Thinking with time:
A brief introduction to Systems Changes Learning

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What would I tell my past self when learning systems?



System(s) overload, right?

Don’t worry about understanding everything.

Just take whatever you find helpful from this.

The single-minded takeaway is:

time first, space second

1.
Background Context

2.
Theory / Concepts

3.
Methods & Case Study

4.
Implications & Takeaways

1.

Background & Context

2017 Completed ‘Systems’ course in SFI

2018 Started deeper discussions with David Ing

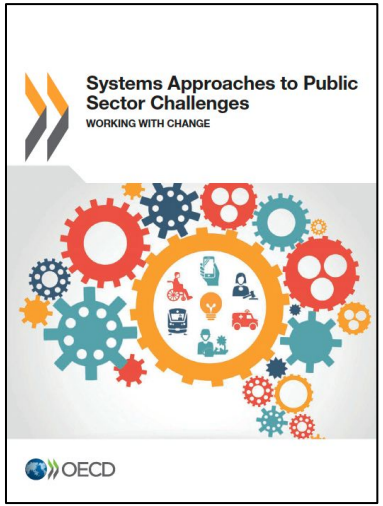
2019 Somehow agreed to joining a 10-year project to re-think systems thinking: **Systems Changes Learning**

2025 In year 7 of 10, able to start to explain concepts better

Background & Context

Rising interest in systems change

Organization for Economic Development & Cooperation (OECD)



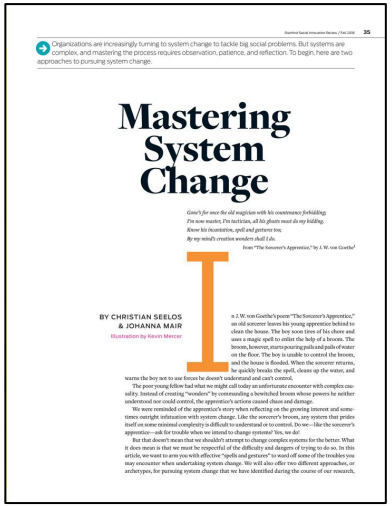
2017

Forum for the Future + McConnell Foundation



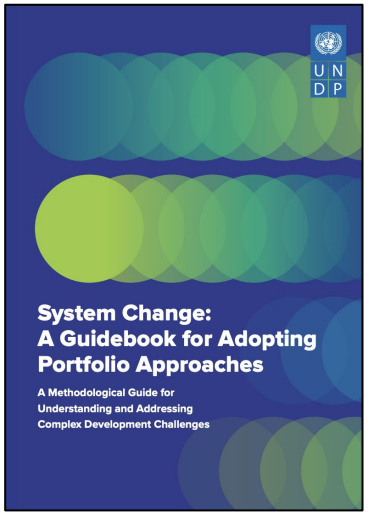
2018

Stanford Social Innovation Review (SSIR)



2018

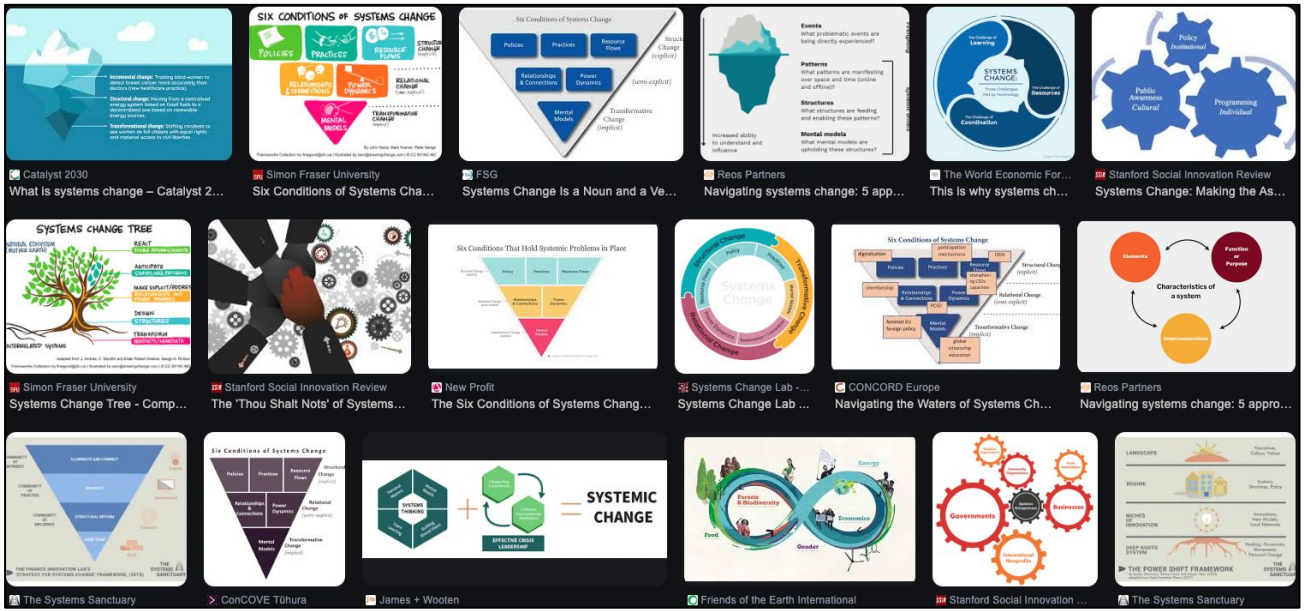
United Nations Development Program (UNDP)



2022

Background & Context

Overwhelming increase in models, toolkits, etc.



We asked ourselves:

How do you approach systems change when there’s no pause button?

2.

Theory & Concepts

Premise:

Time - see reality as dynamic vs. static, emphasizes time over space



The idea:
Seeing the world as made up of processes, moving through time

We emphasize:
The most fixed structures - such as mountains - as slow-moving processes

We downplay:
The perception of reality as snapshots in time (change as freeze -> change -> unfreeze)

Drawn from:
Tim Ingold's "Temporality of the Landscape" (1993)
Stewart Brand's "How Buildings Learn" (1994)
Process philosophy / ontology

Concept 1 of 3:

Rhythms - Understanding the natural rhythms of a living system



The idea:
All living systems have a natural, inherent, rhythm

We emphasize:
Our system of interest as a thread moving through time

We downplay:
Understanding systems as a set of parts in a spatial configuration

Drawn from:
Tim Ingold's "Life of Lines" (2015)
Classical Chinese Medicine (or any philosophy of body)


Elections Canada

Concept 2 of 3:

Contexture - Understanding when rhythms weave together in a contexture



The idea:
Contexture is what your system of interest is weaved into when multiple systems intersect in time

We emphasize:
The larger fabric that your thread (system of interest) is entangled with (influenced by)

We downplay:
Neat system boundaries that delineate inside vs. outside

Drawn from:
Keekok Lee's concept of "Contextual Dyadic Thinking" (2017)
Socio-Ecological Systems (Emery & Trist)



Concept 3 of 3:

Propensity - the inherent potential for change in a particular situation



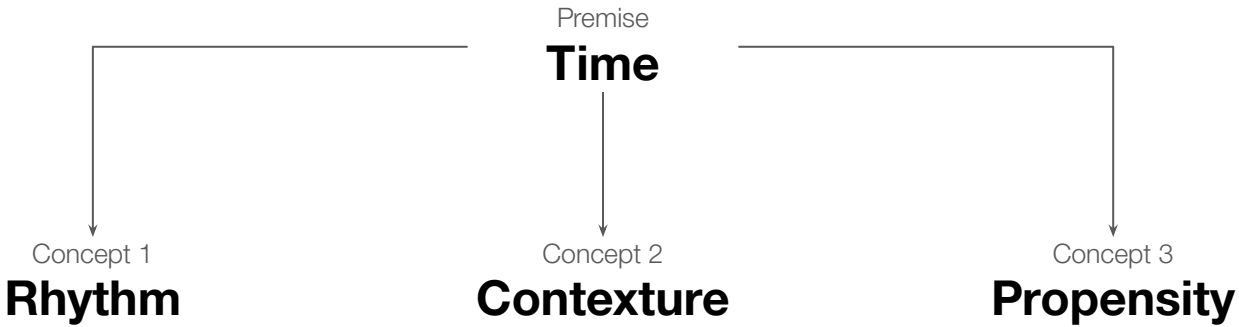
The idea:
The unique situation in a contexture has a tendency towards change

We emphasize:
Exploiting the tendency towards a desired change when the living systems natural behaviours interact

We downplay:
Pre-determining a desired change and pushing systems towards it, regardless of time

Drawn from:
Francois Julien's "The Propensity of Things" (1999)


CANADA

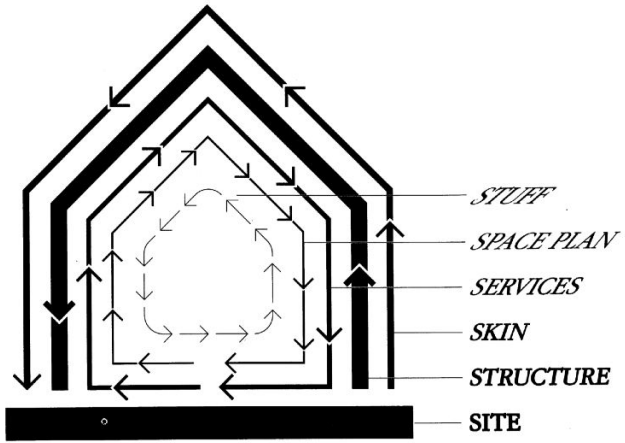

Premise
Time
Concept 1
Rhythm
Concept 2
Contexture
Concept 3
Propensity

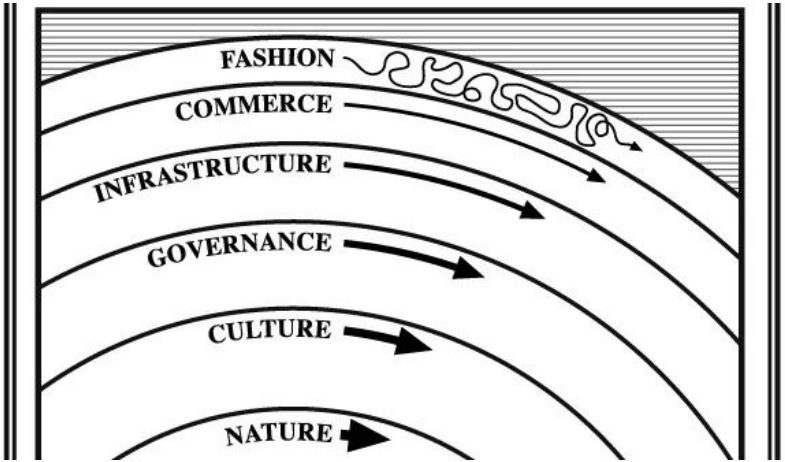
3.

Methods & Case Study

Methods:

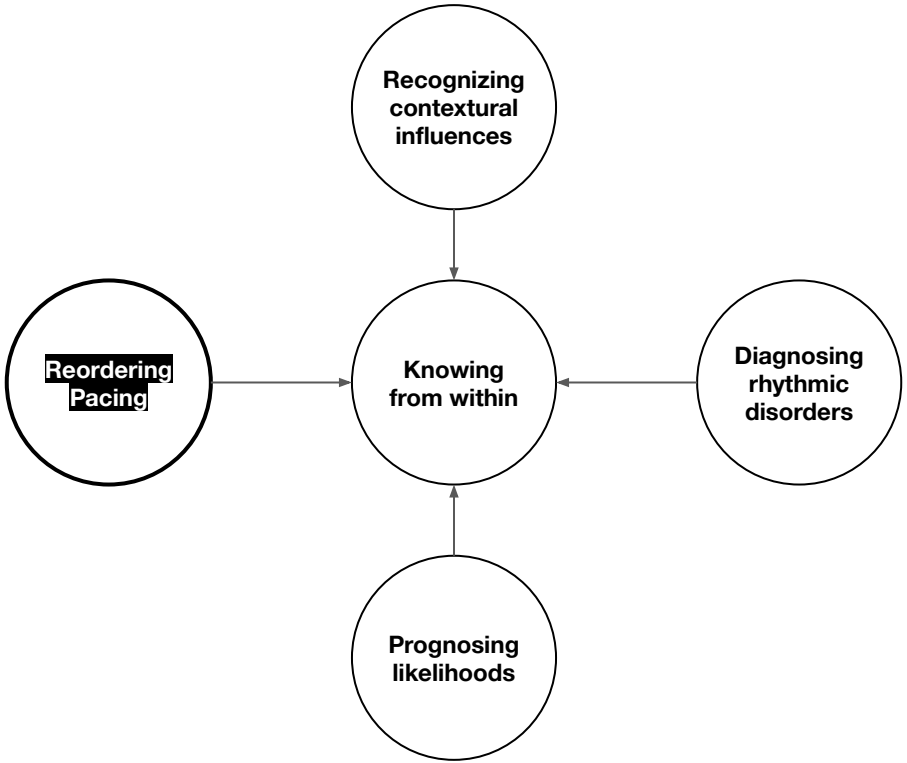
Pace Layering (Stewart Brand) - understanding the stack and speed of changes you're working with





Methods:

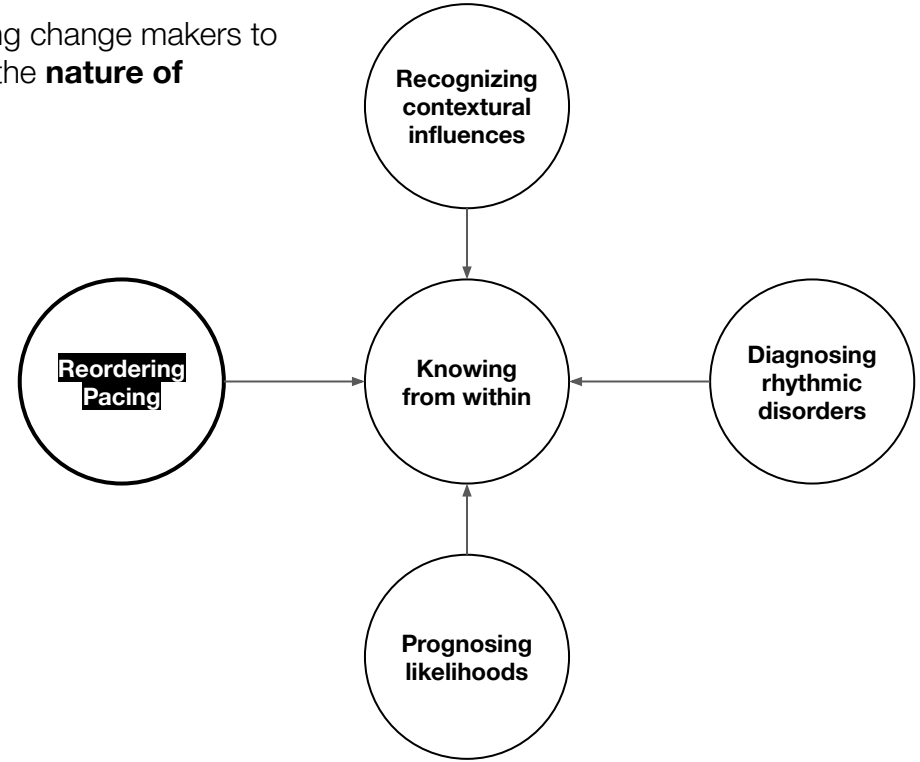
Pacing Changes (Hub & Four Spokes Model)



Methods:

Pacing Changes (Hub & Four Spokes Model)

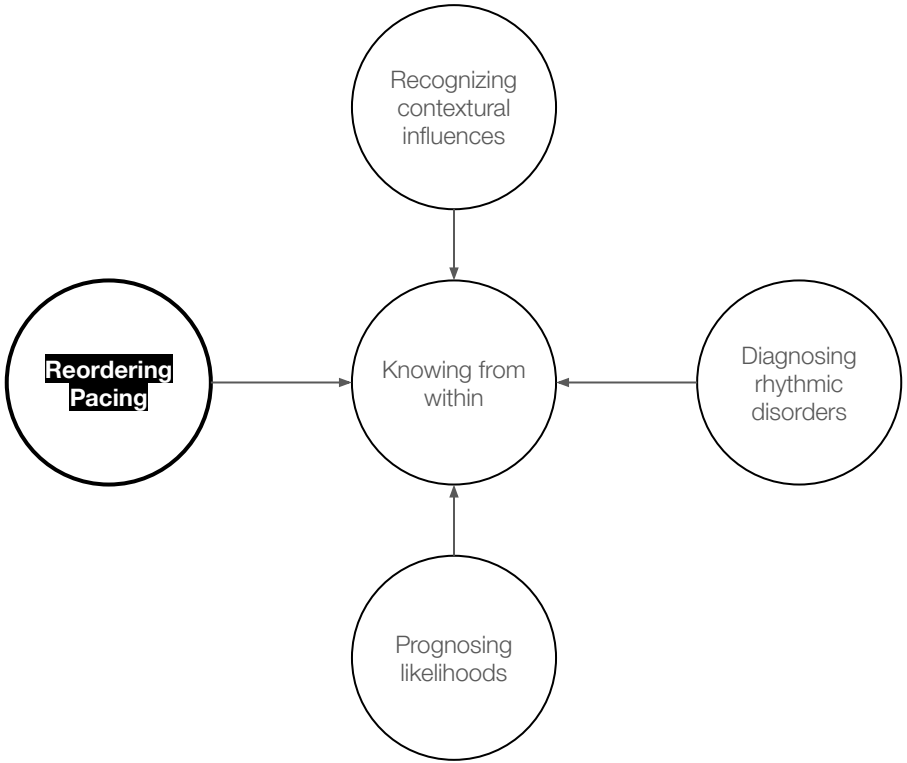
Our method is based on getting change makers to **ask better questions** about the **nature of change** they're working with.



Methods:

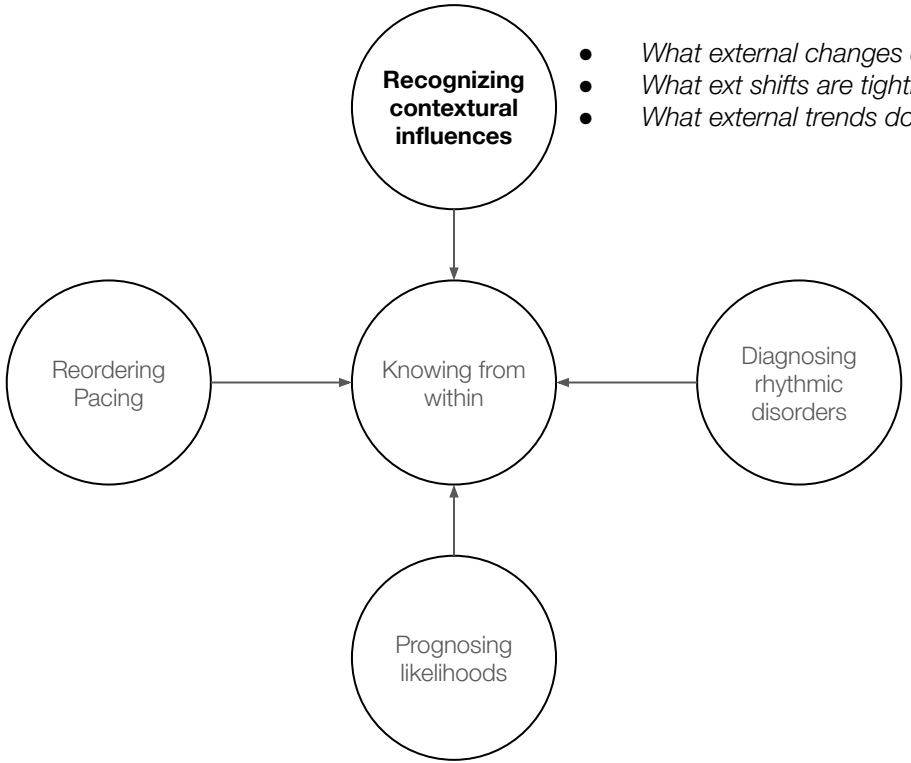
Pacing Changes (Hub & Four Spokes Model)

- *What are the commitments for doing "more/faster"?*
- *And what are the commitments for doing "less/slower"?*



Methods:

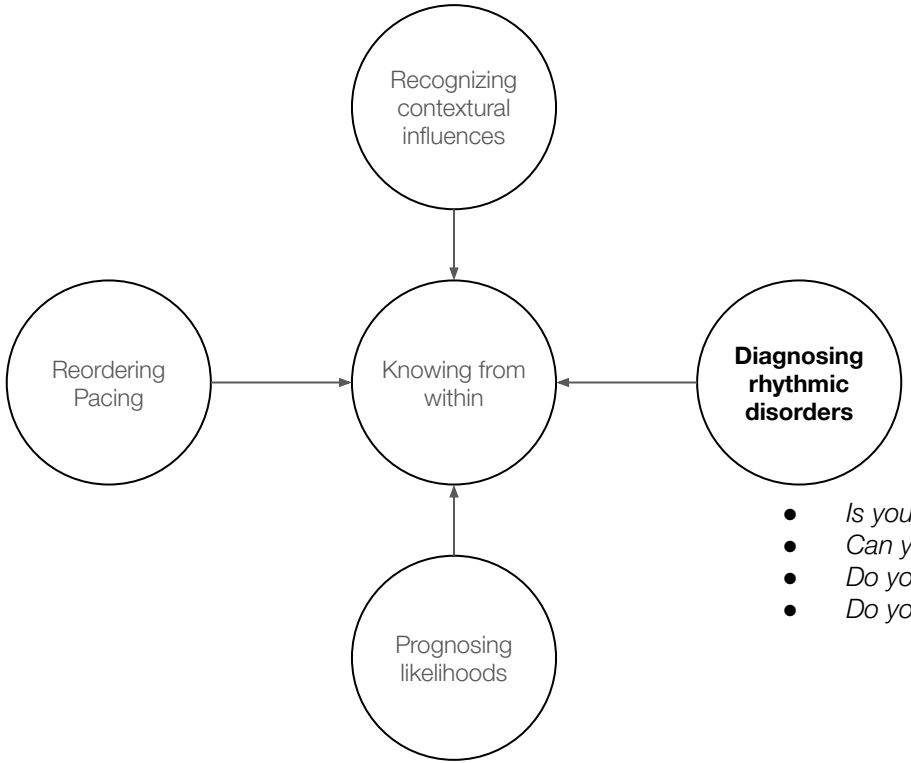
Pacing Changes (Hub & Four Spokes Model)



- *What external changes disrupt your system?*
- *What ext shifts are tightly or loosely coupled to your system?*
- *What external trends do you expect to continue?*

Methods:

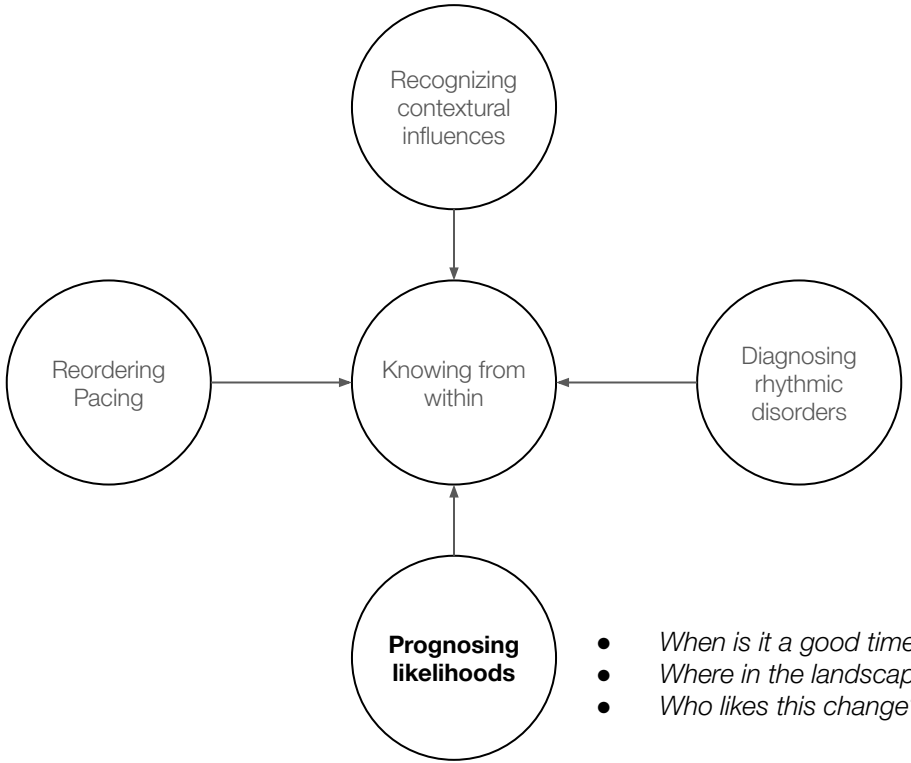
Pacing Changes (Hub & Four Spokes Model)



- *Is your rhythm off a little or a lot?*
- *Can you explain why your rhythm is off?*
- *Do you expect being “off” to last a long time?*
- *Do you think being “off” is going to fix itself?*

Methods:

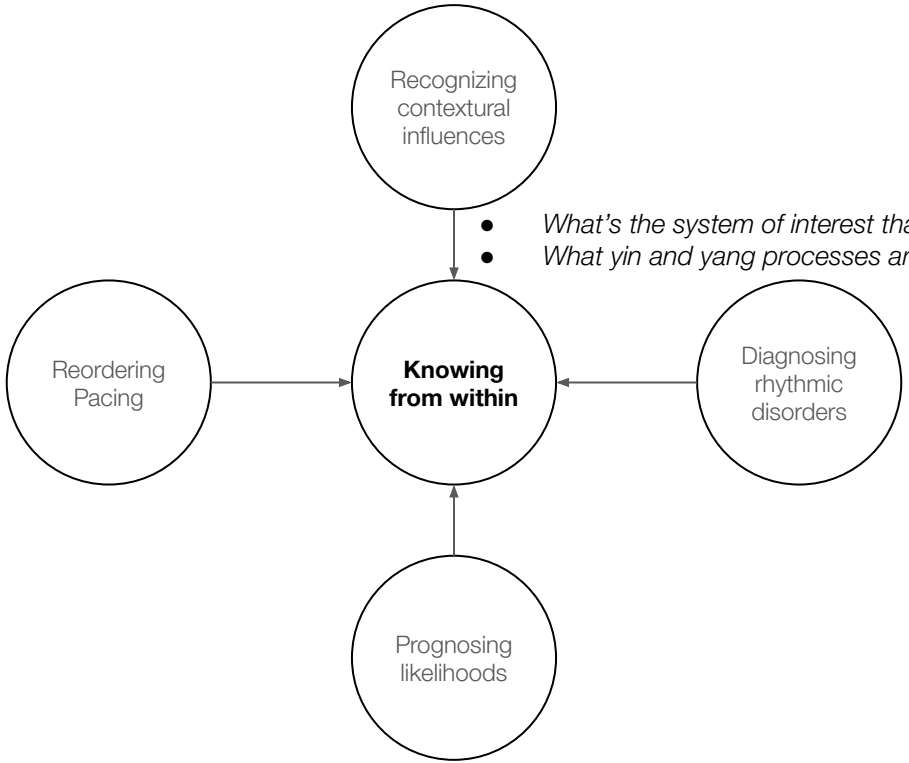
Pacing Changes (Hub & Four Spokes Model)



- *When is it a good time or bad time to make the change?*
- *Where in the landscape does this change work best?*
- *Who likes this change? And who doesn't like it?*

Methods:

Pacing Changes (Hub & Four Spokes Model)



Case Study:

Canadian Digital Service - March 2022



Diagnosing rhythmic disorders



Guiding questions	
1. Is an immediate pathology showing with (i) yang or yin, as (ii) excess or consumed?	**Collaborative approach:** • not enough co-design • too much iteration - too much dependency on the same people - too much conflict - >> not necessarily slower, but might appear slower (and could be costlier), **too much synchronization** **Siloed approach** • Too much focus on getting things done, • Not enough doing things well (quality)
2. Is pathology acute (brief) or chronic (long-lasting)?	• Long-lasting
3. Is the pathology trapped in a cyclical transformation?	• If we spend too much time doing things well, we won't get things done in a timely manner. • If we do things too quickly, then the quality suffers, so the public doesn't get a good experience.

Systems Thinking through Changes March 2022 Canadian Digital Service 2022

4.

Implications & Takeaways

What would I tell my past self when learning systems?

Implications:

Mindset shifts from SCL that have shaped my stance as a strategist & designer

- An absolute answer → the **it-depends'ness** of a situation (thinking in context first)
- Idealistic → **Pragmatic**
- Does it scale? → Can we make it more **local?**
- Chronos (clock time) → **Kairos** (felt time)
- Lawful order (law, policy, rules, etc.) → **Negotiated order** (coordination, flexibility, spontaneity)
- Designing the solution → **Designing the multiparadigm inquiry into the issue** for an agreeable outcome
- Designer's bias towards action → **letting things run their course** without intervening (humbling design)

Takeaway:

ONE THING you can do to apply SCL concepts in your course work

Use **VERBS** in your maps!

Just add “-ing” to everything.

The single-minded takeaway is:

time first, space second

I’ll be see-***ing*** you in ***time.***
Thank you.

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