

# **Systemic change: evolving conditions that hold a situation in place**

Marcus Jenal and Dr Shawn Cunningham

Annual Reflection 2020

## Introduction

Under the Systemic Change<sup>1</sup> research theme, we are researching, developing and applying concepts that help development practitioners to catalyse and assess systemic change. In earlier work, we looked at economic evolution and institutions to rethink systemic change in economic development from a once-off change event to a continuous capability (Cunningham and Jenal, 2016). One of the outputs of this research is also the gaining of systemic insight process logic designed for practitioners to implement processes

of continuous exploration and learning (Jenal and Cunningham, 2013).

In this article we reflect on three perspectives that shape our understanding of systemic change. All three perspectives have their own angle on systemic change, but none of them on its own is enough to allow systemic change to be understood. Combined, they become a powerful tool for systemic change practitioners to improve their understanding of what it takes to transform systems.

## The conditions that hold a system in place

Systemic change can be understood as changing the conditions that are holding a particular situation in place. These conditions are sometimes called “structures”, “constraints” and “institutions”, or, taking all relevant conditions together, they are also called “the regime”. But essentially this definition recognises that in stable times there are a number of factors that shape human behaviour in a system in a certain way.

The systems iceberg, which we introduced in the 2018 Annual Reflection, is one model that conceptualises this understanding (Figure 1). The metaphor of an iceberg is used to imply that only day-to-day events are visible on the surface, but the conditions that shape them are hidden below the surface the water. In the case of the iceberg, these conditions are expressed as patterns, structures and paradigms.

---

<sup>1</sup> Here we are not making a distinction between systemic change and systems change.

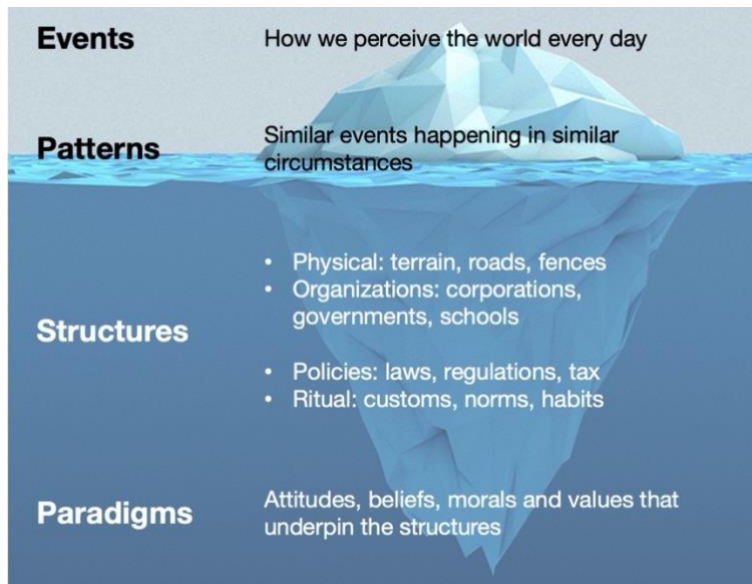


Figure 1: The Systems Iceberg

(Source: Own illustration)

John Kania, Mark Kramer and Peter Senge (2018) have further refined the idea. They defined six interdependent conditions that play significant roles in holding social, economic or environmental problems in place (Figure 2).

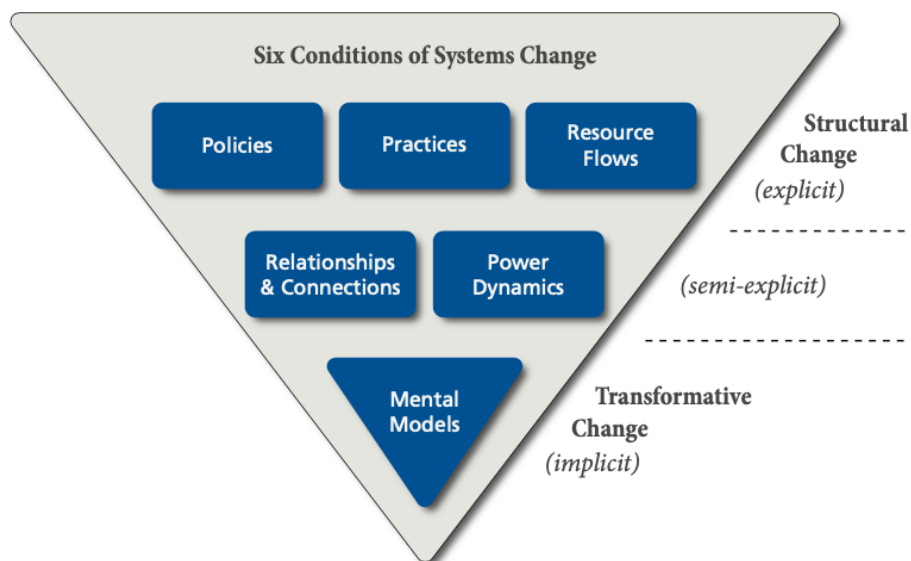


Figure 2: Conditions of Systems Change

(Source: Kania, Kramer & Senge, 2018)

They differentiate between three levels. Explicit structural change contains policies, practices and resource flows. Then there is a semi-explicit layer that includes relationships and connections, and power dynamics. Finally, there is what they call the layer of transformative change, which contains the mental models.

## A dance between structures and flow

Models such as the systems iceberg and the six conditions imply a clear delineation between the structural elements as well as a hierarchy among them – mental models, for example, are more fundamental to systems change than policies and practices. The reality is, however, messier than this. All the elements are interconnected and shape each other. At the same time, they are generally not as stable as we think they are. During times of relative stability, the structures and conditions can feel solid, and their influence can be clearly described. Yet, if anything, these conditions are more like sandcastles than structures made of concrete. Jean Boulton, Peter Allen and Cliff Bowman in their book *Embracing Complexity* (Boulton, Allen and Bowman, 2015) make the point that these structures are always “wobbling” or fluctuating because they are made up of individual and varied actions and behaviours. A shift in the context can erode them slowly without our noticing, or destroy them very quickly. Conditions that are taken for granted over long periods of time, such as gender roles, can change slowly without our noticing immediately – or they can

change quickly, as they are catalysed by specific events.

The temporary nature of many things we took for granted became very clear during the Covid-19 pandemic. People who were told for years that they could not work from home because the managers did not trust them were suddenly able to do just that and the newly gained autonomy often even increased their productivity and creativity. Processes that would normally take months, such as the approval of certain social safety-net payments, suddenly only took a few days. And the absurdity of the idea of planning for specific results in complex and dynamic change initiatives was suddenly revealed, and constant learning became the only way to improve. While a sudden change like this can be scary and lead to temporary chaos, it also makes space for new and better conditions to emerge.

Frameworks such as the two presented above can still be helpful tools. But they are more like triggers that help us to look out for different types of structures and conditions. However, they do not help us to understand change. To understand change, we need a dynamic model.

## Systemic change as an evolutionary dynamic

A body of knowledge that provides such a dynamic model of change is the theory of socio-technical transitions (Geels and Schot, 2007; Geels, 2002). The theory

describes how shifts from one socio-technical regime to the next happen by using a multi-level perspective (see Figure 3).

Increasing structuration  
of activities in local practices

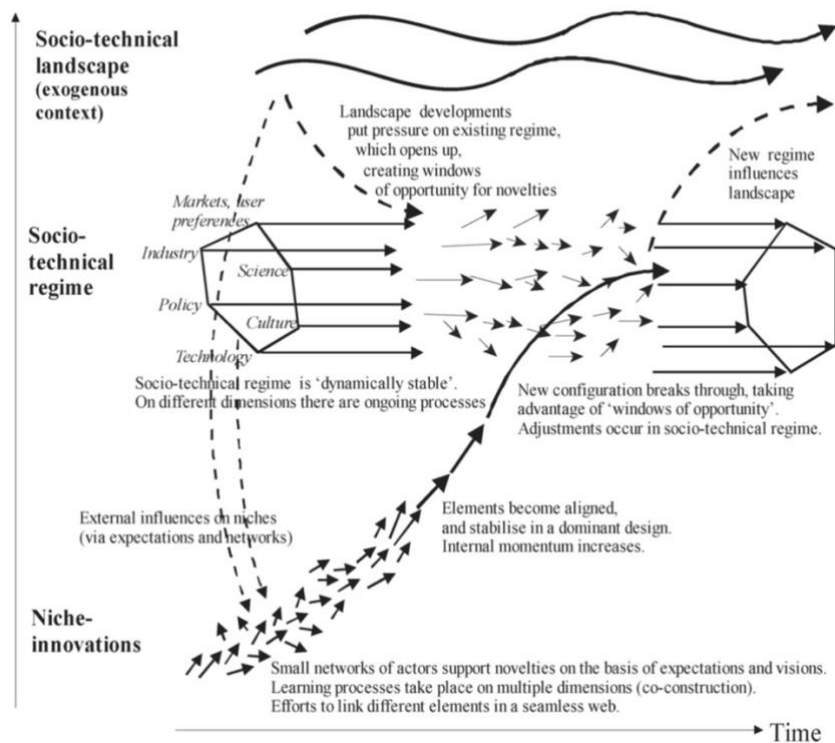


Figure 3: The multi-level perspective described in the socio-technical transition literature

Source: Geels and Schot (2007)

The three levels are:

- **The niche level**, where small networks of actors come up with and support new ideas on the basis of what they think people need. This is where a lot of learning happens, both within organisations and between organisations, which eventually turns into innovations that have the potential to become transformative.
- **The regime level**, which is the level of the predominant way of doing things. It is built up of a dynamic equilibrium where industry, policy, technology, culture, society and markets work together in a more or less seamless way to produce the things and experiences that make up the biggest parts of our daily lives. It is about the things we are used to and the way we expect people to behave<sup>2</sup>.
- **The landscape level**, which is an exogenous level that shapes what can happen in a system. It includes physical features like the topographical landscape or the weather and climate, but also the influence of other, larger systems and cultures. For example, when the system we look at is a city, part of the landscape level would be formed of the country in which the city lies as well as the global level

<sup>2</sup> Indeed, the factors industry, policy, technology, culture, society and markets can be seen as another way to categorise the conditions that hold a situation in place.

In this framework, the simplest way to describe a transformative or systemic change would be when an innovation from the niche level is mature enough to enter the regime level at a specific point in time given the right opportunity. Innovations

from the niche level can either enhance the regime by becoming part of it or replace it. An example is the automobile, which replaced horse carriage as the normal way of transport.

## Conclusion

Systemic change is dynamic and messy. Yet there are a number of frameworks and models that can help us make sense of it in different situations. Static models such as the systems iceberg or the six conditions for system change mainly apply in relatively stable situations and are better at describing the history and the status quo. To better understand the dynamics of systemic change, we need to adopt an

evolutionary perspective, as described in the literature on socio-technical transitions with the multi-level perspective on how regime shifts happen.

All of these models can be useful if we acknowledge their limitations and combine their insights in appropriate and smart ways.

## References

- Boulton, J., Allen, P. and Bowman, C. 2015. Embracing complexity: strategic perspectives for an age of turbulence. Oxford, UK: Oxford University Press.
- Cunningham, S. and Jenal, M. 2016. Rethinking systemic change: economic evolution and institutions. Technical paper. The BEAM Exchange.  
<https://beamexchange.org/resources/861/>
- Geels, F.W. 2002. Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. *Research Policy*, 318-9 1257-1274.
- Geels, F.W. and Schot, J. 2007. Typology of socio-technical transition pathways. *Research Policy*, 363 399-417.
- Jenal, M. and Cunningham, S. 2013. Gaining systemic insight to strengthen economic development initiatives. Mesopartner Working Paper. 16, Scharans and Pretoria: Mesopartner.
- Kania, J., Kramer, M. and Senge, P. 2018. The Water of Systems Change. FSG.