A Month of SYSTEM SEEING

Daily System Journal Prompts

Ruth Malan

Introduction

What's the Big Idea behind these prompts? A daily journal focused on the systems that we work within and influence, is a "Good Idea" (Winnie the Pooh, via Russ Ackoff). But habits are hard to start, to "rut in" to daily practice, so some company and mutual encouragement, and some structure, can help.

What we're seeking to do, is allow the situation, and the ecology of systems around and within it, to be our guide and teacher (which, of course, is a lot about becoming more aware — including aware of the perceptual and interpretational traps we fall into···). And sure, we're still going to be stuck in tunnels of our own vision, if we don't explore the system *with* others — who have different experiences and vantage points from which to perceive the (eco)system (of socio-technical systems), etc. This work can help with convening and guiding the attention of that work.

The prompts follow some general patterns:

- explore the situation, zooming out to the broader context — the ecosystem (e.g. relationships; value flows and transformations) and strategic context, and history and how the context is evolving;

- understand the system of interest in context (of use, of development, of operation, etc.);

- understand the system, its (internal) structure and dynamics; etc.

With just enough mixing it up to discourage linear movement. We need to surprise ourselves. Too.

Note: keep to 15 -20 minutes for each prompt. Expect to accept "good enough" so the exercise can be "done" in that time.

"My 2023 goal is to not focus on immediate solutions but to think about systems and the bigger picture."

"And then there's the analysis of the whole system, even things outside of my control, and work to influence and support enough people in that system that have similar goals and perspectives that we can make broader shifts together over time. If I'm only working on directly what's in front of me, I'm reactive. Not making a difference. I'm also not taking opportunities that I might have that others don't, to make wider and more lasting change. My resolution to myself is to try to think as broadly as I can next year."
*   —Sarah Drasner, on mastodon in December 2022*

"What we care about is the productive life, and the first test of the productive power of the collective life is its nourishment of the individual. The second test is whether the contributions of individuals can be fruitfully united"

*   — Mary Parker Follett*

"All that you touch
You Change
All that you Change
Changes you."
*   —Octavia Butler, Parable of the Sower*

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"The map is not the territory," Snicket's chaperon advises him. "That's an expression which means the world does not match the picture in our heads."

—Lemony Snicket, Who Could That Be at This Hour?

You are Your Own Stories

Tell a story that reflects you

Tell the story in narrative form, giving yourself an open space to reflect on what is meaningful to you, about you and others.

Or, if you'd like more structure, try this out: Think of a situation where you made a difference, and like what you brought to it. Not that you think everything was perfect, but where you brought something to the situation that impacted outcomes and experiences.

Draw a circle (large enough to take notes inside, but with space to take notes outside too. Above the circle, describe the situation briefly. Inside the circle, describe what you brought to it (attitude, characteristics, actions, and so forth). Move back to the outside of the circle and note what others brought to the situation.

Stories are crucibles for learning. Our own stories too. As an exercise in noticing our values, qualities, contributions and appreciating ourselves *and others*, it is worth drawing out: what shaped the situation and what made it important or of value to contribute to? What role did we and others play, and what did we bring to it? How much did we rely on others, and what role does that play in what we bring to outcomes?

We have much to build with and on.

"Of course, you're general, but you're also specific. A citizen and a person, and the person you are is like nobody else on the planet. Nobody has the exact memory that you have. What is now known is not all what you are capable of knowing. You are your own stories and therefore free to imagine and experience what it means to be human without wealth. What it feels like to be human without domination over others, without reckless arrogance, without fear of others unlike you, without rotating, rehearsing and reinventing the hatreds you learned in the sandbox. And although you don't have complete control over the narrative (no author does, I can tell you), you could nevertheless create it."

—Toni Morrison, Commencement Address to the Wellesley College Class of 2004

"Reality is sedimented out of the process of making the world intelligible through certain practices and not others. Therefore, we are not only responsible for the knowledge that we seek but, in part, for what exists."

— Karen Barad

"Kurt Lewin proposed the following heuristic equation:
Lewin's Equation: B = f(P, E)
Behavior is a function of a Person interacting with the Environment (or situation)

Draw a Bicycle

Without looking at one (not even a picture), draw a bicycle.

Annotate with observations and questions that your drawing raises for you.

Yes, this is a warm-up exercise. What are we warming up for? A daily practice of noticing (what we don't notice, too). Of using a journal to look (sometimes with our mind's eye) deeper. A daily practice of "good enough" to learn something (about us, as we interact with systems, as well as about the systems we interact with and within). Where we're following daily prompts that are ambiguous enough that people in very different contexts can do something meaningful with them, but it takes a fair bit of trust and willingness to give it a try.

If you're participating in the daily journaling, do the exercise before reading further.

Despite our various differences in comfort with drawing, and drawing a bicycle in particular, doing so helps us notice what we have and have not noticed about bicycles. We can begin to ask questions about the relationships, say, between seat and pedals (directly below? Not?). We can notice what we're missing (brakes?). And ask what kind of bike (electric? Mountain? Road? Cargo or passenger capable? Did we default to a "men's" frame?). Could we build it? Would it work? We might assume, given everyday familiarity, that we have a pretty good notion of what a bike is composed of, but when we need to draw the actual relationships among the parts, our knowledge of those relationships, generally speaking, is more fuzzy than we might have expected. And that part is not about drawing skill! Sure, if we ride a lot, and maintain our own bikes, we have more of a sense of the structure and key relationships and essential parts than if we don't. But even then, it's surprising to a lot of everyday cyclists, that there are various relationships among structures and mechanisms they aren't really that sure about when they come to draw a bicycle.

That's why it's so important to do the exercise, and not just imagine one did it.

Putting things down on the page, helps us to see more, including where our uncertainties are. We use the world, to save us needing to memorize the world. And we use the world, to interact with our thinking.

"Drawing [isn't] just for "artists" [..]. Think of it as a way of observing the world and learning"
— *Anne Quito*

Sketches are a way of externalizing ideas, of turning internal thoughts public, of making fleeting thoughts more permanent. Of course, written language can do the same [..] Sketches can also convey abstract ideas metaphorically, using elements and spatial relations on paper to express abstract elements and relations. Expressing ideas in a visuospatial medium makes comprehension and inference easier [..] The externality of sketches and similar cognitive tools promotes memory, providing a record that does not rely on unreliable human memory. They also provide a token for the contents of working memory, relieving the dual burden of holding the content and also simultaneously operating on it.
— *Barbara Tversky, What do Sketches say about Thinking?*

Image Source: Nick Sousanis, *Unflattening* (composite)

Systems Concepts Baseline

Jot down your ideas about systems.

This will form a useful baseline to look back at, when we get to the end of this adventure.

You could use a Mind Map to relate concepts and draw out what you have in mind, to see what you mean. Or a Concept Map. A set of doodles perhaps. Text. Or something else — let us know what you tried (if you'd like to, of course).

If you have trouble getting started, just get a few things (concepts, approaches, a work in systems) down, and then more. And if starting to connect and relate them helps to get more ideas to tumble onto your page, start to draw branches and see where they lead you.

It's good to have fun with it and let the ideas flow onto the page. Use any structure you add more as agent than brake, but do whatever supports you in getting your ideas about systems out where you can see them (in the timebox of your journaling commitment).

"Honor thy error as hidden intention"
        — Brian Eno and Peter Schmidt, Oblique Strategies

"A system is a whole, spelled with a w, that consists of parts each of which can affect its behavior or its properties. You for example are a biological system called an organism and you consist of parts: your heart, your lungs, your stomach, pancreas and so on, each of which can affect your behavior or your properties."
..
"the essential or defining properties of any system are properties of the whole which none of its parts have."
        — Russell Ackoff

"A system is an interconnected set of elements that is coherently organized in a way that achieves something"
        — Donella Meadows

"In order to be recognisable as such, a system must be bounded in some way. However, as soon as one tries to be specific about the boundaries of a system, a number of difficulties become apparent. For example, it seems uncontroversial to claim that one has to be able to recognise what belongs to a specific system, and what does not. [..] Since there are also relationships with the environment, specifying clearly where a boundary could be, is not obvious."
        — Paul Cilliers

Visual Vocabulary

Doodle your ideas about systems.

Pick a concept from yesterday's exploration, and explore further. Play with visual ideas that capture something of the nature of the concept.

That sounds awfully fuzzy and hard to get started? Say we pick organizing structure. We might choose to doodle various structures in organizations or the systems we work on. We might choose boundaries, drawing out various ways we might think of boundaries.

Try multiple images for a concept. Quick doodles to play with ideas.

To lower the doodling bar, and get ideas flowing, here's one of my doodles about organizations:
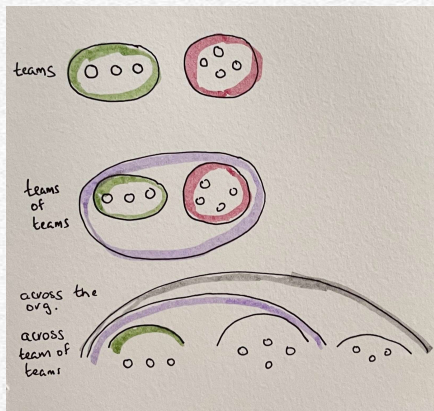
Of course, the classic, as org structure doodles (all grown up into a cartoon) go, is Manu Cornet's!
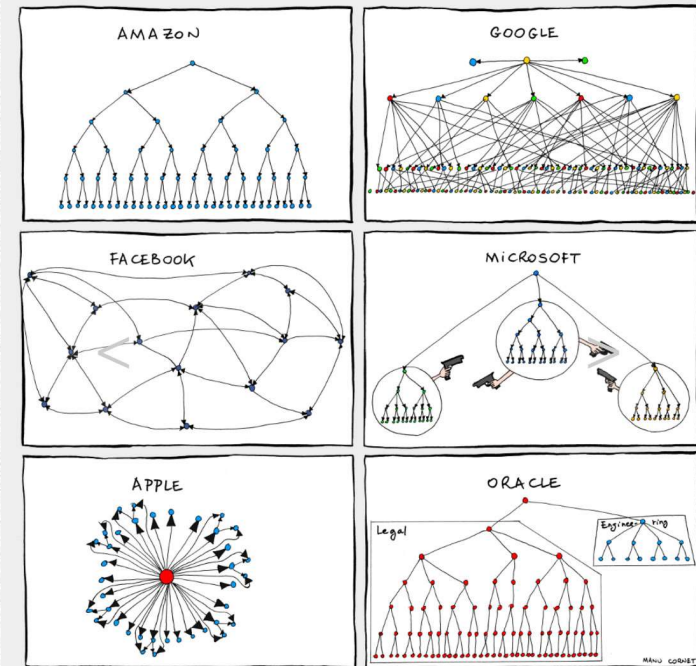
Organization charts cartoon by Manu Corbet.
Source: https://bonkersworld.net/organizational-charts

"Everything, as they say, is connected to everything else, and not neatly. There is no clearly determinable boundary between the sea and the land, between sociology and anthropology, between an automobile's exhaust and your nose. There are only boundaries of word, thought, perception, and social agreement—artificial, mental-model boundaries."
— *Donella Meadows*

"Which despite visual boundaries, remain rhizomatically bound"
— *Nick Sousanis, Unflattening*

Describe Focal Situation

Think of a situation you want to explore with a systems lens and describe it.

Think of a situation you want to explore as we practice various systems approaches and views. It's good if it's something that matters to you, but don't stress too much about your choice, as you can always shift focus as you explore and refine your understanding. If it helps, think of a challenge you're facing, that you want to understand better, and address/resolve/dissolve…

Briefly describe the situation.

"problems do not present themselves to practitioners as givens. They must be constructed from the materials of problematic situations that are puzzling, troubling, and uncertain. In order to convert a problematic situation to a problem, a practitioner must do a certain kind of work. He [sic] must make sense of an uncertain situation that initially makes no sense."
— *Donald Schön, The Reflective Practitioner*

"It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots; what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties."
— *Donna Haraway, Science Fiction, Speculative Fabulation*

"An open problem is one where the system border is not clear, or where it is permeable. It is important to realize that normally when we start out solving a problem we draw a mental circle, nominating things to to think about and what to leave out. Anything beyond the circle we call "context," and that will play a part in our thinking about the problem. Yet in some cases now, we find situations where it is very unclear where this circle is to be drawn"
— *Kees Dorst, Frame Innovation*

"They all together make a certain situation, but they constitute that situation through their relation to one another. If you change one, usually some, if not all, of the others are changed."
— *Mary Parker Follett, The Illusion of Final Authority*

"Our job is not how to get people to obey orders, but how to devise methods by which we can best discover the order integral to a particular situation."
— *Mary Parker Follett, Dynamic Administration*

"creative suspension: that temporary pause when we listen and learn what the system has to teach us before taking action."
— *F. David Peat*

Sketch the Situation

Start to explore the situation you described — visually this time.

Draw the situation, using words and images, but keep it informal and sketchy. The situation sets the general frame (so we aren't bringing the whole world into our picture).

I like *rich pictures* for this: we identify who (people, organizations, systems in the landscape of this frame) is involved in this situation, how they interact, (annotating to add) what their purpose and role is as it relates to this situation, what they care about, their concerns, and so forth. Stick figures and block buildings are fine! The key is to have fun.

Add interactions among them to your sketch (using arrows), and annotate with their concerns (thought bubbles). Continue adding to your picture, using judgment not to over-clutter, but to draw in people, groups, organizations, systems and their interactions and roles and concerns, as they seem significant to you, to understand the situation.

From *Requirements Engineering* by Linda Macaulay, 1996. P.66
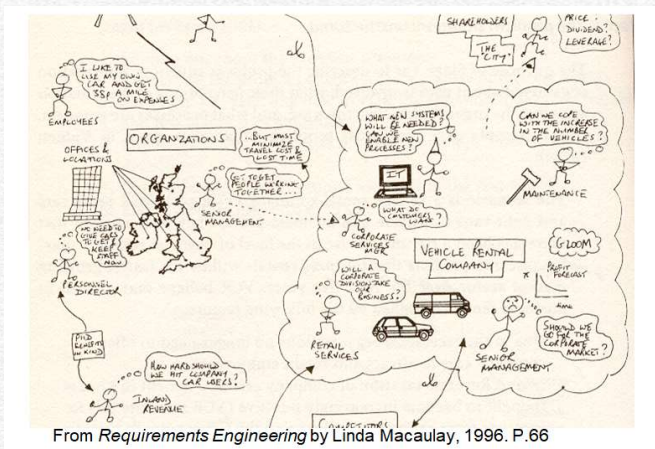
Resources on *rich pictures* (These are outside of the timebox, but offered here for those interested in more):

- *Soft Systems Methodology in Action* by Peter Checkland and Jim Scholes
- Ch 2, *Systems Mapping* https://link.springer.com/book/10.1007/978-3-031-01919-7
- ch 16, *Critical Systems Thinking and the Management of Complexity* by Michael C. Jackson

*"Get the beat.
Before you disturb the system in any way, watch how it behaves. If it's a piece of music or a whitewater rapid or a fluctuation in a commodity price, study its beat. If it's a social system, watch it work"*
 — Donella Meadows, Dancing With Systems, https://donellameadows.org/archives/dancing-with-systems/

"In the early stages, [..] may wish to preserve many visual options, restricting [..] imagery to global structures, or using notes and signs that implicate multiple alternatives. Paper sketching uses denotation systems that include tolerances and indeterminacies in ways that can amplify [..] ability to perceive or imagine many options"
 — Fish and Scrivener, Amplifying the Mind's Eye: Sketching and Visual Cognition, 1990

"Rich pictures are situation summaries. They are an attempt to encapsulate the real situation through a no holds barred, cartoon representation of things that you perceive in the situation – objects, layout, connections, relationships, influences, cause and effect, structures, processes, issues, arguments, and so on. They should also, as far as possible, depict subjective elements, such as character and characteristics, the different points of view, prejudices, and spirit of those involved."
 — Rich Pictures, open.edu

ReCenter

Pick a person or group that is significant to the situation you're exploring, and center the next frame on them.

Draw a Rich Picture of the people, systems, organizations, etc. that they're encountering, as broadly related to their concerns in the previous visual situation description (rich picture).

We're using a re-frame to bring other perspectives into view. For example, if your first rich picture focused on urgent care, you might now recenter on the parents of a sick child, their concerns and the systems and people they interact with, etc.

Having trouble? Just give it a go. There's no "right" answer!

"Try faking it." — Brian Eno and Peter Schmidt, *Oblique Strategies*

Why is it important to widen our lens (in this case by shifting the center, so that in combination we have widened our view)? We mentioned boundaries the other day, and how they are constructs — that we can reshape. And need to, to understand "what's going on." (cue earworm)

Illustrating *why* a shift in center can help us see differently: John Cutler: "How we imagine our customers world vs Their world"

Source: https://twitter.com/johncutlefish/status/1609045822402101250
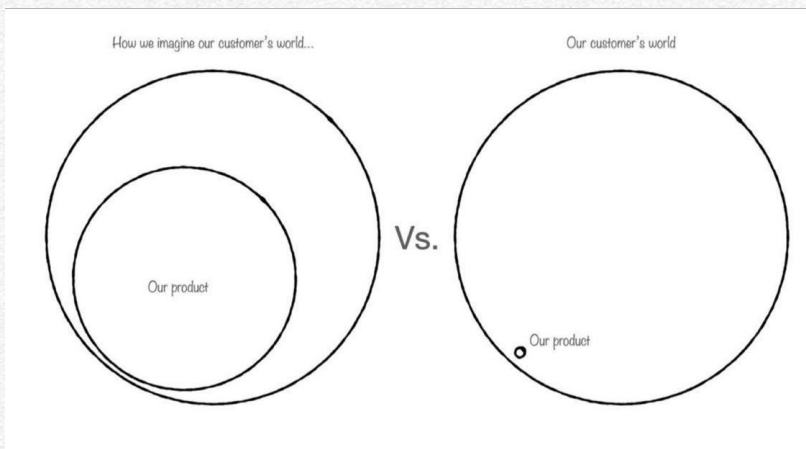
"*The richer this context, the more chance that fruitful avenues can be found to move forward.*"
— Kees Dorst, Frame Innovation: Create New Thinking by Design

'*Sensemaking is the ability or attempt to make sense of an ambiguous situation. More exactly, sensemaking is the process of creating situational awareness and understanding in situations of high complexity or uncertainty in order to make decisions. It is "a motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively."'*
—Gary Klein, Brian Moon and Robert Hoffman, Making Sense of Sensemaking

"*We suffer from Spatial Blindness.*
We see our part of the system
but not the whole;
we see what is happening with us
but not what is happening elsewhere;
we don't see what others' worlds are like,
the issues they are dealing with,
the stresses they are experiencing;
we don't see how our world impacts theirs
and how theirs impacts ours;
we don't see how all the parts influence one another."
—Barry Oshry, Seeing Systems

Narrative History: Unwinding Threads

Pick up a thread in the situation (in your verbal or visual narrative, or in your experience of it), *and explore how it took shape and came to be.*

What were the various paths of influence and unfolding? What are some stories of the history that you were there for, or have heard others tell? While you have time (in the 15-20 minute window), pick up other threads and explore those and notice interconnections.

Octavia Butler's *Kindred*, and Damian Duffy and John Jennings graphic novel adaptation thereof, moves between present and past, and we see how the past is present in the present.

'Realized that the word "context" is shorthand for the cumulative effect of all the past decisions that we cannot change now. Decisions about what business we're in, which clients we serve, what compromises we made, where we've invested time and effort, and where we didn't. All of it adds up.

And here and now we are deciding things that will become tomorrow's context.'

—Elisabeth Hendrickson

"Complex systems have a history. Not only do they evolve through time, but their past is co-responsible for their present behaviour. Any analysis of a complex system that ignores the dimension of time is incomplete"
—Paul Cilliers, Complexity and Postmodernism: Understanding Complex Systems

"An important aspect of complex systems, one which certainly complicates our understanding and modeling of such systems, is their temporal nature. Complex systems unfold in time, they have a history which co-determines present behavior and they anticipate the future. [..] as we know at least since the work of Prigogine, the behavior of complex systems are not symmetrical in time. They have a past and a future which are not interchangeable"
—Paul Cilliers, On the Importance of a Certain Slowness

"We can never understand the total situation without taking into account the evolving situation. And when a situation changes we have not a new variation under the old fact, but a new fact."
*—Mary Parker Follett, Creative Experience, 1924*

Graphical History: How We Got Here

Continue exploring the history, but with a different "lens" and framing — in particular, the unfolding over time, identifying major events and their rippling consequences. Go back (somewhat) further than you think is "the beginning."

Place key events (changes in the landscape such as competitor entry, new technology; project start and product launch; scale points, major incidents, etc), people/org changes (changes in senior or influential people and teams, etc), strategic shifts, etc, on the timeline.

Some ideas for doing this:

- Get ideas for the layout from the Graphic History template in David Sibbet's books, and The Grove: https://grovetools-inc.com/collections/graphic-history

- Get ideas from this post by Paul Osman (source of image below; draw a timeline with deploy markers, changes to infrastructure, user behavior, and team changes): https://paulosman.me/2021/10/02/sociotechnical-lenses-into-software-systems/
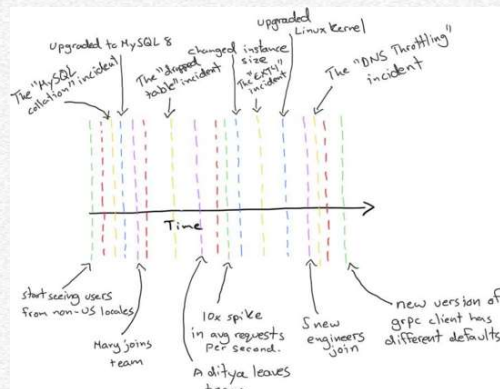
Yes, this is great to do with others, but good to do alone too — to learn from doing this and to gain confidence that we do learn from doing this! And to notice that we've only seen part of the history... and have...questions...

Go back in time, but perhaps not quite this far: xkcd.com/1732/
More to inspire (with awe and wonder):
https://xkcd.com/657/
http://www.radicalcartography.net/index.html?fisk

"The significance of a new invention lies in how it fits into and changes this network. Many innovations are minor — they simply improve some aspect of the network without altering its structure. The automatic trans-mission made automobiles easier to use, but did not change their role. Other inventions, such as the computer, are radical innovations that cannot be understood in terms of the previously existing network. As the use of a new technology changes human practices, our ways of speaking about that technology change our language and our understanding. This new way of speaking in turn creates changes in the world we construct."

"Design serves simultaneously to bring forth and to transform the objects, relations, and regularities of the world of our concerns"

—Terry Winograd and Fernando Flores

We're not just exploring how the situation has evolved through time, but the co-evolution:
"Take a situation made by credit conditions, customers' demand, output facilities, and workers' attitude. They all together make a certain situation, but they constitute that situation through their relation to one another. If you change one, usually some, if not all, of the others are changed."

—Mary Parker Follett, The Illusion of Final Authority

Intermezzo: Some Notes on History

"Since a system's prior experience constrains its behavior, that history, too, is embodied in its ontogenetic landscape."
— Alicia Juarrero, Dynamics in Action

"in the ways in which designers design, the ways in which design is ontological, even at a human product scale, because it creates worlds, habits, dispositions. A designer is never [..] just designing a product: they are reinforcing particular models of the human"
— Cameron Tonkinwise

"The changed texture of the environment was not recognized by an able but traditional management until it was too late. They failed entirely to appreciate that a number of outside events were becoming connected with each other in a way that was leading up to irreversible general change."
— Fred Emery and Eric Trist, The Causal Texture of Organizational Environments,

'let us say, for the sake of simplicity, a fence or gate erected across a road. The more modern type of reformer goes gaily up to it and says, "I don't see the use of this; let us clear it away." To which the more intelligent type of reformer will do well to answer: "If you don't see the use of it, I certainly won't let you clear it away. Go away and think. Then, when you can come back and tell me that you do see the use of it, I may allow you to destroy it."'
— G. K. Chesterton, The Thing

"We suffer from Temporal Blindness.
We see the present
but not the past;
we know what we are experiencing now
but not what has led to these experiences;
[..]
All of this we experience in the present
but we don't see the history of the present,
the story of our system that has brought us to this point in time.
In our temporal blindness,
we misdiagnose the current situation,
and in our efforts to solve system problems
we fix what doesn't need to be fixed
and fail to fix what does
— Barry Oshry, Seeing Systems

'Listen to the wisdom of the system.
Aid and encourage the forces and structures that help the system run itself. Don't be an unthinking intervener and destroy the system's own self-maintenance capacities. Before you charge in to make things better, pay attention to the value of what's already there."
*— Donella Meadows, Dancing with Systems,*
https://donellameadows.org/archives/dancing-with-systems/

Foresight is hindsight looking the other way?

Winds of Change

Consider how the situation is changing.

What's bringing change to this context? What technology and market trends could play/are playing a role in reshaping the space? What are others (people, organizations, partners, competitors, ⋯) doing that is shifting relationships and opportunity, or introducing threat?

It can help (to prompt noticing) to have bands for winds of change, like trends/forces/things changing in the market; and technology change; you might also want to add other bands as relevant (like if you want to separate environmental or cultural from market winds of change to prompt further noticing/discernment).
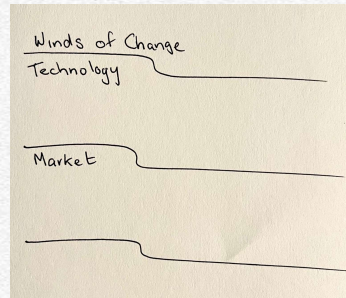
"The future is already here — it's just not evenly distributed yet."
—William Gibson

'Just don't ask Gibson to talk about tomorrow. The modern-day George Orwell says: "I'm not trying to predict the future. I'm trying to let us see the present."'

https://quoteinvestigator.com/2012/01/24/future-has-arrived/

"By flying to these heights, swifts [..] can also use the wind itself to assess the possible future courses of these systems. What they are doing is forecasting the weather"

— Helen Macdonald

"I didn't make up the problems," I pointed out. 'All I did was look around at the problems we're neglecting now and give them about 30 years to grow into full-fledged disasters.'
—Octavia Butler, A Few Rules For Predicting The Future by Octavia E. Butler, May 2000

"the kind of insight which is also foresight is essential to leadership. This doesn't mean that only the president needs it. Foresight is necessary for foreman or head of department; the only difference is that in their case the range about which foresight is necessary is narrower. But no leader of however small a group can forget, without disastrous consequences, that the activities of each group have to be fitted into a whole which is constantly changing"

*— Mary Follett, Dynamic Administration*

"You have to apply what you discover. That is the way that you reach out and snatch a bit of the future and bring it back to the present: You grab it and use it."
—Douglas Engelbart

What if you do nothing?

Divide the page into 2 columns. In the 1st (headed Current Situation): Jot down characteristics of the current state of things (around your situation/challenge from day 1), and in the 2nd column (headed Default Future Situation): what is likely, if you (your team/org/etc.) do nothing different (the default). What's good, that likely remains true? What does inertia and entropy and trends suggest is likely?

You might notice, if you are familiar with Jabe Bloom's *Ideal Present Canvas*, that we are doing the top row of the canvas:
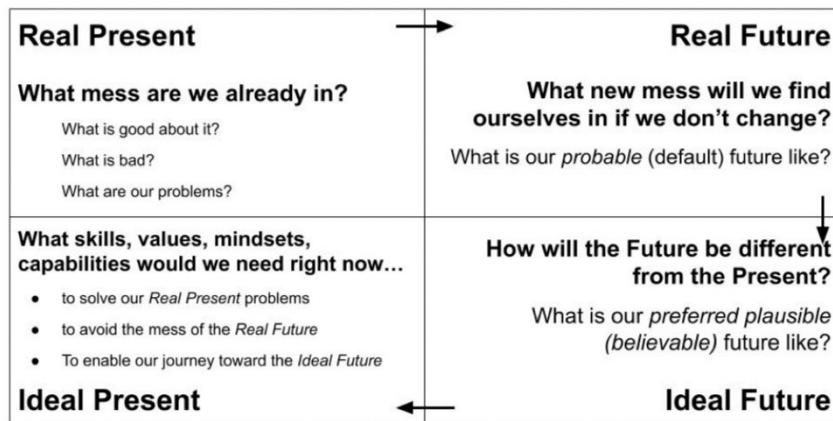
The Ideal Present Canvas

"Reality leaves a lot to the imagination."
~ John Lennon (apocryphal?)

"First Law of Cognition: There are no benefits without costs."

"The tradeoff here is between considering possibilities and acting effectively and efficiently."
— Barbara Tversky

"Knowing what to keep is just as important as knowing what to change."
— Esther Derby

"Alicia Juarerro reminded us of the importance of time in complex systems. She highlighted the difference between Chronos (chronological or sequential) and Kairos (opportune) time. Chronological time is agnostic of context as it inexorably moves along. Kairos time, defined as right, critical, or opportune moments, is inherently linked to context. For each unique context, there will be unique Kairos moments."
— Sonja Blignaut, Flowing Through Time

Intermezzo: Co-Evolution

"Design involves assumptions about the future of the object designed, and the more that future resembles the past the more accurate the assumptios are likely to be. But designed objects themselves change the future into which they will age."
— Henry Petroski, To Engineer is Human

"the Law of Stretched Systems:
every system is stretched to operate at its capacity; as soon as there is some improvement, for example in the form of new technology, it will be exploited to achieve a new intensity and tempo of activity."
— David Woods and Sidney Dekker, Anticipating the Effects of Technological Change, 2000

"resilience is about what a system can do—including its capacity:
• to anticipate—seeing developing signs of trouble ahead to begin to adapt early and reduce the risk of decompensation
• to synchronize—adjusting how different roles at different levels coordinate their activities to keep pace with tempo of events and reduce the risk of working at cross purposes [.]
• to respond—developing deployable and mobilizable response capabilities in advance of surprises"
— David Woods, Resilience is a Verb

"As we design a system, we need to consider that it will reshape contexts — whether we take this into account or not, we're reshaping containing/collaborating systems. So we ought to take it into account! In use, the system takes on capabilities on behalf of users, and extends or augments their capabilities in some way; it places demands on them, while offering something in turn. It changes supply chains and value flows."
https://www.bredemeyer.com/howto.htm

"we should remember that we can never wholly separate the human and the mechanical problem. This would seem too obvious to mention if we did not so often see that separation made. [..] The engineering part of transportation is not the larger part. Please note that I do not say it is a small part. It is a large part, and it is the dramatic part, and it is the part we have done well, and yet the chief part of transportation is the personal things"
— Mary Parker Follett, Dynamic Administration

"past (the time of memory), present (the time of conscious awareness), and future (the time of anticipation)"
— David Scott, Omens of Adversity: Tragedy, Time, Memory, Justice

Circle of Cares and Concerns

Draw a circle, and put the situation in the circle — that is, something that signifies the situation you are exploring.

Around the circle, draw those involved in some way — they're impacted by consequences, or are involved in what's going on, etc.. Jot down notes alongside each one (including yourself!), noting (your impressions of) how they orient to this situation and what they care about (as relevant to this situation).
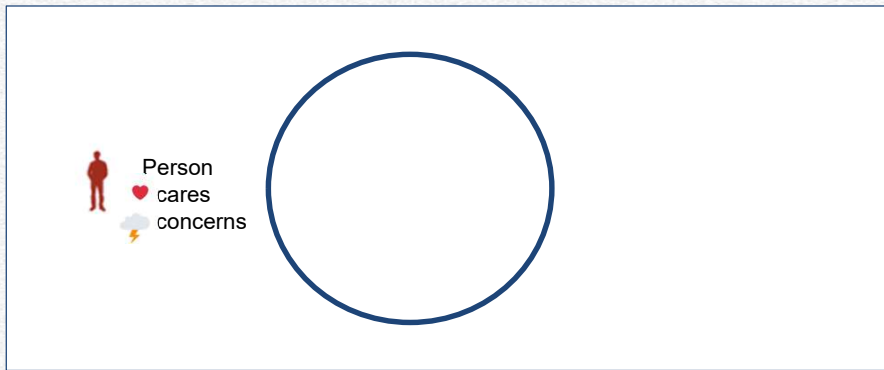
This is about developing our awareness and understanding of others' concerns — a decentering of ourselves, without ignoring our concerns and views. We're taking inspiration from Jabe Bloom, as one does, and we need to expand the circle beyond people too.

Source: Jabe Bloom https://twitter.com/cyetain/status/855420176577290244

"understanding of complex systems is distributed"
— *Chris McDermott*

Value Networks

Explore the situation in terms of value flows.

Start with some of the roles and groups and organizations relevant to this situation (labelled nodes), and show what tangible and intangible value flows (solid and dashed arrows, respectively; annotated) between them, and add other entities (people/roles, teams/groups, organizations, etc.) and value flows, as they occur to you.

Verna Allee's *ValueNet Works*™ Analysis, using the innovative ■*HoloMapping*™ method is a proven methodology for analyzing the dynamics of value at the operational, tactical, strategic and even macroeconomic level.
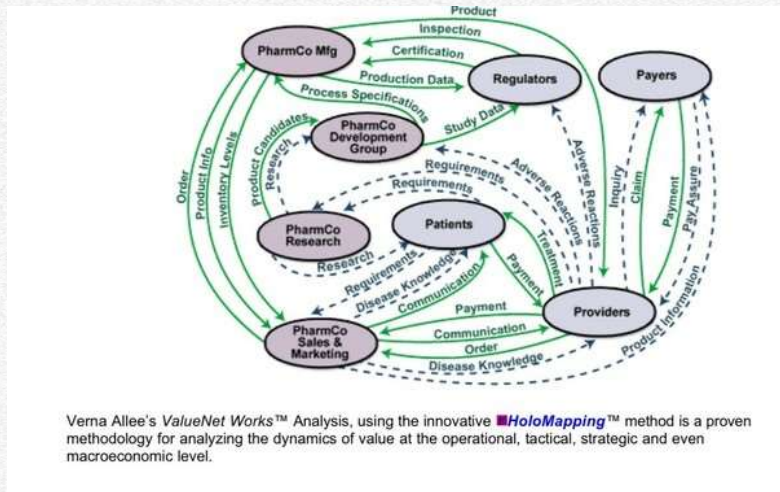
Image: from Verna Allee

Mapping how value is produced, flows and used, combined and transformed, transferred and exchanged, helps us understand the relationship field. Not only are we interested in direct tangible value, but also intangible value (relationship enrichment, respect, ⋯).

To further understand the relationship field, one might also want to map work flows. In that case, activity diagrams may be helpful, or something informal like a rich picture may be good enough.

"We fail more often not because we fail to solve the problem we face but because we fail to face the right problem."
— *Russell Ackoff (via Jamshid Gharajedaghi in Systems Thinking*

"A solution is a thing you make (an output) and knowing the problem is solved is its effect (an outcome). You need to understand what outcomes you want before you develop the outputs."

— *Pavel A Samsonov*

Intermezzo: On Systems

'A system is an interconnected set of elements that is coherently organized in a way that achieves something"

"a system must consist of three kinds of things: elements, interconnections, and a function or purpose."

— Donella Meadows

"We find structure on all scales. In order to see how difficult it is to grasp these structures, it is necessary to look at the boundaries of complex systems, and to the role of hierarchies within them."

"Boundaries are simultaneously a function of the activity of the system itself, and a product of the strategy of description involved. In other words, we frame the system by describing it in a certain way (for a certain reason), but we are constrained in where the frame can be drawn."

— Paul Cilliers

'Considering enterprises as "open socio-technical systems" helps to provide a more realistic picture of how they are both influenced by and able to act back on their environment.'

— Emery and Trist, The Socio-technical System as a Source Concept (Appendix to "Towards a Social Ecology"), https://link.springer.com/content/pdf/bbm:978-1-4615-8082-9/1.pdf

'A system is a whole that is defined by its function(s) in a larger system (or systems) of which it is a part and that consists of at least two essential parts, parts without which it cannot perform its defining functions."

— Russ Ackoff

"Systems are of three types: mechanical, organismic, and social.' A mechanical system is one that operates with a regularity dictated by its internal structure and the causal laws of nature, for example, a clock or an automobile. Because mechanical systems can display no choice, they can have no purposes of their own; nor can their parts. However, a mechanical system can have a function"

— Russ Ackoff, Systems thinking and thinking systems,

"Types of Systems and Models
There are three basic types of systems [..]:
(1) Deterministic: systems and models in which neither the parts nor the whole are purposeful.
(2) Animated: systems and models in which the whole is purposeful but the parts are not.
(3) Social: systems and models in which both the parts and the whole are purposeful.
[..] All three types of system are contained in ecological systems, some of whose parts are purposeful, but not the whole."

— Ackoff and Gharajedaghi

System Purpose and Capabilities

Consider a (socio)technical system of interest. What is its primary purpose (or defining identity). Explore the capabilities it offers, shares, and relies on, to fulfill this purpose.

One way to do this: draw a box to represent the (technical:software, etc.) system. Put users interacting with the system on the outside (on the left, like a use case diagram) and other systems this system interacts with on the outside (right). Put capabilities shared by user and system, or system and other systems, across the boundary; capabilities provided by the system inside the boundary; capabilities of users (not taken and shared by the technical system) outside the boundary.

The idea is to draw out and explore how capabilities are being created, and moved across boundaries, and raise the need for other (new/altered) capabilities (you might find yourself needing to add other actors like operators)···
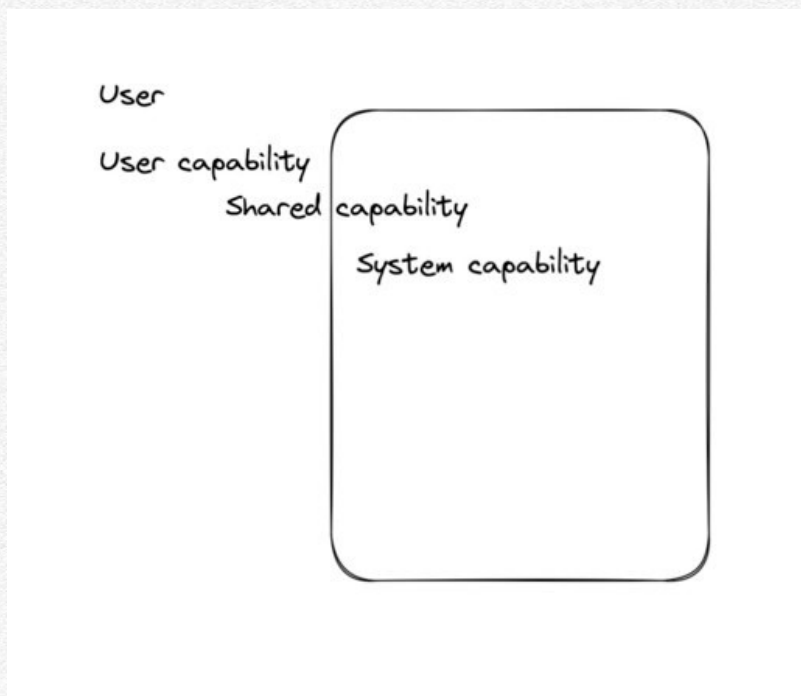
"System design is contextual design — it is inherently about boundaries (what's in, what's out, what spans, what moves between), and about tradeoffs. It reshapes what is outside, just as it shapes what is inside."

Systems and Boundaries

Again, considering the situation you're exploring: *identify systems. List them, or draw them interacting in ecologies of systems.*

Some things to think about: what larger systems are the systems we name, part of? This is about noticing systems (so boundaries), and relationships (and the nature of those relationships) among systems.

For example, patient onboarding is part of an Urgent Care system and Urgent Care is part of the regional healthcare system (which is part of the social infrastructure of the region, along with education, city services like sanitation, etc.?). The software system we're design-evolving, is part of the sociotechnical system developing it, as well as the system-in-use by users, and their larger system of work or other parts of life.

How far out do we zoom? What heuristics do you use?

Donella Meadows (Thinking in Systems):

"There are no separate systems. The world is a continuum. Where to draw a boundary around a system depends on the purpose of the discussion."

"They mark the boundary of the system diagram. They rarely mark a real boundary, because systems rarely have real boundaries. Everything, as they say, is connected to everything else, and not neatly. Architectural design is system design. System design is contextual design — it is inherently about boundaries (what's in, what's out, what spans, what moves between), and about tradeoffs. It reshapes what is outside, just as it shapes what is inside."

"In order to be recognisable as such, a system must be bounded in some way. However, as soon as one tries to be specific about the boundaries of a system, a number of difficulties become apparent. For example, it seems uncontroversial to claim that one has to be able to recognise what belongs to a specific system, and what does not. But complex systems are open systems where the relationships amongst the components of the system are usually more important than the components themselves. Since there are also relationships with the environment, specifying clearly where a boundary could be, is not obvious."
   — Paul Cilliers, Boundaries, Hierarchies and Networks in Complex Systems

"All social systems, and thus all living systems, create, maintain, and degrade their own boundaries. These boundaries do not separate but intimately connect the system with its environment. They do not have to be just physical or topological, but are primarily functional, behavioral, and communicational. They are not 'perimeters' but functional constitutive components of a given system."
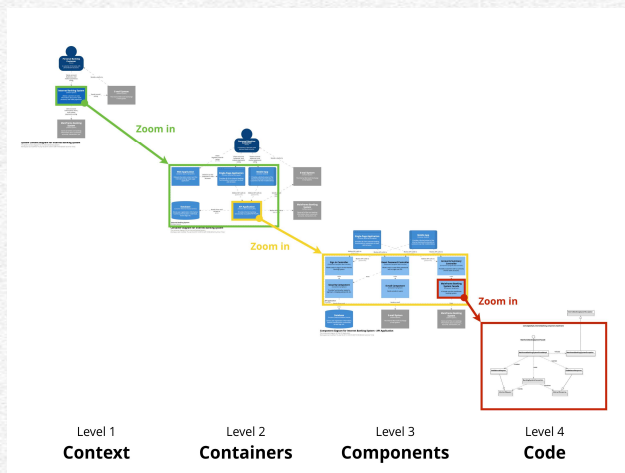   *— Milan Zeleny, On The Social Nature Of Autopoietic Systems (In Evolution, Order and Complexity)*

System Structure: moving inwards

For the system of focal interest to you, sketch its significant constituent structures (named components or parts for a technical system, or teams and other groupings for a social system; add a few words about each part's role in the system,···), and interrelationships — that is, draw boxes and lines or nodes and connectors. For areas of the system that are fuzzy (more distant from the parts of the system you understand), write down some questions and notice over the next week, if you're discovering more about those areas of the system.

If you haven't seen it (in a while), Ray and Charles Eames *Powers of Ten* (short) (1977) film is worth a watch: First it goes out in powers of ten to see wider and wider context, and then it reverses direction (around minute 5:54) and goes inwards. It's dated, but still very cool. Here: https://m.youtube.com/watch?v=0fKBhvDjuy0

This may recall to mind Simon Brown's C4: Context, Containers, Components, and Code, (see image below, from https://c4model.com/). "[C4 is] a way to create maps of your code, at various levels of detail, in the same way you would use something like Google Maps to zoom in and out of an area you are interested in."
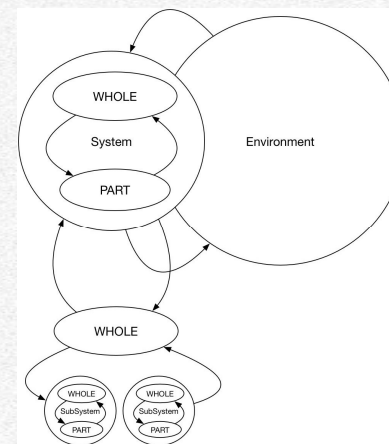

Level 1	Level 2	Level 3	Level 4
Context	**Containers**	**Components**	**Code**

Jabe Bloom (@cyetain) referencing and illustrating Alicia Juarrero:

"(Explanatory primacy) moves up & down levels, from wholes to parts, from inside to outside and vice versa"

Source: Jabe Bloom,
https://twitter.com/cyetain/status/904800025

Walk a Story through the System

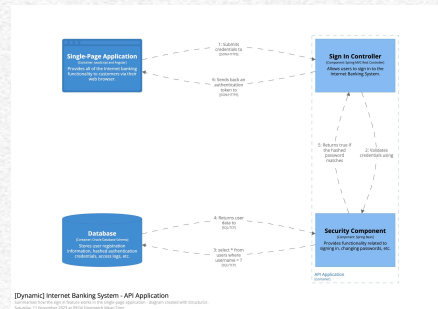*Pick a capability and explore how that capability is co-created by parts of the system.*
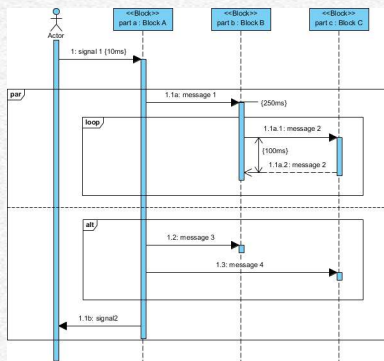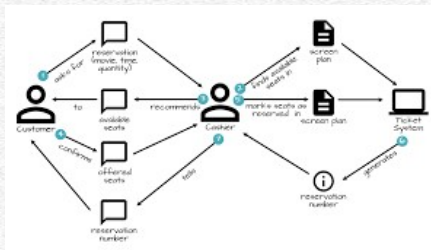
If you are exploring a social system (and, say, the work flows to build a service), you might like to use an informal diagram, Rich Picture or Domain Story, Activity Diagram, Journey Map, etc.. For a software system, Sequence Diagrams are great for exploring interactions among components.

Images:
Domain Story from https://domainstorytelling.org/quick-start-guide

Sequence Diagram from: https://www.visual-paradigm.com/guide/sysml/modeling-scenarios-with-sequence-diagram/

Dynamic Diagram from: https://c4model.com/

> "I have been saying that the whole is determined not only by its constituents, but by their relation to one another. I now say that the whole is determined also by the relation of whole and parts."
>
> — Mary Parker Follett, Dynamic Administration

> "Since the nature of a complex organization is determined by the interaction between its members, relationships are fundamental. [..] The point is merely that things happen during interaction, not in isolation."
>
> — Paul Cilliers

> "One of the hardest and most valuable things you can do as a company is the following:
> 1. Have a fully up to date org chart
> 2. Have a diagram that is not the org chart that accurately reflects how work flows through the company
> 3. Have an up to date and accurate diagram and explanation of what the company does and how it does it (architecture, revenue funnels, business value streams, code-bases)
> Scaling decision making is *impossible* without a shared context to build alignment off of."
>
> — Hazel Weakly

Intermezzo: Messes and Wicked Problems

From Rittel and Webber's characterization of wicked problems:
1. There is no definitive formulation of a wicked problem
2. Wicked problems have no stopping rule
3. Solutions to wicked problems are not true-or-false, but good-or-bad
4. There is no immediate and no ultimate test of a solution to a wicked problem
5. Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly
6. Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated
7. Every wicked problem is essentially unique
8. Every wicked problem can be considered to be a symptom of another problem
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution
10 indicates: The planner (addressing wicked problems) has no right to be wrong — they have responsibilities

"We have also come to realize that no problem ever exists in complete isolation. Every problem interacts with other problems and is therefore part of a set of interrelated problems, a system of problems"

"English does not contain a suitable word for "system of problems. Therefore—, have had to coin one. I choose to call such a system a mess."

*— Russell L. Ackoff, Redesigning the future, 1974*

"Sensemaking is the ability or attempt to make sense of an ambiguous situation. More exactly, sensemaking is the process of creating situational awareness and understanding in situations of high complexity or uncertainty in order to make decisions. It is "a motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively."'

—Gary Klein, Brian Moon and Robert Hoffman, Making Sense of Sensemaking"

Finding Dragons and Elephants

Look over your situation map (Day 5/p9) for "here be dragons" (they might be friendly dragons, once we understand them) and here be "elephants" (elephants are things we are avoiding having direct and real conversations about). Describe the dragons (these might be challenges, resistance, etc.) and elephants, and how you orient to them.

This prompt took inspiration from Christian Nold's work (with children) on mapping sensory journeys http://sensoryjourneys.net
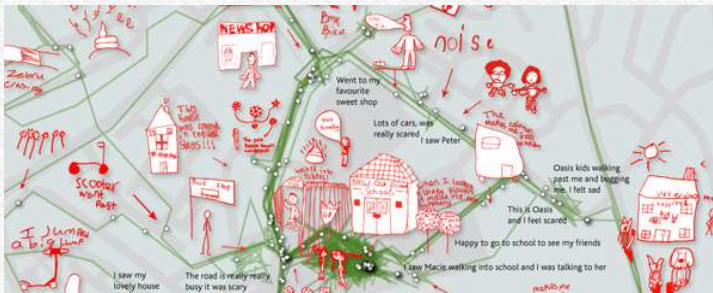
"all systems are what emerges over its history of adaptation to stressors"

— David Woods

"getting people to write down the organizational socio-political context is hard"

— Michael McCliment

"The lack of corrective feedback which would make their models more true is a feature, not a bug"

— Shauna Gordon-McKeon

I Have a Theory About This!

Pick some area of this situation you want to explore in terms of your "working theory." *Describe your theory (a system of ideas about what matters, and what's going on, and explanations), using diagrams and words.*

We're getting our understandings of what matters, and how we're approaching what matters, out where we can see them and interact with them, to probe and test our theory.

Alternately put, we're forming mental models of the situation and system, and how these mutually interact and influence.

Mental models may be connecting in your mind — to Richard Cook's diagram in the STELLA report? (Here: https://snafucatchers.github.io/) In particular, the "above the line/below the line" diagram and (David Woods') description.

"a person who has or possesses a theory in this sense knows how to do certain things and in addition can support the actual doing with explanations, justifications, and answers to queries, about the activity of concern."

"what has to be built by the programmer is a theory of how certain affairs of the world will be handled by, or supported by, a computer program."
— Peter Naur, Programming as Theory Building, 1985
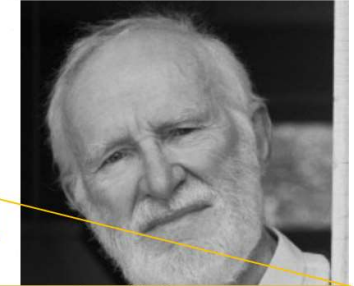

Programming as Theory Building

'A key here is to run multiple simultaneous probes… this is a special property of abductive rationality… you can have multiple equally "good" guesses about the nature of a system.'
—Jabe Bloom

*"people got their opinions
where do they come from?
each day seems like a natural fact
and what we think changes how we act."*
*—Why Theory?
Gang of Four lyrics*

Noticing "the Left Column"

Think of a recent conversation and trace what was said and what happened internally

We're going to use Argyris and Schon's left column exercise, related to the situation you're exploring, where you think of a difficult or troubling recent conversation and write what you actually said and what the other person said, in the right column, and what you heard (in your mind; interpretations; internal responses) and felt, in the left column.

Left hand Column

Exercise developed by Chris Argyris and Donald Schon:

Pick an important conversation you've recently had, and

- Draw a line down the center of a sheet of paper.

- In the right column reconstruct the conversation to the best of your ability - e.g. I said this, then they said this, then I said this etc.

- In the left column jot down what you were thinking and feeling at the moment that each thing was being said.

- Review both columns. Are there differences between your external dialogue and internal thoughts and feelings?

- If so, how can you begin to productively raise some of your left hand column thoughts?

"In every collaborative modelling session YOU are part of the model: your biases will affect the flow and the outcome too. Better be aware of yours"

— Alberto Brandolini

"The propensity among professionals to behave defensively helps shed light on the 2nd mistake that companies make about learning. The common assumption is that getting people to learn is largely a matter of motivation [..] But effective double-loop learning is not simply a function of how people feel. It is a reflection of how they think—that is, the cognitive rules or reasoning they use"
"What happened? The professionals began to feel embarrassed. They were threatened by the prospect of critically examining their own role in the organization. [..] Far from being a catalyst for real change, such feelings caused most to react defensively. They projected the blame for any problems away from themselves and onto what they said were unclear goals, insensitive and unfair leaders, and stupid clients."
— Chris Argyris, "Teaching Smart People How to Learn"
https://hbr.org/1991/05/teaching-smart

'Rick Ross notes: "You can't live your life without adding meaning or drawing conclusions. It would be an inefficient, tedious way to live. But you can improve your communications...by using the ladder of inference in three ways:
Becoming more aware of your thinking and reasoning (reflection);
Making your thinking and reasoning more visible to others (advocacy);
Inquiring into others' thinking and reasoning (inquiry)."'
— Ed Bastista, Racing up the ladder of inference

A Week of Noticing

Plan a Dear Data-like week of data collection to observe yourself.

Track one thing. For example, one could track (one of): what you read (in general, or as related to this situation/system); gratitude/thank you's; conversation topics; your attention (and/or emotions) spent on different parts of the system(s). Think about how you will code and display the data. Start observing/tracking on Monday.

Image source (examples below), and for inspiration: *Dear Data*, by Giorgia Lupi and Stefanie Posavec, https://www.dear-data.com/all

For more inspiration: Nick Sousanis has done this exercise with his Visual Communication students, and has posted some of their work on twitter. These (below) and more wonderful examples at: https://twitter.com/Nsousanis/status/1

"Observing sounds simple — almost like doing nothing but looking around. In fact, it is hard work requires practice & skill."
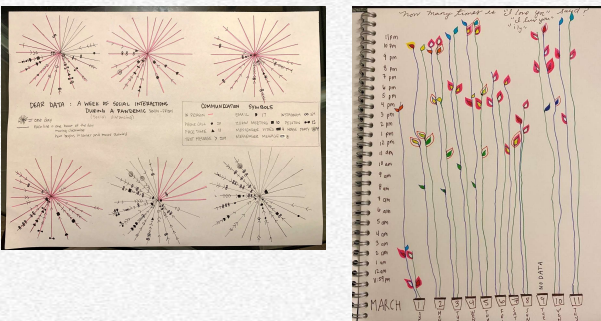
— *Esther Derby*

"Powers of observation can be developed by cultivating the habit of watching things with an active, enquiring mind."

—*W.I.B Beveridge*

"A lot of work is the work of noticing what work needs doing."

— *Elizabeth Zagroba*

Care and Repair

"What we really need to study is how the world gets put back together." — Shannon Mattern

Find where repair is happening in this situation you're exploring, and draw it out, to understand and appreciate and learn from it.

As usual, we're encouraging each other to literally draw, creating visual narrative to support seeing structure and dynamics of repair interactions and mechanisms, but also allowing ourselves the freedom, and discipline, of adding text narrative.

There is hope in the work we do, to sustain and maintain and mend.

"Steven Jackson's now-classic essay "Rethinking Repair," written in the before-time — way back in 2014 — proposes that we "take erosion, breakdown, and decay, rather than novelty, growth, and progress, as our starting points" in considering relations between society and technology. His sober exercise in "broken world thinking" is matched with "deep wonder and appreciation for the ongoing activities by which stability … is maintained, the subtle arts of repair by which rich and robust lives are sustained against the weight of centrifugal odds."
—Shannon Mattern

"[It requires] continuing effort to sustain, extend, & repair common ground."

—Richard Cook

"It is only when a breakdown occurs that we become aware of the fact that 'things' in our world exist"
— T. Winograd and F. Flores

"The normally invisible quality of working infrastructure becomes visible when it breaks: the server is down, the bridge washes out, there is a power blackout. Even when there are back-up mechanisms or procedures, their existence further highlights the now-visible infrastructure."
— Susan Leigh Star, The Ethnography of Infrastructure

"1. People can have unexpressed ambivalence toward shared understanding, and that makes building it take longer.
2. Building shared understanding isn't linear.
3. Shared understanding takes a lot of maintaining, and we are both bad at and not incentivized toward maintenance."
— Yyvonne Z Lam

*"Nobody ever gets credit for fixing problems that never happened"*

— Michel Grootjans

"Organizations can decide to notice when people do glue work and to take it as a manifestation of leadership skills, abilities, and interests, just like they can decide learning many programming languages or whatever is a sign of engineering talent."

—Yvonne Z Lam

Pulling on Threads: Why? (And What?)

Find an interesting thread in the tangle of the situation and pull on it. If you notice something curious or concerning, ask "why?" (looking for direct causes), and again "why?" as exhaustively as a curious two year old. And you may find yourself... tracing out paths in a causal interaction network. Paul Cantrell has a nice example here; it's the source of the image below): https://hachyderm.io/@inthehands/109378117775642584
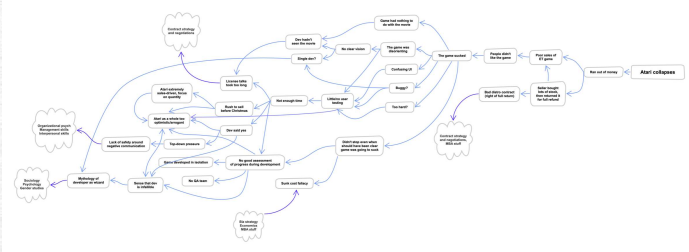
Or follow "what does this depend on (or need)?" and "what does that depend on (or need)?" paths.

"The way a question is asked limits and disposes the ways in which any answer to it [..] may be given."

"the questions make the frame [..] They make more than the frame; they give the angle of perspective, the palette, the style"

"Such assumptions appear so obvious that people do not know what they are assuming because no other way of putting things has ever occurred to them. With these assumptions a certain limited number of types of [..] systems are possible"

— Susanne Langer, Philosophy in a New Key

"We might have to take an approach inspired by Donna Haraway and [..] see what happens when we grab hold of one thread in the tangle and mess and pull it."
— Marisa Leavitt Cohn, Keeping Software Present,

"the wish [or intention] confronts an environment as altered by the wish; the environment confronts a wish as altered by the environment"
— Mary Parker Follett, Creative Experience, 1924,

"We have also come to realize that no problem ever exists in complete isolation. Every problem interacts with other problems and is therefore part of a set of interrelated problems, a system of problems"

"English does not contain a suitable word for "system of problems. Therefore, have had to coin one. I choose to call such a system a mess."

— Russell L. Ackoff, Redesigning the future, 1974

Learn from an expert: Donella Meadows and Dynamics

Take sketch notes as you watch Donella Meadows' (1977 — it's a classic!) lecture on causal loop diagrams; the whole lecture is great, but to keep to 15 minutes, start at minute 18:59   (And stop after 15 to 20 minutes.)

Donella Meadows: A Philosophical Look at System Dynamics, https://m.youtube.com/watch?v=XL_lOoomRTA&t=1139s

For inspiration! A Causal Loop Diagram — by 11 year olds early in the pandemic (April 2020):
https://twitter.com/KateRaworth/status/1254344048216887296

Nicky Case (creator of Loopy) on Seeing Whole Systems:
https://longnow.org/seminars/02017/aug/07/seeing-whole-systems/

"Using examples and stories such as the viciousness of the board game Monopoly and the miracle of self-organizing starlings, Case laid out the visual basics of finessing complex systems. A reinforcing loop is like a ball on the top of a hill, ready to accelerate downhill when set in motion. A balancing loop is like a ball in a valley, always returning to the bottom of the valley when perturbed."

—Stewart Brand

"We have also come to realize that no problem ever exists in complete isolation. Every problem interacts with other problems and is therefore part of a set of interrelated problems, a system of problems"

"English does not contain a suitable word for "system of problems. Therefore, have had to coin one. I choose to call such a system a **mess**.*"*

— Russell L. Ackoff, Redesigning the future, 1974

And more Meadows:

"What we try to do, is build a model that makes our mental understanding of the system, so much better [..] That is, what we are really trying to do, is increase our intuition, our understanding"

https://m.youtube.com/watch?v=f9g4-5-GKBc&feature=youtu.be

Explore dynamics (with causal loop diagrams)

Follow up on yesterday's Donella Meadows lecture, with some practice: Explore the dynamics (and feedback loops), in some part of the situation you're exploring with a causal loop diagram (CLD).

If you haven't done CLDs before, the more important thing is to give it a try. Once you get going, then worry about getting the model more correct, and some guidance is helpful. This might help with that: "Fine-Tuning Your Causal Loop Diagrams — Part I", by John Sterman, https://thesystemsthinker.com/fine-tuning-your-causal-loop-diagrams-part-i/

Alternatively, use an influence diagram like @johncutlefish (John Cutler's) WIP diagram (or at least give it a look over, for ideas from our product/software dev contexts):
https://mobile.twitter.com/johncutlefish/status/1544719466507907072

John talks through it here:
https://www.loom.com/share/5efceb288b634a449041918bdba08202

This (more kids doing CLDs) shows how useful a simple causal loop diagram (CLD) can be:
https://m.youtube.com/watch?v=wI03wmG9Ghk

Pull on a thread (Donna Haraway); an example:
https://hachyderm.io/@inthehands/109378117775642584

The environment changes the system; the system changes the environment (immediate/task and global) — the diagram is from "Self managing management of the self managing organization: an update"
> *by Merrelyn Emery, Self managing management of the self managing organization: an update, 2018*

"My response is not to a crystallized product of the past, static for the moment of meeting; *while* I am behaving, the environment is changing because of my behaving, and my behavior is a response to the new situation which I, in part, have created."
> *— Mary Parker Follett, Creative Experience, 1924*

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*"This takes some disentangling, and time and thought [..]
The big problem is this:
 you are not determining absolute facts;
 you are establishing a set of conventions.
So remember:
 a model is neither true nor false;
 it is more or less useful"*
—Stafford Beer, Diagnosing the System for Organizations, 1985

Gather Stories

This situation or system has stories — tales of how it came into being, what shaped it, challenges faced, incidents, ⋯ If you know some of the stories write them down. Or write questions, so you can gather stories from someone who was involved before you. Or, if you're envisioning some initiative, what is the story there? How would you like the story to be told?

What stories we tell, matters.

"some of us out here in the wild oats, amid the alien corn, think we'd better start telling another one, which maybe people can go on with when the old one's finished. The trouble is, we've all let ourselves become part of the killer story, and so we may get finished along with it. Hence it is with a certain feeling of urgency that I seek the nature, subject, words of the other story, the untold one, the life story"

"the Hero has frequently taken it over, that being his imperial nature and uncontrollable impulse, to take everything over and run it while making stern decrees and laws to control his uncontrollable impulse to kill it. [..]

I differ with all of this. I would go so far as to say that the natural, proper, fitting shape of the novel might be that of a sack, a bag. A book holds words. Words hold things. They bear meanings. A novel is a medicine bundle, holding things in a [.] powerful relation"

—Ursula K. Le Guin, The Carrier Bag Theory of Fiction

Consequence Scanning

Consider consequences (intended and not. direct and indirect effects, positive and negative externalities)

Identify an action (or decision) you're intending to take/taking in this situation.

- What are the intended outcomes of this action (or decision)?

- What are other positive consequences?

- Explore possible effects and unintended consequences of this action.

- What consequences need to be mitigated?

- How will you broaden input here?

Adapted from (and highly recommend):
https://doteveryone.org.uk/project/consequence-scanning/

Guidance, case studies, etc.:
https://doteveryone.org.uk/project/consequence-scanning/

"There are two nonexclusive ways of dealing with possibilities; contingency planning and developing responsiveness"

— Russell Ackoff

"Responsible computing is loosely [defined] as designing computing artifacts that need to take society into consideration. Not doing so can lead to harm in society, even if the harm was unintended."

—Teaching Responsible Computing Playbook,
https://foundation.mozilla.org/en/what-we-fund/awards/teaching-responsible-computing-playbook/

"Consequence Scanning [..] is a way for organisations to consider the potential consequences of their product or service on people, communities and the planet. This practice is an innovation tool that also provides an opportunity to mitigate or address potential harms or disasters before they happen."

— doteveryone

Decisions have different timespans until we see their effects (there are differences in the timespan of feedback loops —paraphrasing @cornazano from memory).

@johncutlefish made a related point:
"One (of many) ways to think of product work is to imagine a series of interlocking and related sense and respond orbits....it is all happening NOW, but the orbits range in terms of length...

Companies are built in 1-3 decade bets
*Someone comes to work and places a 1-3h bet"*
https://twitter.com/johncutlefish/stat

Watterson, Bill. *There's Treasure Everywhere: A Calvin and Hobbes Collection.* Kansas City: Andrews and McMeel, 1996. Print.

Look Inside (Self Empathy)

We've looked around, looked back, looked forward. Now we're going to look inside. For this entry, use the Empathy Map template from Dave Gray, but capture your feelings, thoughts, experiences! How are you feeling, what are you seeing, (as it relates, in a general sense, to this situation you're exploring)? Go back a day or two, to jot down what you are hearing — what are other people saying, emailing, slacking? And what are you saying, writing, texting?

Reference:

Updated Empathy Map Canvas, Dave Gray https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a
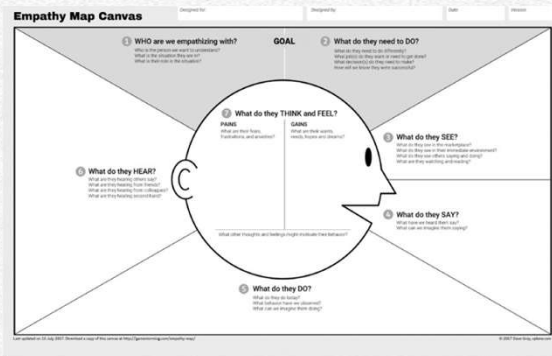
"Take care of yourself. Your brain is working overtime — all the time. Practice "radical" recovery."
—John Cutler (@johncutlefish), 20 Things I've Learned as a Systems (Over)Thinker, https://cutlefish.substack.com/p/20-things-ive-learned-as-a-systems

Illustrated by Viktor Cessan:
https://www.viktorcessan.com/20-systems-over-thinker-tips/
20 Things I've Learned as a Systems (Over)Thinker
The Beautiful Mess

"[Self empathy] can give us the ability to care for our needs in a way that reduces our reactivity, and increases our ability to respond from a place of caring. Wielded expertly, it can provide the relief needed during a difficult conversation, to allow us to keep listening even when what we're hearing hurts. Not always—we're not superheroes. Sometimes we need to take a break for a while."
—Alex Harms, The Little Guide to Empathetic Technical Leadership

"The first step of any project is to grossly underestimate its complexity and difficulty."
—Nicoll Hunt

'Is this not the definition of "blissful ignorance"?'
—Dawn Ahukanna

Nescience is a general term for constructed ignorance. 5 forms of nescience are distinguished by factors motivating the decision to barricade the boundary of knowledge:
- *rational ignorance*
- *strategic ignorance*
- *willful ignorance*
- *privacy and secrecy*
- *forbidden knowledge*

D. DeNicola (as conveyed by @propcazhpm on twitter)

Ignorance serves and disserves us. Confronting the mess (in that system of entangled problems sense) is hard stuff!

Curious Questions

What questions are emerging from exploring this situation, that draw your curiosity and invite deeper reflection and investigation?

Go back over some of your journal entries, and give yourself time to reflect on what has been percolating in your thinking, and note down questions that will help steer your attention as you continue to enhance your system seeing and understanding, through journaling.

"the questions make the frame [..] They make more than the frame; they give the angle of perspective, the palette, the style"

—Susanne Langer, Philosophy in a New Key

"Listen to the wisdom of the system."

—Donella Meadows

"The fundamental job of the imagination in ordinary life, then, is to produce, out of the society we have to live in, a vision of the society we want to live in."

—Northrop Frye

Cover Design

Design a sticker (doodle) for the cover of your System Seeing Journal

The Big Idea here is to doodle around what is representative or what concept "glimmers" with what this journal is shaping up to be, for you. What makes this work meaningful? Go back to your visual language doodles from earlier, if that helps. It is another chance to play with images and what draws you.

Play with visual ideas that might offer metaphors or analogies relating to this situation you've been paying attention to, in this advent(ture) in systems journaling. Or doodle what wants to be expressed, but hasn't yet, like feelings. Or doodle on a theme, like "cultivate response-ability"… Let your doodles draw you. (Draw you along, draw you out, draw you in.)

For inspiration: xkcd 2347: Dependency

Source: https://xkcd.com/2347/
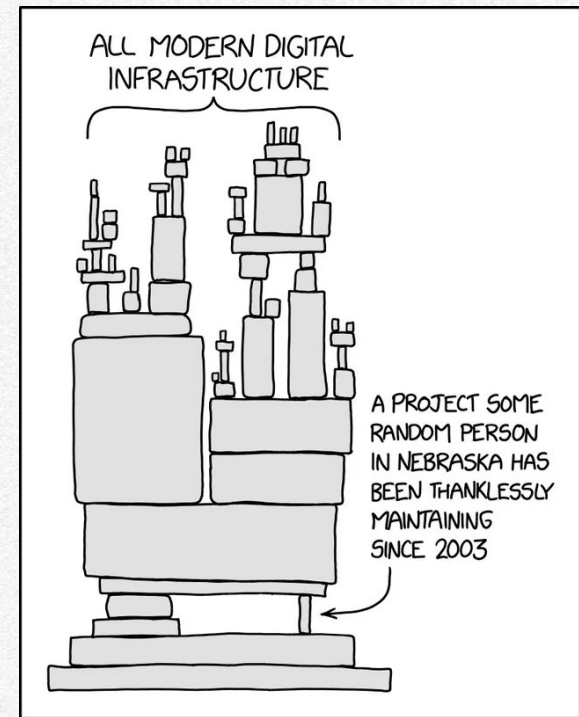
"insides make their way to outsides"

— Barbara Tversky, Mind in Motion

Gratitude

Noticing and appreciating

Spend some time noticing what you appreciate in this situation you've been exploring, and who. Especially seek to notice work that may be under-appreciated for various reasons.

"Thank-yous aren't only expressions of gratitude; they are crucial belonging cues that generate a contagious sense of safety, connection, and motivation."

via Amy Edmondson

"Intersection of empathy and humility: Desire to understand."

— Amy Edmondson

"our roles as leaders is to steward the socio-technical system as a whole."

— Amy Tobey

"I am because we are, and since we are therefore I am"

— John Mbiti

"We know from everyday experience that a person is partly forged in the crucible of community."

— Abeba Birhane, Descartes was wrong: 'a person is a person through other persons', 2017