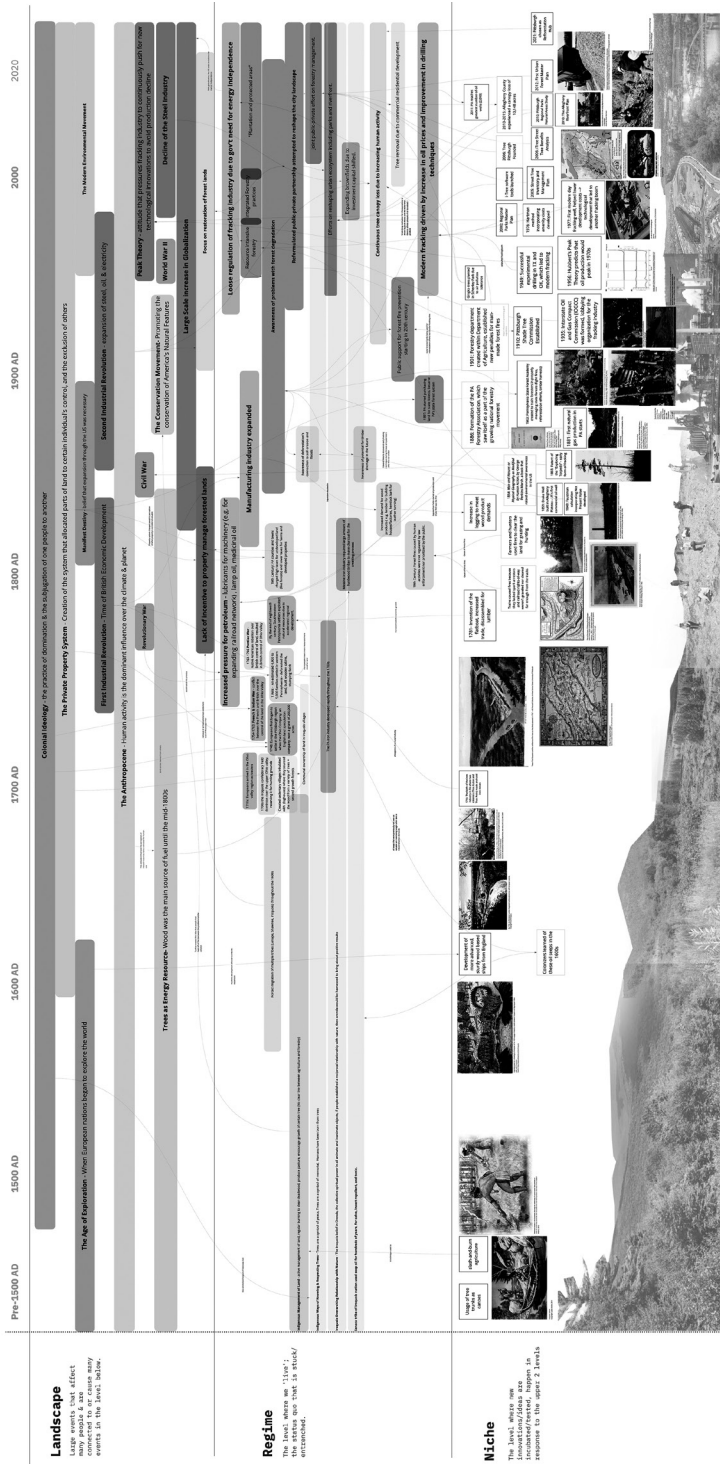


**MAPPING THE EVOLUTION OF A WICKED PROBLEM:  
Deforestation**

Team Members: Alexander Polzin, Amanda Sanchez, Jenny Xin, Mihika Bansal, Xiaozan Zhang



**Figure 5.1.** The Historical Evolution of the Wicked Problem of Deforestation in Pittsburgh. Problem Map Research and Design: Alexander Polzin, Amanda Sanchez, Jenny Xin, Mihika Bansal, and Xiaoran Zhang.

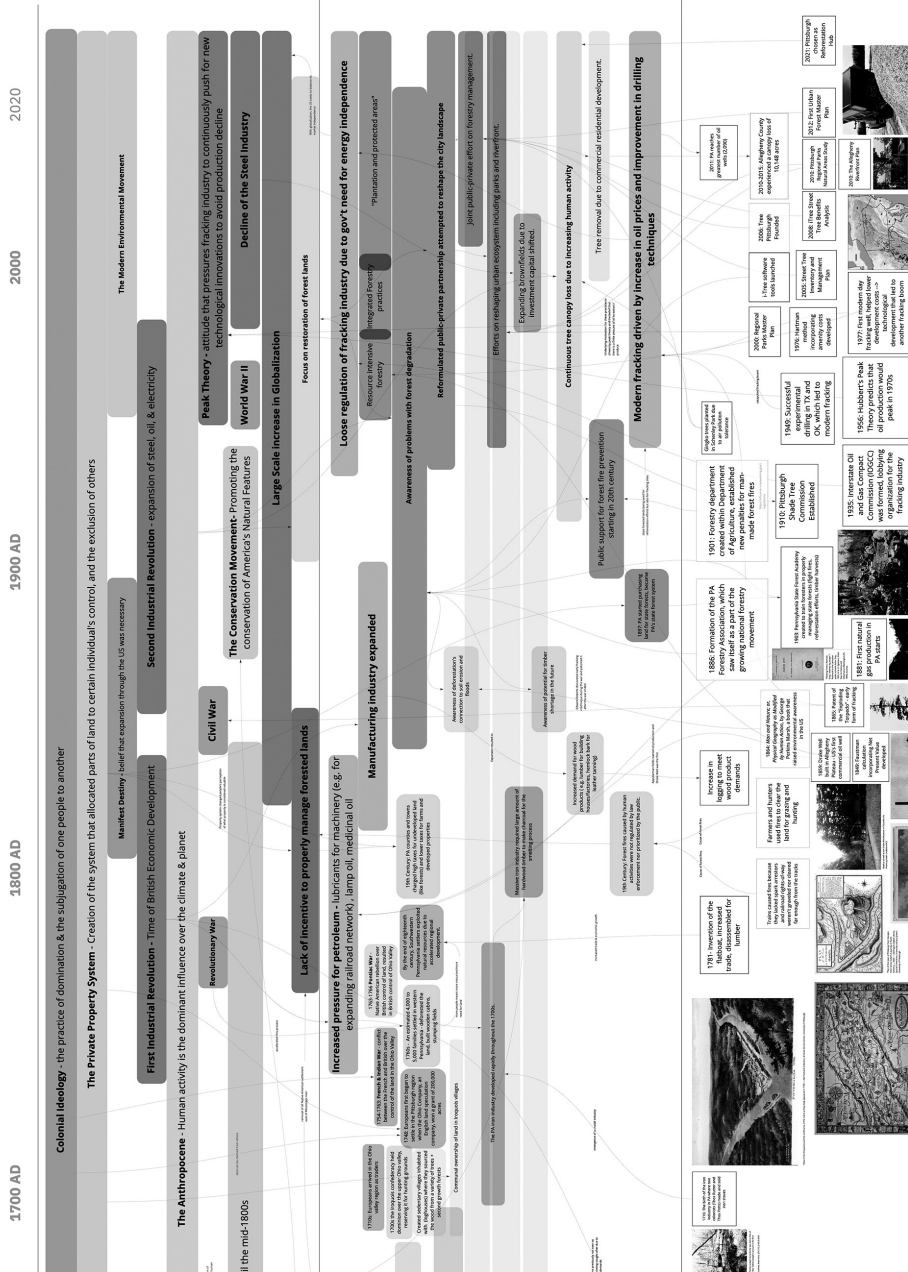


Figure 5.2. Details From the Historical Evolution of the Wicked Problem of Deforestation in Pittsburgh. Problem Map Research and Design: Alexander Polzin, Amanda Sanchez, Jenny Xin, Mihika Bansal, and Xiaoran Zhang.

#### 4. Co-creation of Long-term Future Visions

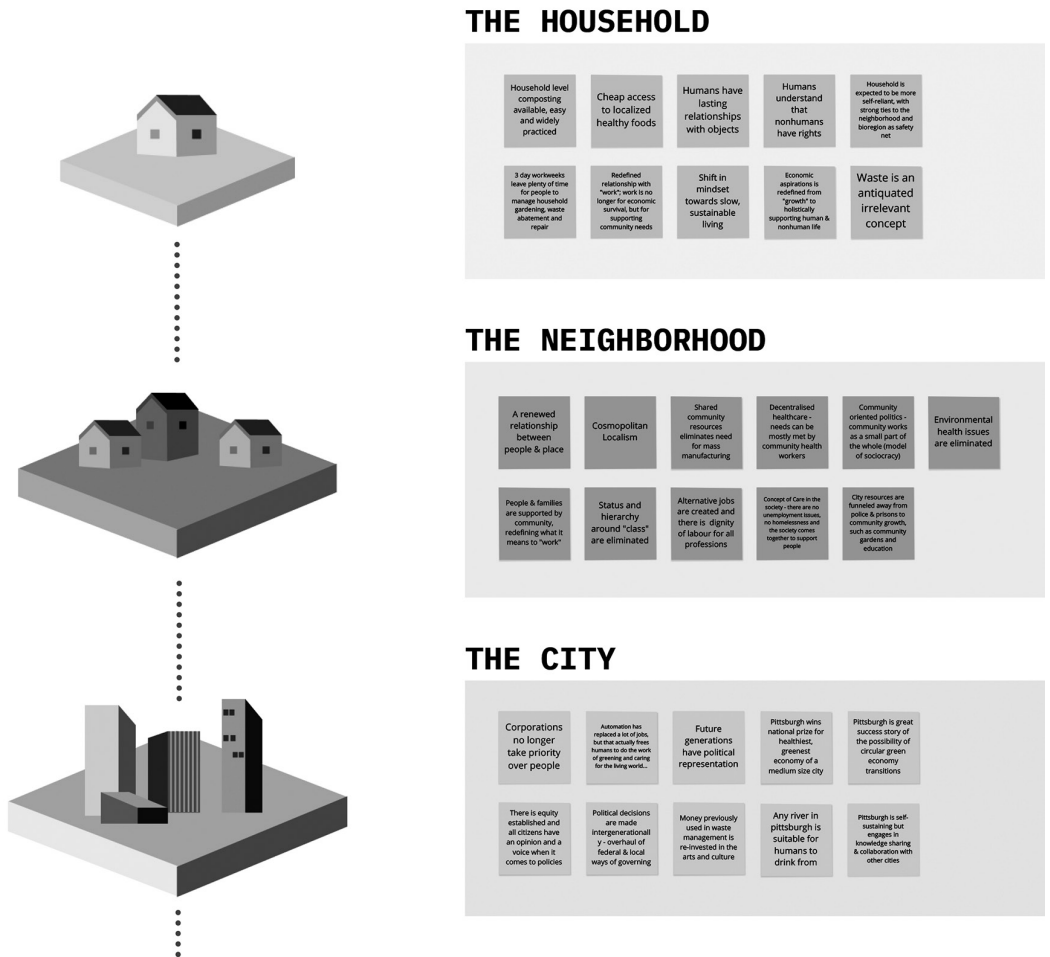
Transition Design argues that more compelling future-oriented visions are needed to inform and inspire projects in the present and guide transitions toward futures that are more sustainable, equitable, and desirable. Dunne and Raby argued that visioning is crucial; it creates spaces for discussion and debate about alternative futures and ways of being and requires us to suspend disbelief as well as forget how things are now and wonder about how things could be (Irwin, 2015). Further, Transition Design workshops challenge stakeholders to co-create future visions based upon the re-conception of everyday life and lifestyles that draws on cosmopolitan localism—a vision of small, diverse, local, and place-based communities that are global in their awareness and exchange of information and technology (Sachs, 1999; Manzini, 2011; Kossoff, 2019a).

Workshops participants develop aspects of a future vision at different systems levels called “The Domains of Everyday Life” (Kossoff, 2011; Kossoff, 2019a): the household, the neighborhood, the city, the state/region, the nation, and the planet. Here, they develop “vision facets” that imagine a future at each level of scale and ask how the resolution of the wicked problem in question would enable new ways of living, working, and meeting needs in place.

When stakeholders enter a creative space to co-envision the futures they want (and in which the wicked problem in question has been resolved, opening up possibilities for new ways of living), it helps them transcend their differences in the present and explore future possibilities upon which they can agree. These future-based visions can serve as measures against which to inspire, conceive, and evaluate design interventions/solutions in the present.

However, transition visions are not conceived as blueprints for design, but rather they should remain open-ended and speculative. Future visions continually change and evolve based upon knowledge gained from projects and initiatives in the present. Transition visioning is conceived as a circular, iterative, and error-friendly process that could be used to envision radically new ideas for the future that serve to inform even small, modest designs in the present. As an example, Figure 6 shows a future vision map for the wicked problem of waste management in Pittsburgh.

The co-creation of long-term future visions by stakeholder themselves is useful for several reasons: 1) co-creating future visions enables stakeholders to transcend their differences in the present and enter into a space in which they can explore common ground; 2) dynamic and evolving future visions (continually updated via feedback from interventions) can serve as both a magnet, pulling stakeholders toward the future they want, and a road map to guide the decades-long transition toward that future; 3) future visions can inform and “inflect” solutions in the present to ensure that they are “steps” on the transition pathway toward the desired future; 4) future visioning can enable participants to transcend current unsustainable, inequitable paradigms and imagine ways of living and meeting needs.



**Figure 6.** Details from a Vision Map for the Wicked Problem of Waste Management in Pittsburgh (Vision Facets for Three Levels of Scale in The Domains of Everyday Life have been shown below). Vision Map Research and Design: Monica Chang, Aashrita Indurti, Sian Sheu, and Maddy Sides.

## 5. Designing for the Transition

Transition Design argues that we must learn to think rigorously about the sustainable, long-term futures we want to transition toward in a process that may take multiple years or even multiple decades. One of the weaknesses of modern, “Westernized” societies is the tendency to think (and act) in short horizons of time and a collective failure to anticipate the negative consequences of hastily considered actions.

This workshop session asked stakeholder groups to respond by thinking of the decades-long transition as if they were packing to go on a long trip and ask the following questions: “What do we want to take with us on the decades-long journey to the future we envisioned? What do we want to leave behind? Are there aspects of our future vision that are already here in the present? Further, stakeholders are also asked to develop narrative milestones along the journey and think about both the probabilities and possibilities on the “transition pathway” to the desired future. These milestones act as mini-visions or narratives about transitioning itself and both the breakdowns and achievements that are part of any journey.

Moreover, stakeholders undertake this exercise not because it is possible to predict the future but because it better prepares us for the journey. It also helps us develop a flexibility of mind and the resilience to anticipate and transcend the challenges that are part of a decades long transition. Further, author William Gibson argued that “the future is already here...it’s just unevenly distributed” (Chatterton & Newmarch, 2016).

Designing for a decades-long transitions is useful for several reasons:

1. It challenges stakeholder groups to think rigorously and creatively about a decades-long process of systems change –something modern societies have lost the ability to do.
2. It reinforces the idea that there is no single, “silver bullet solution” and that solutioning over long arcs of time is necessary to resolve the wicked problem and transition toward the desired future. This helps prepare stakeholders mentally for a process that is more akin to running a marathon than a quick sprint.
3. It challenges stakeholders to rigorously examine current paradigms, practices, and even beliefs in order to determine which ones will be barriers to transitioning toward the future vision.
4. It develops milestones that challenges stakeholders to consider possibilities (both positive and negative) that might occur in short, mid- and long-term future in order to think deeply about eventualities and consequences associated with ‘designed’ transitions.

*Figures 7.1 and 7.2 show details from the Designing Transitions step.*