

Transition Design 2015

A new area of design research, practice and study that proposes design-led societal transition toward more sustainable futures.

You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

—Buckminster Fuller

Fundamental change at every level of our society is needed to address the issues confronting us in the 21st century. Climate change, loss of biodiversity, depletion of natural resources and the widening gap between rich and poor are just a few of the ‘wicked problems’ that require new approaches to problem solving.

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Transition Design acknowledges that we are living in ‘transitional times’. It takes as its central premise the need for **societal transitions to more sustainable futures** and argues that design has a key role to play in these transitions. It applies an understanding of the interconnectedness of social, economic, political and natural systems to address problems at all levels of spatiotemporal scale in ways that improve quality of life.

Transition Design advocates the reconception of entire lifestyles, with the aim of making them more place-based, convivial and participatory and harmonizing them with the natural environment. Transition Design focuses on the need for ‘cosmopolitan localism’, (MANZINI 2009; SACHS 1999) a lifestyle that is place-based and regional, yet global in its awareness and exchange of information and technology.

Everyday life is viewed as a potentially powerful, transformative space (LEFEBVRE 1984; GARDINER 2000) where transition designers explore ways in which basic human needs are satisfied locally, within economies that exist to meet those needs (MAX-NEEF 1992; ILLICH 1987; KAMENETSKY 1992). This is in contrast to the dominant economic paradigm that is predicated upon unbridled growth and an imperative to maximize profit (KORTEN 1999, 2010; MANDER 2012; DOUTHWAITE 1996).

Transition designers are temporally aware and design for the ‘long now’ (BRAND 1999). They draw on knowledge and wisdom from the past to conceive solutions in the present with future generations in mind. They study how large sociotechnical transitions have manifested throughout history (GEELS 2010; GRIN, ROTMANS, SCHOT 2010; SHOVE AND WALKER 2007) and draw on the wisdom of pre-industrial indigenous societies who lived and designed sustainably in-place for generations (BROWN 2013; PAPANEK 1995; WHITT 2001).

The transition to sustainable futures calls for new ways of designing that are based upon a deep understanding of how to **design for change and transition within complex systems** (IRWIN 2011). This knowledge and the new skillsets it will inform must be integrated from areas such as science, philosophy, psychology, social science, anthropology and the humanities and will therefore challenge existing design paradigms. Transition Design is conceived as a new area for design education, practice and research and is presented here as a proposal and invitation for further discussion and debate among educators, practitioners and researchers.

➤ **Origins of the Transition concept**

Shared by most transition discourses is the contention that we need to step out of existing institutional and epistemic boundaries if we truly want to envision the worlds and practices capable of bringing about the significant transformations seen as needed. The project seeks to develop a particular approach to such a contention, based on a set of concepts derived from both trends in the academy and in social-political life.

—Arturo Escobar
Transiciones

The concept of transition is central to a variety of contemporary discourses and initiatives concerned with **how change manifests and can be catalyzed** and directed in complex systems. These discourses are found within academia, non-profit and community sectors but are often unrelated to each other or to the field of design. The concept of Transition Design acknowledges and draws from all of these approaches. It aspires to act as an integrative agent among them and educate a generation of designers qualified to work in transdisciplinary teams developing transition solutions. These approaches include:

Sociotechnical Transition Management Theory & Sustainability Transitions

Originating in Northern Europe within the academic fields of Innovation Management and Technology Assessment, these theories focus on how societal transitions happen. These approaches have been used as practical tools by the Dutch Government to manage the radical transformation of the energy systems in the early 2000s. These theories represent the convergence of sustainable development research, technology forecasting, social ecological impact analysis and the fields of social history and construction of technology. They study 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. (ELZEN ET AL 2005; GEELS 2010; GRIN ET AL 2010)

Transition Town Network

Transition Towns was a community-based movement founded in Totnes, UK by Rob Hopkins in 2005. It has since grown into an international network of communities working to develop local resilience and autonomy and expand their capacity to respond and 'bounce back' from external perturbations such as economic downturns, climate change or disruptions to energy systems. Transition Towns develop local food and energy systems, alternative currencies and support the development of local businesses. (HOPKINS 2008)

The Great Transition Initiative

The Great Transition was a term first used in 1964 by the economist and systems theorist Kenneth Boulding. In 1995 the Global Scenario Group began to produce a series of reports identifying multiple future-based planetary scenarios and strategies for change that could lead to the 'Great Transition' (improved quality of life, reduced poverty and inequity, human solidarity, enriched cultures and protection of the biosphere). In 2003 the Tellus Institute launched the Great Transition Initiative (GTI), an international network of more than 40 scholars and activists 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. (RASKIN ET AL 2002)

Transitions in complex systems

'Phase transition' is a phenomenon that describes change within complex social and natural systems that are dynamic, non-linear, self-organizing and interdependent.

The term refers to the unexpected sudden ‘emergent’ changes that can occur in systems when they are subjected to outside stresses or ‘perturbations’. These changes are self-directed and cannot be predicted or controlled, yet are the source of new order (forms) and types of behavior (GOODWIN 1998; PEAT & BRIGGS 1999; CAPRA 1997).

❖ Important concepts and streams of thought for Transition Design

Transition Design draws upon multiple theories, streams of thought and movements from varied fields and disciplines:

Living Systems Theory

Within the last few decades, scientists within the ecological and biological fields have proposed general principles for how all living systems work (CAPRA & LUISI 2014; BRIGGS & PEAT 1999; PRIGOGINE & STENGERS 1994; WHEATLEY 2006). Instead of examining phenomena by attempting to break things down into components, living systems theory explores phenomena in terms of dynamic patterns of the relationships between organisms and their environments. Principles such as self-organization, emergence, resilience, symbiosis, holarchy and interdependence, among others, can serve as leverage points for initiating and catalyzing change within complex systems (IRWIN 2011B).

Futuring

Transition Design proposes that more radically new ideas and compelling visions of sustainable futures are needed. There are myriad approaches to developing future-based narratives that come from the field of science fiction, narrative and storytelling, future-casting/futuring and speculative and critical design to name a few.

Transition Design argues that design solutions in the present can be informed by longer-term visions of sustainable futures (CANDY 2015; DUNNE & RABY 2013; PORRITT 2013; MANZINI & JEGOU 2003).

Indigenous Wisdom

Indigenous pre-industrial societies lived sustainably in place for generations, informed by ‘slow knowledge’ that was place-based and embedded within local cultures (ORR 2004; PAPANEK 1995). Transition designers have much to learn from these approaches to designing and their symbiotic relationship with the natural environment.

Cosmopolitan Localism

Coined by German activist, author and educator Wolfgang Sachs, the term ‘cosmopolitan localism’ describes a place-based lifestyle in which solutions to global problems are designed for local circumstances and tailored to specific social and ecological contexts whilst being globally connected/networked in their exchange of information, technology and resources (SACHS 1999; MANZINI 2009, 2012, 2013).

Everyday Life Discourse

Everyday life is an important yet often overlooked context for understanding society and the forces which mold it (LEFEBVRE 1984, 1991; HIGHMORE 2002; GARDINER 2000). Transition Design proposes that everyday life, and lifestyles, should be the primary context within which to design for sustainable futures and improved quality of life.

Post Normal Science

Post normal science is a method of inquiry for addressing long-term issues when relatively little information is available, facts are uncertain, values are in dispute and urgent decisions and outcomes are critical (RAVETZ 2007).

We have fragmented the world into bits and pieces called disciplines and subdisciplines, hermetically sealed from other such disciplines. As a result, after 12 or 16 or 20 years of education, most students graduate without any broad, integrated sense of the unity of things. The consequences for their personhood and for the planet are large.

—David Orr
Earth in Mind

Needs

Within the context of lifestyles and everyday life, understanding how people go about satisfying their needs is a key strategy for developing sustainable solutions. Manfred Max-Neef's theory of 'needs and satisfiers' (1992) proposes that needs are finite and universal, but the ways in which people meet those needs are unique to their era, culture, geographic location, age and mindset. Transition Design argues that everyday life is more likely to be sustainable when communities are self-organizing and therefore in control of the satisfaction of their needs at multiple levels of scale: the household, the neighborhood, the city, the region etc.

Social Psychology Research

Since the Rio Earth Summit in 1992, sustainability researchers have tried to establish how best to encourage people to live in more sustainable ways. Social psychology based research, drawn from work on Health Behavior Change, aimed to establish the connection between information and awareness, attitudes and values and behaviors and built environments. Heuristics from this work included 'stages of change,' 'self-efficacy,' 'small steps lead to big steps,' and 'spill-over effect' (KASSER 2011; HARGREAVES ET AL 2012).

Social Practice Theory

Social Practice theory looks at constellations of devices, skills, actions and meanings that form the slow-changing/inertial habits and habitats of everyday life. It designs immersive ethnographies to help identify opportunities for innovation in existing practices, and to facilitate the design of multiple interventions that can help create new, more sustainable forms of everyday life (SHOVE 2009, 2010).

Alternative Economics

The transition to sustainable futures will require the development of new kinds of equitable and integrated economic systems in which most needs can be satisfied locally while some remain reliant on global networks. Exploring alternative modes of exchange (outside the dominant economic paradigm) whose objective is the satisfaction of needs for everyone (as opposed to the generation of profit for a few) is an important cornerstone to developing transition solutions (KORTEN 1999, 2010; DOUTHWAITE 1996; MANDER 2012).

Worldview

Living in and through transitional times requires a new way of 'being' in the world. Environmentalist and physicist Fritjof Capra has argued that the myriad problems confronting us in the 21st century are interconnected and interrelated and can be traced to a single root problem which is a 'crisis in perception.' He defines this crisis in perception as a mechanistic/reductionist worldview, inadequate for understanding the nature of complex systems. A shift to a more holistic/ecological worldview is one of the most powerful leverage points for transition to sustainable futures (CAPRA 1983; CAPRA & LUISI 2014; CLARKE 2002; TOULMIN 1990; TARNAS 2010; MEADOWS 2008).

Goethean Science & Phenomenology

Artist and poet Wolfgang von Goethe developed a phenomenological approach to understanding the 'wholeness' of natural organisms, particularly plants. This understanding focused on the temporal dynamics of growth, maturation and demise and looked at the symbiotic, holarchic relationship between part and whole. (BORTOFT 1996, 2012; AMRINE ET AL 1987; HOFFMAN 2007; SEAMON 1998).

[the disciplines need to] combine to form something new in which each and every constituent discipline suffuses the whole of the analyses...the disciplinary parts are no longer evident as desaggregatable components...[we need]...holistic conceptual frameworks that transcend the narrow scope of disciplinary worldviews.

—M.A. Somerville &
D.J. Rapport
Transdisciplinarity

→ The Transition Design Framework

The Transition Design framework outlines four mutually reinforcing and co-evolving areas of knowledge, action and self-reflection: **1)** Vision; **2)** Theories of Change; **3)** Mindset & Posture; **4)** New Ways of Designing.

1. Vision for Transition

Transition Design proposes that more compelling future-oriented visions are needed to inform and inspire projects in the present and that the tools and methods of design can aid in the development of these visions. Tonkinwise (2014) argues for “motivating visions as well as visions that can serve as measures against which to evaluate design moves, but visions that are also modifiable according to the changing situation.” Dunne and Raby (2013) argue that visioning creates spaces for discussion and debate about alternative futures and new ways of being. It requires us to suspend disbelief and forget how things are now and wonder about how things could be.

Transition Design proposes the development of future visions that are dynamic and grassroots based, that emerge from local conditions vs. a one-size-fits-all process, and that remain open-ended and speculative. This type of visioning is a circular, iterative and error-friendly process used to envision radically new ideas for the future that serve to inform even small, modest solutions in the present. Visions of sustainable futures can provide a means through which contemporary lifestyles and design interventions can be assessed and critiqued against a desired future state and can inform small design decisions in the present.

Various design approaches have diversified our ability to imagine the future, and inspire short, mid- and long-term solutions. Examples include Critical and Speculative Design (DUNNE & RABY 2013) and backcasting and scenario based initiatives such as Manzini and Jegou’s Sustainable Everyday (2003) and Jonathon Porritt’s The World We Made (2013).

2. Theories of Change

Never in history has the need for change been more urgent (MAX-NEEF 2011). Yet, transformational societal change will depend upon our ability to change our ideas about change itself—how it manifests and how it can be catalyzed and directed. Systems-level, ongoing societal change is inherently transdisciplinary—it must be informed by ideas, theories and methodologies from many varied fields and disciplines. Theories of Change is a key area within the Transition Design Framework for three important reasons: **1)** A theory of change is always present within a planned/designed course of action, whether it is explicitly acknowledged or not; **2)** Transition to sustainable futures will require sweeping change at every level of our society; **3)** Our conventional, outmoded and seemingly intuitive ideas about change lie at the root of many wicked problems (IRWIN 2011; SCOTT 1999; ESCOBAR 1995).

A new, transdisciplinary body of knowledge is emerging that explains the dynamics of change within complex systems and challenges our current paradigms and assumptions. These ideas have the potential to inform new approaches to design and problem solving. Ideas and discoveries from a diversity of fields such as physics, biology, sociology and organizational development have revealed that change within open, complex systems such as social organizations and ecosystems manifests in counter-intuitive ways. And, although change within such systems can be catalyzed and even gently directed, it cannot be managed or controlled, nor can outcomes be accurately predicted (CAPRA & LUISI 2014; WHEATLEY 2006;

As creators of models, prototypes and propositions, designers occupy a dialectical space between the world that is and the world that could be...to plan effectively in the present requires a vision of what the future could and should be like.

—Victor Margolin
The Future and the Human Spirit,
DESIGN ISSUES

[the problems confronting society today are] just different facets of one single crisis, which is largely a crisis of perception...that derives from the fact that most people in our modern society, and especially our large social institutions, subscribe to the concepts of an outdated worldview, a perception of reality inadequate for dealing with our overpopulated, globally interconnected world.

—Fritjof Capra &
Pier Luigi Luisi
A Systems View of Life

MEADOWS 2008; BRIGS & PEAT 1990; PRIOGGINE & STENGERS 1994). The Transition Design Framework is a fluid, evolving body of knowledge and ideas, often from outside design, whose objective is to provide designers with new tools and methodologies to initiate and catalyze transitions toward more sustainable futures.

3. Posture and Mindset

Living in and through transitional times calls for self-reflection and new ways of 'being' in the world. Fundamental change is often the result of a shift in mindset or worldview that leads to different ways of interacting with others. Our individual and collective mindsets represent the beliefs, values, assumptions and expectations formed by our individual experiences, cultural norms, religious and spiritual beliefs and the socio-economic and political paradigms to which we subscribe (CAPRA 1997; KEARNEY 1984; CLARKE 2002). Designers' mindsets and postures often go unnoticed and unacknowledged but they profoundly influence what is identified as a problem and how it is framed and solved within a given context. Transition Design asks designers to examine their own value system and the role it plays in the design process and argues that solutions will be best conceived within a more holistic worldview that informs more collaborative and responsible postures for interaction. Transition Design examines the phenomenon of mindset and worldview and its connection in wicked problems (KEARNEY 1984, LINDERMAN 2012, TARNAS 2010; CAPRA AND LUISI 2014; IRWIN 2011A).

4. New Ways of Designing

The transition to a sustainable society will require design approaches informed by new and different value sets and knowledge. Transition Designers see themselves as agents of change and are ambitious in their desire to transform systems. They understand how to work iteratively, at multiple levels of scale, over long horizons of time. Because transition designers develop visions of the 'long now' (BRAND 1999), they take a decidedly different approach to problem solving in the present. Transition Designers learn to *see* and *solve* for wicked problems and view a single design or solution as a single step in a longer transition toward a future-based vision. Some solutions have intentionally short life-spans and are designed to become obsolete as steps toward a longer-term goal. Other solutions are designed to change/evolve over long periods of time. Transition Designers look for 'emergent possibilities' within problem contexts, as opposed to imposing pre-planned and fully resolved solutions upon a situation. This way of designing must be informed by a deep understanding of local eco-systems and culture. Transition Designers work in three broad areas:

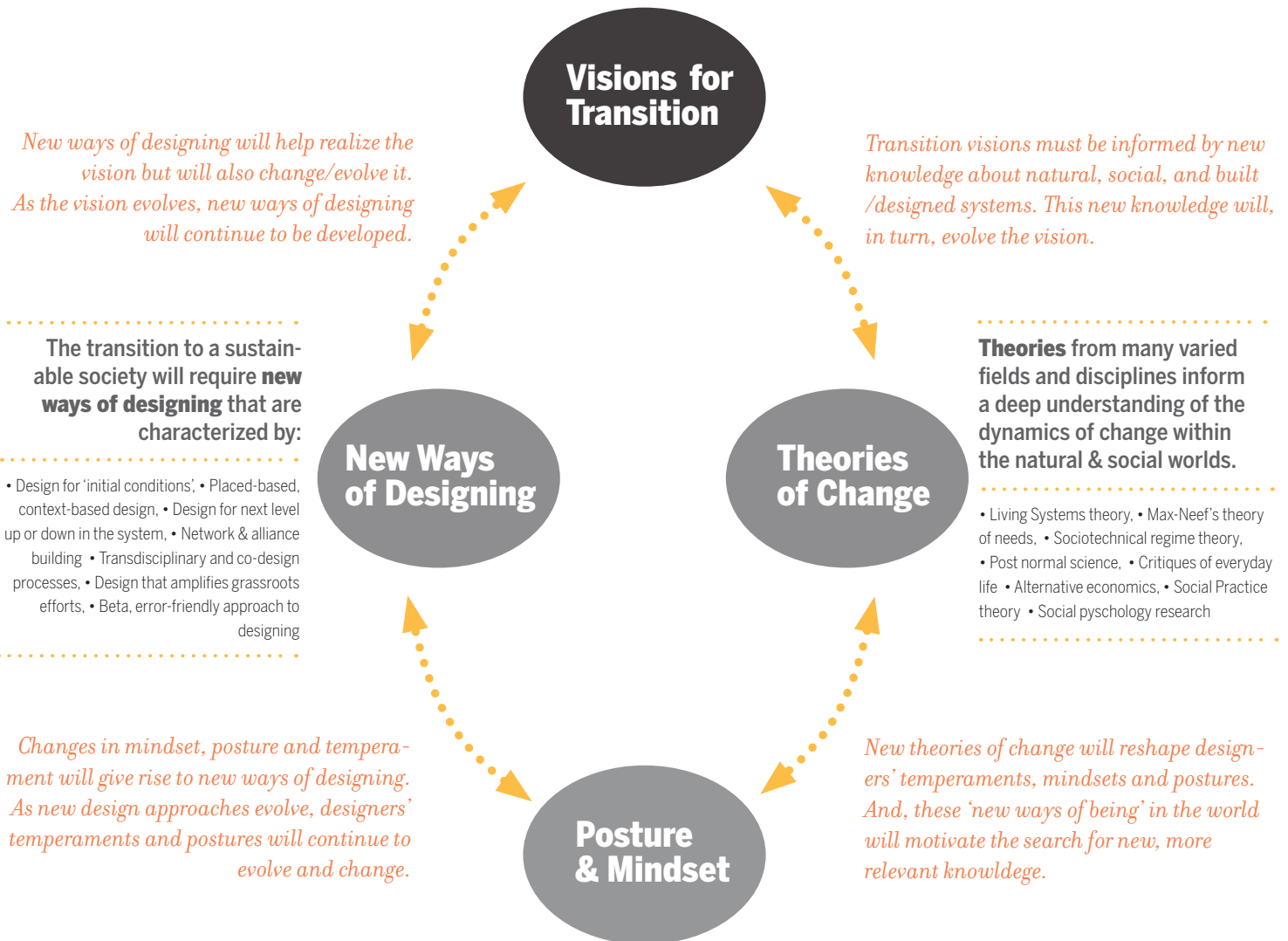
1. They develop powerful **narratives and visions** of the future or the 'not yet' (BLOCH 1995; DE SOUSA SANTOS 2006).
2. They **amplify and connect** grassroots efforts undertaken by local communities and organizations (PENIN 2013; MANZINI 2007, 2015). Service design or social innovation solutions can be steps within long-term transition solutions.
3. They work in transdisciplinary teams to design new, innovative and **place-based solutions** rooted in and guided by transition visions.

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. Transition Design requires a commitment to ongoing learning and personal change as well as the tenacity to change a system through multiple, iterative interventions over time.

TRANSITION DESIGN FRAMEWORK

Four mutually reinforcing and co-evolving areas of knowledge, action and self-reflection

Visions for transitions to sustainable societies are needed, based upon the reconception of entire life-styles that are human scale, place-based, but globally connected in their exchange of technology, information and culture. These visions are based upon communities that are in symbiotic relationships to the ecosystems within which they are embedded.



Living in & thru transitional times requires a **mindset and posture** of openness, mindfulness, self-reflection, a willingness to collaborate, and 'optimistic grumpiness'

- Shifting values: cooperation over competition, self-sufficiency, deep respect and advocacy for 'other' (cultures, species etc.)
- Indigenous, place-based knowledge, • Goethean Science/ Phenomenology, • Understanding/embracing transdisciplinarity, • Ability to design within uncertainty, ambiguity, chaos and contradiction,
- A committed sense of urgency (grumpiness) along with optimism in the ability to change

A Continuum of Design Approaches

Mature discipline

Design for Service

Design within existing socio-economic & political paradigms

Solutions reach users through many 'touch points' over time through the **design of experiences**. Solutions are based upon the observation and interpretation of users' behavior and needs within particular contexts. Service design solutions aim to provide profit and benefits for the service provider and useful and desirable services for the user (consumer). Solutions are usually **based within the business arena and existing, dominant economic paradigm**.

Developing discipline

Design for Social Innovation

Design that challenges existing socio-economic & political paradigms

Design that **meets a social need more effectively than existing solutions**. Solutions often leverage or 'amplify' existing, under-utilized resources. Social innovation is a 'co-design' process in which **designers work as facilitators and catalysts** within transdisciplinary teams. Solutions benefit multiple stakeholders and empower communities to act in the public, private, commercial and non-profit sectors. **Design for social innovation represents design for emerging paradigms and alternative economic models, and leads to significant positive social change.**

Emergent discipline

Transition Design

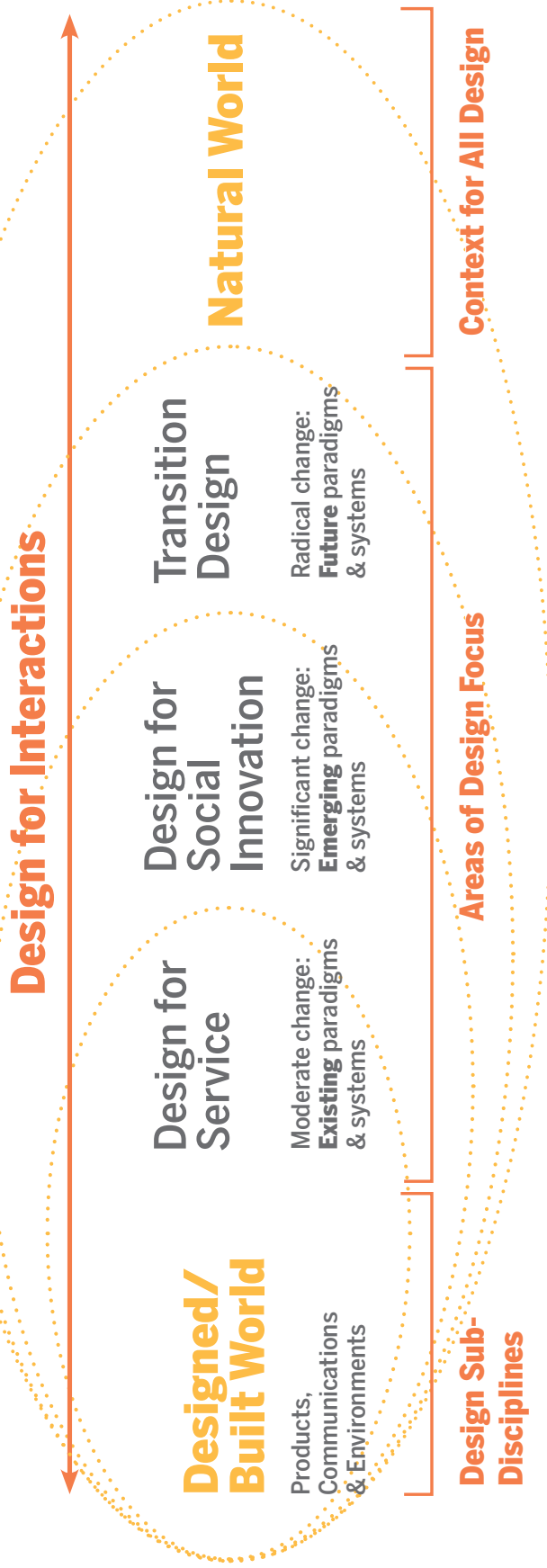
Design within radically new socio-economic & political paradigms

Refers to design-led societal transition toward more sustainable futures and the reconception of entire lifestyles. It is based upon an understanding of the **interconnectedness and inter-dependency of social, economic, political and natural systems**. Transition Design focuses on the need for '**cosmopolitan localism**', a place-based lifestyle in which solutions to global problems are designed to be appropriate for local social and environmental conditions. **Transition Design challenges existing paradigms, envisions new ones, and leads to radical, positive social and environmental change.**

Scale of time, depth of engagement, and context expand to include social & environmental concerns

Designing along a continuum

Transition Design is proposed as an emergent area of design study, research and practice that complements the established and developing sub-disciplines of Design for Service and Design for Social Innovation. Designers have the ability to contribute along a spectrum that ranges from existing paradigms (in which design is practiced primarily within the commercial marketplace) to radically new paradigms that challenge the status quo and are based upon equity and quality of life.



CMU’s Integration of Transition Design into Curricula

The School of Design’s new framework unifies programs and curricula and facilitates a greater level of exchange between students and faculty at the undergraduate and graduate levels. It also provides a means for integrating new knowledge and skill sets in response to recent changes in the field of design.

Design for Interactions is the over-arching theme for all programs and curricula at the School of Design. It refers to the focus on the quality of interactions between people, the built (designed) world and the environment (natural world). It can involve design for product semantics, brand experiences, multi-modal media, smart devices, urban wayfinding, large information systems, and more. The curricula prepares students to work in the fields of healthcare, retail, telecommunications, transportation systems, food systems, and environmental monitoring, to name a few.

Design Sub-Disciplines refer to a student’s area of speciality within the broad discipline of design. Students in the undergraduate program can choose among Product (Industrial) Design, Communication (Graphic) Design and a new area, Environments (this includes design for physical and digital environments).

Three Areas of Design Focus Students apply their skills on projects situated within three broad, externally-focused areas: **1.** Design for Service **2.** Design for Social Innovation and **3.** Transition Design. These areas of focus represent ways of framing and solving problems that can lead to moderate (service), significant (social) or radical (transition) change.

The Natural World All programs and curricula emphasize that the natural world/environments is the greater context for *all* design problems and solutions.

→ Our Proposal and Invitation

Transition Design is an area of design research, practice and study that was conceived at the School of Design at Carnegie Mellon University in 2012 and integrated into new programs and curricula that launched in fall, 2014. However it is presented here as an *open source concept and an invitation for engagement* and co-evolution with educators, researchers and practitioners from design and related disciplines.

The area of service design is now an internationally recognized approach with a network of researchers, educators and practitioners who are working to evolve the practice and develop accepted methodologies, tools and processes. Our proposal is to open a space in which Transition Design can evolve in a similar way and connect to other global transition initiatives.

Partner Institutions

The School of Design is working with the UNIVERSITY OF PALERMO, Buenos Aires; EINA SCHOOL OF DESIGN AND ART, Barcelona; and SCHUMACHER COLLEGE/PLYMOUTH UNIVERSITY, UK to integrate Transition Design into their research agendas and curricula. This Transition Design monograph is an open invitation for more design programs and organizations to join the conversation.

→ Groundwork and Next Steps

Groundwork has been done over the past two years and we are working to create a body of written materials and resources that can be shared in an open-source manner.

Articles on Transition Design

Links to materials written by several faculty members at the School of Design at CMU are included in the resources section of this monograph along with citations and links. We hope to publish a second monograph in 2016 that includes essays and papers from colleagues in academia, research and the practice.

Teaching Materials and Transition Design Bibliography

Also included in the resources section is an outline for a masters and doctoral seminar taught at CMU in the spring of 2015 and a link to a template for documenting Transition Design case studies. Bibliographic references for all reading material has been included in the bibliography for this monograph.

Transition Design Symposium: March 2015

A Transition Design Symposium was hosted at the School of Design at Carnegie Mellon University on March 7, 2015 and was attended by the School's doctoral alumni, faculty and several invited guests. The purpose of this symposium was to extend the Transition Design conversation beyond the School and develop a body of material that can be shared with other educators, researchers and practitioners. Among the guests attending were: Ezio Manzini, Milan Polytechnico; Arturo Escobar, University of Chapel Hill; Anne-Marie Willis, editor, Design Philosophy Papers; Lara Penin & Eduardo Staszowski, Parsons New School; Damian White, Rhode Island School of Design; and Dennis Doordan, University of Notre Dame. All participants submitted position papers in response to a formal provocation and the resulting body of work will be disseminated in the fall of 2015 in two ways:

Transition Design Issue of Design Philosophy Papers

Anne-Marie Willis, editor of the international design journal *Design Philosophy Papers* (DPP) will be producing an issue about Transition Design, comprised of several position papers from the Symposium. This issue is expected in late fall 2015 or spring, 2016.

Transition Design Website

An institution-neutral Transition Design website is being developed with an expected launch of fall, 2015. It will contain resources and links relevant to Transition Design, articles and papers on the topic (including position papers from the Symposium), a blog area, database for contributing case studies and the ability to post institutional membership/partner information. Please email us if you would like to be notified of the launch: transitiondesign@andrew.cmu.edu

Transition Design Conference

There are plans for an open Transition Design Conference to be convened sometime in 2017. Expressions of interest in helping to organize it are welcomed.

→ **Transition Design Resources**

The following sections contain links to papers and articles about Transition Design. A bibliography of relevant texts and a syllabus, course outline and case study template developed for a masters/doctoral seminar taught at CMU in spring 2015.

Articles and papers on Transition Design

These articles will eventually be compiled on the Transition Design website. For now, they can be accessed through the following links.

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

Terry Irwin, DESIGN AND CULTURE JOURNAL, July 2015 <http://www.designandculture.org/>

Transition Design as Postindustrial Interaction Design

Cameron Tonkinwise, MEDIUM website <https://medium.com/@camerontw/transition-design-as-postindustrial-interaction-design-6c8668055e8d>

Design's (Dis)Orders and Transition Design

Cameron Tonkinwise, MEDIUM website <https://medium.com/@camerontw/designs-dis-orders-transition-design-cd53c3ad7d35>

Holism and the Reconstitution of Everyday Life: A Framework for Transition to a Sustainable Society

Gideon Kossoff, GROW SMALL, THINK BEAUTIFUL, Stephan Harding (ed.) 2011.

also at: https://www.academia.edu/6085518/Holism_and_the_Reconstitution_of_Everyday_Life_A_Framework_for_Transition_to_a_Sustainable_Society

Design for Transitions—from and to what?

Cameron Tonkinwise, for a Symposium on Futuring at Rhode Island School of Design, May, 2015.

https://www.academia.edu/11796491/Design_for_Transition_-_from_and_to_what

Holism and the Reconstitution of Everyday Life: A Framework for Transition to a Sustainable Society

Gideon Kossoff, PhD Dissertation, Centre for the Study of Natural Design, University of Dundee, 2011.

<https://independent.academia.edu/GideonKossoff>

Transition Design Symposium Provocation, March, 2015

Terry Irwin, Cameron Tonkinwise, Gideon Kossoff

https://www.academia.edu/11439480/Transition_Design_Symposium_Provocation_abbreviated_version_

Transition Design: An Educational Framework for Advancing the Study and Design of Sustainable Transitions

Terry Irwin, Gideon Kossoff, Cameron Tonkinwise for the 6th International Sustainability Transitions Conference, University of Sussex, UK, August, 2015

forthcoming on academia.edu site in August

Transition Design: The Importance of Everyday Life and Lifestyles as a Leverage Point for Sustainability Transitions

Gideon Kossoff, Cameron Tonkinwise, Terry Irwin for the 6th International Sustainability Transitions Conference, University of Sussex, UK, August, 2015

forthcoming on academia.edu site in August

What Kind of Design is Transition Design?

Peter Scupelli for the Transition Design Symposium at CMU, March 2015.

forthcoming in an issue on Transition Design in Design Philosophy Papers.

Relevant Websites

Transition Design

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

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/>

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>

Sustainability Transitions Research Network (STRN)

<http://www.transitionsnetwork.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

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

Shareable
<http://www.shareable.net/>

Commons Transition
<http://commonstransition.org>

Design-Related Websites

Four Orders of Design
<http://www.ida.liu.se/~steho/desres/buchanan.pdf>

AIGA: Transition Design: Re-conceptualizing Whole Lifestyles
<http://www.aiga.org/video-HHH-2013-irwin-kossoff-tonkinwise/>

Emergent Structures
<http://www.emergentstructures.org/>

Pratt Design Incubator
<http://incubator.pratt.edu/>

designmatters
<http://www.designmattersatartcenter.org/>

Social Design Pathways: Winterhouse Symposium
<http://www.socialdesignpathways.com/about/>

Living Principles for Design: AIGA
<http://livingprinciples.aiga.org/>

Doors of Perception
<http://www.doorsofperception.com/working-with-john-thackara/>

Schumacher College
<https://www.schumachercollege.org.uk/>

DESIS Design Network
<https://www.desis-network.org/>

Transition Design Bibliography

The Transition Design Bibliography contains references and links to texts relevant to the emerging field of Transition Design and has been organized into categories that correspond to the four areas of the Framework. Many texts are naturally relevant to more than one area. Key topics have been listed in the margin of each section to provide an overview of the territory covered by the texts.

Vision

Key Topics

Cosmopolitan Localism

Relationship to Place

Futuring

Scenario Planning

Long-term Thinking

Narrative & Storytelling

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Theories of Change

Key Topics

Living Systems Theory

- Self-Organization
- Resilience
- Chaos/Complexity
- Emergence
- Holarchy
- Diversity
- Symbiosis

Transition Management

Sustainability Transitions

Sociotechnical Regimes

Post Normal Science

Needs Theory

Everyday Life Critiques

Social Practice Theory

Social Psychology

Alternative Economics

Systems Thinking

Social Ecology

Ecology

Interdependence

Decentralization

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Mindset & Posture

Key Topics

Worldview/Mindset

Goethean Science

Holism & Form

Beauty

Phenomenology

Mechanism/Reductionism

Collaboration

Self-Reflection

Indigenous Wisdom

Ecopsychology

Craft

New Ways of Being

Transdisciplinarity

Mind & Body

Relationality

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New Ways of Designing

Key Topics

- Social Innovation
- Service Design
- Permaculture
- Transition Design
- Design Ethics
- Indigenous Design
- Biomimicry
- Ecological Design
- Wicked Problems
- Co-Design
- Indigenous Design

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Teaching Materials to Share

The following pages contain the course outline for an inaugural masters and doctoral seminar on Transition Design taught in spring, 2015. The outline, syllabus and a case study template are available for download at: <https://cmu.academia.edu/TerryIrwin>

Syllabus and course outline/schedule

Transition Design Seminar II
 51702-51946 Spring 2015 | Monday, Wednesday | 10:00 - 11:20 | MMajr

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...the forefurl emergence of transition discourses and proposals in multiple sites of academic and activist life over the past decade is one of the most revealing and anticipatory signs of our times. This emergence is a reflection of both the steady worsening of planetary ecological and social life conditions and of the inability of established policy and knowledge institutions to imagine ways out of such crisis conditions. Shared by most transition discourses is the contention that we need to step out of existing institutional and epistemic boundaries if we truly want to envision the worlds and practices capable of bringing about the significant transformations seen as needed. The project seeks to develop a particular approach to such contention, based on a set of concepts derived from both trends in the academy and in social-political life.

— **Arturo Escobar**

Transition theory draws upon concepts and models of human behavior, social structures, and technological systems that span diverse disciplines and areas of study, including sociology, management, science, technology, social studies, and philosophy. It is rooted in a recognition of the significance of systems and an appreciation for the ability of systems thinking to conceptualize and model complex patterns of behavior... thinking about transition this way is appealing for several reasons. It recognizes the fallacy of the silver bullet—that is, the dream of a singular solution that can leverage complex systems. It offers a way to conceptualize socio-technical change that can accommodate multiple perspectives. It aims to be participatory and draw contributors from across the social spectrum and emphasizes the processes of knowledge creation and sharing.

— **Dennis P. Doordan**

Clearly, this is not dependent solely on a solitary designer who skillfully puts together technical elements in a given design. It involves, in addition, a more diverse activity in which the design space is continually co-created through anticipations, theories, and imaginations of what can be or what is possible in our language, social order, and technological world.

— **Kalle Lyytinen**

A huge amount of creativity is emerging as citizens figure out new ways to meet their daily-life needs—from clothing and food, to shelter, care, and learning. At a local level, these efforts are clustering in a wide variety of social micro-economies in which people share skills, time, and resources. There's an emphasis on collaboration and sharing; on person-to-person interactions; on the care and maintenance of existing assets. The main driver of this growing wave of social activity is necessity. Design for sustainability, it is turning out, is not about designers telling other people how to live. It's about the co-creation of tools and enabling platforms that make it easier for people to share resources—such as energy, matter, time, skills, software, space or food. Developing grand visions for futuristic new systems is an important part of the mix—but so, too, is nurturing a continuous wave of small adjustments.

— **John Thackara**

Transition Design Seminar Spring 2015 Course Schedule Terry Irwin, Cameron Tonkinwise, Gideon Kossoff

4.215	Course Narrative & Discussion Topics	Readings/Requirements for following session	Instructors
Section 1: Why Transition Design?			
January 12 M	<p>Why Transition? Fundamental change at every level of our society is needed to address the issues confronting us in the 21st century. Transition Design is a new area of design practice, research and study that addresses deep-level societal transitions that these complex issues. Transition Design integrates new knowledge and skill sets from many different fields and disciplines to inform the approaches to conceptualizing complex problems and designing for their solution.</p> <p>Discussion: of global problems and the origins of 'transition design' (What This is Not, Transition Design, Movement, Social, Technical, Transition Theories). Discussion about how design needs to change and why it is in a strong position to catalyze future transitions.</p>	<p>Over: Changing World via ppt</p> <p>Origin: Connecting the Dots via ppt</p> <p>Significance: Transition to Sustainable Society via ppt</p> <p>Discussion: Transition to Sustainable Society via ppt</p> <p>Design: What Problems do the Sustainability Field see as most important? Transition Design as Part Industrial Innovation via ppt</p> <p>Transition Design as a Participatory Process via ppt</p> <p>Readings: Transition Design 1-10</p>	Terry Cameron Gideon
14 W	<p>Wicked Problems: Climate change, loss of biodiversity, depletion of natural resources and the widening gap between rich and poor are examples of the 'wicked' problems transition designers must address. Wicked problems are multi-dimensional and complex. A wide range of stakeholders with conflicting objectives and desires must be understood and their objectives met. There is no simple solution, understanding the systems and system dynamics of wicked problems is a key skill of transition designers.</p> <p>Lecture: Examples of engaging a wicked problem. Discussion: of the characteristics of wicked problems and how designers approach such problems. The discussion will work in smaller groups to discuss concrete examples and early project design ideas.</p>	<p>Assignment 8: Working in groups of 3-5, design a wicked problem that begins with a local place-based issue and trace its connections to regional and global levels. Represent the problem and its interconnectedness (visually and clearly) the most powerful leverage points for design interventions. Present at the next session then apply to course blog.</p> <p>Video: How Wicked Change Works http://www.youtube.com/watch?v=Ujz9v8v8v8v8</p> <p>Medium: Design in Transition in a System http://www.youtube.com/watch?v=Ujz9v8v8v8v8</p>	Terry Cameron Gideon
21 W	<p>Mapping/Visualizing Wicked Problems: Wicked problems are complex, but in reality are often 'fragments' of wicked problems that exist in multiple scales, local, regional and global. The ability to see the roots of these complex problems and visually represent their interconnectedness/interdependencies and features that when broken (observed) likely to be most powerful is a key skill for transition designers.</p> <p>Discussion: Design groups their visual maps and recommended points of intervention and group discussion.</p>	<p>Understanding Why the World Around Us Hasn't Changed http://www.youtube.com/watch?v=Ujz9v8v8v8v8</p> <p>Appendix 1-10</p>	Terry Cameron Gideon

Complete outline at right

Case study guidelines and templates

Transition Design Case Study: School of Design, Carnegie Mellon University

Team Members:
 Team member names here

Organizations Involved in the Project: List the companies, organizations or individuals involved in creating/sponsoring the project

Region of the World: List the country/city/region where the project is based.

Project Name
 Part 1: Critique of Existing Project

Project Overview

This section should contain a description of the project in narrative form, not exceeding 250 words. Begin with a high-level overview of the project, describing it's stated objectives and outcomes. This section is not a critique; just describe the project as it is in the reference material you are using (it could be an article in a magazine or website or it might be a formal case study or even an interview). The 'tone' of the writing for this case study should be objective/journalistic and begin at a high level then progress to the details of the project. Try to outline the basic parameters that the project team or organization was working within. These 'limits' might be financial, cultural, place-based, temporal or material. Understanding how the project was framed is crucial to the critique. Do not speculate on how the project could/should have been done differently. This paragraph should simply be an abbreviated report on what you have found and should be free of speculation on your part. Note that the project profile in the far right column provides additional details about the project from a transition design point of view. Attach the original case study or article about the project to your final document.

Vision and Lifestyle

Taking a transition design perspective, begin the critique by discussing whether this project is connected to a mid- or long-term vision of sustainable futures. This vision might be explicitly stated, it might be implicit or it might not be present at all. An important aspect of transition design is to develop visions of sustainable lifestyles: Was the project framed within the context of lifestyle or everyday life either explicitly or implicitly? Did the designers 'back-cast' from a future vision to inform the project or were there near term visions that informed it? Was temporal scale mentioned in the article or case study? Were the designers and implementers concerned about how long the project would or should live? Was it conceived as a 'step' in a longer evolution to something else, or did the designers discuss how the project might change and evolve over time? Is there evidence of 'cosmopolitan localism' in the solution? In this section, answer these questions in narrative form. Your critique should also include what the project did well. Do NOT begin to conceptualize here about what the project could be. Do not exceed a word count of 250 for this section of the template will 'fall' out of format. This applies to any section in this template; sub sections should not run onto following pages.

Area of Initial Design Focus
 List the area of original design focus: product, communication, interaction, service, social innovation design etc. (just list one or two)

Levels of Spatial Scale
 Identify the levels of scale at which the project is situated (household, neighborhood, city, region, planet)

Temporal Scale
 Identify the temporal parameters of the project. How far into the future was it intended to exist? Is it within a fixed timeline? Did the people involved in the project think about its future trajectory? (no more than 3-5 sentences)

Transition Design Potential
 State whether the project has potential to become a transition design solution; through 'connecting', 'reconnection', 'scaling', 'amplifying'/'protecting'/'restoring' etc.

Part 1: Critique of Existing Project 1

Transition Design Case Study: School of Design, Carnegie Mellon University

Team Members:
 Team member names here

Organizations Involved in the Project: List the companies, organizations or individuals involved in creating/sponsoring the project

Region of the World: List the country/city/region where the project is based.

New Project Name
 Part 2: Transition Design Proposal

Proposal Overview

In this section write a description of how the project you just critiqued could become part of a larger transition design solution. For example, you might have the idea to link the project to other similar projects in a household, neighborhood or city (remember the levels of spatial scale) and the new ecology might have new, more expanded possibilities and potential. Or, the project might be connected to others that are entirely different, but new possibilities emerge out of their integration. Describe the long-term, lifestyle-based vision that informs this solution and explain how it would inform this transition design solution in the present (backcasting). Lifestyles and everyday life should be central to your description of the solution. We suggest first working to design the entire idea for your solution, then list the main features (vision, spatiotemporal scale, lifestyle changes, needs, how it is local/global etc.) This case study should not be written up until you've designed and mapped the solution! The following sections will enable you to go into greater detail. Leave the headlines as they are and replace the text with your new content. Do not exceed 250 words.

Vision and Lifestyle

Transition designers develop compelling future and lifestyle based narratives that inform the conception, design and implementation of projects in the present. In this section, describe the future vision that informs your proposed solution and describe how the project you critiqued in Part 1 is connected to it. Remember that transition design visions are based in compelling narratives about everyday life and sustainable lifestyles. Describe how the future vision that informs your project is connected to/ will result in more sustainable lifestyles. Describe the 'backcasting' process you went through and how this future-oriented vision, informs the present proposed solution (backcasting from future visions can open up new possibilities that are not always evident from our position in the present). How far in the future is this vision? If it is only a few years out, then try to imagine evolving the vision over the next 10, 20, 50 years and describe how it might in turn change/evolve the solution. Remember that principles of 'connecting', scaling up/down/across and over time and place-based design combined with global awareness are central to transition design solutions and should inform your solution. It is important to acknowledge that your visions will be constantly evolving as the projects in the present opens up new possibilities that will shift the landscape and inform new/revisted visions.

Area of Design Focus
 List the area of new design focus. Draw from the categories in part 1 but remember that TD solutions may combine many areas of design focus.

Levels of Spatial Scale
 Identify the levels of scale at which the proposed project is situated (household, neighborhood, city, region, planet). TD solutions are scalable so this might be different than part 1.

Temporal Scale
 Identify the temporal parameters of the project. How far into the future is it intended to exist? Is it within a fixed timeline? You might develop a timeline with multiple phases on it.

Part 2: Transition Design Proposal 1

Section 1: Why Transition Design?

<p>January</p>	<p>12 M</p>	<p>Why Transition? Fundamental change at every level of our society is needed to address the issues confronting us in the 21st century. Transition Design is a new area of design practice, research and study that advocates design-led societal transition toward more sustainable futures. Transition Design integrates new knowledge and skill sets from many different fields and disciplines to inform new approaches to understanding complex problems and designing for their solution.</p> <p>Discussion: <i>of global problems and the origins of 'transition design' (Great Transition network, Transition Town Movement, Socio-Technical Transition Theory etc.). Discussion about how design needs to change and why it is in a strong position to catalyze/facilitate transition.</i></p>	<ul style="list-style-type: none"> • Orr: <i>Designing Minds</i> 104–111 • Capra: <i>Connecting the Dots</i> 362–366 • Speth: <i>Transition to a Sustainable Society</i> 870–872 • Doordan: <i>Transition</i> 67–70 • Irwin: <i>Wicked Problems & the Relationship Triad</i> 232–257 • Tonkinwise: <i>Transition Design as Post Industrial Interaction Design</i>. https://medium.com/@cameronitu/transition-design-as-postindustrial-interaction-design-6c8668055e8d 4 pp. • Escobar: <i>Transiciones</i> 1–11 	<p>Terry Cameron Gideon</p>
<p>14 W</p>	<p>14 W</p>	<p>Wicked Problems: Climate change, loss of biodiversity, depletion of natural resources and the widening gap between rich and poor are examples of the 'wicked' problems transition designers must address. Wicked problems are multi-faceted/multi-scalar, are comprised of many stakeholders with conflicting agendas and because their 'parts' are interconnected and inter-dependent, there is no single solution. Understanding the anatomy and system dynamics of wicked problems is a key skill of transition designers.</p> <p>Lecture: <i>Example of mapping a wicked problem. Discussion: of the characteristics of wicked problems and how designers approach/solve for them. The dynamics at work in complex systems often seems counterintuitive and calls for different design skill sets.</i></p>	<p>Assignment 1: Working in groups of 3–4, diagram a wicked problem that begins with a local/place-based issue and trace its connections to regional and global levels. Represent the problem and its connections visually and identify the most powerful leverage points for design intervention. Present in the next class then upload to course blog.</p> <ul style="list-style-type: none"> • Video: <i>How Wolves Change Rivers</i> https://www.youtube.com/watch?v=yso5QBhXz-Q • Meadows: <i>Places to Intervene in a System</i> http://www.thesolutionsjournal.com/node/419 12 pp. 	<p>Terry Cameron Gideon</p>
<p>21 W</p>	<p>21 W</p>	<p>Mapping/Visualizing Wicked Problems: Wicked problems can manifest as seemingly mundane/simple problems at a local level (limited context), but in reality are often 'fragments' of wicked problems that exist on multiple levels; the local, regional and global. The ability to see the roots of these complex problems and visually represent their interconnections/interdependencies and therefore know where design intervention is likely to be most powerful is a key skill for the transition designer.</p> <p>Discussion: <i>Groups present their visual maps and recommended points of intervention and group discusses.</i></p>	<ul style="list-style-type: none"> • Linderman: <i>Why the World Around You Isn't As It Appears</i> 1–61 	<p>Terry Cameron Gideon</p>

Section 2: The Transition Design Framework			
26	M	<p>Transition Education/Thinking: Albert Linderman PhD is the author of "Why the World Around You Isn't as it Appears" and CEO of the Sags Corporation, a leader in leadership transition and the elicitation and preservation of expert knowledge. Dr. Linderman will join us for a discussion about the concept of and need for 'transition': Western Education is built on scientific thinking born of the Enlightenment. It says much about the material world and little about what it means to be human. New thinking that will allow for societal transition combines western materialist education with an understanding of the evolving consciousness of human beings. He will present some of the similarities and differences of the two approaches while introducing the thinking stream that allows for the creativity and imagination needed for transition.</p>	<p>Albert Linderman</p> <ul style="list-style-type: none"> • Maxwell: <i>Conceptual Frameworks</i> 39-53 • Kossoff: <i>Why a Framework is Needed/Integration of Knowledge</i> 5-10, 25-27 • Irwin: <i>Transition Design</i> 1-13
28	W	<p>The Transition Design Framework: A framework is used to help formulate and evolve the new ways of thinking, being and designing that Transition Design requires. Frameworks are conceptual maps or models that can guide, inform and shape practice, research and study. The Transition Design framework is open and dynamic and proposes four mutually influencing/co-evolving areas in which future-based narratives, knowledge, skills and action can be developed: 1) vision; 2) theories of change; 3) mindset/posture; 4) new ways of designing.</p> <p>Discussion: <i>frameworks and their value and the importance of the integration/application of transdisciplinary knowledge & ideas. Introduction to the Transition Design framework and the relationship between the four areas.</i></p>	<p>Terry Gideon Cameron</p> <ul style="list-style-type: none"> • Eguren: <i>Theory of Change</i> 1-33 • Candy: <i>TED Talk on Envisioning the Future</i> https://www.youtube.com/watch?v=YagJzu2mdZI 19 MIN. • Brand: <i>Clock of the Long Now</i> 8-9, 28-31, 132-136, 144-147, 160-164 • Margolin: <i>Design, the Future and the Human Spirit</i> 4-15
February	2	<p>Vision & Theories of Change: Transition Design proposes that more radically new ideas and compelling visions of sustainable futures are needed. These long-term visions are conceived through a circular, iterative, error-friendly process that can inform small, discrete design solutions in the present. The concept of change is central to Transition Design. Societal transformation will depend upon our ability to change our ideas about change itself—how it manifests and how it can be initiated and directed. Therefore Transition Design is based upon a deep understanding of the dynamics of change within complex social and natural systems.</p> <p>Discussion: <i>of the history of 'visioning'/utopian thought. Discussion of the Vision and Theories of Change sections of the Transition Design framework and their importance.</i></p>	<p>Terry Gideon Cameron</p> <ul style="list-style-type: none"> • Clarke: <i>Framing the Problem</i> 14-22 • Kuhn: <i>The Structure of Scientific Revolutions</i> 111-135 • McGilchrist: <i>Recapturing the Whole</i> 67-71 • Margolin: <i>Design for a Sustainable World</i> 92-101

4	W	<p>Mindset/Posture & New Ways of Designing: Transition Design argues that living in and through transitional times calls for self-reflection and a new way of 'being' in the world. This change must be based upon a new mindset/worldview and posture (internal) that leads to different ways of interacting with others (external) that informs problem solving/design. Transition Designers see themselves as agents of change, are ambitious in their desire to transform systems and lifestyles, and understand that transition calls for a commitment to work iteratively, at multiple levels of scale over long horizons of time.</p> <p>In class reading: <i>Killing of the Wolf. Discussion: of the Mindset/Posture and New Ways of Designing sections of the Transition Design framework and their importance.</i></p>	<ul style="list-style-type: none"> • Porritt: <i>The World We Made</i> 4-19 • Manzini & Jegou: <i>Sustainable Everyday</i> 246-255 http://www.sustainable-everyday-project.net/blog/library-sustainable-everyday/ • Dunne & Raby: <i>Beyond Radical Design</i> 1-9 • de Sousa Santos: <i>The Sociology of Emergences</i> 207-209 • Wilkinson et al: <i>Plausibility-Based Scenario Practices</i> 699-705 • Borjesson et al: <i>Scenario Types and Techniques</i> 723-738 • Great Transition: <i>Where We are Headed</i> 13-29 & 44-45 	Terry
Section 3: Transition Topics				
9	M	<p>Vision: Scenario Development Designers are uniquely suited to develop compelling visions of sustainable futures because of their experience in areas such as scenario development, future-casting and speculative design. Transition 'visioning' helps transcend the limitations of the present and creates a space in which we can speculate and wonder about how things could be. These future-based visions can serve as measures against which to guide, inspire and evaluate design solutions in the present.</p> <p>Discussion: <i>of various future-oriented scenarios and visioning approaches and their strengths/weaknesses.</i></p>	<ul style="list-style-type: none"> • Brand: <i>The Order of Civilization</i> 34-39 • Orr: <i>Slow Knowledge</i> 35-42 • Deutsche Post: <i>Delivering Tomorrow, Logistics 2050</i>, 12-16, 22-26, skim 38-105 	Terry Cameron
11	W	<p>Vision: Connecting Visions to the Past & Present One of the characteristics of modern society is its rapid pace and the implementation of 'fast knowledge' which often damages or destroys natural and social ecosystems. By contrast, design within pre-industrial societies was informed by 'slow knowledge' which enabled them to live sustainably in place for generations. Such cultures, as Stuart Brand argues, had six distinct temporal layers, each moving at a different pace in a system of checks and balances. Transition designers need to learn from such societies, thinking in long horizons of time to develop visions and solutions aimed at transforming/transitioning societal infrastructures.</p> <p>Brief Lecture: <i>on levels of civilization. Discussion: about the importance of establishing a connection between past and present in order to 'vision' the future. The importance of thinking in/designing for long horizons of time and application of slow knowledge. Overview of the characteristics of healthy, long-lived societies and the categories of infrastructure that will need to transition/transform.</i></p>	<ul style="list-style-type: none"> • Manzini: <i>Small, Open, Local and Connected</i> 216-228 • Manzini: <i>Resilient Systems & Cosmopolitan Localism</i> 1-6 • Orr: <i>Pedagogy and Place</i> 86-94 • Casey: <i>Being Before Place</i> IX-XVII • Aberley: <i>Building a Bioregional Sustainable Alternative</i> 159-160 • Berg & Dasmin: <i>Reinhabiting California</i> 35-38 • Charles: <i>A Bioregional Quiz</i> pg.1 • Sachs: <i>Cosmopolitan Localism</i> 238-239 • Kossoff: <i>Everyday Life</i> 142-157 • Delanty: <i>Communities as an Idea</i> 162-166 	Terry

16	M	<p>Vision: Connecting Planet, Communities & Place Transition Design proposes the re-conception of whole lifestyles and addresses quality of life issues within the context of the everyday. It focuses on the need for Cosmopolitan Localism, a lifestyle that is place-based and regional, yet global in its awareness and exchange of information and technology. Transition Design works to create multi-scalar networks of sustainable communities that foster symbiotic relationships with the ecosystems in which they are situated.</p> <p>Discussion: of <i>Cosmopolitan Localism and the characteristics of design solutions conceived to contribute to local, sustainable lifestyles.</i></p>	<p>• Irwin: <i>Excerpt from MSc thesis</i> 169-185</p> <p>• Irwin: <i>Principles of Living Systems Matrix</i> 1-2</p> <p>• Shirkey: <i>Small World Networks</i> 248-250</p> <p>• Walker & Salt: <i>The System Rules</i> 270-274</p> <p>• Wheatley: <i>A Simpler Way</i> 251-253</p>	Gideon
18	W	<p>Theories of Change: Dynamics of Natural & Social Systems Social organizations, natural ecosystems and even wicked problems are all examples of complex systems that Transition Designers must design for and within. The study of the dynamics within these 'living systems' (such as emergence, resilience, feedback, sensitivity to initial conditions, self organization and the relationship between 'whole' and 'part') has shown that they are often counter intuitive, yet they can be leveraged by Transition Designers to create more impactful solutions.</p> <p>Discussion: of <i>living systems principles and how they can inform design process and solutions.</i></p>	<p>• Grin, Rotmans & Schot: <i>Introduction: Exploration of the Research Topic</i> 11-17</p> <p>• Grin, Rotmans & Schot: <i>Theoretical Backgrounds</i> 29-53</p> <p>• Grin, Rotmans & Schot: <i>Conceptual Framework for Analyzing Transitions</i> 126-139</p> <p>• Snowden: <i>Complex Acts of Knowing</i> 23-28</p> <p>• Snowden: <i>Strategy in the Context of Uncertainty</i> 47-53</p> <p>• Ravetz: <i>Post Normal Science & the Complexity of Transitions Toward Sustainability</i> 275-283</p>	Terry
23	M	<p>Theories of Change: Various Systems Approaches Transition Designers will need to understand where to intervene in complex systems in order to transform them and there are myriad relevant 'change' theories including: 1) Socio-technical Regime Theory looks at the process of change and transformation in socio-technical regimes (patterns of artifacts, institutions, rules and norms) and the role of 'niches' within such systems as an important loci for intervention and change; 2) The Cynefin framework enables a problem to be analyzed from new/ various viewpoints and promotes the assimilation of complex concepts to inform decision making; 3) Post normal science is a method of inquiry for addressing long-term issues when relatively little information is available, facts are uncertain, values are in dispute and urgent decisions/outcomes are critical. These are a few examples of 'theories of change' that can inform Transition Designers in framing and solving problems.</p> <p>Discussion: of <i>the theories of change listed above and how they can inform the way in which designers frame problems within complex social contexts/systems. Additional theories of change to be discussed in subsequent class sessions.</i></p>	<p>• Max-Neef & Smith: <i>World on a Collision Course</i> 73-78</p> <p>• Max-Neef: <i>A Human Scale Economics for the 21st Century</i> 109-118</p> <p>• Irwin: <i>Design for a Sustainable Future</i> 41-60</p> <p>• Illich: <i>Useful Unemployment and its Professional Enemies</i> 3-22</p>	Cameron Jabe

	25	W	<p>Theories of Change: Globalization vs. Needs Satisfaction Design is inextricably connected to the way in which we meet our needs. 'Satisfiers' for needs, however, are often misconceived or inappropriate and motivated by the desire for profit and economic growth rather than human fulfillment. As a result, the consumerist/globalized economy is fragile, inequitable and degrades both communities and the natural environment. Transition Designers must understand the consequences of globalization including the ways in which it undermines the ability of local communities to meet their needs in sustainable, place-based ways.</p> <p>Discussion: <i>Brief lecture on Marx-Neef's theory of needs and its relevance for design followed by discussion.</i></p>	<p>• Kossoff: <i>Holism and the Reconstitution of Everyday Life: A Framework for Transition to a Sustainable Society</i> 122-140</p> <p>• Colin Ward: <i>Spontaneous Order</i> 197-201</p> <p>• Escobar: <i>Other Worlds are Already Possible</i> 254-259</p> <p>• Jones: <i>A Gaian Social Critique</i> 179-189</p>	<p>Gideon Terry Cameron</p>
March	2	M	<p>Theories of Change: The Domains of Everyday Life & Needs Satisfaction Everyday life is the primary context for Transition Design and is more likely to be sustainable when communities are self-organizing and control the satisfaction of their needs. In many traditional societies everyday life was organized at different levels of scale: households, neighborhoods, villages, cities and regions—the 'Domains of Everyday Life'. In modern times control of the satisfaction of needs has been ceded to centralized institutions and this is directly connected to the decline of both the 'Domains' and unsustainability. Transition to sustainable futures will involve the redesign/reinvention of the Domains as self-organizing, participatory, networked and nested forms within which communities regain the control of the satisfaction of their needs.</p> <p>Discussion: <i>Discussion of the Domains of Everyday Life, everyday life as the locus for action and communities and self-organization.</i></p>	<p>• Thøgersen & Crompton: <i>Simple and Painless?</i> 141-161</p> <p>• Kasser: <i>Ecological Challenges, Materialistic Values and Social Change</i> 89-105</p> <p>• Power & Mont: <i>Dispelling the Myths About Consumption Behaviour</i> 1-21</p> <p>• Shove: <i>Beyond the ABC: Climate Change Policy and Theories of Social Change</i> 1273-1283</p>	<p>Gideon</p>
	4	W	<p>Theories of Change: Social Psychology Research Since the Rio Earth Summit, sustainability researchers have tried to establish how best to encourage people to live in more sustainable ways. Social psychology based research, drawn from work on Health Behavior Change, aimed to establish the connection between Information/Awareness, Attitudes/Values and Behaviors/Built Environments. Theories of Change from this work included heuristics such as: stages of change, self-efficacy, small steps lead to big steps, spill-over effect. This work is now widely criticized for over-emphasizing rationality and under-emphasizing structural constraints.</p> <p>Discussion: <i>concerning experiences of 'fostering sustainable behavior' initiatives at schools, universities or by local governments/utilities.</i></p>	<p>• Scott et al: <i>Designing Change by Living Change</i> 279-295</p> <p>• Hangreaves/Longhurst/Seyfang: <i>Understanding Sustainability Innovations</i> 3-20</p> <p>• Strengers: <i>Conceptualising Everyday Practices</i> 3-18</p>	<p>Cameron</p>

9	M	Spring Break: Doctoral Workshops (Transition Symposium March 7)		
11	W	Spring Break: Doctoral Workshops (Transition Symposium March 7)		
16	M	<p>Theories of Change: Social Practice Theory Transition Designers have a deep understanding of the dynamics of change within complex social systems. Social Practice Theory looks at constellations of devices, skills and meanings that form slow-moving habits and habitats. Practice Theory informed design involves immersive ethnographies of everyday life to identify innovation opportunities in existing practices in order to design multiple interventions that can help them coalesce into new conventions.</p> <p>Discussion: <i>discussion of Practice Theory as the basis for understanding how change occurs or can be initiated within social systems.</i></p>	<p>Theories of Change: Social Practice Theory Transition Designers have a deep understanding of the dynamics of change within complex social systems. Social Practice Theory looks at constellations of devices, skills and meanings that form slow-moving habits and habitats. Practice Theory informed design involves immersive ethnographies of everyday life to identify innovation opportunities in existing practices in order to design multiple interventions that can help them coalesce into new conventions.</p> <p>Discussion: <i>discussion of Practice Theory as the basis for understanding how change occurs or can be initiated within social systems.</i></p>	<p>Cameron</p> <ul style="list-style-type: none"> • Hopkins: <i>The Transition Concept</i> 210-212 • McArthur Foundation: <i>The Circular Economy</i> 128-131 • Shirkey: <i>Extracts from Here Comes Everybody</i> 267-273 • Jones: <i>Reality Check</i> 123-127 • Tapscott & Williams: <i>Wikinomics</i> 291-297 • Benkler: <i>Peer Production & Sharing</i> 288-290
18	W	<p>Theories of Change: Alternative Economies The transition to a cosmopolitan localist society will require the development of a new kind of equitable and integrated economic system in which most needs can be satisfied locally, while some remain reliant on global networks. Many grassroots groups have advocated organizing economies along these lines e.g. the Transition Town Movement, the New Economics Foundation, advocates of the Circular Economy, various sharing and P2P networks and 'alternative economics' theorists. In recent years new networking technologies and flexible manufacturing systems have made 'cosmopolitan localist' economies a much stronger possibility and Transition Design can play an important role in helping to facilitate their emergence.</p> <p>Discussion: <i>of the various aspects of cosmopolitan localism and alternative economies and the ways in which they can inform design and design can catalyze them.</i></p>	<p>Theories of Change: Alternative Economies The transition to a cosmopolitan localist society will require the development of a new kind of equitable and integrated economic system in which most needs can be satisfied locally, while some remain reliant on global networks. Many grassroots groups have advocated organizing economies along these lines e.g. the Transition Town Movement, the New Economics Foundation, advocates of the Circular Economy, various sharing and P2P networks and 'alternative economics' theorists. In recent years new networking technologies and flexible manufacturing systems have made 'cosmopolitan localist' economies a much stronger possibility and Transition Design can play an important role in helping to facilitate their emergence.</p> <p>Discussion: <i>of the various aspects of cosmopolitan localism and alternative economies and the ways in which they can inform design and design can catalyze them.</i></p>	<p>Cameron Gideon</p> <ul style="list-style-type: none"> • Drengson: <i>Shifting Paradigms: From Technocrat to Planetary Person</i> 10-17 • Mathews: <i>Post Materialism</i> 27-41
23	M	<p>Mindset & Posture: The Mechanistic Worldview Fritjof Capra's film MindWalk introduces the section on mindset and posture. The film outlines the characteristics of the mechanistic worldview and its implication in many of the problems confronting us today.</p>	<p>Mindset & Posture: The Mechanistic Worldview Fritjof Capra's film MindWalk introduces the section on mindset and posture. The film outlines the characteristics of the mechanistic worldview and its implication in many of the problems confronting us today.</p>	<p>Terry</p> <ul style="list-style-type: none"> • Ritzer: <i>McDonaldization of Society</i> 172-178 • Fleming: <i>Form Follows Worldview</i> 3-7 • Ehrenfeld: <i>The Roots of Unsustainability</i> 15-26 • Mumford: <i>Enter Leviathan on Wheels</i> 160-161 • Scott: <i>Conclusion: Seeing Like a State</i> 167-171 • Shiva: <i>Peace with Diversity</i> 186-189

25	W	<p>Mindset & Posture: Design & the Mechanistic Worldview Since the scientific revolution of the 17th century the dominant, western worldview or ‘way of knowing’ has been characterized by a mechanistic/reductionist approach to understanding, which entails a belief in predictability and control, values quantity over quality and views nature only as a resource for human consumption. This worldview influences every aspect of our society, economy and culture and values and lies behind many of the wicked problems that we face today. Transition Designers should understand how design has been adversely affected by the mechanistic worldview, and how it implicates design in all of the above problems.</p> <p>Lecture: <i>brief lecture on the characteristics of the mechanistic worldview and sociologist George Ritzer’s concept of ‘The McDonaldization of Society’.</i></p> <p>Discussion: <i>of how this mindset has affected design.</i></p>	<ul style="list-style-type: none"> • Capra: <i>Deep Ecology—A New Paradigm</i> 89–94 • Goerner: <i>After the Clockwork Universe + Matrix</i> 111–118 • Orr: <i>The Design of Culture and the Culture of Design</i> 3–32 • Morin & Kern: <i>Reform in Thinking</i> 10–15 • Goerner: <i>Contrast in Scientific & Cultural Visions</i> 444–451 	Terry Gideon Cameron
30	M	<p>Mindset & Posture: Ecological/Holistic Worldview A new ecological/holistic worldview has begun to inform the theory and practice of many fields and disciplines. This new paradigm emphasizes relationship, participation and self-organization, and calls for a mindset/posture of openness, speculation, mindfulness and a willingness to collaborate. Together, these represent a new skill and value set—a new way of ‘being’ in the world—that the transition designer will need to embrace.</p> <p>Discussion: <i>of the characteristics of the new worldview and its implications for design, process and solutions.</i></p>	<ul style="list-style-type: none"> • Issues: <i>Dialogue and the Art of Thinking Together</i> 2–11 • Madson: <i>Improv Wisdom</i> 103–113 • Jenkins & Jenkins: <i>The 9 Disciplines of a Facilitator</i> 194–209 	Terry
April 1	W	<p>Mindset & Posture: Working With/In Systems Within an ecological paradigm, designers find themselves as part of an ecosystem. In this context they cannot impose their will on the system. Learning to work with the system’s inherent intelligence is key to creating any sustainable shift. Through the use of improvisation exercises and discussions, this class will focus on four key skills a transition designer needs to cultivate. They are (a) being present (b) being open and accepting (c) working with emergence and (d) reflecting and learning. Wear comfortable clothes/flat shoes.</p>	<ul style="list-style-type: none"> • Irwin: <i>The Dynamical View of Form</i> 1–9 • Waddington: <i>The Character of Biological Form</i> 106–111 • Lane: <i>Timeless Beauty</i> 15–20, 119–136 • Hoffmann: <i>A Question of Method</i> 125–135 	Hannah du Plessis Marc Rettig

6	M	<p>Mindset & Posture: Understanding 'Wholeness' Transition Designers need to learn to think, see, design and solve problems holistically (right-fit/contextually). To do this, they must be able to understand the relationships between parts and the wholes to which these belong, and the dynamics of such wholes. Goethe's phenomenological approach to understanding the 'wholeness' of natural organisms is a key methodology in this process, and gives important insights into the meaning of 'beauty' and 'form'.</p> <p>Discussion: <i>of the importance of seeing/understanding the relationship between parts and wholes in order to frame design problems more appropriately and responsibly.</i></p>	<ul style="list-style-type: none"> • Brown: <i>Design from Edo Japan</i> 19-42, 68-81 • Papenek: <i>Best Designers in the World</i> 223-234 • Scott: <i>Metis</i> 41-48 • Alexander: <i>The Unselfconscious and The Selfconscious Process</i> 46-70 	Terry Gideon
8	W	<p>New Ways of Designing: Indigenous Design Indigenous cultures lived and designed sustainably in place for generations. Their designs typically integrated functionality and beauty and were grounded in what James C. Scott describes as <i>metis</i>, a "wide array of practical skills and acquired intelligence necessary in a constantly changing environment and situations". Transition Designers will need to rediscover what it means to design in place, and develop a new form of 'metis' through deepening their knowledge and connection to their local environment with a regional and global exchange of technology and knowledge.</p> <p>Discussion: <i>of how indigenous design approaches (and worldview) can inform transition design</i></p>	<ul style="list-style-type: none"> • Orr: <i>The Origins of Ecological Design</i> 186-197 • Shedroff: <i>What Are the Approaches to Sustainability?</i> 45-101 • Berry: <i>Solving for Pattern</i> 31-40 • Fuad-Luke: <i>Co-Design</i> 19-47 • Design Council: <i>Design & Sustainability</i> 3-18 • Manzini: <i>Sustainable Everyday</i> 13-19 • WinterHouse: <i>Social Innovation Matrix</i> http://www.socialdesignpathways.com/ 1-15 • Irwin: <i>Transition Design Continuum diagram</i> 1PG 	Terry
13	M	<p>New Ways of Designing: Survey In the last few decades many sustainable design methodologies/processes have emerged (eg. biomimicry, permaculture, cradle to cradle, LEED, lifecycle analysis etc.). Transition Designers access/use relevant aspects of these approaches to develop transition solutions at multiple levels of scale within short, mid-term and long horizons of time. From this inclusive perspective, many design processes can contribute to a Transition Design solution, particularly service design and design for social innovation.</p> <p>Lecture: <i>matrix of design approaches and their effectiveness based upon Donella Meadows leverage points. Discussion: of various design approaches, the Winterhouse social design matrix and the Transition Design continuum diagram.</i></p>	<p>Assignment 2: Working individually, develop a list of skill sets for the Transition Designer. Be prepared for a brainstorm/clustering exercise in the next class. Upload your list to the blog afterward.</p> <ul style="list-style-type: none"> • Manzini: <i>Intro: Sustainable Everyday</i> 13-19 • Lommec: <i>TED Talk on Open Structures</i> https://www.youtube.com/watch?v=5FXTIOrtIRI 	Terry Gideon Cameron

15	W	<p>New Ways of Designing: Characteristic of Transition Design Although Transition Design is complementary to/borrows from a myriad of other design approaches, it is distinct in its emphasis on: 1) uses living systems theory as an approach to understanding/addressing wicked problems; 2) solutions that protect and restore both social and natural ecosystems; 3) everyday life/lifestyles as the most fundamental context for design; 4) place-based, globally networked solutions; 5) solutions that are designed for varying horizons of time and multiple levels of scale; 6) linking existing solutions so that that they become steps in a larger transition vision;</p> <p>7) identifying emergent/grassroots solutions in order to amplify them; 8) basing solutions upon genuine 'needs' vs. wants/desires; 9) the designer's own mindset/posture is seen as an essential component of the design process; 10) transition design calls for the reintegration and re-contextualization of knowledge.</p> <p>Discussion: <i>of the relationship of Transition Design to other approaches and its complementarity and differences. Class brainstorming session to identify, cluster and discuss the skill sets of Transition Designers.</i></p>	<ul style="list-style-type: none"> • DESIS website: http://www.desis-network.org/ • Review website and become familiar with the case studies • Design Council Case Studies: http://www.designcouncil.org.uk/knowledge-resources/search/bundle/case-study. Review and become familiar with format • Readings on Case Studies TBD 	Terry Gideon Cameron
20	M	<p>New Ways of Designing: Developing Case Studies through Critique</p> <p>An important skill set of Transition Designers is to identify and critique existing solutions within the context of Transition Design and reframe them as steps within larger 'transitions'. Building a database of projects in order to identify the characteristics of transition designs/initiatives will be an important in creating a Transition Design pedagogy and process.</p> <p>Lecture: <i>instructors will give examples of how existing projects/designs can be recast as transition initiatives or steps within longer transitions.</i></p>	<p>Assignment 3: Working in groups of 4-5 people, find 2 examples of solutions that could be considered 'Transition Design Solutions' or steps in a larger transition. You will be asked to analyze/critique these examples and discuss how they might have been differently conceived and implemented within the context of Transition Design and how they might evolve within a TD context.</p>	Terry Cameron Gideon
Section 4: Transition Solutions				
22	W	<p>Group Presentations: Case Studies Groups 1 & 2 present their case studies as the basis for a group discussion.</p>	<p>Upload A assignments: Remaining groups continue work on their presentations. Upload recent presentations</p>	Terry Cameron Gideon
27	M	<p>Group Presentations: Case Studies Groups 3 & 4 present their case studies as the basis for a group discussion.</p>	<p>Upload A assignments: Remaining groups continue work on their presentations. Upload recent presentations</p>	Terry Cameron Gideon

	29	W	Group Presentations: Case Studies Groups 4 & 5 present their case studies as the basis for a group discussion.	Upload Assignments: Remaining Groups upload their presentations	Terry Cameron Gideon
May	4	M	Final Discussion		

For more information about Transition Design

In fall of 2015 we will launch an institution-neutral Transition Design website that will enable the exchange of information and provide a space for ongoing dialogue and debate.

If you would like to obtain more information on Transition Design or be notified when the website launches, please contact us at: *transitiondesign@andrew.cmu.edu*.

www.transitiondesign.net