

Doctoral Reviews+ Transition Design Symposium

Friday March 6 + Saturday March 7, 2015

→ Provocation & Briefing

We are delighted that you have agreed to attend the Transition Design Symposium hosted by Carnegie Mellon's School of Design. This will be a day of lively discussion and debate on the topic of Transition Design and we are asking all participants to respond to this formal provocation by writing a position paper of 2,500+ words. This document poses a series of questions on the topic and we suggest that you choose 2-3 of them as the basis for your paper. Please feel free to discuss your own work and research in relation to these questions.

The symposium is an open peer review of participants' papers with discussions led by a designated respondent to each paper. Two weeks prior to the symposium, we will circulate all papers among the attendees for review. Following the event, participants will be asked to submit a final version of their paper for an edited collection on Transition Design that we hope to publish in some form.

The questions posed on the following pages reference written materials we have produced/gathered on Transition Design. We have included some of these as additional files/attachments or links below and in the Resources section of this document. These should provide you with additional background on Transition Design:

Transition Design: A Proposal for a New Area of Design Practice, Study and Research

Terry Irwin, DESIGN AND CULTURE JOURNAL, March 2015 *see email attachment*

Transition Design as Postindustrial Interaction Design, Cameron Tonkinwise

<https://medium.com/@camerontw/transition-design-as-postindustrial-interaction-design-6c866805e8d>

Design's (Dis)Orders and Transition Design, Cameron Tonkinwise

<https://medium.com/@camerontw/designs-dis-orders-transition-design-cd53c3ad7d35>

Transition Design Seminar Course Outline, Terry Irwin & Gideon Kossoff (Draft)

see email attachment

Holism and the Reconstitution of Everyday Life: A Framework for Transition to a Sustainable Society, Gideon Kossoff, GROW SMALL, THINK BEAUTIFUL, Stephan Harding ed.

see email attachment

One of the objectives of the symposium is to broaden the conversation about Transition Design in hopes that it will be taken up by other educators and practitioners. We do *not* see Transition Design as a proprietary approach but rather an attempt to develop a design approach aimed at long term societal transition toward more sustainable futures. It is proposed as a counterpoint and complement to existing design approaches. Post symposium, we will compile the position papers into an edited volume on Transition Design that can be disseminated to a broader audience. Please keep this in mind as you write your position paper.

The questions below should serve as 'entry points' in writing your position paper. We have attempted to take a multi-perspectival approach and hope that you will find 1 - 3 questions that resonate with your current work and thinking. There are 7 over-arching questions and with each is a statement about Transition Design followed by question(s) and an answer from our current point of view. We invite your responses.

The Questions:

1. Why Name a New Approach to Designing?

There is nothing new about the call for design to do more than cater to capitalist retail economies. Twentieth century design was greatly influenced by the Bauhaus' modernist project of making a new 'man'; the Design Methods movement was inspired by the need for design to be more reliable in the face of increasingly complex problems; Sustainable Design aims to foster new lifestyles and economies (circular, access, sharing, support, etc); Ecological, Regenerative and Permaculture Design use nature as an analogue in the design process and work to integrate human and natural systems; Cradle to Cradle design works to eliminate industrial waste by treating all materials as 'nutrients'. There are also many individuals who have called for change within the field of design: John Chris Jones' *Redesigning Design*, Bruce Mau's *Massive Change*, John Thackara's *Xskool*, Tony Fry's *Redirective Practice*, Alastair Fuad-Luke's and Ann Thorpe's *Design Activism*, Ezio Manzini's *Changing the Change*, and now *DesignX*, etc.

- ❖ **Question:** Is there a need for another kind of designing that is connected to long horizons of time and visions of sustainable futures?
- ❖ **Question:** How does Transition Design differ from other attempts to reorient design?
- ❖ **Question:** What skill sets would be unique to the Transition Designer?

Answer: We believe that while many have called for design-led societal change, few have articulated how to undertake and lead/catalyse such change, nor have they identified the areas of knowledge and investigation required to do so. Though Transition Design is complementary to, and borrows from, myriad other design approaches, it is distinct in the following ways:

- 1) uses living systems theory as an approach to understanding/addressing wicked problems;
- 2) designs solutions that protect and restore *both* social and natural ecosystems;
- 3) sees everyday life/lifestyles as the most fundamental context for design;
- 4) advocates place-based, globally networked solutions;
- 5) designs solutions for varying horizons of time and multiple levels of scale;
- 6) links existing solutions so that they become steps in a larger transition vision;
- 7) amplifies emergent, grassroots solutions;
- 8) bases solutions on maximizing satisfiers for the widest range of needs;
- 9) sees the designer's own mind-set/posture as an essential component of the design process;
- 10) calls for the reintegration

and recontextualization of diverse transdisciplinary knowledge.

The above points suggest multiple skill sets specific to transition design eg. the ability devise solutions that integrate social and natural systems and to intervene sensitively in such systems; to devise solutions which take account of short, medium and long horizons of time and all levels of scale of everyday life, and the ability to identify potentialities for transition in everyday life; the ability to design for the needs of particular groups of people in particular places. We are especially keen to develop this area with your help.

See: *Transition Design Seminar Course Outline*

2. Why 'Transition'?

Transition Design acknowledges that we are living in 'transitional times' and takes as its central premise the need for societal transitions to more sustainable futures and the belief that design has a key role to play in these transitions. The idea of and need for transition is central to a variety of current discourses concerned with how change manifests and can be initiated/directed (in ecosystems, organizations, communities/societies, economies and even individuals). These approaches have inspired the use of the word 'transition' in our project. When applied to social systems, many of the approaches outlined below emphasize change/transition that is gradual or step-wise rather than decisive and revolutionary. As yet, most of these are unrelated to each other or to the field of design. We believe new ways of designing need to be informed by knowledge outside design (science, philosophy, psychology, social science, anthropology and the humanities etc.) in order to gain a deeper understanding of how to design for change/transition in complex systems.

- Question: Is there too much of a gap between these discourses and the practice of design, or are applicable connections evident?
- Question: How can we leverage these theoretical frameworks to inform design and how can they in turn be enriched through design?
- Question: What additional theories of change might be helpful to Transition Design and from how 'far afield' should we be looking for such theories?

Answer: We have been focusing on bringing together several discourses relating to transition, including:

Ecosystems Transition

Transition is a fundamental concept in ecology and speaks to the changes that occur as complex ecosystems sustain themselves over long periods of time (such as succession). Healthy ecosystems are comprised of complex webs of reciprocal relationship and interdependence between living organisms and their environment. When these complex, open systems undergo external stresses or 'perturbations' from their environment, they can display 'emergent properties' and transition to unexpected and unpredictable, new forms of behavior and structure.

BY COLLORARY, Transition Design incorporates living systems literacy in order to prepare designers for work within complex social systems and leverage the potential of self-organization, interdependence and emergence.

See: *Holism and the Reconstitution of Everyday Life*, Kossoff

Sociotechnical Transition Management Theory

This theory was formed in Northern Europe by the convergence of: **1)** Sustainable Development research, **2)** Technology Forecasting, **3)** Social Ecological Impact Analysis, and **4)** the fields of Social History of Technology/Social Construction of Technology. It was originally developed to conduct applied research into how societies could intentionally transition toward more sustainable infrastructures and economies. This research studies the coevolution of technologies and their uses in order to conceive how innovations can be introduced into society to enable new ways of living and working. More recent work in this area has incorporated Social Practice Theory and is beginning to make explicit use of ideas about designing.

BY COROLLARY, Transition Design should involve a deep understanding of the social history of technology, and a post-planning approach to how the introductions of new technologies impact society and visa versa.

Transition Towns

This international network of communities seeks to build resilience in response to peak oil and climate change and the vagaries of the globalized economy. Founded in the UK in 2006, it is a self-organizing, grassroots movement of hundreds of communities working together worldwide to make a managed transition to more sustainable futures. The movement is characterized by local, place-based initiatives (such as the development of local currencies) aimed at making towns and communities more self-reliant and resilient.

BY COROLLARY, Transition Design involves a type of social engagement and community organizing that goes deeper and beyond co-design and participatory design, and situates projects and initiatives within the context of long-term visions for specific places and ecosystems.

Transitioning Economies

There are myriad efforts underway in both the developed and developing world to intentionally transition economies. The problematic 20th century economic modernization/development efforts by North Atlantic-based institutions like the World Bank and World Trade Organization (WTO) are now being appropriated by ascendant nations such as BRIC (Brazil, Russia, India and China) and The Global South. Transitioning economies involves the development of systems-level change strategies (the creation of markets, infrastructure development, adoption of new lifestyles etc.). It also raises questions about how to transition two fundamentally different kinds of economies, i.e. the late capitalist liberal democracies (which have mature design professions in which transition design can take root) and emergent economies (which have the potential to leapfrog many of the problems facing the west).

BY COROLLARY, Transition Design needs to be an approach that is useful to both developed and developing economies and should enable the latter to transcend/bypass the socially and ecologically destructive economic development pathways of the west.

Organizational Transition

Transition Management and Organization Change have to do with the ways in which change (such as leadership succession) and transition within social organizations is managed. This approach to change management acknowledges that many factors are involved in successful organizational/institutional transitions: the psychology of groups and individuals; the need to capture the wisdom and experience of those leaving the organization; workspaces and workflow communications; tools and infrastructure, are all involved in holistic transitions.

BY COROLLARY, Transition Design acknowledges that organizations are comprised of people and that their practices, habits and expectations are the basis for structural change. This calls for designers to develop a deep understanding of the dynamics of social change and suggests an approach that incorporates many aspects of service design.

Personal Transitions

The term 'transition' is also used to refer to personal change, especially physiological change. These changes can be intentional – e.g., gender reassignment, or unintentional e.g. aging or illness. Design has been directly associated with many of the latter types of transitions, especially in John Zimmerman or Kursat Ozenc's work on *Designing for Self*, an approach that has received much attention with respect to sensor technology, especially wearables. Thus far, these initiatives have primarily remained at the level of individual change, however sustainable designers have begun to experiment with the potential for group transition afforded by performance data being shared through social media.

BY COROLLARY, Transition Design has the potential to aid in group/societal transitions by leveraging new sensing/digital technologies.

Great Transitions Network

The term 'Great Transition' was first used in 1964 by the economist and systems theorist Kenneth Boulding who argued that the economy was part of an interconnected, planetary system that has social, spiritual and ecological dimensions. In 1995, the Global Scenario Group (convened by the Tellus Institute and The Stockholm Environment Institute) began to produce a series of reports that identified multiple future-based planetary scenarios. They also identified strategies, values and leverage points for change that could lead to the 'Great Transition' i.e. improved quality of life, reduced poverty and inequity, human solidarity, enriched cultures and protection of the biosphere. Within the last decade, the Tellus Institute has launched the Great Transition Initiative (GTI). GTI is an international network of more than 400 scholars and activists from over 40 countries who seek to develop and mobilize a planet-wide citizens transition movement. The concept of the 'Great Transition' has also been adopted by several leading think tanks, such as the New Economics Foundation in London.

BY COROLLARY, Transition Design should develop future based scenarios and the means/ tools by which local communities can transition towards these, within a planetary context.

See Arturo Escobar's paper *Transiciones* [see email attachment](#)

3. Why the Transition Design Framework?

We use a heuristic model to characterize four different but interrelated and mutually influencing areas of Transition Design. These areas are **1)** vision; **2)** theories of change; **3)** mindset/posture; and **4)** new ways of designing. We welcome suggestions on how to refine, expand or evolve the framework and its four sections.

Visioning

An important aspect of design is related to future-making, yet few designers have a compelling or comprehensive vision of the longer-term future toward which they are working. Modernist designers developed clear visions for the future (i.e. Norman Bel Geddes' Futurama for the 1939 World's Fair) and succeeded to a large extent in realizing those

visions. The result has been that since that time, we have been forced (in a Procrustean manner) to live in those unsustainable, concretized 'designed' systems.

To avoid the pitfalls of the past, we need visions of futures that are dynamic and grass-roots based (meaning they emerge from local, existing conditions) as opposed to being imposed in a one-size-fits-all process. Various design approaches have diversified our ability to imagine the future. Design Fiction and Speculative Design are two such examples though they can have the tendency to lead to 'micro-utopias' or even 'dystopias'. Backcasting and scenario-based initiatives such as Manzini and Jegou's *Sustainable Everyday* project and Jonathan Porritt's recent book *The World We Made* are good examples of how compelling, long-term transition visions might inspire short and mid-term solutions that are steps in longer transitions.

- ... Question: How can Transition Design avoid the modernist pitfall of the imposition of static images of a rigid future? What is the process for developing dynamic/constantly evolving visions of the future that can inform design in the present?
- ... Question: What other concepts and streams of thought can inform the content of Transition visioning? We have started with Cosmopolitan Localism, a concept developed by Sachs, Manzini et al.
- ... Question: Visions can aid transition by providing a means through which contemporary lifestyles and transition design interventions can be assessed, evaluated and critiqued in terms of how we are tracking toward a desired state. How should Transition Design interventions be evaluated? What are the indicators that a future-based vision is opening up possibilities in the present for design initiatives/interventions?

Theories of Change

Most design approaches are based upon the objective of meeting existing needs. By contrast, Transition Design aims to initiate and catalyze mid and long-term change/transition within complex social and natural systems. This type of design must be based upon a deep understanding of change and how it manifests as a rationale for design interventions. Borrowing from Environmental Health Research, many design for social innovation approaches have cited a need for a 'theory of change'. The Transition Design Framework brings together a myriad of approaches from outside design in order to provide designers with new tools and methodologies to initiate and catalyze transitions toward more sustainable futures.

- ... Question: We have identified approaches such as Socio Technical Regime Theory, Post Normal Science, Living Systems Theory and others as relevant to Transition Design. Are there others? See: *Transition Design*, Irwin
- ... Question: What can design/designers contribute to these approaches to social, economic, political and environmental change?

Posture and Mindset

Designing to enable change requires designers to acquire new dispositions. They need to adopt agile, collaborative postures and be less invested in design outcomes and more focused on the process of change/transition. In addition, change agents need to acknowledge that living in/through transitional times comes with high degrees of ambiguity, contradiction and even hypocrisy.

- ❖ **Question:** How do we educate designers for these new postures and temperaments?
- ❖ **Question:** How do we sustain Transition Designers through life stages in the face of competing pressures from conventional organizations for more conservative creative class workers?

New Ways of Designing

Although we consider Transition Design to be a distinctive way of designing, it is complementary to other design approaches such as design for service and design for social innovation. Other relevant approaches can lead to consequences instead of artifacts, such as Dan Hill's work on Strategic Design with his notions of Dark Matter, McGuffins and Trojan Horses. New Ways of Designing is an inclusive area of the Transition Framework that draws on myriad approaches to formulate design interventions and solutions.

- ❖ **Question:** Are there other relevant design approaches or methodologies that can contribute to the transition solutions?
- ❖ **Question:** How can existing solutions be recast within the context of Transition Design to become steps within a longer-term transition toward a sustainable future/outcome?

See: *Transition Design*, Irwin

4. How Does Transition Design Relate to Interaction Design?

CMU's School of Design is a school of design for interactions. Students learn to design for communications, products and environments and conduct design research, all through the lens of Interaction Design. Within programs such as HCI, interaction design is an area of specialized study that often incorporates service design methodologies and research to the design of digital devices, environments and myriad other applications.

- ❖ **Question:** What is the relationship between designing for interactions and transition? Are there affordances of change?

Answer: See *Transition Design as Post Industrial Interaction Design*, Tonkinwise

5. How Does Transition Design Relate to Material Craft?

The sensitivity to material constraints and attention to detail that is embodied in the design/craft traditions is the foundation of most undergraduate design programs like ours and is something that we will continue to emphasize. The same type of sensitivity, humility and deep understanding of materiality should be at the core of any Transition Design solution.

- ❖ **Question:** What are effective ways to talk about the relationship between Transition Design and material craft/design?
- ❖ **Question:** What is the material aspect of Transition Design? How are sensors, the internet of things, etc material aspects of Transition Design?

Answer: Transition Design is distinct from more modernist forms of imposed design solutions. To this extent, Transition Design is more sensitive to the constraints and resistances that are present in any attempt at change. This sensitivity is exactly what designers learn when working with materials and tools that have their own dispositions and even wills.

6. How Does Transition Design Relate to Business?

An important step in the evolution of the Transition Design Framework and narrative is to articulate its relationship and value to business. Viewed within short horizons of time, Transition Design could be perceived as anti-business/antithetical to the concerns of the very organizations who hire our graduates. However there are signs that business is beginning to recognize the need for transitions to more sustainable futures. One example is the global company Deutsche Post/DHL, who undertook what could be viewed as transition visioning. The result was a report entitled *Delivering the Future*, intended to inform Deutsche Post's strategic decisions and the design of products and services in the short and mid-term. Other similar approaches in business transformation include: Service Economies, Platform Dynamics, Shared Value and BRIC economies.

See: *Deutsche Post/DHL Report*: http://www.dhl-usa.com/en/press/events/logistics_2050.html

❖ **Question:** What should the relation between Transition Design and traditional for-profit business be? What is the role of the Transition Designer within such organizations?

Answer: We believe that Deutsche Post and the myriad '2050' business initiatives found on the internet represent a growing interest in alternative economies and sustainable solutions within the profit sector. European initiatives such as WEE which promote sustainable design are examples of a growing trend in legislation/policy that support transition solutions. These solutions must be based upon a deep understanding of current value propositions and business models as well as an understanding of alternative economies and systems level global issues. Transition Designers will work to seed change within the for profit sector; in order to initiate change toward alternative paradigms, designers must function effectively in existing ones.

7. How Does Transition Design Relate to 4th Order Designing?

CMU's Design PhD was established by the former Head of School, Dick Buchanan, who is well-known for his characterization of the *4 Orders of Design*. Another important step in developing the Transition Design framework and narrative is to articulate its relationship or lack of relationship to Buchanan's model.

See: *4 Orders of Design*, Buchanan, <http://www.ida.liu.se/~steho/desres/buchanan.pdf>.

❖ **Question:** Does Transition Design represent a 4th order version of design? Is the change-orientedness of Transition Design distinct from the cultural design that characterizes 4th Order Designing?

❖ **Question:** Because of its long term objective of catalyzing transitions to sustainable futures, can Transition Design be considered a 5th Order of Designing?

Answer: See: *Design's (Dis)Orders and Transition Design*, Tonkinwise

Additional Information + Resources

Transition Design

https://en.wikipedia.org/wiki/Transition_design

Transition Economy

https://en.wikipedia.org/wiki/Transition_economy

Transition management (governance)

[https://en.wikipedia.org/wiki/Transition_management_\(governance\)](https://en.wikipedia.org/wiki/Transition_management_(governance))

Transition Town

https://en.wikipedia.org/wiki/Transition_town

Transition Network

<http://www.transitionnetwork.org/>

Transition Research Network

<http://www.transitionresearchnetwork.org>

Great Transition Initiative

<http://greattransition.org>

Transition United States

<http://www.transitionus.org/transition-towns>

Transition Academy

<http://transitionacademy.nl>

The Long Now Foundation

<http://longnow.org>

Center for Ecoliteracy

<http://ecoliteracy.org>

Sustainable Everyday Project

<http://www.sustainable-everyday-project.net>

Donella Meadows Institute

<http://www.donellameadows.org>

Resilience

<http://www.resilience.org>

Post-Carbon Institute

<http://www.postcarbon.org>

New Economics Foundation

<http://www.neweconomics.org>

Deutsche Post, Logistics 2050 — a Scenario Study

http://www.dhl-usa.com/en/press/events/logistics_2050.html

Four Orders of Design

<http://www.ida.liu.se/~steho/desres/buchanan.pdf>

Tellus Institute

<http://www.tellus.org/index.php>