

Design for Transitions - from and to what?

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As part of its attempt to resituate the practice of designing within a commitment to facilitating social change toward more sustainable futures, the School of Design at Carnegie Mellon University has started talking about 'Transition Design.' It is risky to invent yet another term which too easily looks like an appropriative branding exercise. But it can also be useful as way of marking an ambition. The following is a further attempt to explain the differences from existing practice to which Transition Design aspires.

Assumptions

1) There are crises

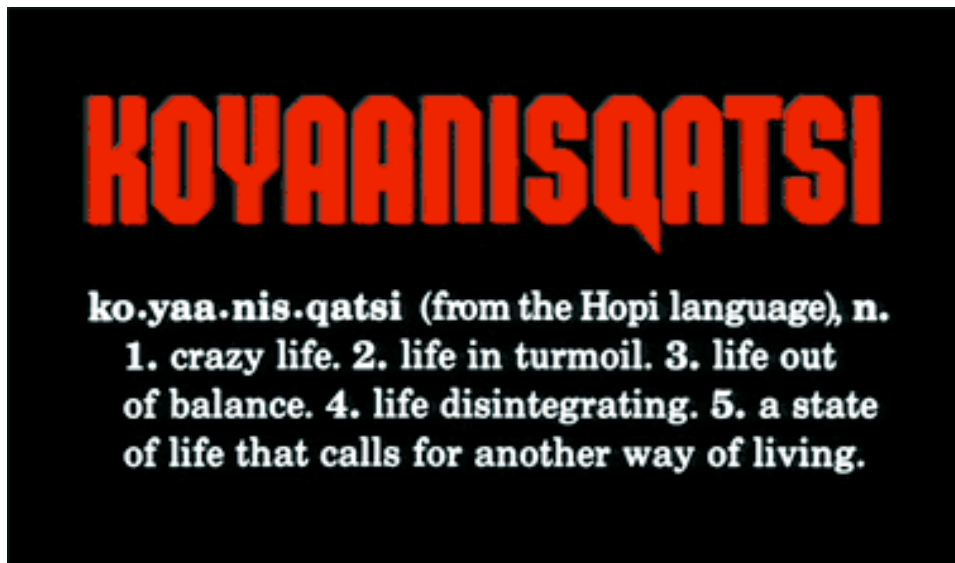


Figure 1: We are still in crisis even if we have crisis fatigue – from Godfrey Reggio's Koyaanisqatsi (1983)

Transition Design assumes that the dominant, or at least dominating, ways of living today are not sustainable. How the global consumer class resource their lives is damaging the ecological impacts upon which those lifestyles depend and entails increasing inequality that excludes many from that class and even diminish the capacity of most in that class from living as they intend.

Transition Design accepts the too often repeated litany of current ecological and social stresses: diminishing access to readily available fossil fuels, potable water, top soil, rare earth elements, etc; mass extinctions and major ecosystem transitions; structural racism,

sexism, classism, etc. Transition Design also works from the assumption that all these social stresses are interlinked; no one instance of these crises can be solved in isolation from the others. This also means that Transition Design is motivated by the belief that most current initiatives directed at these problems are futile or misdirected.

While Transition Design can and should be of value to existing commercial design practices, without this sense of crisis Transition Design seems pretentious. If you believe, as many do, that this litany of crises are fabrications or exaggerations, or if you admit that these are problems but believe that business-as-usual is progressing in ways that will successfully deal with these problems, then Transition Design will seem superfluous or dangerous.

However, a central assumption of Transition Design is that whilst our societies are in crisis, these crises are not being, and will never be, experienced in sufficiently motivating ways. There is never going to be a crunch time necessitating Promethean responses. These are slow motion crashes with which humans, especially while still moderately wealthy, are adept at coping. Transition Design, as with the Transition Town movement by which it is inspired, attempts pre-emptive change before change is unavoidable (which this may be never).

2) Design is crucial

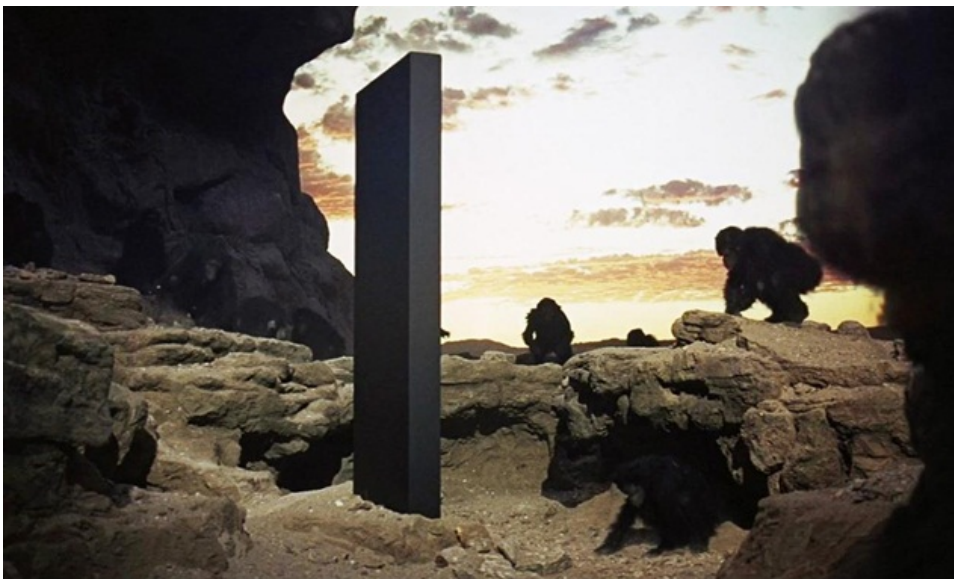


Figure 2: Humanity is a product of design – from Stanley Kubrick's 2001 (1968)

The dominant forms of consumerist living are dependent on design. The interface between everyday habitual practices and the unsustainable economies and infrastructures that resource them are designed artifacts, environments and systems; socio-ecologically

exploitative industries manifest as clothes I wear while accessing my bank through an app on my cell phone as I sit in a car at traffic lights with the air conditioning on.

This quotidian ubiquity of designed products is perhaps the reason why design is often missed as axial to our societies and their unsustainability. Being a relatively recent profession and not yet a discipline, understandings of design are not commensurate with its importance, even by designers themselves. Current work in the sociology of technology is only just now articulating the sociomaterial power of designed things. The ways in which designs influence how people act, making certain activities and their associated product ecologies inertial, are central to explaining how our societies are so unsustainable – just as they are crucial to shifting our societies out of current crises. Transition Design assumes that designing must play a central role in the systems-level change that our societies need to undertake. By assuming the need to foreground design, Transition Design is as much a challenge to other forms of psychological and social change as it is to forms of designing that believe they are powerless service providers.

3) Design is in Transition

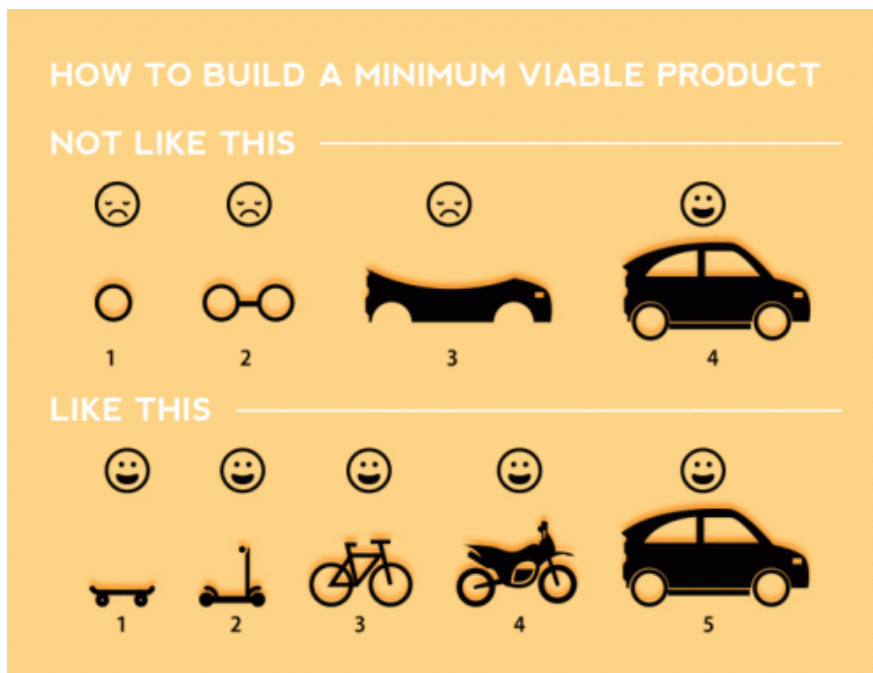


Figure 3: Every design prototype should be a product on the market

Design is both the product of and the producer of modernism. Shaping material things became the art and science of interfacing between mass production and mass consumption. However, perhaps half-a-century after being predicted, developed

economies are now post-industrial. Service sectors, information economies and digital platforms dominate new business.

As a result, design appears to be undergoing one its most significant transformations. The conventional design process of contextual inquiry, ideation, prototyping and fixed final product is being displaced by data-driven into-the-field releases of constantly modifying systems (consider the role of a 'product designer' at Facebook for instance). The in-house innovation teams of large technology, and even financial companies, are challenging design consultancies. Meanwhile, design thinking is becoming mainstream in schooling, the liberal arts and business.

All of these shifts, which reflect wider changes in late capitalist neoliberal economies, mean that the practice and discipline of design are currently in transition. Transition Design is based on the assumption that these transitions in the professional practice of designing are important opportunities for design education and research to demonstrate bold leadership. Practitioners and sponsors of design are looking for more comprehensive ways of negotiating change and complexity. There is consequently an openness to change-oriented values-based designing.

Contexts

4) Sustainable Design was too Problem-Solving

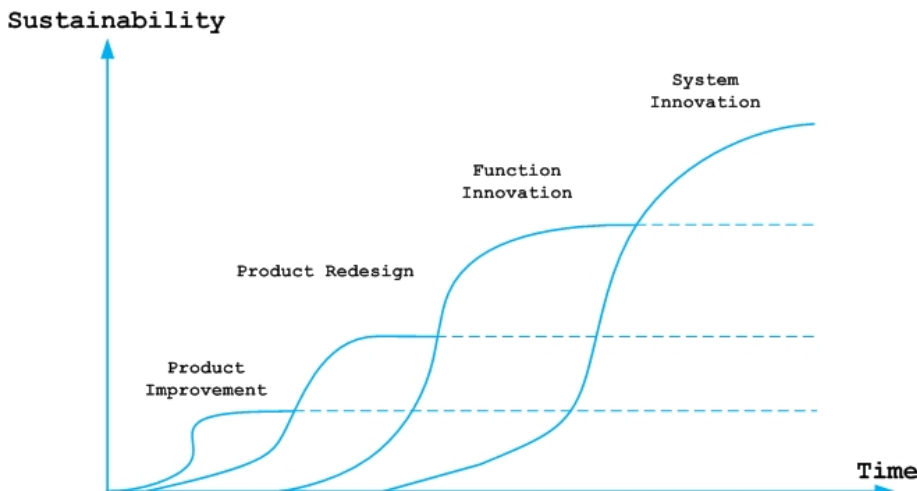


Figure 4: You have to walk before you can fly – after Han Brezet; from <http://systeminnovationforsustainability.com/2012/06/11/system-innovation-for-sustainability-using-systems-thinking-and-design-thinking/>

Design has always sought resource efficiency: the minimalist functionalism of modernism aimed to do more with less. Designers have been explicitly concerned about the ecological

sustainability of their products since the 1970s. At that time, the Oil Crisis showed many designers that work they were doing for developing nations (what was called intermediate technology transfer) was also relevant to developed nations. Ecodesign became central to the discourse of Sustainable Development promoted by the UN in the late 1980s.

However, the results fell short of these ambitions. The supply-side focus of the early 1990s – Cleaner Production, Ecoefficiency – reduced the rate of ecological impact of business-as-usual but did not lead to net impact reductions. In addition, economic growth increased the overall volume produced, outstripping resource efficiency and pollution reduction efforts. In the later 1990s and early 2000s, emphasis shifted focus to the demand-side – Sustainable Consumption – but failed to deal with the Rebound Effect – when money saved by going ‘green’ was re-spent on other eco-impacting activities. This is why current Sustainable Consumption efforts focus on social psychology derived value-based behavior change.

In the mid-2000s, Sustainable Design researchers recognized that the focus should not be on impact reduction but system change: how to make large-scale shifts in infrastructure, such as fuel-switching to distributed renewable energy systems; and how to radically transform consumer economies – from linear ownership-based models (resource extraction > manufacturing > retailing > domestic use > waste stream) to circular usership-based models (product service systems). There is now a strong discourse of ‘Sustainability Transition Management’ exploring Multi-level, Multi-stage Sociotechnical Changes.

Transition Design is explicitly connecting to this systems-level change version of Sustainable Design. It aims to bring design’s human-scale artifact-interaction focus to the transformation of everyday practices needed to enable structural transitions to more sustainable economies.

5) Social Design was too Problem-Solving

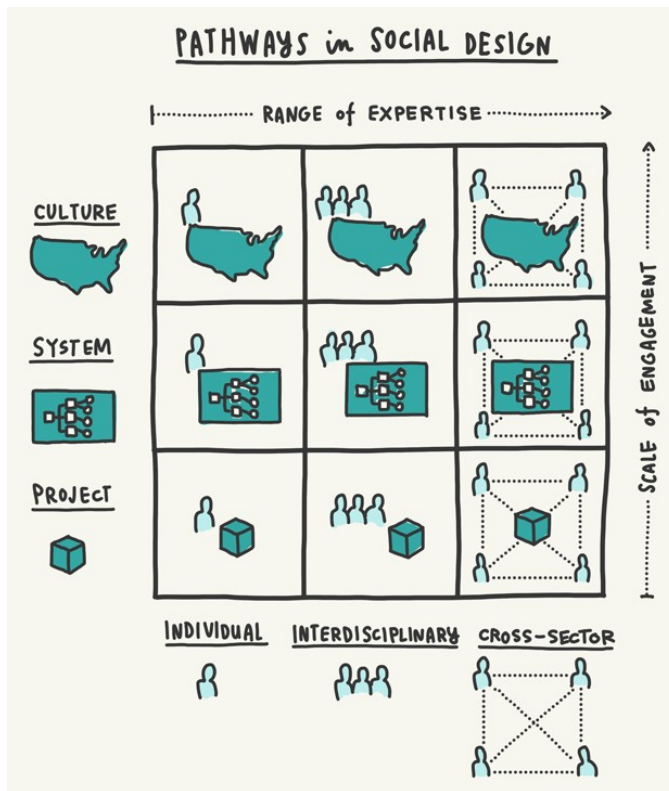


Figure 5: The aim is not to get to the top right, but too many projects are bottom row – illustration by Craighton Bermann, from <http://www.socialdesignpathways.com/>

Design has always also been a form of Social Design: from the worker-oriented Arts and Crafts movement, through the social-utopia vein in the various iterations of the Bauhaus, to the other-90%-directed designing promoted by Victor Papanek. The latter, which is currently dominant (e.g., IDEO.org, Frogimpact™, etc) tends to be ameliorative rather than politically pursuing structural changes. This is changing as wealthy philanthropists embrace design and design thinking, funding larger scale and longer term social entrepreneurship.

Work by Ezio Manzini's DESIS (Designing for Sustainability and Social Innovation) represents a shift in method and objective. Rather than being design-led, DESIS work lends service design expertise to existing community initiatives. Despite this localized focus, the work is committed to wider social change, via 'scaling-across,' since the initiatives it helps redesign represent non-market and often also non-governmental, ways of resourcing everyday life. In this way, DESIS advances alternative economies.

The Social Design Pathways matrix was developed in part by people interested in articulating the need for more ambitious, longer-term forms of Social Design, including some of us now developing ideas around Transition Design. For us, Transition Design articulates a commitment to structural social change beyond social problem-solving.

Heuristics

6) Design needs to rethink its relation to the Future



Figure 6: *We live unsustainably in the world Modernist Designers Envisioned – Futurama from New York World's Fair 1939*

Design is the process of deciding on and then realizing preferred futures. The modern practice of design arose early in the twentieth century in North Atlantic countries as the development of strong visions for otherwise quotidian objects: the minimalistic machine aesthetic signaling the universal ahistoric human at the Bauhaus or the streamlined subject of ever-changing technocapitalism in the US. As Damian White has documented, the discourse of design has always maintained this utopian tendency, now apparent in visualizations of smart green future cities on the one hand or cyborgian singularity on the other.

However, the professional practice of design today has a strong counter-tendency to abdicate from futuring. Talk of complexity, disruption and constant change suggest that the future is unanticipatable: risks are black swans and value lies in fickle movements of crowds. Consequently, the job of commercial design, especially in the realm of digital platforms, has become to remain agile, constantly building alternatives in response real-time analytics, rather than to pursue a vision.

Transition Design counters with a revived insistence on design taking responsibility for the futures it materializes. This should be more dynamic than the Procrustean visioning of

modernism, but it should have a more forceful sense of what kind of society it is contributing to building.

7) Design needs to have much more explicit Theories of Change

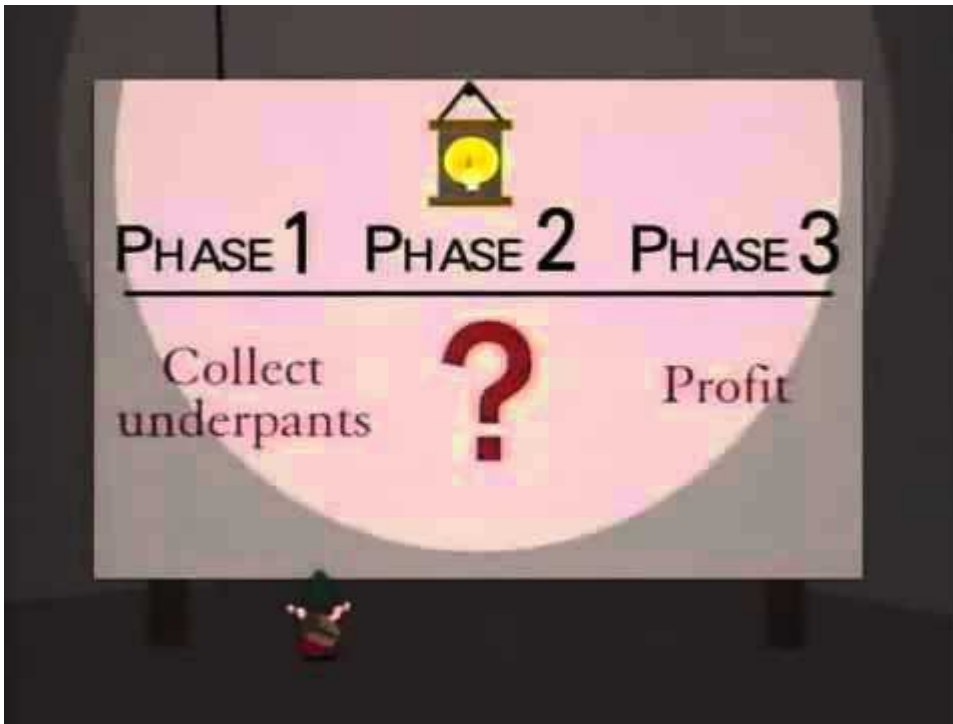


Figure 7: Designers often take for granted their agency within incomplete systems – from Southpark Episode 17, Season 2 (December, 1998)

As design has matured over the 20th century and into the 21st century, it's scope and influence has grown. Design has shifted from the problem-solving activity of giving form to new technologies, through the problem-reframing activity of new product development, to the research and change practices of design thinking applied to management and social issues. However, in cases of the latter, designing often assumes the same rationale as informed the former: artifacts (communications, products, environments) designed with human-centered principles can make activities easier, more productive or enjoyable. The 'Models of Man,' as Herbert Simon called them, that underlie much Design Thinking are ones that cast humans as a combination of lazy and hedonistic; individuals (almost never treated as members of communities in any profound way) are only ever semi-rational, and hence need to be nudged or gamified by designs that makes things simple or rewarding.

The kinds of expanded social fields in which design now aids innovation and change are precisely ones in which humans need to be acknowledged as being more complex than marketing's notion of consumers. These are people with strong social commitments and complicated ethics, groups of people often prepared to engage in effortful interactions that

do not have immediate benefit. These contexts afford and demand a wider palette of interactions and design rationales.

Transition Design is a deliberate attempt to update the theoretical frameworks informing designing, especially design directed at structural, long-term sociocultural change. It tries to apply all that has been learned recently about individual and social change, as well as innovation diffusion and the social histories of large-scale technologies and infrastructures. These accounts of modern material cultures and sociotechnical practices equip designers to be powerful change agents without losing their core craft expertise.

8) Design needs to take responsibility for its Sociality



Figure 8: *Design has a social epistemology: charisma is a form of validity* – October 31, 1949

Whilst most designed artifacts are effectively anonymous, the history of design often comprises the biographies of iconic (white male) designers. The creation of the modern practice of designing was accompanied by strong personalities that were as deliberately designed as their products: think of Raymond Loewy's explicit project of self-promotion, no less than Walter Gropius.

This is perhaps a necessary aspect of the fact that design is a ‘science of the artificial.’ Design brings things into existence, things that can then become crucial to our everyday life. This kind of world-making is not just a physical skill, but necessarily a social one. A wide range of people must be convinced to lend their money and materials and components and time and skills to realizing a particular design. Being a charismatic visionary is evidently one way that design has performed the social work of gathering allies for materializing a preferred futures. However, this strategy clearly has its limits and there are many other cultures that designers could employ.

Transition Design foregrounds these questions of the social roles designers need to play to accomplish large-scale change in situations of urgency and crisis. Central is the recognition that design in realms of social complexity implicate the designer in what is being designed. This is quite distinct from conventional commercial design where the designer is making products for a client and primarily a set of users in different segments from the designer. Any Transition Design project also entails a redesign of the knowledge, values and practices of the designer as well; Transition Design is always what John Chris Jones called *Designing Designing*, or Tony Fry *Redirective Practice*.

Techniques

9) Multi-stage

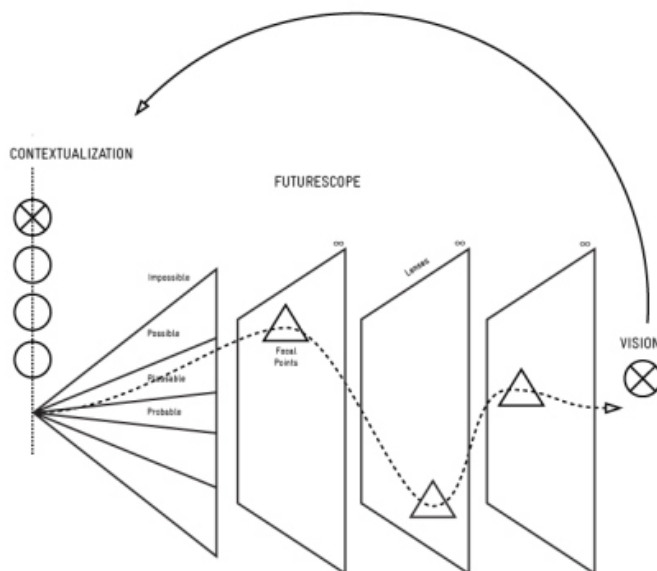


Figure 9: There is no future, only the futures of futures – by The Extrapolation Factory (Elliot Montgomery & Chris Woebken) <https://extrapolationfactory.wordpress.com/about/>

Designing to date has been primarily problem-based. This means that each design project tends to have a stopping point. There is an end-product. When the money for a dead-lined project runs out, the designers are rarely completely satisfied with the outcome –

perfectability is an inexhaustible motivator for design. Nevertheless, the consultancy model of designing that has been dominant for the last century encourages the designer to move on to some other very different kind of project.

This episodic way of working perhaps explains the notoriety Horst Rittel attained amongst design researchers with his notion of a 'wicked problem' – a problem whose social complexity means that it has no determinable stopping point. Transition Design explicitly locates itself within the domain of 'wicked problems' because it involves a kind of designing that 'stays with' a problem.

On the one hand, this 'taking responsibility for ongoing work in the one context' that defines Transition Design is a challenge for the psychology of the designer. When you are in for the long haul, the satisfiers are less direct and regular. On the other hand, this aspect of Transition Design is just a re-emphasis: it plays up that designing is a project-based practice, one whose expertise lies in its capacity to make strategic interventions in contexts. Designing is always a process of action research, coming to understand by making changes.

What is therefore a distinct technique of Transition Designers is attention to multi-stage multiplier effects. A Transition Designer designs something not to be an end-unto-itself, a final solution to a problem, but to open up subsequent opportunities. Any design must solve some problems, but the point is to always also ask what new options are generated by the conditions that successful design generates. Transition Designers ask "... and so ... and then ...". Designing a digital service system that enables people to ride-share creates new habits and expectations that Transition Designers immediately seek to take further, scaling-across to other ways of living and working to create large structural economic and cultural change.

Though longer-term thinking is inherent to Transition Designing, this practice is not like strategic planning. The multi-stage quality of it means that after each accomplishment, the way forward needs to be re-evaluated because un-anticipatable consequences will have arisen. Transition Designers in this way seek to see round corners, moving in one direction not in order to get at the end point, but instead to discern other change-possibilities afforded by having shifted current conditions through the insertion of new designs and designed activities.

10) Practice-Oriented

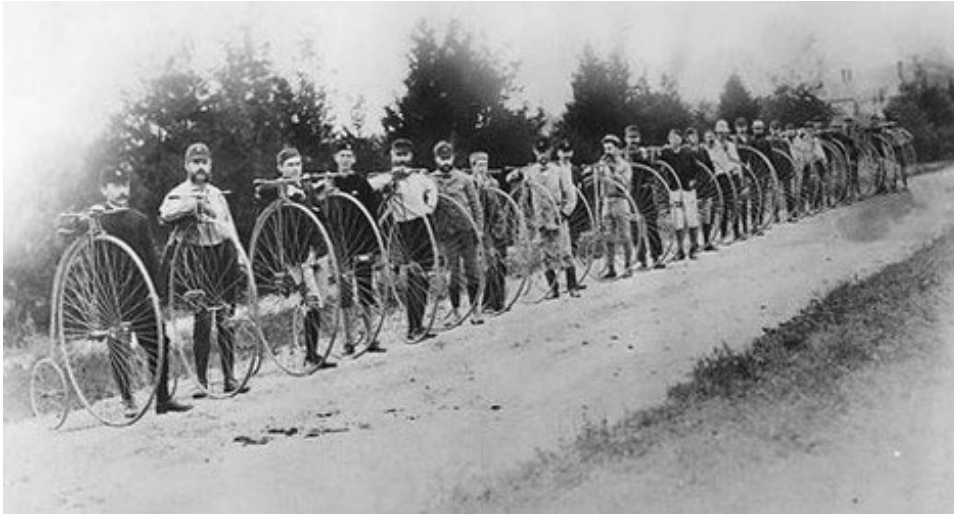


Figure 10: The form of the artifact reflects its non-linear history of use

Design is the art and science of making useful things, but as indicated in 2 above, those things, when well-designed, become transparent to the activities their use affords. This leads to a conundrum inside and outside of the discourse of design. Designers tend to focus only on the material things they produce (episodically – see 9). Designers often have to be reminded by design researchers and managers that their really object(ive) is enabling activities. Social researchers by contrast have almost entirely ignored the central role played by everyday designed artifacts, foregrounding instead immaterial things like values, meanings and identities.

Only recently have social researchers begun to effect Material and Thing Turns in their analyses. Exemplary is the *Practice Turn in Contemporary Theory* (edited by Karin Knorr Cetina, Theodor Schatzki & Eike von Savigny, Routledge, 2001). These perspectives incorporate insights from the field of Sociology of Technology Studies and propose that practices be considered a basic unit of society. A practice is a constellation of devices, skills and meanings that coheres as an everyday only-ever semi-conscious activity: breakfasting, commuting, work meeting, skiing, dating, etc.

One of the merits of Social Practice Theory is that it can explain how inertial our modern societies are despite media celebrations of constant technological development and economic change. Despite all the new inventions of the last half-century, the global consumer class still lives on a day-to-day basis in much the same way: eating, laundering, transporting, even schooling and holidaying, have not changed much as practices – with continued social and ecological impact consequences. The invention of new devices is only ever one third of the problem of sociotechnical change. Any innovation must adapt to existing skills and meanings or assist in the development new ones to be incorporated into everyday life. Similarly, any new value – ecological or social sustainability as a new

‘meaning’ for instance – will not ‘take’ unless it can be materialized into devices that significant groups of people have the capacity to use habitually.

For designers, the way Social Practice Theory accords structural significance to devices and their skilled use at last registers the value of design to how we live our lives and organize our societies. By corollary, Social Practice Theory demands that designers acknowledge their responsibility for determining how our societies are made durable (to paraphrase Bruno Latour).

Transition Design is a form of Social Practice Oriented Designing. Its tactic for bringing about structural change (4 and 5) targets multi-stage change (9) of practices.

Key here is a somewhat new timespace of designing (see Theodore Schatzki *The Timespace of Human Activity*, Lexington Books, 2001). As discussed above, design evaluates preferred futures in the studio, though this is currently under pressure from the agile data analytics driven approach to product development that demands early fail-able beta-releases into the field. Social Practice Theory suggests something in the middle: groups of people need to be able to trial new everyday practices. It takes time to learn and then embed new devices and/or meanings, so the design of practice changes requires venues like Living Labs. Whilst ‘in real life’ and involving lay people, these are not into-the-field releases, but carefully designed experiences. In Transition Theory, these are referred to as ‘Niche Experiments.’ They are semi-protected domains in which new devices, skills and meanings can co-evolve. When robust, these new social practices can then be reproduced or translated more widely.

Conclusion

Transition Design is an attempt to name an ambition for an expert craft of designing that acknowledges the extent of our social crises by advancing the practices of social and sustainable designing through the incorporation of multi-stage practice-oriented transformation.