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Governing in a complex society

Wilfred Dolfsma

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BOOK REVIEWS

Complexity and the art of public policy – solving society’s problems from the bottom up, by David Colander and Roland Kupers, Princeton, Oxford, Princeton University Press, 2014, viii, 310 pp., \$29.95 (hardback), ISBN 978-0-691-15209-7

1. Complex society, complex economy

As each society becomes more complex over time, the number of complex societies increases with increasing wealth, and their interrelations become increasingly intricate, governments face significant challenges. Colander and Kupers, or Dave and Roland as they refer to themselves in this intriguing book, offer ideas on how to understand these challenges and suggest ways out. They start from the notion of complexity – a notion that comes from systems theory, referring to a system where a large (or: infinite) number of complex entities relate with each other in a large (or: infinite) number of different ways. Alas, it takes a while finding the explicit definition the authors use.

Their suggestion, in short, is for policy-makers, economists, and in fact everybody, to embrace the complexity perspective, ‘letting go’ of the idea that any actor can control processes in society, but at the same time indicating that full-fledged Laissez Faire with a very minimal role for government is not to be adopted either.

Throughout the book Colander and Kupers provide a number of examples of government policy failing because a control perspective was adopted with too much vigor – with supposedly detrimental consequences for society. Consequences that could in some cases be foreseen, but that in many cases are largely unforeseen and unintended. The sad intricacies of the current intellectual property rights (IPR) legal system is a case in point – one that very few economists would argue with. The current system of IPR laws, and especially the ones in the USA, is not founded in economic rationale, inspired by neoclassical economics, heterodox economics, nor complexity economics (see Dolfma, 2013; Jaffe & Lerner, 2004). Machlup (1958, p. 28) has famously remarked that if we did not have an IPR system,

it would be irresponsible, on the basis of our present knowledge of its consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.

This conclusion still holds.

The discussion of IPRs, but also of other examples, is rather cursory throughout the book. That is both the book’s strength and its weakness. An IPR law that is singled out for deserved critique, the Digital Millennium Copyright Act (DMCA), is not even referred to by its proper name, but rather by the name opponents give it: the Mickey Mouse Copyrights Act. What is so wrong with the act, and why, from a complexity point of view, is not mentioned. Experts in the area of IPR or copyrights would say

that this is a problem since intricacies are missing. Dave and Roland converts would say that it is a strength: being too much drawn into the technicalities of how a domain is currently regulated will naturally turn someone to adopt a control view. Fresh thinking is needed is the message from this manuscript.

2. Complexity science

Still, some analysis of a domain in complexity (science) terms would indicate what in particular makes the domain complex, why control or *laissez faire* will not work, and how insights from complexity science will help to adopt which particular kind of *laissez faire* activist policy that makes actors adopt the proper behavior ‘from the bottom up.’

The Colander and Kupers book is surprisingly thin on details about complexity science. One may suggest that this is due to the intended audience of the book, which clearly is not (just) an academic one. Occasionally, if the need for it is clear, however, one would have liked to learn more from the authors what the implications for policy-making are of the concept of path dependence. How does the observation that ‘the past strongly influences your choices for the future’ (p. 54) alter one’s perspective on policy-making or one’s actual policies? To authors, the attractiveness of a book is, as well, that one can play around with form more than in an article, relegating detail and complex argumentation to appendices, boxes or the like. Colander and Kupers could have found a form and place for such more in depth discussion. Those who want to study elaborations can do so, and others simply go with the flow. The book indeed has plenty of flow – something to expect from much-published authors and a publisher that takes editing seriously.

References in the book to chaos, randomness, non-linearity, emergence, lock-in, phase-transitions, and multiple equilibria are not much more than that: references. What they are in physics, where such concepts emerge from, and how they could lead systematically to different insights for the social realm, remains unclear.

The social sciences do, however, offer a number of different suggestions about how such terms could fruitfully be used in the social realm. Some of these are acknowledged, but often only in passing. One would have hoped for reference for follow-up reading to authors quickly mentioned, such as Brian Arthur and Paul David. A reference to a study by a friend of the authors, who happens to be a former colleague of the author of this review, Wander Jager, is not included. Interested readers are left in the dark. There is a curious mismatch between the abundance of attention given to particular episodes and individuals in the history of economics thought on the one hand, and the lack of attention to the foundations of core ideas that the authors propose as alternatives. Why not talk more about the need for diversity in society, conceptually, drawing among others on work of Granovetter (1979)? The examples provided could also be discussed more in terms of concepts from complexity science to have a better sense of what new insights their use offer.

Beyond modeling complexity, and agent-based simulations, scholars in the social sciences focusing on complexity wholesale, or just elements, have suggestions to offer about how to further develop complexity science concepts for, or cater them to the social realm. Lock-in and feedback mechanisms and evolutionary dynamics may need to be conceptualized very differently in a social realm where reflective actors abound (Leydesdorff, 2006; Schreyögg & Sydow, 2009). Actual empirical analysis, using admittedly different statistical techniques than commonly used in, for instance,

economics, are used here (cf. Leydesdorff, Dolfsma, & Van der Panne, 2006) – in line indeed with what Colander and Kupers suggest in their penultimate chapter.

3. Complexity governance: *laissez faire* activism (LFA)?

Much is made in the book of a single example of how the Dutch city of Drachten has listened to architect Modderman in designing its public spaces, and intersections in particular. Minimal guidance is offered on intersections, and attention is paid to design features that suggest to participants in traffic to make choices themselves, following norms that would be commonly subscribed to. Traffic in the city of Drachten is more orderly than in many other cities, which the authors claim is due to the policy choice in favor of a *laissez faire* activist option. Another example is the mayor of Bogota having the roads in his city narrowed substantially in order to broaden side-walks: social contacts and interactions went up, crime down.

One may wonder to what extent these examples are a persuasive. If the claim by Colander and Kupers is that their suggestions for policy apply to relatively simple and micro situations only, the examples are persuasive. Invoking the complexity argument, however, as the authors do, seems to imply that they believe that their suggestions are relevant for more complex and macro policy domains as well. If that is the case, the examples provide too thin a case: they do not offer more general guidance. Traffic in the backwaters of a city such as Drachten, located in a backwater province in the Netherlands, can perhaps be ‘self-regulated’, and only needs some activation, but does the same thing hold true for the capital, Amsterdam, with tenfold the number of inhabitants, or of New York, another tenfold bigger still? And what about the kind of policy that does not involve the actions of individuals directly, but that is made in their behalf? In some cases, it seems to me, there is no alternative to top–down governing – top–down governing will not necessarily ‘make things worse’ (p. 26). Can foreign policy, the European Union’s failed Common Agricultural Policy, or monetary policy result from some sort of bottom up policy-making approach in which individuals behave according to norms about which the authors believe ‘there is far less disagreement [...] than is generally assumed’ (p. 277)? I have doubts.

Establishing proper norms among the individuals in a setting that will persuade them to behave orderly, ‘not pushing their freedom too far’ (p. 9) is an important element of LFA. A positive role-model should espouse the norms, such that the ‘voluntary guidelines’ (p. 57) will be followed by others. In this argument, the parenting metaphor is invoked, rather unfortunately. Parenting is top–down. In addition, influence from the social environment on individuals decision-making and behavior is more diverse than emulation of a successful or positive example. Will people emulate a successful and positive example because they want to jump the bandwagon? Or do people emulate because they are unaware of the alternatives and their pay-offs, and risk-aversion makes them imitate the first example that seems satisfactory? While sometimes the outcome may be the same, this may not always be the case. Some people look to others to decide what *not* to do, or what *not* to do when *too many* do something. This is the social dynamics behind fashion consumption (Pesendorfer, 1995). The ‘replicator dynamics’ (p. 60) or (social) ‘contagion’ (p. 186) in the argument Colander and Kupers unfold is under-developed.

4. Government failure

What is the problem that a Laisser Faire Activist approach to government policy would solve? At what, and how do governments that have a control or a undiluted Laisser Faire approach fail? If it is unclear how currently governments fail, and why, it is unclear as well what an alternative would offer. The book does not provide an answer to this, admittedly, elusive question. It does offer a claim: control could never work given the complexities in society, and Laisser Faire will not produce the public goods that any economy relies on to thrive.

Colander and Kupers present a much discussed episode in the history of economics theory to make their point: the socialist calculation debate where two economists taking extreme positions are contrasted. Abba Lerner argues how the economy can be planned, while Friedrich Hayek argues that the economy cannot and should not be planned. This is both a much discussed and an irrelevant theme, if not elaborated at more length. The two extremes are never observed in real life, and the discussion is not pursued to establish why, and when, either position would suggest a government should fail.

These are too general claims; much more can be said about government failure even from the point of view of economics (Dolfsma, 2013). Why the domains of public administration is not more actively drawn on, or law, or even the philosophy of law, is unclear. Philosophy of law would suggest, for instance, that rules or laws can serve different purposes, one being something to resort to when a worst-case situation arises, when actors are not empathetic, let alone sympathetic to each other. One expression of this, in Rawls (1971) when he discusses his 'maximin' principle, is known broadly among non-philosophers as well. It is striking how the authors do not draw on works such as this to further their substantive argument, but rather rehash pretty well-known stories from the history of economic thought. Economists know the story, non-economists might not care or be persuaded by it.

5. Governing and institutions

A key activity for governments is issuing, revising, and revoking institutions. Some argue that it is here that one could start to understand reasons for government failure. In previous work, I argue that governments can fail when their institutions (rules) are too specific, too broad, arbitrary, or when they conflict. The kinds of government failures that Colander and Kupers seem to point to are instances when the rules are too specific, thus making change difficult and making them amenable to being manipulated by special interest groups. Another type of government failure that they may have in mind is rule conflict. A control mindset might lead to a plethora of rules, increasing the chance of some rules, perhaps instigated to regulate one domain, conflicting with other rules perhaps initially meant for a different domain.

Laisser Faire Activism might, however, itself give rise to two other kinds of government failures. LFA could issue too broad rules, leaving what behavior remains that might otherwise be regulated to self-regulation. Broad rules can, however, be interpreted and implemented quite differently, and are more costly to police. Conflicts are more likely to emerge, if interests or interpretations differ.

Another kind of government failure that can emerge when LFA is used to determine how to govern, is to implement arbitrary rules. What the circumstances are that give rise to the kind of self-regulation sought in one context or region might be different from another context or region. Arbitrariness looms. In addition, such an approach to

governing relies on a relatively stable set of actors to be self-governed, preventing outsiders from participating. Outsiders entering a domain or region is in part what makes today's globalized society so complex, however. The other option is that the rules that help actors self-govern in a specific domain are so exceptionally self-evident that they offer little guidance. In the latter case a de facto free-for-all situation emerges: Why would then 'the life of [most] man [not be] solitary, poor, nasty, brutish and short'?

6. The lure of technocrat-dictator and the need for slow decision making

Colander and Kupers must be commended for making an informed case, readily accessible and energetic, about an approach to governing in today's complex society that forcefully shows that the lure of the Technocrat-Dictator should be resisted. Here, the socialist planning debate in economics, some 70 years ago, still weighs in. Governing in a complex society requires that many considerations and concerns are taken into account – making some suggest, and lay people in particular, that a Technocrat-Dictator is what is needed. If anything, Colander and Kupers make clear that nothing good can come from that. It is a message that is worth making clearly, strongly and repeatedly. Government is indeed 'just one component of those endogenously evolved control mechanisms' (p. 5): do not expect or hope too much from it. Thinking from a complexity perspective makes one humble.

Governing a complex society is bound to be cumbersome, messy, and slow. Colander and Kupers try to explain this by pointing to concepts from systems theory. I hope that they develop the complexity concepts more, to make them more obviously relevant for social contexts, in a sequel to this book, being clear what makes governments fail, and when, and offer more, and more systematic guidance to scholars and policy-makers alike.

References

- Dolfsma, W. (2013). *Government failure*. Cheltenham: Edward Elgar.
- Granovetter, M. (1979). The idea of 'advancement' in theories of social evolution and development. *American Journal of Sociology*, 85(November): 489–515.
- Jaffe, A., & Lerner, J. (2004). *Innovation and its discontents: How our broken patent system is endangering innovation and progress, and what to do about it*. Princeton, NJ: Princeton University Press.
- Leydesdorff, L. (2006). *The knowledge-based economy: Modeled, measured, simulated*. Boca Raton, FL: Universal.
- Leydesdorff, L., Dolfsma, W., & Van der Panne, G. (2006). Measuring the knowledge base of an economy in terms of triple-helix relations among 'technology, organization, and territory'. *Research Policy*, 35, 181–199.
- Machlup, F. (1958). *An economic review of the patent system*. Washington, DC: US Government Printing Office.
- Pesendorfer, W. (1995). Design innovation and fashion cycles. *American Economic Review*, 85, 771–792.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Schreyögg, G., & Sydow, J. (Eds.). (2010). *The hidden dynamics of path dependence – Institutions and organizations*. London, UK: Palgrave Macmillan.

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