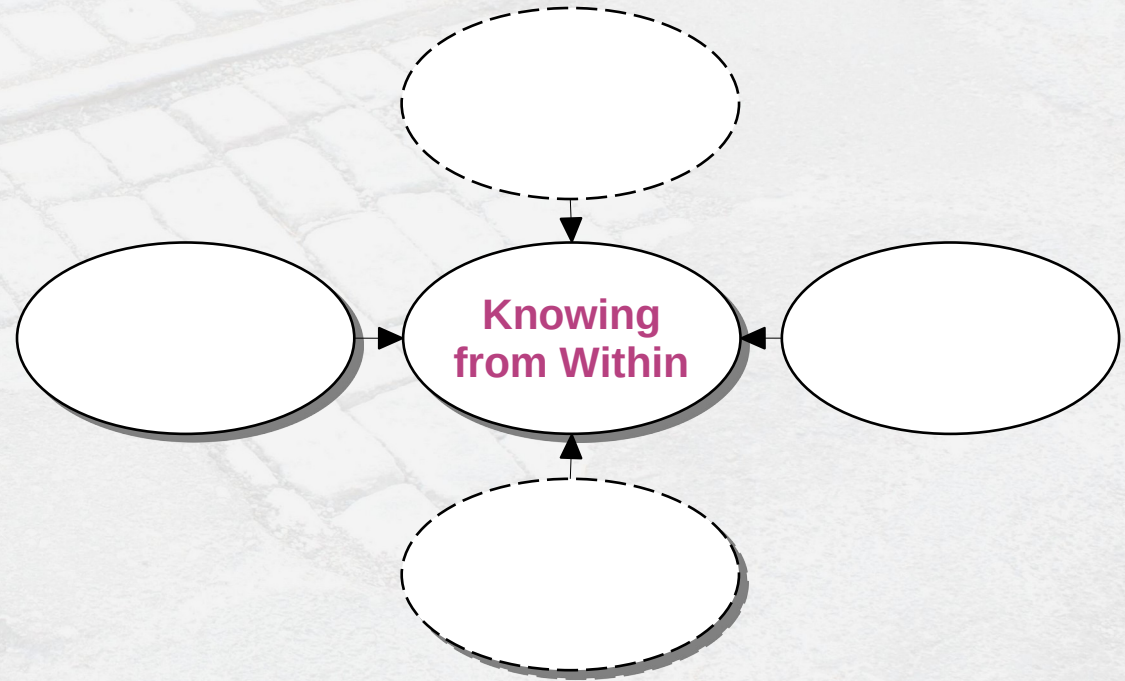
Essence
Informational;
Origin
Environmental

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Knowing from within embodies a becoming within rhythmic shifts of a system of interest, in the synthesis of co-responding dyadic processes

Guiding questions

1. Which rhythmic shift(s) is/are most present to you?
2. Which is your system of interest, that
(i) can and should know, and
(ii) can adapt and/or learn?
3. Which two dyadic processes carry on synthesizing to sustain living?
 - Yang == working, dissipating, expanding
 - Yin == resting, materializing, contracting



B. Doing: Briefing, then hub + 4 spokes in workshop ...

Knowing from within, example 1:

Consider a shift to pandemic working-from-home on (family) life

Guiding questions		Knowing from within
1.	Which rhythmic shift(s) is/are most present to you?	<ul style="list-style-type: none">• Residents living + working in closer quarters• Easy conveniences → resource preplanning
2.	Which is your system of interest, that (i) can and should know, and (ii) can adapt and/or learn?	<ul style="list-style-type: none">• Household
3.	Which two dyadic processes carry on synthesizing to sustain living? <ul style="list-style-type: none">• Yang == working, dissipating, expanding• Yin == resting, materializing, contracting	<ul style="list-style-type: none">• Working (providing income)• Domesticizing (homemaking)

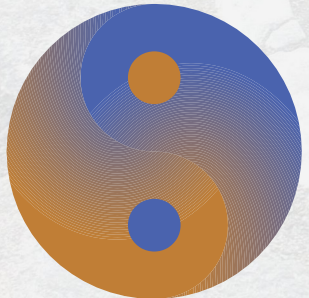
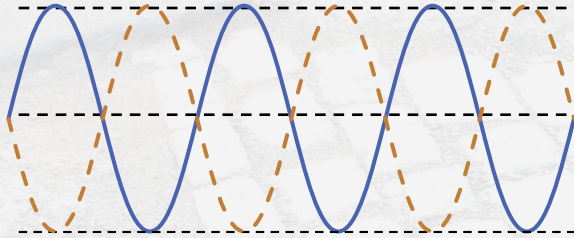
Knowing from within, example 2:

Consider a shift into a software app for venue vaccination tracking

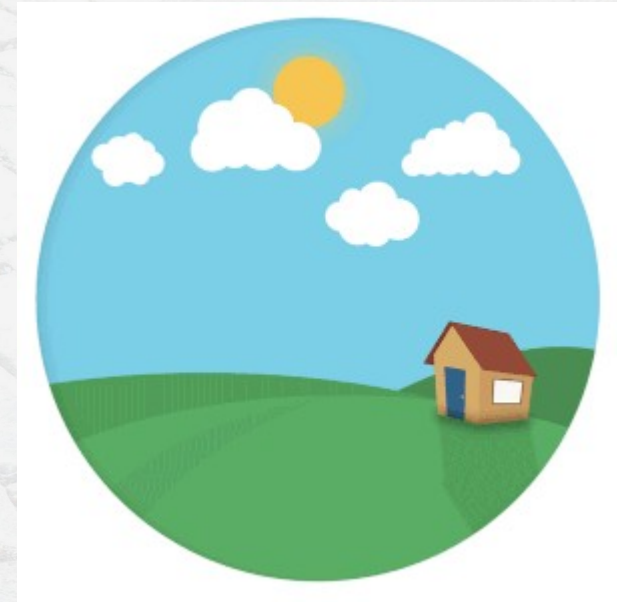
Guiding questions		Knowing from within
1.	Which rhythmic shift(s) is/are most present to you?	<ul style="list-style-type: none">• Visitors previously anonymous → tracked• Venue checking, recording names at door
2.	Which is your system of interest, that (i) can and should know, and (ii) can adapt and/or learn?	<ul style="list-style-type: none">• Civic Tech?• Collaboration between volunteer technical professionals and small organizations in a region
3.	Which two dyadic processes carry on synthesizing to sustain living? <ul style="list-style-type: none">• Yang == working, dissipating, expanding• Yin == resting, materializing, contracting	<ul style="list-style-type: none">• Privileging access of personal records for entry• Right-to-be-forgotten after n days

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Knowing from within, hint (philosophy of science, Classical Chinese Medicine):
Dyadic processes make up a whole with parts that co-respond



<i>Yang</i>	<i>Yin</i>
Illuminating	Darkening
Working	Resting
Warming	Cooling
Rising	Descending
Dissipating	Materializing
Scattering	Congeaing
Generating	Growing
Expanding	Contracting

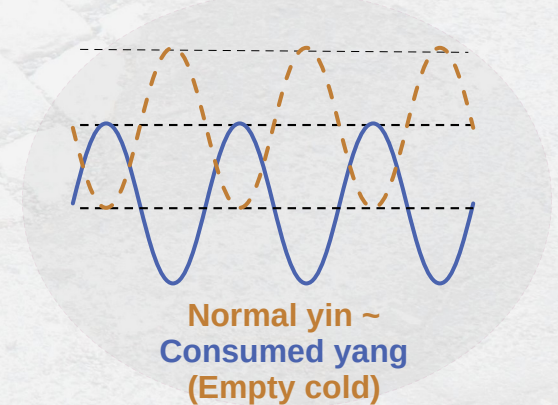
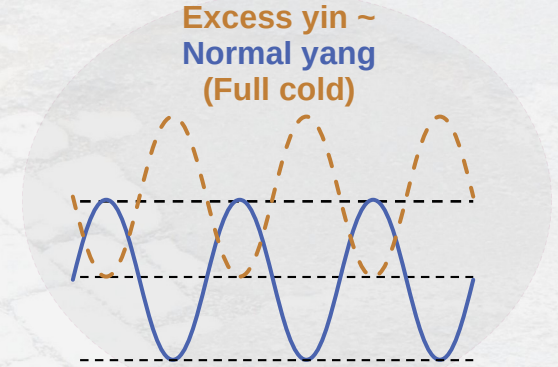
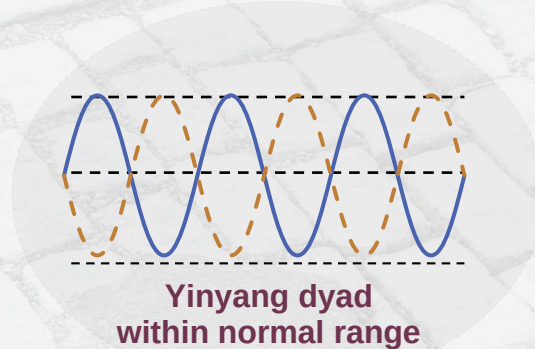
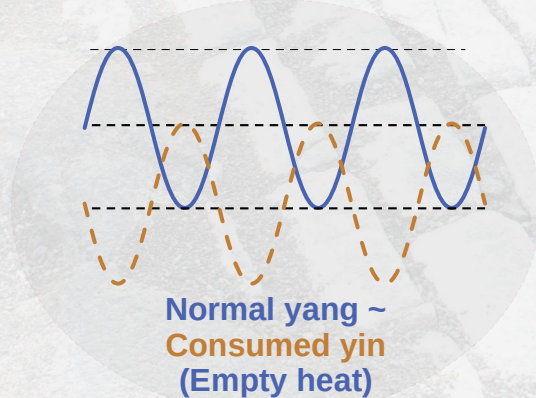
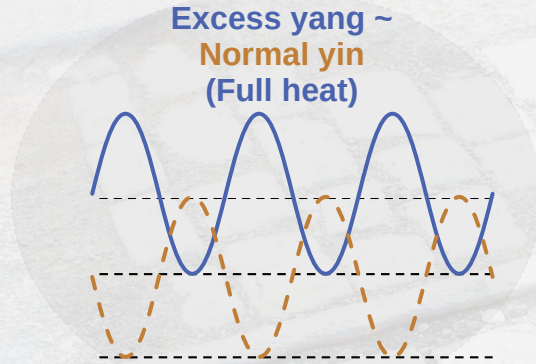


"Sunset-Sunrise" by Rick Ilover 2021 on Dribbble

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Diagnosing rhythmic disorders hint:

Pathologies may be diagnosed as one of four conditions



B. Doing: Briefing, then hub + 4 spokes in workshop ...

Recognizing contextural influences, hint:

Concurrent changes over time and space can be placed as (i) *at hand* for directly joining, and/or (ii) *remote* engaging via intermediaries

Distant Expediting trauma emergencies



Organizing operating room teams



Local Summoning battlefield medics



Scheduling neighbourhood clinics

Urgent

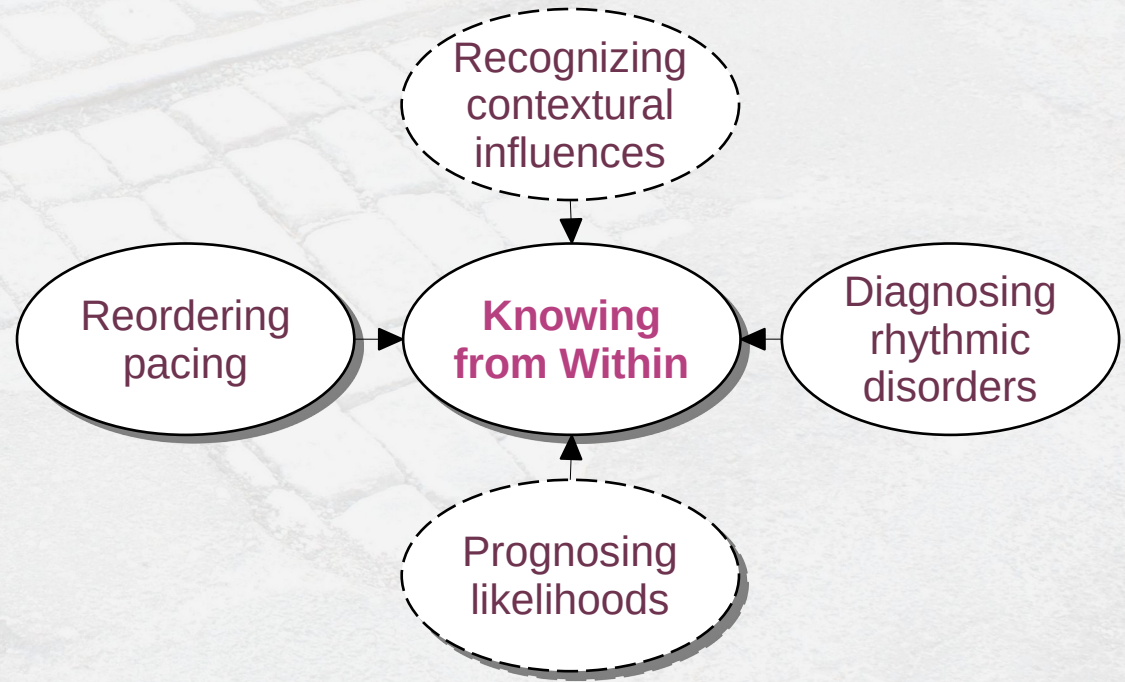
Important

B. Doing: Briefing, then hub + 4 spokes in workshop ...

Action learning is formalized through documenting joint deliberations, alternatives considered, and paths not chosen

Guiding questions

- | | |
|----|---|
| 1. | What did you collectively learn during the workshops? |
| 2. | What more do you need to learn? |
| 3. | Which options did you choose? |
| 4. | Which paths did you disfavour (and why)? |
| 5. | What actions are next? |



Agenda

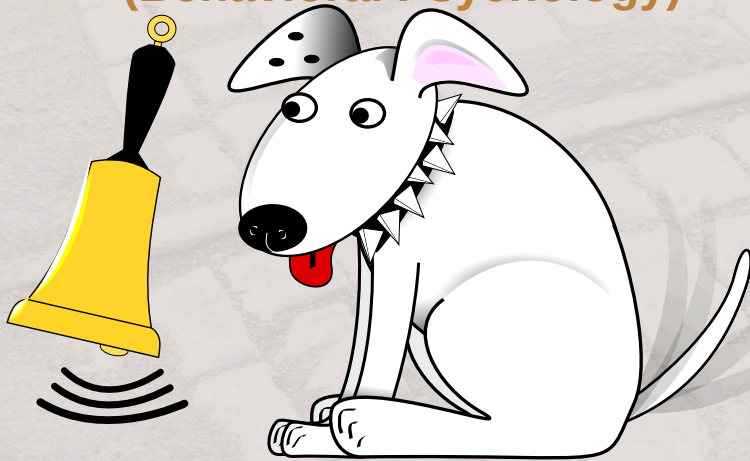
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Systems Change Learning first reorients attention, and then aims to nurture both co-relating and articulating

	<i>Praxis - Doing</i>	<i>Theoria - Thinking</i>	<i>Poiesis - Making</i>
<i>Educating of attention</i>	Behavioral and/or ecological?	Changelessness and/or temporality?	Causality and/or propensity?
<i>Learning for co-relating</i>	Action-agencing	Theory-enskillling	Methods-weaving
<i>Learning for articulating</i>	Action-guiding	Theory-building	Methods-composing

While Behavioral Psychology asked “*What’s inside your head*”,
an Ecological Approach asks “*What’s your head inside of?*”

Stimulus – Response (Behavioral Psychology)



[In the 1950] ... the **psycho-physical** program was ... traditional in considering **perception** to be **a set of responses to presented stimuli** (albeit “higher order” stimuli).

Ecological Approach to Perception



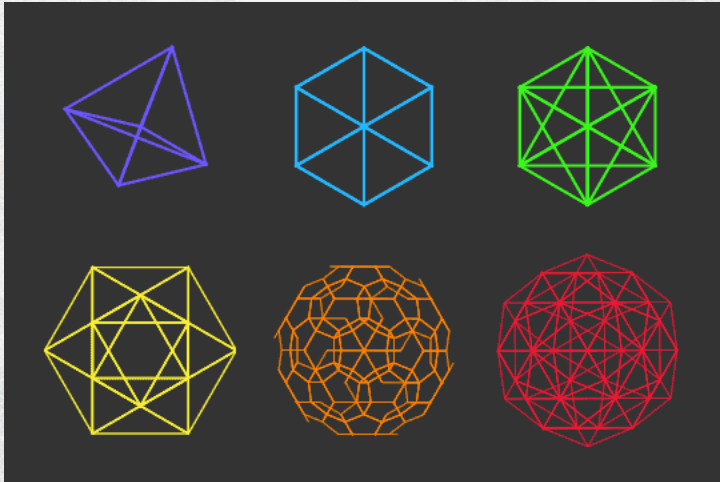
[**James J. Gibson**] has tried to develop enough theory ... to demonstrate that **direct perception** is indeed plausible ... The ... analysis of the optic array, stimulus organization, and the functional organization of **perceptual systems** are what Gibson oftens points to as **radical features**

William M. Mace 1977. “James J. Gibson’s Strategy for Perceiving: Ask Not What’s inside Your Head, but What Your Head’s inside of.” In *Perceiving, Acting, and Knowing: Toward an Ecological Psychology*, edited by Robert Shaw and John Bransford, 43–65.

Two ways of seeing nature, since ~500 BCE, have set how humans beings negotiate with themselves and in their world(s)

Reality as a **changelessness state**

- Parmenides of Elea, Confucius
- Shift → stability → sustainable
- Analytic paradigm



Hyper Platonic, by Nathan P. Seddig (natpbs.tumblr)

Reality as a **state of change, not a change of state**

- Heraclitus of Ephesus, Laotse
- Beauty of dynamic (c.f. protection of static)
- Contextual appreciation



Walking, by Dominique Taswell (strawberrylicorice.tumblr)

Hawk, David L. 1999. "Changelessness, and Other Impediments to Systems Performance." In *Proceedings of the Conference to Celebrate Russell L. Ackoff, and the Advent of Systems Thinking*, edited by Matthew J. Liberatore and David N. Nawrocki. Villanova University.
<http://davidhawk.com/wp-content/uploads/2018/09/Ackoff-Birthday-Conference.pdf#page=59> .

Willful action and non-intrusive action are central in Chinese thinking

為

wèi

無為

wú wèi

为 (為) wéi: p. 517

I (动, verb)

1. **do; act**: 敢做敢 ~ gǎn zuò gǎn ~ bold in action

2. **act as; serve as**: 以此 ~ 凭 yǐ cǐ ~ píng This will serve as proof.

3. **become**: 变沙漠 ~ 良田 biàn shā mó ~ liáng tiān turn the desert into arable land.

4. **be; mean**: 一公里 ~ 二华里 yī gōng lǐ ~ èr huā lǐ One kilometer is equivalent to two li.

无 (無) wú: p. 526

I (名, noun) **nothing; nil**: 从 ~ 到有 cóng ~ dào yǒu start from scratch

II (动, verb) **not have; there is not; without**: ~ 一定计划 ~ yī dìng jì huà have no definite plan

III (副, adverb) **not**: ~ 须多谈 ~ xǔ duō tán need not go into details

Concise English-Chinese Chinese-English Dictionary (2004), 3ed, Commercial Press and Oxford University Press

Wei meant application of **the force of will-power**, the **determination** that things, animals, or even other men, should do what they were ordered to do, but **wu wei** was the opposite of this, **leaving things alone**, letting **Nature** take her course, profiting by **going with the grain** of things instead of going against it, and **knowing how not to interfere**.

Needham, Joseph. 2004. "General Conclusions and Reflections." In *The Social Background*, edited by Kenneth Girdwood Robinson. Vol. VII:2. *Science and Civilisation in China*. Cambridge University Press. p. 16

Some scholars have argued that the interpretation of **wuwei** as "**non-intrusive action**" or "**non-interfering action**" is more philosophically profound and interesting. These latter translations support a meaningful rendition of the concept **wuwei both at the sociopolitical level** (arguing against the imposition of artificial, conformist and universally binding norms) **and at the metaphysical level** (acknowledging the inappropriateness and fatality of imposing egocentric or anthropocentric norms upon other individuals or species).

Lai, Karyn. 2003. "Conceptual Foundations for Environmental Ethics: A Daoist Perspective." *Environmental Ethics* 25 (3): 247–66. <https://doi.org/10.5840/enviroethics200325317>.

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- E. Co-learning with the 10-year journey

D. Making: Systematic methods via multiparadigm inquiry ...

Appreciating philosophies in (i) architectural design, (ii) ecological anthropology and (iii) Chinese medicine led to insights into systems rhythms

	Appreciative Systems		
	Reality Judgments	Value Judgments	Instrumental Judgments
Philosophy of Architectural Design	Differentiating space	Living order (Quality without a Name)	Unfolding patterns, constructing, repairing, systems generating systems
Philosophy of Ecological Anthropology	Lines of becoming, meshworks	Attending (wayfaring) alongside other beings	Co-responding through habit, agencing and attentionality
Philosophy of Classical Chinese Medicine	Diseases as internal, with external causes	Wei, wuwei	Tonifying yin or yang, expelling pathogenic factors
Philosophy of Rhythms	↓	↓	↓
Philosophy of Systems Rhythms	Rhythmic shifts, in textures	Propensity	Reordering pacing

Coevolving Innovations

... in Business Organizations and Information Technologies

Christopher Alexander, Horst Rittel, C. West Churchman

At U.C. Berkeley in the 1960s, [Christopher Alexander](#), [Horst Rittel](#) and [C. West Churchman](#) could have had lunch together. While disciplinary thinking might lead novices to focus only on each of [pattern language](#), [wicked problems](#) and [the systems approach](#), there are ties (as well as domain-specific distinctions) between the schools.



Circa 1968-1970: Christopher Alexander, Horst Rittel, West Churchman

Recent Posts

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- [Open Innovation Learning and Open Data](#)
- [Learning data science, hands-on](#)
- [Innovation Learning and Open Sourcing: IoT + Cloud + Cognitive](#)
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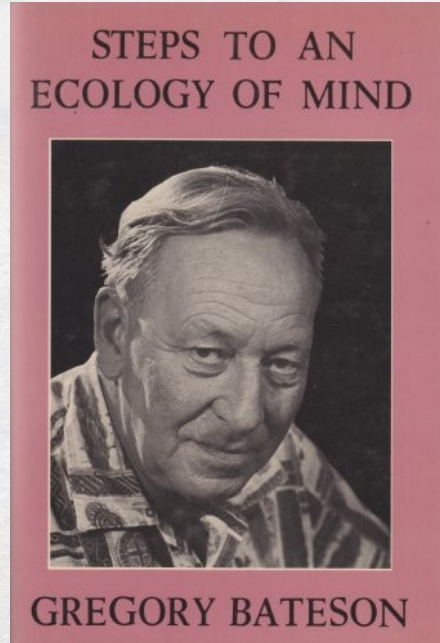
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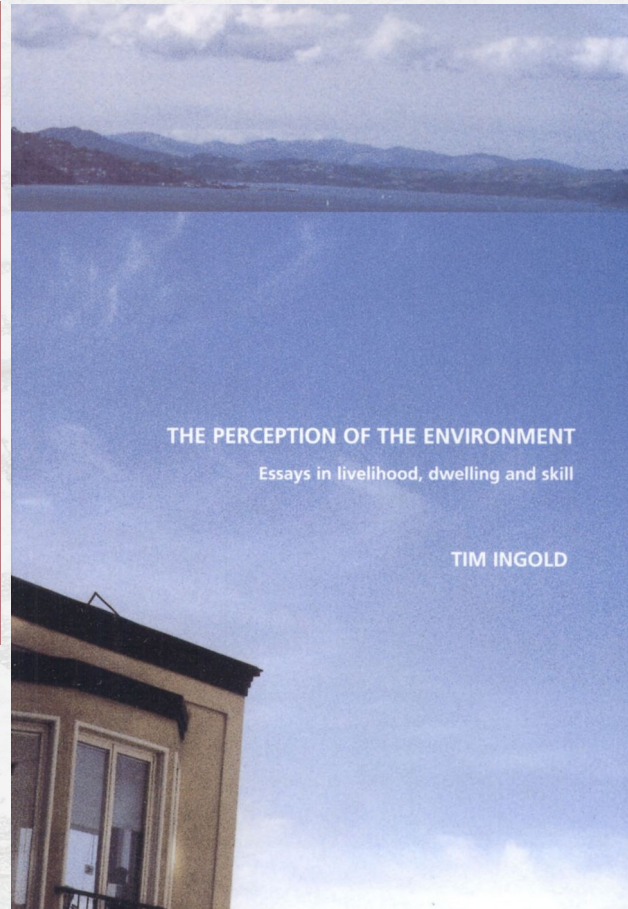
D. Making: Systematic methods via multiparadigm inquiry

The Perception of the Environment (Ingold, 2000) extends ecological epistemology as by Gregory Bateson in “Form, Substance and Difference” (1970)



“the mental world
... is not limited
by the skin”

[Bateson 1972, p. 461]



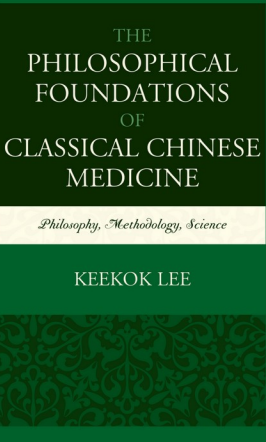
... an **‘ecology of life’** ... all hinges on a particular answer to Bateson’s question:
what is this ‘organism plus environment’?

For conventional ecology, the ‘plus’ signifies a simple addition of one thing to another, both of which have their own integrity, quite independently of their mutual relations.

A **properly ecological approach**,
to the contrary, is one that would take, as its point of departure,
the whole-organism-in-its-environment.

In other words, **‘organism plus environment’**
should denote not a compound of two things,
but **one indivisible totality** (Ingold, 2000, p. 19).

In contrast with a science based on the universals + duals, Chinese medicine follows traditions of contexts + dyads

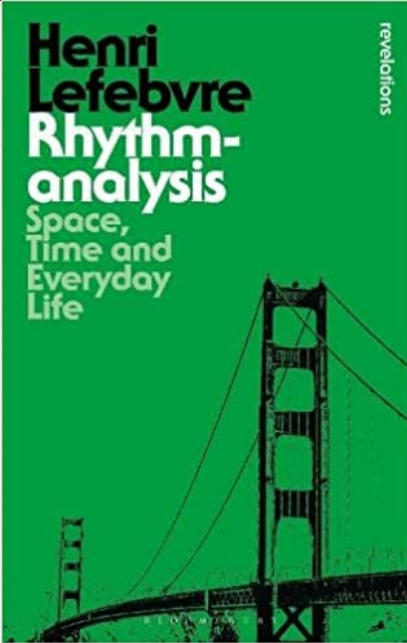
	Dualistic (Modern Western formal logic)		Contextual-dyadic (Classical Chinese implicit logic)
	Abstract and permanent, is independent of context <ul style="list-style-type: none">• Can extrapolate from propositions	Truth - Falsity	Application and meaning is relative to a particular context <ul style="list-style-type: none">• Evaluate assertion as embedded
	<i>Oppositions</i> Superior ↔ Inferior Superordinate ↔ Subordinate Intrinsic value ↔ Non-intrinsic value Human ↔ Nonhuman	Pairings	<i>Characteristics under context</i> A term presupposes its opposite <ul style="list-style-type: none">• e.g. cat implies <i>non-cat</i>, not universe Context-dependence <ul style="list-style-type: none">• e.g. men or women superior when/where?
	Hierarchical Reductionist Entity- (thing-) ontology	Frames	Yin-Yang Harmonious whole Mutually engendering or constraining

D. Making: Systematic methods via multiparadigm inquiry ...

Polyrhythmia is an alignment of multiple organic repetitions in time and space, beyond metrics of mechanical regularity

Polyrhythmia

Isorhythmia is an equality of rhythms, in an identity of temporalities	Eurhythmia is an association of heterogeneous rhythms, as normal in a healthy living body	Arrhythmia is a breaking apart of rhythms, altering and bypassing synchronization
Isorhythmia is present in symphonic and orchestral music, but otherwise is rare.	Eurhythmia is present in living bodies as diverse rhythms in a metastable equilibrium unified with the environment.	Arrhythmia appears as functional disruption than can manifest into illness and progress into morbid and fatal disorder.



Lefebvre, Henri. 2004. "The Rhythmanalyst: A Previsionary Portrait." In Elements of Rhythmanalysis: An Introduction to the Understanding of Rhythm, translated by Stuart Elden and Gerald Moore, 19–26. *Rhythmanalysis: Space, Time and Everyday Life*. Continuum.

"liquid light ~ modulate I" CC-BY hobvias sudoneighm 2004.



Agenda

- A. What if Systems Changes aren't Unfreeze-Move-Refreeze?
- B. Doing: Briefing, then hub + 4 spokes in workshop
- C. Thinking: Action learning for facilitators
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E. Co-learning with the 10-year journey ...

Centered in Toronto, the Systems Changes Learning Circle originates from CSI, OCADU SFI and Systems Thinking Ontario



David Ing

[linkedin.com/in/
daviding/](https://linkedin.com/in/daviding/)



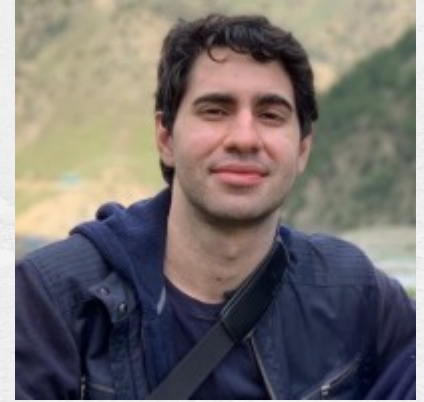
Dan Eng

[linkedin.com/in/
daneng/](https://linkedin.com/in/daneng/)



Kelly Okamura

[linkedin.com/in/
kelly-okamura/](https://linkedin.com/in/kelly-okamura/)



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[linkedin.com/in/
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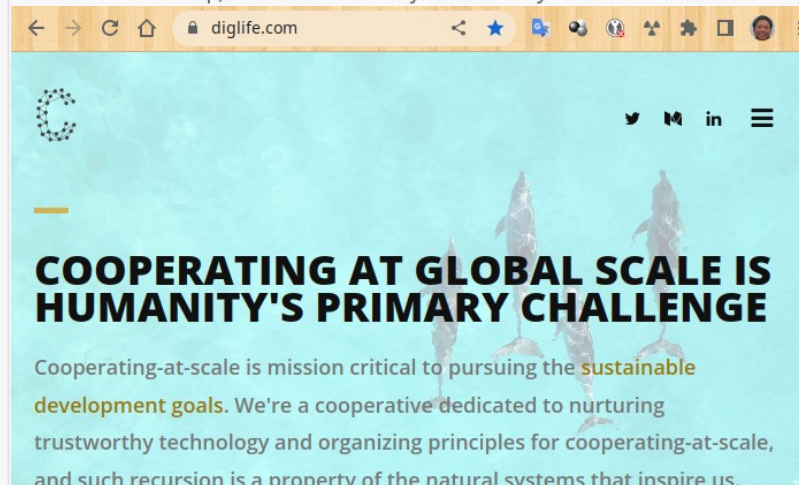
In a review of the Stewart Brand biography, we might recognize an emerging journalist who fell into systems thinking and has been in the right place at the right time. The review may be seen as negative, but maybe it's worth remembering that public figures are human beings, too.

“Brand’s next big idea combined his receding interest in photography with his increasing interest in “systems thinking,” a shift from his Randianism to the faddish work of architectural theorist Buckminster Fuller. On one 1966 acid trip, Brand was struck by an idea: Why hadn’t NASA released

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Image CC-BY Mike Cassano (2009) *Most Interesting Pothole*