

Toward Co-operative Commonwealth: Transition in a Perilous Century

System Thinking Activity Templates

This document contains printable versions, basic instructions and some tips for using the systems thinking activities that were introduced throughout the MOOC.

This document is in 8.5" x 11" (letter size) and can be printed using a standard printer.

You can also use the templates here to upload onto Miro or any other collaborative digital tool for shared and group participation.



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Templates included in this document:

1. Just Transition Framework
 - a. Just Transition Values Filters
2. Multi-level Perspective (MLP)
3. Iceberg / Causal Layered Analysis (CLA)
4. Leverage Points
5. Strategies for Scaling Impact
(*Scale Up, Out & Deep*)
6. Ecosystem Mapping

0 Using the Templates on Miro

Using your own Miro Board

You can use the templates that we have provided here to upload to Miro (or any other digital whiteboard tool) for group collaboration and sharing with others. Follow the instructions below for uploading a template to Miro.

1. **Log in or create a Miro account.** 'Free' Miro accounts have access to three boards; when you reach that limit older boards cannot be worked on.
2. **Create a new board (fig. 1).** You may be prompted by Miro to select a new template – you can ignore this by clicking the 'X' in the upper right corner (fig. 2).
3. **Download** the templates.
4. **Drag and drop** (fig. 3) the template you would like to use directly into your new Miro board.
5. **Lock your template (fig. 4).** Once your file uploads, make sure to **left-click** the template to show the image toolbar, and click on the **lock** to keep the template from moving.
6. **Go ahead and use your template!** Make sure to unlock the template background if you need to move it.

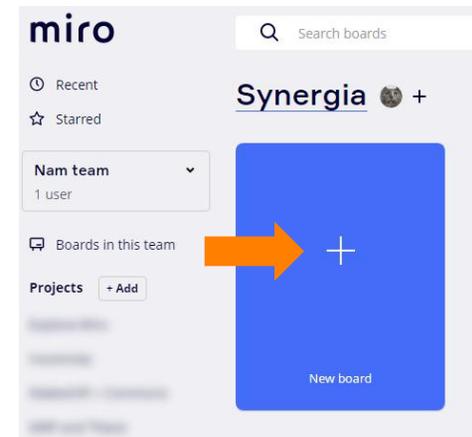


Fig. 1 - Use the 'new board' button.

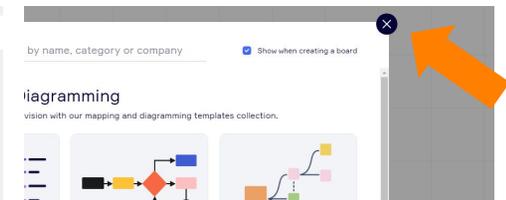


Fig. 2 - Use the 'X' to forgo a Miro-made template.



Fig 3. - Dropping a file directly on Miro will show these icons.

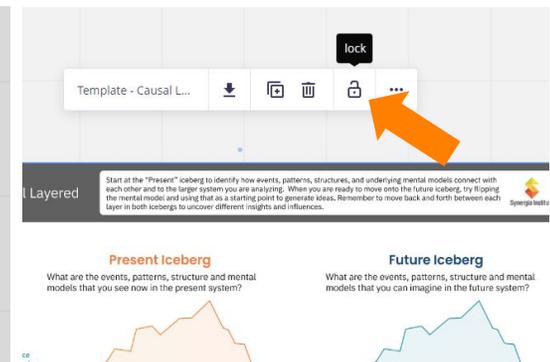


Fig 4. - Left-click your new uploaded file to show the toolbar, and lock the image.

1 Just Transition Framework

What is it?

The Just Transition Framework was developed by the Climate Justice Alliance. The “Just Transition” is defined as a “vision-led, unifying and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy.” The framework offers a visual diagram to show the different aspects to consider as we shift away from the extractive economy to a regenerative economy - where are we going and how do we get there?

The “Values Filters” on the bottom that are central to shaping the strategies and principles of the Just transition. *These have been separated into another template to allow you to combine with any other activity/tool where you may want to understand how the Just Transition values work within your analysis.*

Why Use It?

- Offers a clear breakdown of different aspects and stages of transition: what to move away from, what to work towards, and grounding values in the transition at different scales.
- Good for high level analysis and mapping to understand where an initiative, or multiple initiatives contribute to a Just Transition.
- Can be used as a guide for education or reflection to understand an issue or initiative through a Just Transition lens.
- The Just Transition Values Filters offer a useful lens which can be used with other tools to understand how values and mindsets shape transition work.

Challenges

- Follows an existing framework/pedagogy so it can be less generative and less flexible than other tools.
- The framework diagram is fairly high level and broad, so it may not be best for identifying specific opportunity spaces.

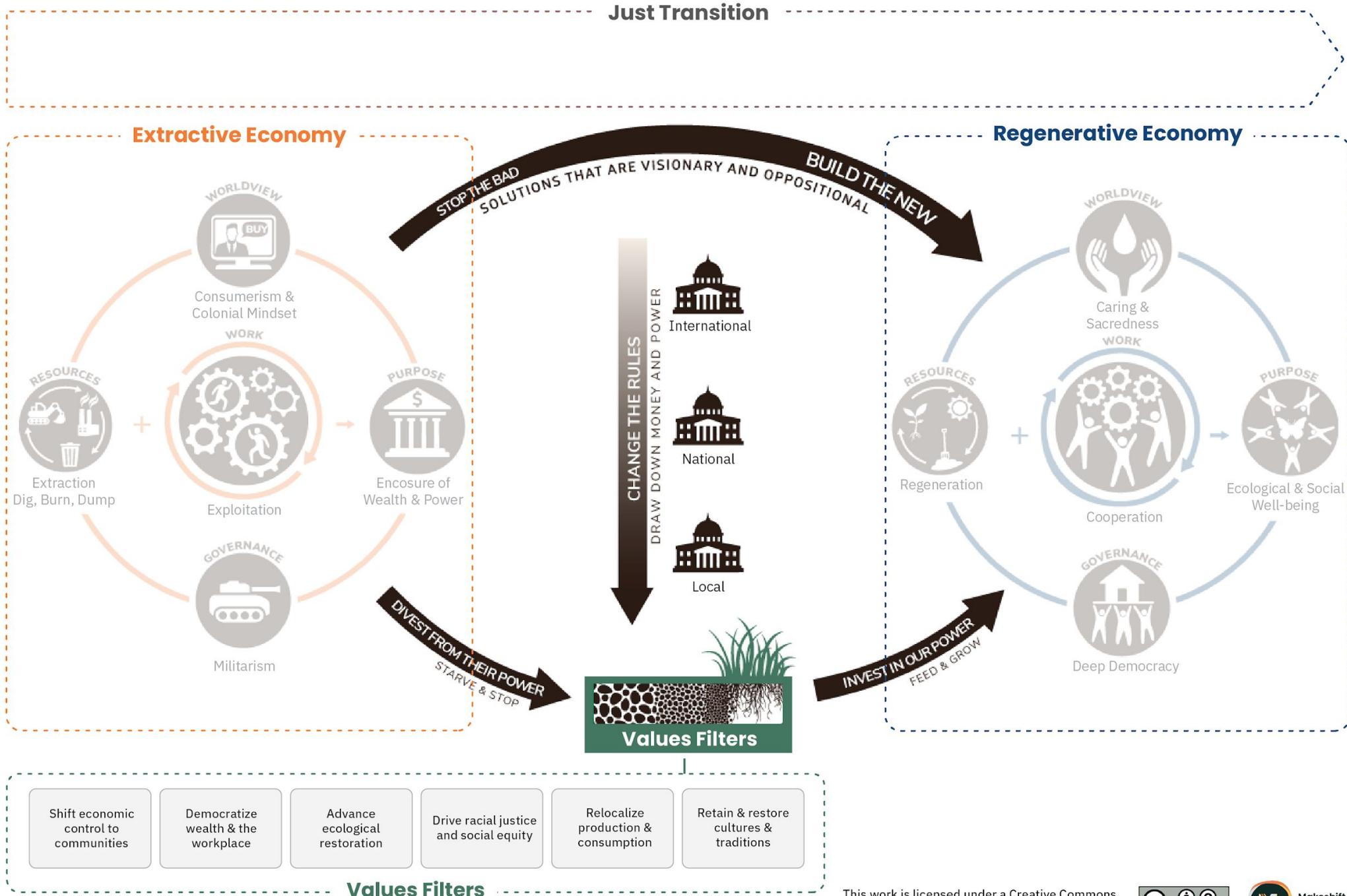
References / Read More

- Climate Justice Alliance. “Just Transition: A Framework for Change.” Web page. Accessed June 27, 2021. <https://climatejusticealliance.org/just-transition/>
- Indigenous Environmental Network. Indigenous Principles of Just Transition,” October 2017. <http://www.ienearth.org/wp-content/uploads/2017/10/IENJustTransitionPrinciples.pdf>

Activity Template

Just Transition Framework

Use the Just Transition diagram to guide you. Identify aspects of the extractive economy in the left box then identify aspects of the regenerative economy that you are working towards in the right box. What action may be needed to for that transition? Add your thoughts to the box labeled "Just Transition". Remember to refer to the "Values Filters" at the bottom of the diagram.



Activity Template

Just Transition Framework: Values Filters

Use this activity in combination with any other activity to explore how the Just Transition Values Filters relate to you analysis. Feel free to add any additional values you think may be missing. Go through each value and identify any ideas from your analysis that relate to it, note these down in the boxes below.



Shift economic
control to
communities

Democratize
wealth and the
workplace

Advance ecological
restoration

Drive racial justice
and social equity

Relocalize production
and consumption

Retain and restore
cultures and traditions

*Something Missing?
Add your own here*

2 Multi-level Perspective (MLP)

What is it?

Multi-level Perspective (MLP) is a tool originally created by Frank W. Geels for analyzing the influence and impact of forces and interventions at multiple scales, over time. MLP conceptualizes three levels of complex systems, the Niche, Regime, and Landscape, and asks how each level applies pressures to the other. MLP proposes that identifying and analyzing trends over time at each level, and understanding the relationships across a system's components and actors, is the key to advancing systems change.

This approach to transition 'highlight[s] co-evolution and multi-dimensional interactions between industry, technology, markets, policy, culture, and civil society'. MLP takes a cross-disciplinary and cross-sector perspective on how transition takes place over time.

Why Use It?

- MLP is good for visualizing the influence and impact of forces and interventions at multiple scales, over time.
- You can start at any scale (the niche, regime or landscape) and work between scales to understand how events/actions/activity influence each other and lead to a change/transition in the system.
- Because the time aspect can be used with the MLP, it can be a useful way of using narrative to better understand and communicate complex relationships that lead to transition.

Challenges

- Due to its nature of being cross-disciplinary, MLP can quickly become complex. Move quickly, but revise often, and be open to changing your MLP with new research or conversations.
- To mitigate information overload, remember the 'story-telling' aspect of analyzing systems to help you frame problems or questions you have in mind.

References / Read More

- [A short video primer for MLP from Erica Oleson](#)
- [Frank Geels at NESTwebinar in 2020, explaining MLP in longer form video](#)
- [Paper: A socio-technical analysis of low-carbon transitions: introducing multi-level perspective into transport studies by Frank Geels.](#)

2 Multi-level Perspective (MLP) Cont'd

Landscape Level



Description

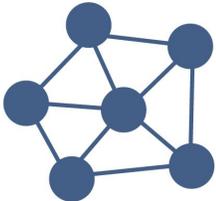
The landscape level contains macro-societal pressures and external trends that can significantly disrupt existing regimes. Some are slow moving and cumulative (e.g. climate change) and other are abrupt and sudden (e.g. COVID-19).

Landscape factors are beyond the direct influence of individual actors, yet stimulate and exert pressure on them at the regime and niche levels.

Mapping

Landscape-level is for visualizing causation, links, and environmental pressure that lead to reactions in niche/regime levels. You might ask: how have landscape changes created openings or opportunities for niches to deepen their hold and spread out, OR how have the Niche and Regime changes locally had an effect on other communities?

Regime Level



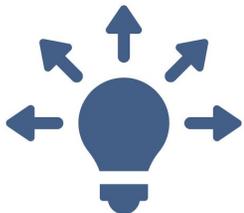
Description

The regime level represents the constellation of structures and practices of a current system. This can be characterised by key actors, dominant rules, institutions, and technologies that are self-reinforcing. Regimes may respond or be disrupted by niche and landscape influences.

Mapping

At the Regime, map the slow change of society, government, our rules and norms over time, and what influences these changes. In this module, we might think about how the role of the community is disrupting the current regime, or speak to evidence of a Partner State.

Niche Level



Description

The niche fosters innovations that differ fundamentally from the prevailing regime, emerging as responses to landscape pressures and regime-level rigidity and dysfunction. They can also benefit from windows of opportunity opened at the regime level. Niche innovations seek to chart pathways to change larger systems, exert pressure on the regime, and are often at the crucible for forging significant change.

Mapping

The Niche is great for mapping the story of a single innovation, policy, or technology. It can also be a step or decision, for example, made by the community that begins to galvanize change.

Activity Template

Multi-Level Perspective (MLP)

Use this template to understand and explore how factors at different levels connect and influence larger changes over time. Start at any level (Landscape, Regime, Landscape) for your analysis. Then move between the different levels to identify connections, causes and effects between these factors.

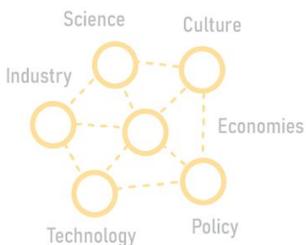
 **Macro-Level:**
Landscape

LANDSCAPE

Time →

 **Meso-Level:**
Regime

Aspect that shape a regime can include:



REGIME

Time →

 **Micro-Level:**
Niche Innovations

NICHE

What is it?

The 'Iceberg' concept has been riffed on and remixed for decades, and has as many different names as it does use-cases. However, most Icebergs are based on the idea that what we see in everyday life is layered, that underlying patterns and mental models emerge the deeper we go down the Iceberg.

Why Use It?

- As an analysis tool, Iceberg is great for systematically exploring underlying layers of events, patterns, structures, and the mental models that drive a society's actions.
- It is highly generative, and after some sorting out of definitions of what should fit in each layer, can be used fairly intuitively by a large group.
- The tool shines when the group using it is cross-disciplinary, able to identify patterns and structures from outside any individual perspective.
- The individual layers challenge a group to be specific about the problem they are looking to examine, and provides a good framework for driving ongoing research, or as a starting point or problem framing for a project.
- Can be used as a futures thinking tool by using the 'flip' process: a concept borrowed in this course from Sohail Inayatullah's 'Causal Layered Analysis' or CLA. After arriving at the bottom of an iceberg at the 'metaphor' (or mental model for Iceberg), that underlying driver is 'flipped': we ask the question 'how might a system act were its driving metaphor changed'? From there we move up each layer, to imagine a new future.

Challenges

- Iceberg can fall into a 'linearity' trap. Though intuitive, moving down the Iceberg as the main directionality of the tool can make it seem like the upper levels do not have an effect on the lower ones. For example, large scale 'events' and shocks in some cases have large effects on the mental model of a society. *Escape linearity by always zooming in and zooming out, understanding that cause and effect can flow in both directions.*
- Though not a challenge or weakness in and of itself, the Iceberg 'flip' or CLA on its own is an exercise in 'normative' futures thinking – we are moving towards a preferred future. While CLA can provide a very robust idea of this preferred future, it does not necessarily on its own allow a group to brainstorm 'explorative' futures, a wide variety of possible or plausible futures. CLA/Iceberg can be easily mixed into a larger methodology to cover explorative futures.

References / Read More

- [Think Jar Collective's take on Iceberg, with a ZIP \(Zoom in, Innovation, Problem Area\) analysis](#)
- [Sohail Inayatullah speaks on Causal Layered Analysis in a TED Talk](#)
- ["Causal layered analysis: Poststructuralism as method" by Sohail Inayatullah](#)

Activity Template

Iceberg / Causal Layered Analysis (CLA)

Start at the “Present” iceberg to identify how events, patterns, structures, and underlying mental models connect with each other and to the larger system you are analyzing. When you are ready to move onto the future iceberg, try flipping the mental model and using that as a starting point to generate ideas. Remember to move back and forth between each layer in both icebergs to uncover different insights and influences.



Present Iceberg

What are the events, patterns, structure and mental models that you see now in the present system?

Future Iceberg

What are the events, patterns, structure and mental models that you can imagine in the future system?

Events

What we see and hear, surface level issues, headlines of the day.

Patterns

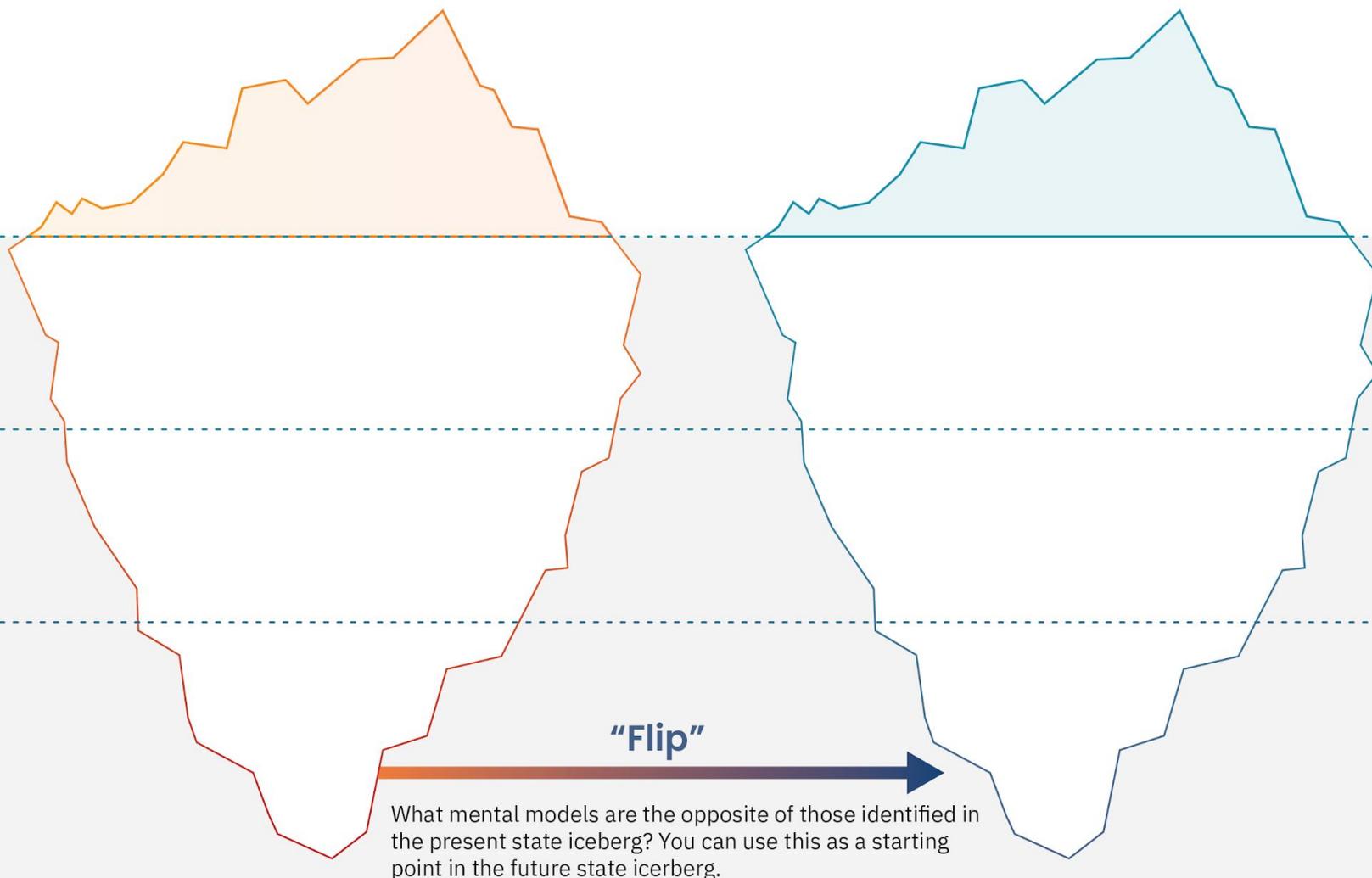
Connecting Events, visible trends, what keeps re-occurring?

Structures

What infrastructure, organizations, policies, or social structures reinforce Patterns?

Mental Models

Attitudes, beliefs, morals, and values that allow structures to continue as they are.



What is it?

The concept of 'Leverage Points' describes specific, high-leverage places in which we can intervene within a system. First described by Donella Meadows, the idea has been built upon by other systems designers and many toolkits developed around the idea. In her original article, Meadows describes twelve leverage points, with an ascending level of difficulty to take action, but much larger effect on a system's behavior. These range from relatively simple or linear changes in the inputs or stocks and flows of a system, all the way up to the ability to transcend 'paradigms' or a system's purpose.

Why Use It?

- Leverage Points are a great introduction to systems thinking and the idea that you can (and must) intervene at many points within a system; this is an especially important idea for designing for transition.
- This activity is a great way to start parsing and understanding the complexity of a system, but can also help you understand the multitude of places where change might take place.
- Helps you see how a single intervention might be affecting multiple leverage points, or how you may need to design your intervention for higher or lower leverage points.
- Seeing the linkages between leverage points helps you more effectively change the systems you see, and helps you design interventions with a detailed and granular systems perspective. Because there are twelve leverage points, it's also useful for identifying many opportunities at different scales and level of difficulty in implementation.
- Can be useful even as a concept when working with other tools. Keep the twelve categories that Meadows describes in mind, and combine Leverage Points with other tools to help you think more holistically and systemically.

Challenges

- Pre-reading may or additional preparation may be necessary before using this tool since it uses more complex terminology.
- Learning the differences and the language of each Leverage Point can be difficult at first. What is a stock or flow? Or a buffer size? And how do we apply this to the system we are studying?
- Can be challenging to add individual concepts or interventions into ALL twelve leverage points in the analysis without existing subject matter expertise.

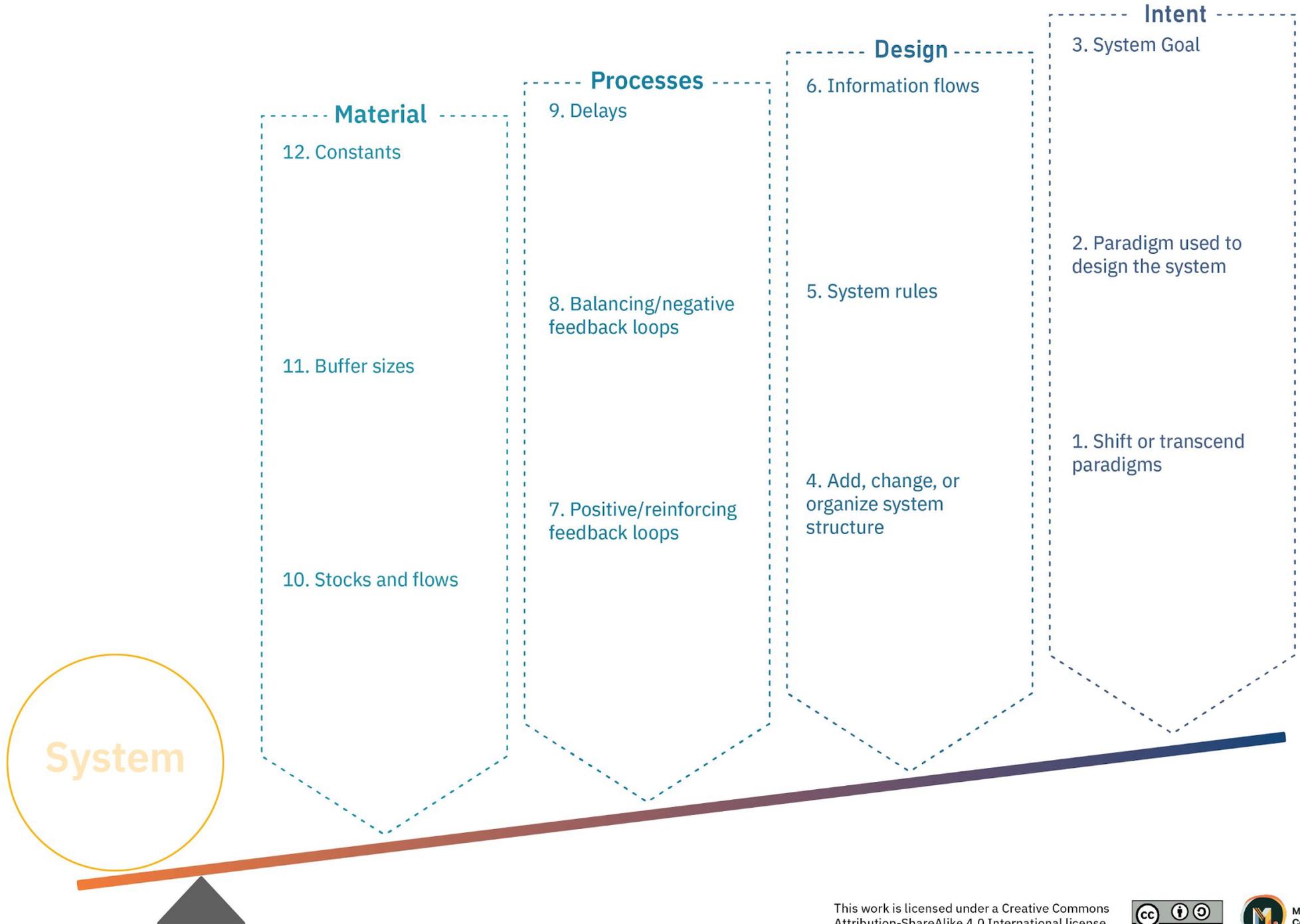
References / Read More

- MARS Living Guide to Social Innovation Labs. "Leverage Points." (2019).
<https://mars-solutions-lab.gitbook.io/living-guide-to-social-innovation-labs/seeing/understanding-the-problem-systems-and-complexity/leverage-points>
- <https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>

Activity Template

Leverage Points

Use this template to explore the leverage points that you may consider when trying to change or influence an existing system/problem. First identify the system you want to address in the "system" circle. Then move through each of the 12 leverage points listed in the four arrows and identify potential factors for each. If you are having trouble, try brainstorming ideas under the larger headers (Material, processes, design, intent) as a starting point.



What is it?

This tool was created by the McConnell Foundation, a Canadian social innovation think tank, and comes as the result of their operations and learnings. They propose a typology of three types of ‘scaling up’ within social innovation:

- Scaling up to impact laws, policy, and rules
- Scaling out to impact larger numbers or communities
- Scaling deep to change beliefs, ‘hearts and minds’

The McConnell Foundation team and the learning group of social innovators they were working with and funding, had originally put an emphasis on scaling out as the primary factor for successful social innovations. In working with and funding social innovators, they instead found the importance of scaling up to ‘address deeper systems holding social problems in place,’ and scaling deep to transform values and cultural practices create lasting and ‘durable change.’

Why Use It?

- Scaling Impact can be a great framework in understanding how a social innovation spreads: up, out, and deep all provide a very holistic approach to understanding transition and systemic design.
- Each type of scaling is already useful on its own to help advance ideas for transition design, but where the framework shines is in the intersections of each scaling type.
- Having a framework to categorize and make visual your actions, ideas, and innovations helps you generate even more new ideas – and also helps you fill in where you might be lacking. Running your idea for transition through the framework might help you understand that, while you have scaling out covered, you might need more attention in addressing policy and rules, or require some way of changing relationships to create lasting change.

Challenges

- Less a tool and more a concept, Scaling Impact is nonetheless a very useful idea to incorporate as part of larger ‘methods’ with other tools, as we have done with this course. If some tools, like Iceberg or Ecosystem Mapping, are more generative in nature, Scaling Impact adds an extra layer of analysis to deepen any findings and create new insights.

References / Read More

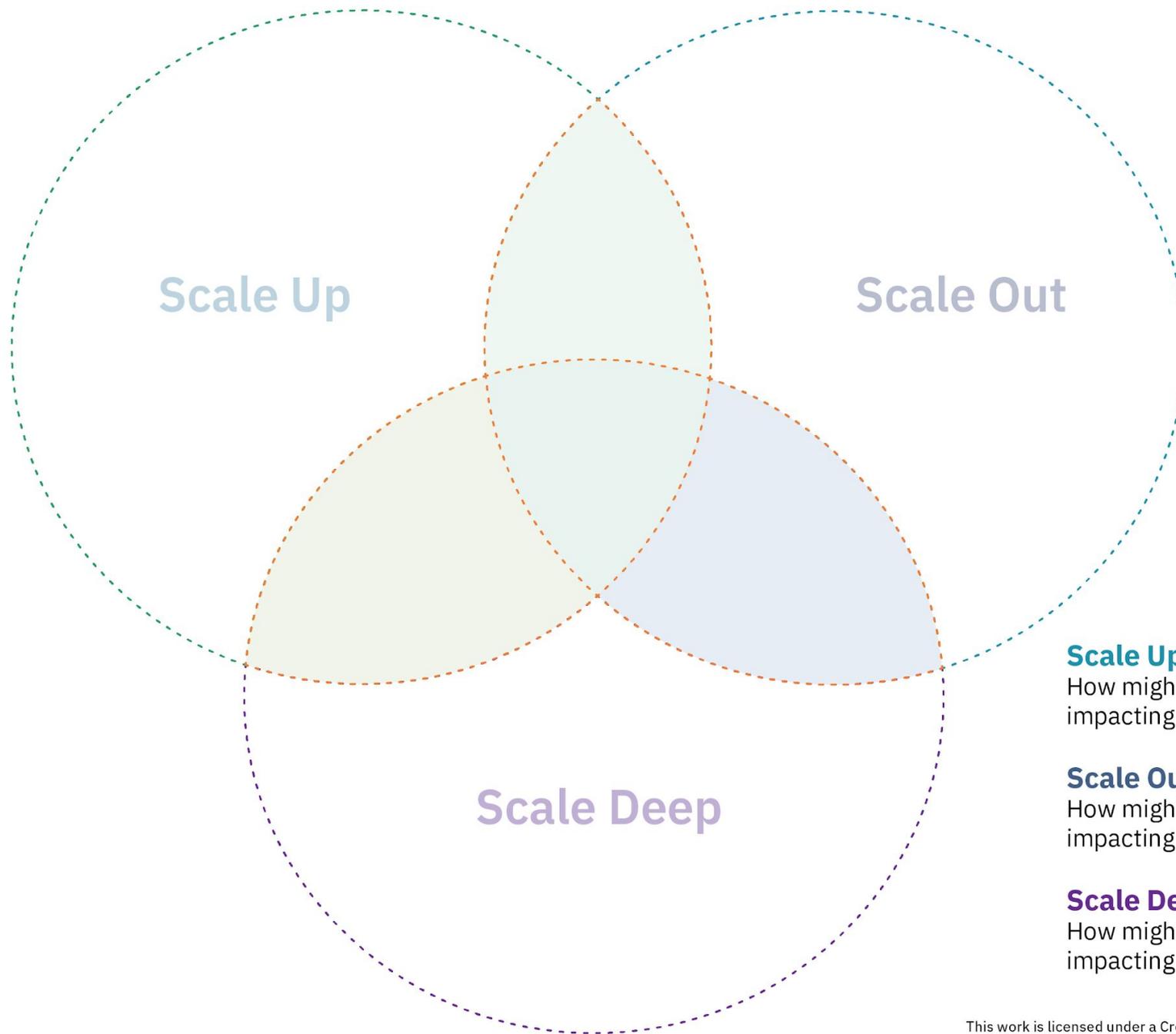
- Scaling up, scaling out, scaling deep: Advancing systemic social innovation and the learning processes that support it:
https://mcconnellfoundation.ca/wp-content/uploads/2017/08/ScalingOut_Nov27A_AV_BrandedBleed.pdf

Activity Template

Strategies for Scaling Impact

(Scale Up, Out & Deep)

Use this template to think about how an idea/movement/action etc... may scale up, scale out and/or scale deep. Ensure that you consider the intersections of each scaling method - how might an idea scale in all three areas? You can also use this activity in addition to other activities to see how other transition initiatives have successfully scaled their initiatives in each way.



Scale Up:

How might this idea scale up through impacting related laws and policy?

Scale Out:

How might this idea scale out by impacting greater numbers?

Scale Deep:

How might this idea scale deep by impacting cultural roots?

What is it?

Ecosystem maps are tools used to understand the connections, interdependencies, and relationships (or lack thereof) between actors or different parts of a system. Often used at the beginning or discovery phase of a project, they are useful for a project team to align on a system of interest or frame a problem, and create a common understanding of the work ahead. Ecosystem mapping has many forms, and is used in user experience design and user research, to community engagement and resource mapping. Of the tools we have introduced, we believe ecosystem mapping to be one of the tools with the most potential for participatory engagement (i.e. involving stakeholders outside of the project team).

Why Use It?

- As a discovery tool, ecosystem mapping can help a group of people land on a shared understanding of the chosen system/problem.
- Can be especially useful at the beginning of a project to align a team and collect research, but also to engage with stakeholder groups to create participatory maps. The flexibility of mapping means you can create exercises that are simple or complex, to be completed in one short session or many.
- Ecosystem mapping makes your conversations visual and tangible. By writing ideas down on sticky notes (for example), you can move them in space to spark new conversations and see more connections, or even gather feedback from others using this visual artifact.
- Can help show you what might be missing from the overall picture you have painted. What connections are you missing, what gaps exist between specific actors, and do certain conclusions require a bias check?
- The flexibility of the tool allows you to choose categories that match the problem or system you are analyzing. If mapping actors and relationships is proving to be too general, perhaps breaking actors into multiple types (e.g. by power, by location etc.), or relationships into many qualities (e.g. the practices groups perform, services available, communication channels etc.) can give our visual map that extra layer of data we need.

Challenges

- Though ecosystem maps are very flexible, this means intentional design (and re-design) is important. Think carefully about what you put in the centre of the ecosystem, or the categories and relationships you are creating. Ecosystem mapping has a much more flexible framework than other activities (MLP, Leverage Points) so you will need to set some parameters to help keep your ecosystem map focused.
- This becomes especially important when using the ecosystem map with participants outside of your team. Think about the time and facilitation when designing tools for participants.

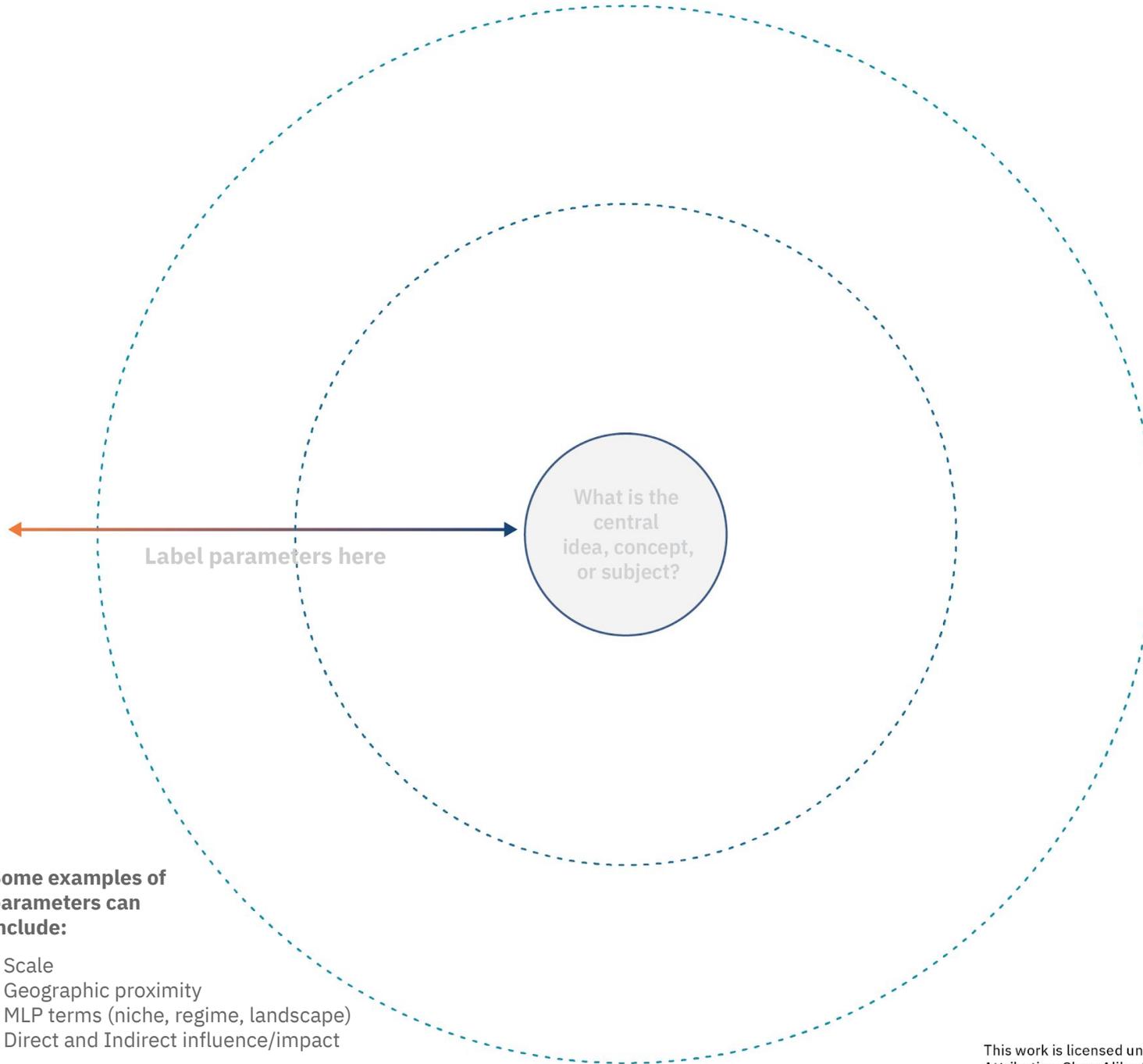
References / Read More

- [A quick primer for mapping within user-experience research](#)
- Since we introduce ecosystem mapping as a participatory tool, we recommend the book [Emergent Strategy](#) by adrienne maree brown to learn more about facilitation through a transformative justice lens. We love the book, but would recommend the section on facilitation (pages 213-270) for this purpose.

Activity Template

Ecosystem Mapping

Use this template to create an ecosystem map around a central idea/concept/subject. Start by adding the key concept to the centre of the ecosystem. Label the rings or axis line to determine any parameters of your ecosystem. Add ideas to the ecosystem map circle diagram. You can start to colour code and connect ideas with arrows to create additional layers of information onto your map. You can add any additional notes, ideas, insights, etc in the "Notes" box on the right.



Notes

Some examples of parameters can include:

- Scale
- Geographic proximity
- MLP terms (niche, regime, landscape)
- Direct and Indirect influence/impact