Systems thinking for wicked problems

Ray Ison and Ed Straw 2020 *The Hidden Power of Systems Thinking: Governance in a Climate Emergency*, Routledge, 311 pages ISBN: 978-1-138-49398-8 (hardback) - £120; ISBN: 978-1-138-49399-5 (paperback) - £34.99; ISBN: 978-1-351-02690-1 (e-book) - £31.49

In this book, Ison and Straw make a strong case for the value of thinking and acting systemically as a means to 'create ways of appreciating the complexity in a situation and of designing actions that facilitate change' (p. 24). They illustrate their argument with examples of change – those that take systemic approaches and those that do not – and make proposals for improvement that range from adopting small cognitive and behavioural differences to applying radical principles to change national institutions and practices.

The sub-title highlights climate change but, whilst a continuing theme of the book concerns addressing the dangers arising from humankind's actions toward the environment, much of the text concerns systems thinking and government activity in a wider range of policy areas. For readers interested in specific examples of the application of systems thinking to climate change, some of Ison's other publications will be of more value.

There is much here for the practitioner of action learning who is faced with wicked problems, particularly in the sphere of public sector or community activity. In a classic paper published in this journal, Seddon and Caulkin (2007) argued that there are potentially close links between systems thinking and action learning. Ison and Straw would agree with the kind of questioning and thoughtful dialogue that takes place within an action learning set, designed to help its members understand the problems they are tackling, and systemic thinking will add richness to action learning analyses.

The book begins with a critique of ineffective state action, particularly by the democratic governments of the developed West, in the face of the wicked problem of climate change, where the authors find that there is 'much posturing and small actions painted into major achievements, but the fact is things continue to get worse' (p. 2). Why should this be so? They suggest some of the negative beliefs that underpin inaction in tackling this problem, but the bigger point they wish to make is that key economic, political and technological systems are dysfunctional in relation to this global threat. A critique of government performance from a systems thinking perspective is not new – for example, Chapman (2004) and Seddon (2008) have put forward detailed criticisms of ineffective state systems – but this book provides an analysis founded on more recent failures.

In Part 1 of the book, they argue that governments in modern Western democracies are faced with concentrations of economic power that are politically unmanageable. Neoliberal ideologies have led to reductions in the size and power of the state in favour of private sector providers of services. The authors give an example of 'state capture', where private sector interests significantly influence governmental decision-making processes. One chapter focuses on the practice of preferential lobbying and the ways in which it shapes government policies. To conclude this part of the book, they ask what is missing from governance models, and propose the explicit inclusion of consideration of three factors in how states, businesses and societies operate: environmental factors, the use and abuse of technology, and the social purpose of communities and individuals. On this third factor, they argue for the benefits to communities and individuals of having social purposes, above and beyond a search for sectional power and individual gratification, and they link

this development and pursuit of social purpose to decision-makers being honest and listening to different concerns, and involving and trusting the members of society in decisions that affect them.

Part 2 sets out in two chapters to explain the practices of systems thinking. Chapter 5 presents two case studies of systems thinking in decisions taken in UK organisations, one in relation to a public health intervention, the other concerning flood defenses on the south coast of England. The two examples are used to illustrate different aspects of systems thinking in action. In the flood defence example, the first phase was unsuccessful and a different, and more effective approach was taken in the second phase: Ison and Straw describe this as moving from a DAD (Decide-Announce-Defend) approach to an EDD (Engage-Deliberate-Decide) approach – in other words moving from a directive, top-down approach that ignored many of the factors and interests in the situation, to an approach that took into account multiple stakeholders and their knowledge and concerns. The case they make here, and elsewhere in the book, is that systemic approaches to policy-making should include citizen stakeholding, feedback, learning, reflexivity and adaptation. Applying systems thinking will mean involving people who are part of the system in joint learning.

Chapter 6 explains some characteristics of systems thinking: that it means thinking in terms of relationships, not in terms of individual units; that unlike pairs (such as yin and yang, night and day) are seen as systemic totalities rather than opposing alternatives; and that we should expect to find that there are multiple interrelated influences on phenomena, rather than simple cause and effect equations. Although both authors teach courses on systems thinking for the Open University, this chapter is not pitched at the level of an introduction, but instead appears to speak to readers who already have some understanding of the principles of systems thinking. This feels like an opportunity missed. An explanation of some of the more basic components of systems thinking could have been enlightening for newcomers to this area, and easily skipped over by those who are familiar with the ideas.

Part 3 of the book contains five chapters and presents ideas for using systems thinking in practice for governing, proposing ways of reinventing government systems, and creating new practices and institutions. The authors cite the OECD (2017):

> ‘Innovative governments are enhancing citizen engagement and ensuring public involvement at every stage of the policy cycle: from shaping ideas to designing, delivering and monitoring services. The goal is not only to improve the type and quality of services that governments provide, but also to transform the culture of government so that citizens are seen as partners who can shape and inform policy and services.’

As well as citizen engagement, the authors propose improved monitoring and feedback regarding government policies. They reflect on nine systemic design principles, discussed in earlier chapters of the book, which could be applied to reform government systems and practices. They suggest behaviours that we could each adopt to promote the application of systems thinking. In the penultimate chapter, they set out 26 principles for ethical, systemic government and the conduct of public life. There is much to like about these principles, although many of them are a long way from current practices, as the authors admit. Having an idea of an ideal state of affairs, however, can provide a guide as to the direction we might take to move towards it.

This is a book with values that will find a resonance with those involved in action learning and action research – those values concerning the importance of learning, involving others in addressing wicked problems and developing plans for action through co-inquiry and dialogue. It is likely to be of most

interest to those engaged in developing, implementing or trying to change public sector policies and programmes.

References

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George Boak

York St John University

g.boak@yorksj.ac.uk