

INTRODUCTION

In conversation with Terry Irwin. Research through design and the Transition Design perspective.

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Terry Irwin, director of the School of Design at Carnegie Mellon University, delivered the inaugural and inspirational conference of symposium Southern Perspectives on Transition Design, held on June 8th and 9th, 2018 at EINA, University of Design and Art attached to the Autonomous University of Barcelona.

At the conference, Irwin participated, together with CMU professors Guideon Kossoff and Cameron Tonkinwise, in the presentations and debates carried out by Francesc Casadella ([Som Energia](#), green energy consumption cooperative), Roger Pueyo ([Guifi.net](#), commons telecommunications network), Helena Trias ([Sostre Cívic](#), cooperative of houses under transfer of use arrangements), Ramón Parramon ([Idensitat](#), artistic practices in transition) and Lluís Casado ([Reforma Horària](#), citizens' initiative for time reform).

Terry Irwin, Guideon Kossoff and Cameron Tonkinwise are currently working on an area of study, practice and research called Transition Design, aimed at creating alternative lifestyles which are sustainable and beneficial for the economy, society and the planet.

The interest aroused by their work was one of the incentives which paved the way to the creation of research group [Design for social innovation](#). Art and design in / for transition at EINA, Barcelona. Symposium Southern Perspectives on Transition Design was an activity of the research group, as well as the present volume of the Journal Design Processes in which we publish the articles produced from the academic sessions that took place at the symposium.

One of the concerns of the EINA research group is, precisely, the relationship of academic activities with the development of design and the real incidence of research in the transformation of citizen contexts. That is why we want to focus this interview with Terry Irwin on those aspects of Transition Design which influence the views we have of

research through design, of the idea of knowledge linked to design and of the eventual function-impact of applied research.

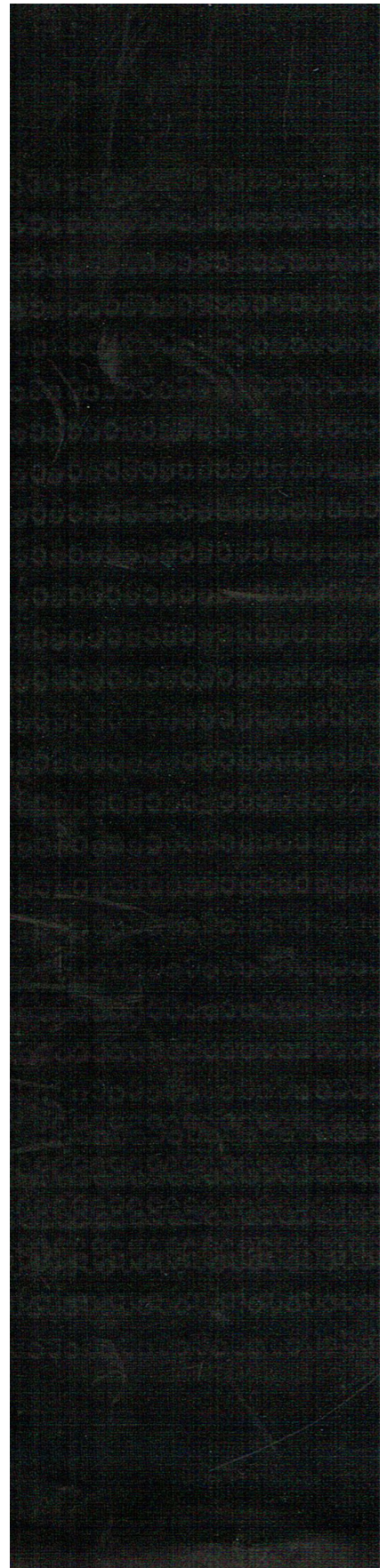
For those readers who want to have a global overview of Transition Design which can help them contextualize the contents of the interview, we recommend Terry Irwin's video [Transition Design class: What is It and Why is It Important?](#), recorded on February 12, 2018 at Carnegie Mellon University, Pennsylvania.

Tània Costa. Gideon, Cameron and you always include research as part of the definition of Transition design: "(...) a new area of design study, practice and research that argues for societal transition toward more sustainable futures". I would like to start by focusing on what you understand by research within the context of Transition Design. According to the distinction proposed in the article [Research in Art and Design](#) by Christopher Frayling (1993), there are three approaches to design and research, namely: research for design (research within the design project itself), research into design (that which is carried out by other disciplines that use design as an object of study) or research through design (the practice of design used to generate knowledge). Terry, do you think Transition Design concurs with any of these approaches? If not, which other approach to research would Transition Design be identified with?

Terry Irwin. *This is a really good question, Tania and I would say that to an extent, it involves research in all three of these areas but perhaps the second and third in particular. We are trying to start an international conversation about the need for a new area of design study/practice/research for two reasons. 1) we believe that design and designers have a key role to play in addressing the complex problems confronting us in the 21st century and in seeding and catalysing societal transitions. We believe that the tools and approaches designers use can be valuable to transdisciplinary teams of people undertaking this work, so we aspire to make these approaches more useful and practical. 2) we aspire to educate new generations of designers who are qualified to join these transdisciplinary teams and take up the work to ignite systems-level change. This is an important role for design education.*

In order to develop new design approaches and prepare students for this kind of work, we have to conduct research into design in order to understand what is valuable, what is missing and what needs to evolve. We need to ask, how are designers working now and in what ways do their approaches fall short in terms of systems-level change? I would see these questions and their findings as research into design.

In order to develop new approaches, tools and knowledge, we need to conduct research through design. This will likely take the form of Tran-



sition Design projects and initiatives in which we are testing or developing these tools and approaches by working in transdisciplinary teams and the stakeholders who are involved in the transition and/or affected by the wicked problem(s) that must be resolved in order for transitions to take place. In this way, the theory behind Transition Design is tested through applied research and the practice that is native to the discipline. The difference is that instead of designers applying these tools and techniques as ‘experts’, they will be applied within transdisciplinary teams in a co-design process with stakeholders. We often say that Transition Design aspires to make the tools and approaches used by designers available to people working to ignite systems-level change. It is only through practical, place-based application that we can develop and evolve these approaches. I see this as research through design.

Finally, we conduct the previous two types of research in order to develop a new area of design focus, practice and research—Transition Design. We conduct research into design and through design for design... and the planet.

T.C. When you suggest that the work of the designer for the transition “must be based on new knowledge and skill sets”, it gives the impression that you integrate knowledge and skills within the same category of thought-action, although semantically it might seem that one refers to theory and the other to practice. In the field of art and aesthetics, enactivism is increasingly used to explain the forms of knowledge which make up knowledge-making, thought-to-action and cognitive-to-body, from the proposals developed by of Varela, Thompson and Rosch (1991) in their book *The Embodied Mind*. Do you think that enactivism can be an approach related to the manners of understanding ways of knowing from Transition Design? If not, what thought framework do you see as adequate to the idea of ways of knowing propitiated by Transition Design?

T.I. *I am not an expert in the concept/theory of enactivism, but insofar as it relates to the cognition which arises through interactions with our environment, I would say that is correct. But, it seems to me that this would apply to almost any discipline or area of new undertaking in which mastery or proficiency is the goal. Michael Polyani’s concept of tacit knowledge or Richard Sennett’s references to knowing in his book *The Craftsman* are also relevant. This speaks to the necessity of research through design—we only know if the theory works, if we go out and actually test it through tangible action.*

The work we are currently doing in Ojai, California, which frames their drought as a Transition Design project whose long-term goal is to transition the community to climate resiliency is an example of this. The Transition Design framework was developed as a way of bringing together knowledge, tools and concepts we felt were relevant to seeding

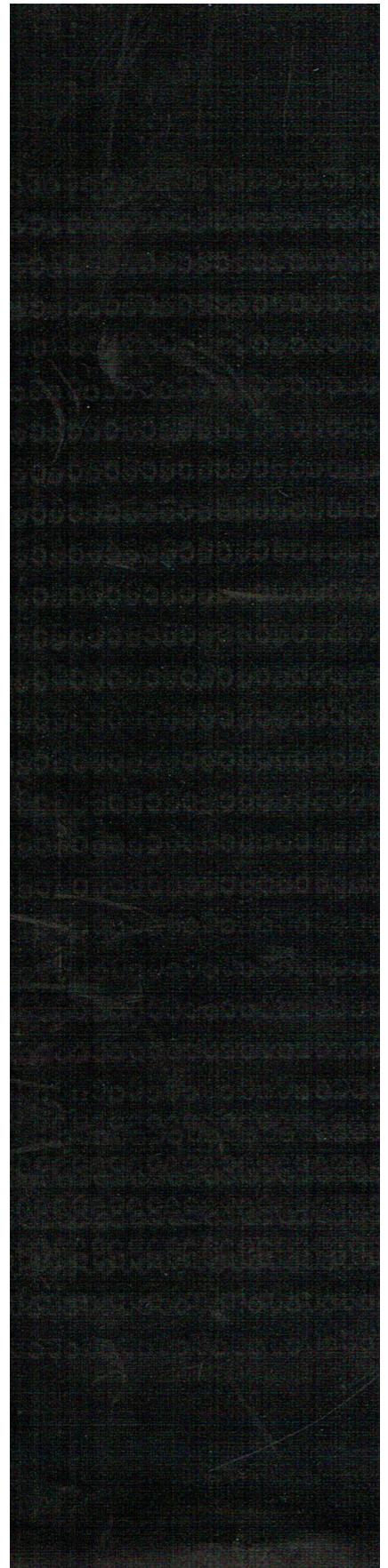
and catalysing systems-level change and addressing systems problems. Through practical work with stakeholders we are developing new tools and approaches that would not have arisen solely out of theory. We can only refine these through sustained interaction over time, in the community. So new ways of knowing or this ‘cognition’ is indeed arising through these interactions in the environment. But I want to underscore that Transition Design does differ from many other approaches in its intention to work over long horizons of time—dozens of years, decades or even centuries. It took these problems a long time to get ‘wicked’, and it will take them a long time to be resolved.

T.C. From my point of view, artistic research and research through design are not the same, but have more traits in common than it might seem at first glance. Both the Frayling perspective and enactivism, previously mentioned, comprise modes of generating knowledge that take place through the practice of creative processes. Therefore, both approaches suggest that beyond the experiential value of the creative process, the value of the knowledge which can be achieved through research is different from that rendered by scientific knowledge, but not inferior to it.

This way of approaching knowledge would relate to what German philosopher Peter Sloterdijk (2009) calls “exercising behaviour” in his lecture *Death apparent in thinking. About philosophy and science as an exercise*. I especially like it within the context of Transition Design because it adapts to the iterative nature of the project which faces wicked problems and long horizons of time. Sloterdijk explains that between contemplative life and active life, there is a third way, the exercising one, usually ignored and which involves acquisition and generation of knowledge through exercise, rehearsal, training, and testing. Exercising behaviour is a self-referential praxis because “(...) its results do not converge on external objects or circumstances, as it happens when working and producing, but rather they configure the exerciser himself/herself and put him/her “in shape” as a subject capable of doing things. The results of exercise are shown in the current “condition”, that is, in the state of training of the exerciser, which, according to the context, is described as habit, virtue, virtuosity, competence, excellence or fitness “.

Terry, maybe this would be partly the attitude and behaviour of the designer of the society in transition which we inhabit (or should I say transit) nowadays? Maybe design learning for future horizons should add up new skills to the designer’s skills?

T.I. *This is an extremely interesting reflection Tania and one I will look into. I am not familiar with Sloterdijk’s work, but one of our doctoral students is using a lot of Sloterdijk’s work to explore Transition Design.*



Your observation is related to what we often call 'ways of knowing', which is a distinction from Goethean Science. My work draws heavily on Goethe's approach to understanding the dynamic nature (coming into being of form) and the different cognitive modes that are employed to understand it. In particular he writes about the relationship between process, form and understanding that helps us transcend our 'habitual ways of knowing' in order to arrive at moments of insight or 'aperçu'. Simply put it is a way of using deep observation, imagination and participation to arrive at a new and deep way of knowing that informs future action.

One of the four areas in the Transition Design Framework is Mindset and Posture and I think it is perhaps the most important of the four because it challenges designers themselves to 'transition'. It asks us to examine our own values and worldviews, challenge our assumptions and take up new postures and ways of knowing. The premise is that these will change our ways of interacting with each other and the environment, which will in turn change our values/worldviews/assumptions etc. in a circular, almost alchemical way. Although I am not familiar with Sloterdijk, it seems like his and Goethe's and many other people like Polanyi and Sennett are all talking about an inner transformation that enables or leads to a different type of action in the world.

T.C. Design environments in Barcelona are increasingly using Design Fiction as a prospective tool. More specifically, the most narrative version of Design Fiction through diegetic prototypes and storytelling techniques supported by texts such as those of [Tim Morton](#), the [4 futures](#) of Peter Frase (2016) or those of [Nesta](#). In fact, one of the most influential exhibitions which is being currently held in Barcelona is [After the End of the World](#), at the CCCB, where future visions of artists and designers such as Superflex, Natalie Jeremijenko, Tomás Saraceno or Rimini Rotokoll meet. Terry, which authors, designers, methodologies or projects does Transition Design rely on for its prospective analyses or visions of the future?

T.I. *I'm very excited about the intersection of design and design fiction/foresighting/futuring techniques and the futurist Stuart Candy just joined our faculty, in part because we want to develop this as an important area within Transition Design. I'm aware of some of the people and projects you reference here and I think one of the important and laudable things about Design Fiction is its ability to challenge us to think more rigorously and creatively about the future and with a greater degree of fidelity. So any attempt to model futures and prompt people to think more deeply about them can only be a good thing for a society that increasingly cannot think beyond the horizons of fashion seasons or fiscal quarters. I believe one of the failings of the environmental movement during my lifetime has been its inability to give people tangible visions of a future they want to inhabit. The default is to see a sustainable future that is dystopian at worst, and one of abstention at best. Design fiction and fu-*

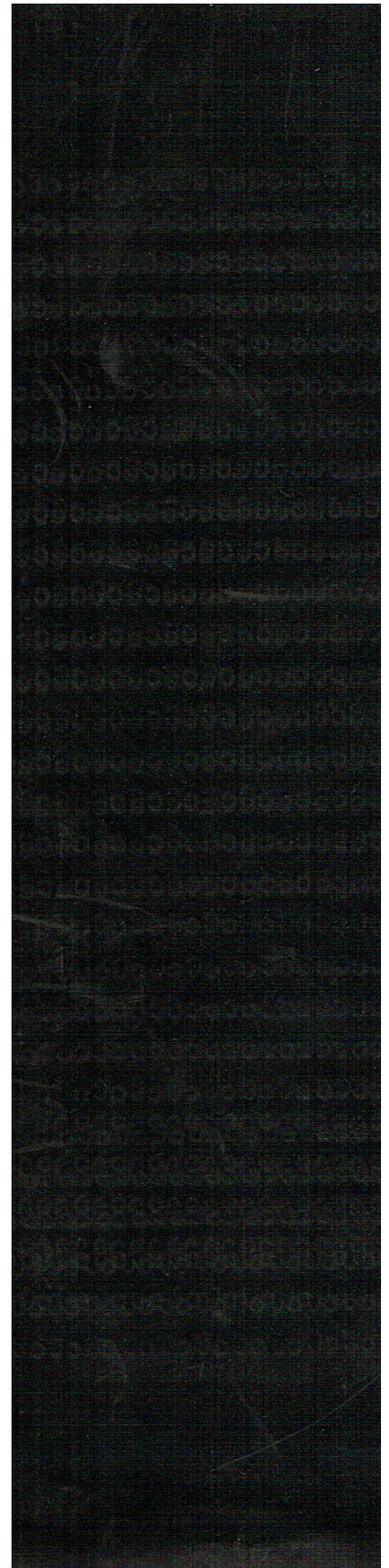
turing helps us to develop the cognitive muscles to think about designing futures as places of invention.

Transition Design's approach is to support stakeholders (the groups—human and non-human—affected by the problem or involved in a transition) in the co-creating of long-term future visions of more sustainable futures. Backcasting from these visions creates a 'transition pathway' along which projects and initiatives in the present and near-term act as 'steps' along that pathway toward the desired future. As outcomes of these practical actions are realized, the knowledge informs another round of future visioning in an iterative, dynamic process of thinking about the long-term future. We often say that visioning helps stakeholders transcend their differences in the present and define a future they can agree upon. So, with Transition Design, the process of futuring/visioning is as important as the future that is imagined and this may differ somewhat from other approaches.

*In terms of authors, designers, methodologies, we have been very influenced by Jonathan Porritt's book *The World We Made*. It is a fictional story told by a man writing from the year 2050, reflecting back on how the sustainable society in which he lived transitioned toward that future. The narrative is highly detailed and written in the form of a story that recounts highly specific events in the areas of politics, technology, economics and other areas and in this way provides readers with a high fidelity snapshot of not only the future but what a transition might look like. We have also drawn on the work of Dunne and Raby and of course the writing of Paul Polak and Jim Dator from the University of Hawaii. Our work in the area of futuring/foresighting goes hand in hand with writings from many people on backcasting (which is distinct from forecasting).*

To conclude, I would say that whereas many design fiction approaches share our concern with developing images of the future, many are not as concerned with designing the transition of how to get there. Or, to put it in the language of chaos and complexity science, how we 'design initial conditions' for the emergence of the transition and perturb the systems in ways that guide its trajectory toward sustainable futures. Another point of emphasis in Transition Design is the importance of understanding that there are many futures, not one utopian future and that they must be conceived and guided by the people who will inhabit them. The designer might be a member of this community or a catalyst but will not be acting as an expert in the process of specifying these futures.

Developing an approach for supporting stakeholders in the visioning process, integrating it with effective backcasting approaches, then reprising it as a process that follows project and initiative outcomes is something we will be working on in the coming years.



T.C. Finally, I wanted to share with you the question with which I will introduce the roundtable I am organizing and moderating in June at the Open sessions Neighbourhoods and artistic practices from the NEXES project, organized by IDensitat and EINA at Fabra i Coats, in Barcelona. The debate will address issues like design and art research applied to the transformation of neighbourhoods in the local context of Barcelona. Certainly, the neighbourhood is something very specific but totally systemic, and its problems are imbricated in complex systems which expand beyond its geographical limits. In this multi-scale and systemic sense, I clearly see that the intervention of Transition Design is very appropriate and, in a certain way, I perceive it as a particular way of applied research. I do not consider Transition Design as if it were a research group, but I do think that it shares areas of work with university research institutes such as the IGOP, or research groups such as Dimmons, or strategic research communities such as Cores UAB, all of which have a strong component of applied research. Terry, what do you think of this vision of Transition Design as applied research?

I think it is absolutely essential, as I mentioned in my answer to your first question. I have been a practising designer for my entire life and a full time academic for only 9 years, so my motivation has always been practically motivated. For me theory exists to inform practical action and not for its own sake. We started the conversation about Transition Design with the very practical intention of developing new design-led tools and approaches for addressing wicked problems and igniting societal, systems-level change. Those can only be developed through practical action. But that practical action must be informed by new ideas (theories and concepts) from a wide variety of disciplines and professions. I believe that one of the weaknesses of design practice has been a tendency to be too self-referential and designers are often not well read because of the lack of a liberal arts education. Design academics on the other hand can be overly focused on theory for theory's sake and can be out of touch with the realities and challenges that practical projects represent. For this reason, we are hoping to develop an international conversation that involves academics, researchers and practitioners who are interested in this work. Design educators are essential because our greatest leverage point for change is enabling new generations of designers to take up this work. But it also will involve working with educators, researchers and practitioners from other fields and disciplines to develop practical tools and approaches.

As an example, I think that the Transition Design Framework has worked really well as a way to bring together the knowledge, theories and skillsets relevant to seeding and catalysing systems-level change. But as we begin to work on practical engagements, such as our work with the community of Ojai, I can see that the framework is not a guide for process and we are working now to develop a more practical, design-orient-

ted approach that can serve as a guide for teams working in the field. You only begin to see the limitations and needs as you engage in practical action. Then there comes a point at which the practical action needs to be scaffolded with theory. It's a cyclical process that needs a plurality of voices from many different countries, professions and points of view. That is why we are trying to constitute a global network.

Barcelona, April 3th 2018

