

From Transition to Adventures: Reflections on Transition Systems Design

The term Transitional System Design has the strength of many elastic and ambiguous concepts, in that it is adaptable for varied purposes, and a container for a range of aspirations. Each term has its own elasticity. We could say that everything subject to the process of design is in transition. Contemporary scientists have taught us that everything, from the smallest atom to the largest galaxy is a system. All of us, as human beings, are in some sense designers. So I don't want to pin down the term in to a closed definition, but rather explore it in relation to the subject matter and approach of the Symposium.

First the term Transition. This has the additional strength of all teleological concepts. Its end point provides a magnetic pull to the present. As with the acorn reaching its potential as an oak, it suggests the end point is already inherent in what precedes it. If the end point is dark, it leads to depression. If it is light, it inspires. An idea of a possible future must of course have its roots in the imagination of the present if it is to resonate and mobilise action. But I want to suggest that we keep the shape of the possible futures more open. We have aspirations and sets of values and principles that inform what we do, but the green-prints are what we create in practise and can only guide rather than determine the future.

I say this in part because of my experience of one small example of systems change, namely the growth of fair trade. In the second half of the 1980s there were many initiatives that wanted to change the relationships between marginalised countries as well as small farmers and artisans in the South, and consumers in the North. The products they brought over ranged from coffee to Bolivian hats. In the case of Twin Trading, the company I have been involved in, we started out as a Northern agent for items needed by post revolutionary countries in a bartered exchange for items they could supply to the UK market. All this was known, in the spirit of 1968, as alternative or solidarity trade. It was a collection of micro projects.

In 1988 things changed. That was the year when the term fair trade began to be used. The first 'fair trade mark' was introduced in Holland. Twin launched the first fair trade brand, Café Direct, in 1992, followed by Divine Chocolate in 1998. In 2000, the UK fair trade mark was suddenly vitalised and is now carried by £4.5 billion worth of products. The large supermarkets, caterers and later the multinational food producers bought into the fair trade brand. Fair trade spread to tourism and to services such as photo-agencies. The small farmers formed their own international co-ops. The international association of peasant farmers, the Via Campesina who had been resisting WTO free trade reforms, adopted it as their economic policy.

The point of this cameo is that no one involved had any idea that fair trade would grow in this way. It felt rather that these micro initiatives had somehow sparked something that spread like a forest fire. There was a latent demand (that turned out to be predominantly of women between 25 and 45). There was a latent social entrepreneurial supply (Twin Trading, Café Direct, Divine, and more

recently Liberation Nuts all had women as their managing directors.) Sympathisers from other industries came out to help – advertisers, designers, journalists, broadcasters, some food retail managers. There was a similar story among the small farmer organisations in the South.

Looking at it all now I would describe fair trade as it is now as a system. It has its protocols, its models, and its multiplicity of networks. Organisationally it is highly distributed and has grown autonomously of governments (though some of the radical Latin American states set up their own inter-government fair trade arrangements). Above all, it developed without an overarching plan. It unfolded in its own way and exemplifies one particular type of system.

Yet though it can be described as a transitional system, this can only be done if we look at it in a rear view mirror. Of course, there were dreams of a different world order amongst the early initiators. But it was the values underlying that order, rather than the order itself, which inspired the micro ventures. These were known at the time as prefigurative forms, small projects that showed practically that a different order was possible. It was an attempt to move away from the world of theory, or of policy, and enter the uncertain, open ended world of makers. For this reason, I see our subject as better described as adventures towards an ecological social economy rather than the charting of a transitional path.

This leads straight into the second term, system. The idea of a system has been used in design and social innovation writing (including by me) as a separate design stage in the development of an innovation. First there is the generation of the idea, then its design and prototyping, then its launch and guidance to a sustainable path, its diffusion or scaling, and finally to systems change. The treatments then distinguish different types of systems, they identify methods, and institutions, the role of ideology and culture, the significance of power and its changing contours, and of infrastructures. These are all valuable. But from the perspective of living (and generative) systems theory, I wonder if we lose something by making too sharp a break between the diffusion of an innovation and its systematisation.

Up to the point of establishing a sustainable enterprise or project, the micro system as it has developed has been under the formal control of a single organisation. The notion of growth through scaling (a 20th century mass production concept) remains an organised path of expansion – either by an enterprise, or a government.

Diffusion is another matter. There is no longer a single authorial shaper of the spread of the innovation. The level of complexity increases. Property and power relations change. New institutions emerge, new networks, and forms of co-operation. Many streams become a river, and many rivers a great estuary. In these multiple, gathering journeys there will be giants in the way, some of them to block the advance, others to divert it for their own ends. Where and when these giants arise depends on the case we are dealing with. And it suggests that it may be helpful to think of the spread of an innovation less in terms of a

distinction between scaling and system change, and rather in the more continuous terms of the growth of complexity in a system.

A complex generative system is an idea which has an elasticity all of its own. It is not confined by stages or by defined spaces (from the local to the global) or sectors. As it grows, and its creative elements diffuse, they may become simultaneously global and local. They will make new connections. Sectors will mesh... Food, waste, transport, health, and education have all been locked in their own supply determined silos. Diffusion can liberate and reconfigure them. The nature of these systems is in short emergent, and those factors discussed as part of system change may be relevant to the process of diffusion and vice versa.

The critical question is the level of complexity. What we know is that complexity can be organised in different ways. A distributed system locates complexity at the margins, while a centralised system concentrates it at its core. And one of the decisive points comes when the complexity of a system can no longer be managed by a single institution. So I am suggesting that rather than drawing a sharp distinction between the process of diffusion and that of system change, we recognise that diffusion itself, like growth itself, is systemic and the level of complexity provides a more useful axis of analysis. Following the system as it unfolds will identify the challenges that arise as complexity increases, and what responses are then needed. They also set an agenda for design.

What do we mean by design, our third term? I think it is above all about agency. A designer is one who is involved in 'making', in contributing ideas to the process of transformation. Now in one sense we are all designers. Mike Cooley is an industrial designer who was one of the leading figures in the Lucas Aerospace Shop Stewards Alternative Plan, that had such an impact in the 1970s. He wrote a book of reflections on that experience (recently re-published) called *Architect or Bee*, and began it with a quote from Marx:

“A bee puts to shame many an architect in the construction of its cells; but what distinguishes the worst of architects from the best of bees is namely this. The architect will construct in his imagination that which he will ultimately erect in reality. At the end of every labour process, we get that which existed in the consciousness of the labourer at its commencement.”
(Capital vol 1 chapter 7)

Cooley's book, and the Lucas Plan itself, highlights the different technological paths that there are for what is produced and how. Its focus is power in the workplace. Who has the power of design, and how the contest over that power determines the way technology is developed. As the chair of the Technical Union Tass, Cooley had no doubt that workers had the imagination and skill to contribute to the design and implementation of a labour process – and developed the idea of human centred technology and its prototyping in a number of fields. What was not at issue, however, was the question of agency. Whether it was management or management + workers who were responsible for design, they would both be involved in its implementation.

Ezio Manzini and Rachel Coad have made a similar argument about civil society and the potential of all to contribute their imagination to projects of social and ecological innovation. The title of their latest book “Design, when Everybody Designs” makes the point. Co-creation and co-design are other ways to describe it. Wide engagement is a feature of multiple social innovation projects that have mushroomed in recent years. ICT has supported this process, through crowd sourcing, and collective decision making. As with the Lucas stewards, these practices are about democratising design, and in the case of the civil economy its scope and purposes.

It leaves two questions. The first is that if everyone can become a designer, what is left of the distinctive skills of design, of its approach, and its profession? My experience in the time I worked as an economist on public service design with a team of designers at the Design Council was that designers had an approach and a culture that was extraordinarily fruitful and welcome to someone from the more arid zone of economics.

I would pick out five qualities that struck me:

1. instead of the linear culture of the written word, it was a visual culture of images and radical imagination, and of tacit rather than codified knowledge. Ideas were privileged over proof: and their prioritisation determined by intuition.
2. it rooted its ideas in practice; there was a continuous interplay of ideas and what might work. One of the great Italian furniture designers who came to England that year described how he would develop his designs through ‘gossiping’ with the artisans in the small factories who would do the making. Practise was the discipline, the proof of the concept.
3. as a result, designers are face to face with the tensions of ideas and economy; what will it cost, how can it be produced within the budget, what will be the returns it will generate. Financial economy provided designers with both a constraint and a spur to innovation
4. user centred design was transformative in the public service projects we worked on, and part of a wider trend from producer determined mass production.
5. multi-disciplinarity; the design teams drew in high quality specialists according to the needs of the project; ethnographers, psychologists, photographers, doctors, sports consultants, (even economists). They worked with the front line users of the service, and with the front line workers, and managers. In this sense everybody was designing. But the designers remained in the lead and their distinct approach was appreciated by all those involved.

These are qualities which will be important for the tasks of ecological system design.

The second question is about the point in a system where it moves beyond the scope of any one party to control it. How can a designer be an agent without an

agency? There is one approach which is to design a system and then try and assemble a group of agents to bring into being. Or in some cases the state tries to act as the agent, before realising that it, too, whatever its formal control, is seeking to manage a complex system with its own distribution and conflicts of power. There is another, more grounded approach, which lodges the designer amongst sympathetic agents who then identify together the next 'system' issues that require design, rather than designing 'beyond the horizon'.

These are general remarks about the elastic concept of transitional systems design and explain what lies behind the idea of adventures in ecological systems design. I want now to explore two further issues. First how do we characterise the current moment within which we are designing – the field of forces, some carrying us forward, some flowing hard against. Do we have a history of the present which would suggest promising paths to pursue? Second, what are the issues that call for the attention of designers with their specific skills in order to make progress alongside the ecological path of system transformation?

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May 5th 2016

Bibliography.

- Bowes, John, *The Fair Trade Revolution*, Pluto Press, 2010
- Braungart Michael with McDonough, William, *The Upcycle*, North Point Press 2013
- Cooley, Mike, *Architect or Bee: the human price of technology*, 2nd edition, Spokesman Books, 2016
- Ellen MacArthur Foundation, *Delivering the Circular Economy: A Toolkit for Policy Makers*
- European Commission, *Changing Gear in R&I: green growth for jobs and prosperity in the EU. Report of the European Commission Expert Group, "RT&I policy framework for green jobs and growth 2016.*
- Geels, Frank "Ontologies, socio-technical transitions (to sustainability) and the multi-level perspective." *Research Policy* 39 (2010) pp. 495-510
- Jacobs, Michael and Mazzucato, Mariana, *Rethinking capitalism: Economic Policy for Sustainable and Equitable Growth*, Wiley Blackwell, 2016
- Leadbeater, Charles, *The Systems Innovator: Why Successful Innovation Goes Beyond Production*, NESTA 2013
- Leach, Melissa, Newell, Peter, and Scoones, Ian, *The Politics of Green Transformation*, Routledge 2015
- Manzini, Ezio, and Coad, Rachel, *Design, When Everybody Designs: an Introduction to Design For Social Innovation*, MIT Press 2015
- Mazzucato, Mariana and Perez, Carlota, "Innovation as Growth Policy: the Challenge for Europe". in: Fagerberg, J., S. Laestadius and B. Martin (eds.) *The Triple Challenge: Europe in a New Age*, Oxford University Press, 2015, accessible at: <https://www.sussex.ac.uk/webteam/gateway/file.php?name=2014-13-swps-mazzucato-perez.pdf&site=25>
- McDonough, William and Braungart, Michael, *Cradle to Cradle*, North Point Press 2002
- Mulgan Geoff, *Joined Up Innovation: What is System Innovation and How Can it be Done Effectively?* NESTA 2010
- Murray, Robin, *Creating Wealth from Waste*, Demos 1998
- Murray, Robin, *Zero Waste*, Greenpeace 2002
- NESTA, *Systemic Design*, March-April 2013
- Stahel, Walter *The Performance Economy*, 2nd edition, Palgrave Macmillan 2010 (Geneva Association).
- Thackera, John *How to Thrive in the Next Economy, Designing Tomorrow's World Today*, Thames and Hudson 2015