

---

**Abstract:** 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, forced migration, depletion of natural resources, and the widening gap between the rich and the poor are just a few of the “wicked problems” that require new approaches to problem solving. Transition Design or “design for transition” brings together two powerful memes: (a) the idea that entire societies will need to transition toward sustainable futures, and (b) the realization that this will involve systems-level change informed by a deep understanding of the anatomy and dynamics of complex systems. This emerging field of “transition studies” now encompasses a community of international researchers from the areas of social and management sciences, engineering, activism, and related disciplines. However, contributions from the field of design and its related sub-disciplines are still relatively rare, and Transition Design seeks to address this gap. This is surprising given the degree to which design permeates socio-technical systems and is implicated in most of the wicked problems previously mentioned. This ubiquity, along with the evolution of design in recent decades to become a highly integrative discipline, positions design and designers as potentially powerful leverage points for positive systems-level change.

**Key words:** Transition Design - sustainable design - socio-technical transitions - transition studies, - transition towns - design theory.

[Abstracts in spanish and portuguese at pages 25-26]

---

<sup>(\*)</sup> Terry Irwin is a Professor and Head of The School of Design at Carnegie Mellon University. She has been a design practitioner for more than 40 years and was a founding partner of the international design firm MetaDesign. Her research focus is in Transition Design and how principles from living systems and Goethe’s approach to understanding natural phenomena can inform more responsible and sustainable design approaches. tirwin@andrew.cmu.edu

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, forced migration, depletion of natural resources, and the widening gap between the rich and the poor are just a few of the “wicked problems” that require new approaches to problem solving. Transition Design

or “design for transition” brings together two powerful memes: (a) the idea that entire societies will need to transition toward sustainable futures, and (b) the realization that this will involve systems-level change informed by a deep understanding of the anatomy and dynamics of complex systems.

Our societies are *always* in a constant state of transition. However, these transitions are largely unintentional and full of “drift,” and we only understand their implications in hindsight –we call this history. The question that Transition Design and many other transition-related movements ask is as follows: “Can we intentionally direct societal transitions toward more sustainable futures?” Groups, such as the Great Transition Initiative, The Socio-Technical Research Network, The Transition Town Network, Commons Transitions, and Just Transitions, and systems-related initiatives, such as the Forum for the Future’s School of System Change and The Next System Project, are all contributing to the growing body of knowledge about societal transitions and systems-level change. At the same time, many fields and disciplines, such as foresight studies and futuring, policy design, stakeholder conflict studies, and methodologies, such as social practice theory and design for behavior change, are deepening our understanding of wicked problems, socio-technical system “entrenchment,” and the process of envisioning long-term futures that societies want to transition toward.

This emerging field of “transition studies” now encompasses a community of international researchers from the areas of social and management sciences, engineering, activism, and related disciplines. However, contributions from the field of design and its related sub-disciplines are still relatively rare, and Transition Design seeks to address this gap. This is surprising given the degree to which design permeates socio-technical systems and is implicated in most of the wicked problems previously mentioned. This ubiquity, along with the evolution of design in recent decades to become a highly integrative discipline, positions design and designers as potentially powerful leverage points for positive systems-level change.

## Origins of Transition Design

The term “Transition Design” was first used in 2005 by activist Louise Rooney as the name of a not-for profit company connected to the first transition town initiative in Kinsale, Ireland (Hopkins, 2006; Rooney, 2006; Southern Star Staff, 2006). In 2008, two papers delivered by Boehnert and Kossoff at the “Changing the Change” conference in Turin, Italy connected the concept of societal transitions to the field of design: Transition town activist and designer Joanna Boehnert (2008) asked “What designers can learn from the Transition Movement,” whereas social ecologist and design researcher Gideon Kossoff proposed a holistic framework to aid in the designed transition toward a more sustainable society (Kossoff, 2008). In 2009, Boehnert launched the “Design Transition” website to introduce ecoliteracy into design education.

Between 2010 and 2012, several PhDs linked transition-related initiatives and theories to the field of design. For instance, Idil Gaziulusoy (2010), Peter Joore (2010), and Fabrizio Ceschin (2012) argued for the integration of systems design with socio-technical transition theory (Ceschin, 2012; Gaziulusoy, 2010; Joore, 2010). In 2011, the book *Grow Small*,

*Think Beautiful*, edited by Harding, contained two chapters (by Irwin and Kossoff, respectively) that proposed Transition Design as a new area of design focus: Irwin proposed Transition Design as an approach to address complex wicked problems, whereas Kossoff synopsized his 2011 doctoral thesis in a chapter calling for the integration of radical social theory and contemporary holism (Kossoff, 2011a; Kossoff, 2011b).

In 2013, Irwin, Tonkinwise, and Kossoff developed the Transition Design framework and proposed it as an area of design focus within the newly designed curricula at Carnegie Mellon's School of Design. This project became the basis for several subsequent papers, two of which were presented at the Socio-technical Transitions Network conference in 2015 (Irwin, 2015; Irwin, Tonkinwise, & Kossoff, 2015; Kossoff, Tonkinwise, & Irwin, 2015).

Three Transition Design symposia have been held—in Pittsburgh in 2015, in Dartington, UK in 2016, and in Barcelona, Spain in 2017. The proceedings of the 2015 symposium were published as a Design Philosophy Papers monograph, which included papers by Cameron Tonkinwise, Ezio Manzini, Arturo Escobar, and Damian White, among others (Kossoff, Irwin, & Willis, 2015). The proceedings from the 2016 symposium are forthcoming in spring of 2018 and will include papers from people in the fields of activism, economics, theatre, and psychology, such as Andrew Simms, Tony Greenham, Robin Murray and Julie Richardson, Lucy Neal, and Tom Crompton.

## **Objectives of Transition Design**

As an emerging area of research, study, and practice, Transition Design has two primary objectives: (a) to develop new, design-led tools and approaches that can aid transdisciplinary teams working on transition-related projects and initiatives; and (b) to educate new generations of designers who will be qualified to collaborate on these teams. It acknowledges that we are living in “transitional times,” and takes the need for societal transitions to more sustainable futures as a central premise. It argues that design has a key role to play in these transitions and that it applies an understanding of the interconnectedness of social, economic, political, and natural systems to address problems at all levels of spatio-temporal scales in ways that improve the quality of life. Transition Design advocates the reconception of entire lifestyles, with the aim of making them more place based, convivial, and participatory, as well as harmonizing them with the natural environment.

The transition to sustainable futures calls for new ways of designing that are based on a deep understanding of how to design for change and transition within complex systems. This knowledge and the new skillsets it will inform must be integrated from areas outside design, such as science, philosophy, psychology, social science, anthropology, and the humanities. This will therefore challenge existing design and design education paradigms.

## **Contributions in this Volume**

The Transition Design framework is a fluid, evolving body of knowledge and practices that are useful in seeding and catalyzing transitions toward more sustainable futures. The

framework outlines four mutually reinforcing and co-evolving areas of knowledge, action, and self-reflection: (a) vision, (b) theories of change, (c) mindset and posture, and (d) new ways of designing. These four categories provide an organizing structure for the 13 articles included in the volume (See Figure 1). The 19 contributing authors are practitioners, researchers, and educators from six countries representing the disciplines of design, social ecology, film, journalism, philosophy, architecture, and foresight studies, and they offer important perspectives on the topic of designing for transition and systems-level change.

**Vision.** Kossoff, Lockton, and Candy all discuss the important role that long-term visioning plays in societal transitions. Lockton and Candy explore the role of visioning for transitions and, drawing from a variety of fields, offer a “visioning vocabulary” of elements. Kossoff looks specifically at cosmopolitan localism as a transition strategy that calls for the reconception of entire lifestyles to be more place based and local, yet cosmopolitan in their global awareness and exchange of information and technology.

**Theories of change.** Gaziulusoy provides an important survey of the landscape, discusses the emergence of Transition Design/design for transition and its origins, and reflects upon current practices, whereas Tonkinwise contrasts Transition Design with previous attempts to position design as a catalyst for systems-level change. Mulder, Jaskiewicz, and Morelli explore recent paradigm shifts that have the potential to seed change within societal systems and look specifically at how open data can become a new type of “commons” and how hackathons can support digital citizenship. They further reflect upon the role of Transition Design in building social capacity and establishing a new social infrastructure.

**Mindset and posture.** Both Scupelli and Boehnert contribute articles that address a crucial facet of Transition Design –the need for practitioners and researchers to examine their own value sets and postures of collaboration. Scupelli discusses how these important principles must be taught in the classroom (providing strong connections to Rohrbach and Steenson’s articles) with course content focusing on topics related to *ethos* and the way in which it contributes to systems-level change. Boehnert argues for ecological literacy as the basis for a Transition Design approach and discusses the “limitations of philosophical traditions that discount, dismiss, or even deny the importance of life-sustaining processes that enable human existence”. Her paper supports the Transition Design premise that new ways of designing must be underpinned by a more holistic and ecological worldview.

**New ways of designing.** In this section, Irwin, Costa Gomez, Hamilton, and Dahle all look at how the emerging practice of Transition Design engages with projects in the field. Irwin’s article reports on a project in Ojai, California to frame water shortage in the community as a Transition Design problem. She discusses the emerging Transition Design approach by resisting the idea of a prescriptive process and arguing in favor of a framework or “palette of practices” that can be configured in situation- and place-specific ways. Costa analyzes a series of projects based in Barcelona and the surrounding region of Catalonia through the lens of the Transition Design framework and provides an important alternative cultural perspective. Building on Irwin’s essay, Hamilton provides another perspective on the Ojai,

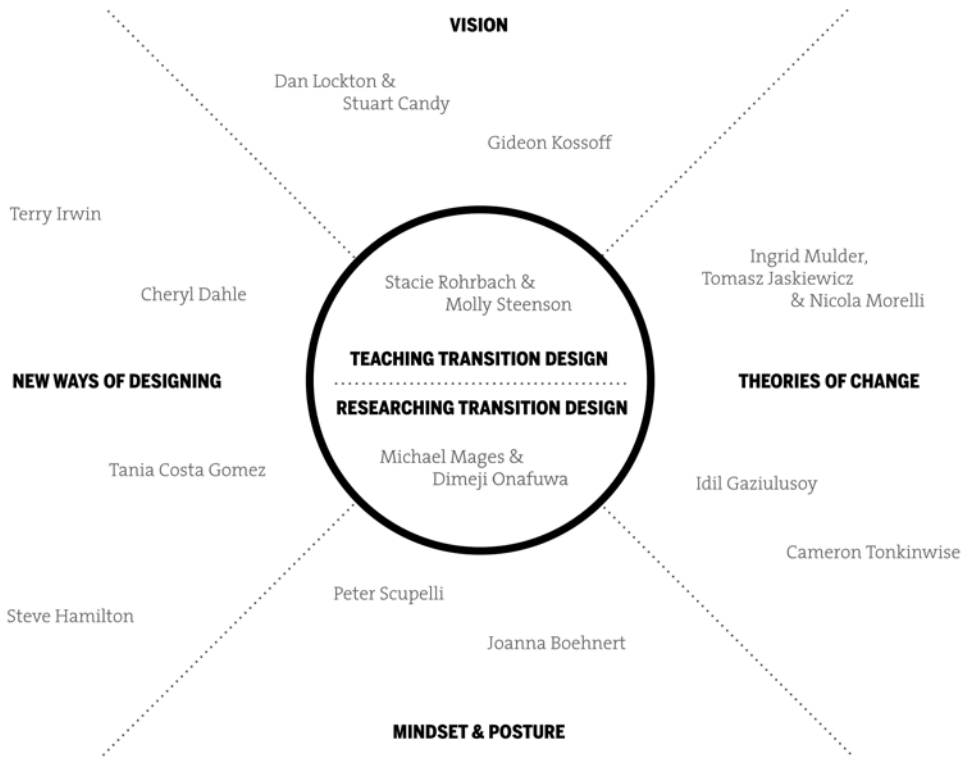


Figure 1.

California project by focusing on the social dynamics inherent within a wicked problem, such as water shortage in a community. Dahle concludes the section with a report on her 10-year process of applying Transition Design principles to the wicked problem of global overfishing. She specifically focuses on the “messiness” of stakeholder collaboration and provides insights into cultivating what she refers to as system leadership.

**Teaching and researching Transition Design.** Rohrbach and Steenson argue that teaching Transition Design at the higher education level is integral to its development and report on coursework at both the undergraduate and master’s levels. Finally, Mages and Onafuwa discuss the challenges of conducting research whose objective is social, cultural, and psychological change. Their paper discusses several approaches undertaken within the doctoral program at Carnegie Mellon’s School of Design and their inherent challenges.

Transition Design is still a nascent area of design focus, but international interest among educators, researchers, and practitioners is growing. Carnegie Mellon University, USA; University of Palermo, Argentina; Royal Melbourne Institute of Technology and University of New South Wales, Australia; and Schumacher College/Plymouth University, UK, have all integrated Transition Design into their research strands and/or coursework. Workshops on Transition Design have been held at Schumacher College, UK; the University of the Balearic Islands, Spain; Monterrey Technical University, Mexico; and The Bauhaus, Germany. In 2016, the University of Trondheim, Norway, created a professorship in Transition Design. As noted earlier, three symposia have been held, and a fourth one is planned at Dartington, UK in June 2018.

In order for Transition Design/design for transition to fulfill its objective, additional voices from diverse cultural perspectives must be integrated into the conversation and ongoing research. This edition of Cuadernos represents a collaboration between Carnegie Mellon University, Pittsburgh, USA, and the University of Palermo, Buenos Aires, Argentina. I want to thank my co-editor, Daniela Di Bella and the University of Palermo for giving me and my fellow contributors the opportunity to participate in this project. This volume on Transition Design is presented as a progress report and an invitation for feedback, critique, and collaboration.

## References

- Boenhert, J. (2008). *Design and transition: What designers can learn from the transition movement*. Paper presented at the Changing the Change: Designs, Visions, Proposals and Tools Conference, Torino, Italy.
- Ceschin, F. (2012). *The introduction and scaling up of sustainable Product-Service Systems: A new role for strategic design for sustainability* (Doctoral dissertation). Retrieved from <https://www.politesi.polimi.it/handle/10589/56785>
- Design Transition: Ecological Literacy in Design Education. (n.d.) *Ecological Literacy in Design Education by 2012*. Retrieved from <http://teach-in.ning.com/>
- Gaziulusoy, A. I. (2010). *System innovation for sustainability: A scenario method and a workshop process for product development teams* (Doctoral dissertation). Retrieved from <http://aut.researchgateway.ac.nz/handle/10292/3699?show=full>
- Gaziulusoy, A. I. (2018). Postcards from “the edge”: Towards futures of designing for sustainability transitions. *Cuadernos Journal*. Publication in preparation.
- Hopkins, R. (2006, 28 April). Willits comes to Kinsale! [Web log post]. Retrieved from <https://www.transitionculture.org/2006/04/28/willits-comes-to-kinsale/>
- Irwin, T. (2011). Wicked problems and the relationship triad. In S. Harding (Ed.), *Grow small, think beautiful: Ideas for a sustainable world from Schumacher College* (pp. 232-259). Edinburgh: Floris.
- Irwin, T., Tonkinwise, C., & Kossoff, G. (2015). *Transition design: An educational framework for advancing the study and design of sustainable transitions*. Paper presented at the Sustainability Transitions Research Network Conference, Brighton, United Kingdom.

- Irwin, T. (2015). Transition design: A proposal for a new area of design practice, study and research. *Design and Culture Journal*, 7(2), 229–246. DOI:10.1080/17547075.2015.1051829
- Joore, P. (2010). *New to improve: The mutual Influence between new products and societal change processes* (Doctoral dissertation). Retrieved from [https://www.researchgate.net/publication/308781532\\_New\\_to\\_Improve\\_-\\_The\\_Mutual\\_Influence\\_between\\_New\\_Products\\_and\\_Societal\\_Change\\_Processes](https://www.researchgate.net/publication/308781532_New_to_Improve_-_The_Mutual_Influence_between_New_Products_and_Societal_Change_Processes)
- Kossoff, G. (2008). *The reconstitution of the domains of everyday life: A tool for assessing the health of existing conditions and a framework for designing sustainable solutions based on principles from the natural world*. Paper presented at the Changing the Change: Designs, Visions, Proposals and Tools Conference, Torino, Italy.
- Kossoff, G. (2011a). Holism and the reconstitution of everyday life: A framework for transition to a sustainable society. In S. Harding (Ed.), *Grow small, think beautiful: Ideas for a sustainable world from Schumacher College* (pp. 122-142). Floris: Edinburgh.
- Kossoff, G. (2011b). *Holism and the reconstitution of everyday life: A framework for transition to a sustainable society* (Doctoral dissertation). Retrieved from <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.699805>
- Kossoff, G., Irwin, T., & Tonkinwise, C. (2015). *Transition design: The importance of lifestyles and everyday life as a leverage point for sustainability transitions*. Paper presented at the Sustainability Transitions Research Network Conference, Brighton, United Kingdom.
- Kossoff, G., Irwin, T., & Willis, A. (Eds.) (2015). Transition design [special issue]. *Design Philosophy Papers*, 13(1). <http://dx.doi.org/10.1080/17547075.2015.1051829>
- Kossoff, G. (Ed.). (2018). Transition design: Widening the conversation. *Proceedings of the 2016 Dartington Transition Design Symposium*. Dartington: United Kingdom (forthcoming).
- Southern Star Staff. (2006, January 17). *Kinsale Council Supports Transition Town Venture*. The Southern Star. Retrieved from <http://www.resilience.org/stories/2006-01-17/kinsale-council-supports-transition-town-venture/>
- Rooney, L. (2006). *Kinsale transition town: Projects for 2006*. Retrieved from <https://www.transitionculture.org/wp-content/uploads/PresentationtoTC6thFeb.doc>

---

**Resumen:** Se necesita un cambio fundamental en todos los niveles de nuestra sociedad para abordar los problemas que enfrentamos en el siglo XXI. El cambio climático, la pérdida de biodiversidad, la migración forzada, el agotamiento de los recursos naturales y la creciente brecha entre los ricos y los pobres son solo algunos de los “problemas perversos” que requieren nuevos enfoques para la resolución de problemas. El diseño de transición o “diseño para la transición” reúne dos memes poderosos: (a) la idea de que todas las sociedades necesitarán una transición hacia un futuro sostenible, y (b) la comprensión de que esto implicará un cambio a nivel del sistema informado por un profundo conocimiento de la anatomía y dinámica de los sistemas complejos.

Este campo emergente de “estudios de transición” ahora abarca una comunidad de investigadores internacionales de las áreas de ciencias sociales y administrativas, ingeniería, activismo y disciplinas relacionadas. Sin embargo, las contribuciones del campo del

diseño y sus subdisciplinas relacionadas todavía son relativamente raras, y el diseño de transición busca abordar esta brecha. Esto es sorprendente dado el grado en que el diseño impregna los sistemas socio-técnicos y está implicado en la mayoría de los problemas perversos mencionados anteriormente. Esta ubicuidad, junto con la evolución del diseño en las últimas décadas para convertirse en una disciplina altamente integradora, posiciona al diseño y los diseñadores como puntos de apalancamiento potencialmente potentes para un cambio positivo en el nivel de los sistemas.

**Palabras clave:** Diseño para la transición - diseño sostenible - transiciones socio-técnicas - estudios sobre la transición - ciudades en transición - teoría del diseño.

**Resumo:** É necessária uma mudança em todos os níveis de nossa sociedade para enfrentar os problemas do século XXI. A mudança climática, a perda de biodiversidade, a migração forçada, o esgotamento dos recursos naturais e o crescente fosso entre ricos e pobres são só alguns problemas perversos que requerem novos enfoques para a resolução de problemas. O design de transição ou design para a transição reúne dois conceitos poderosos: a) a ideia de que todas as sociedades necessitarão uma transição até um futuro sustentável, e b) a compreensão de que isto implicará uma mudança ao nível do sistema informado por um profundo conhecimento da anatomia e dinâmica dos sistemas complexos.

Este campo emergente de estudos de transição abarca agora uma comunidade de pesquisadores internacionais das áreas de ciências sociais e administrativas, engenharia, ativismo e disciplinas relacionadas. Entretanto, as contribuições do campo do design e suas subdisciplinas relacionadas são ainda relativamente excepcionais, e o design de transição procura abordar este fosso. Isto é surpreendente pelo grau em que o design impregna os sistemas sócio técnicos e está presente na maioria dos problemas perversos mencionados. Esta ubiquidade, junto com a evolução do design nas últimas décadas para se converter numa disciplina altamente integradora, posiciona ao design e aos designers como pontos de alavancagem potencialmente potentes para uma mudança positiva no nível dos sistemas.

**Palavras chave:** design para a transição - design sustentável - transições sócio técnicas - estudos sobre a transição - cidades em transição - teoria do design.

---