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Chapter 9

Resilience and Governmentality of Unknowns

By Simin Davoudi

[...] the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interest is vastly exaggerated compared with the gradual encroachment of ideas [...] the ideas that civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

The above are the words of John Maynard Keynes (1936:241) whose own influential ideas contributed to the revisionist approaches to classical liberalism of the 19th century and the rise of welfare states after the 2nd World War. They suggest that ideas matter and should be taken seriously in the narratives of change. Contemporary scholars have turned to ideas in order to bring agency back in the so-called new institutionalism and undermine its over-emphasis on: fixed rationalist preferences, self-reinforcing historical paths, or all-defining cultural norms (Schmidt, 2008:304). Advocates of policymaking as social learning have also highlighted the role of ideas. An early example is the work of Hugh Heclo on social policy in Britain and Sweden. He argued that, "Governments not only 'power' ... they also puzzle"

(Heclo, 1974:305); that, "Much political interaction has constituted a process of social learning expressed through policy" (ibid: 306). Like the concept of "knowledge", ideas carry multiple meanings. Some see them as, triggers for interests, road maps or focal points (Goldstein and Keohane, 1993). Others consider them as strategic constructs (Jabko 2006), event-shaping narratives (Roe 1994), frames of reference or collective memories (Rothstein 2005). Schmidt (2008) defines ideas as the *substantive* contents of discourse and argues that their explanatory power lies in not only what is said, but also who said it, where, when, how and to whom. This understanding of ideas resonates with Foucault's power/knowledge dyad (1980) and his perspective on governmentality. It strips away the modernist baggage associated with the use of the term "knowledge" and its epistemic definition as "justified, true belief" (after Plato). Used in this way, ideas do not simply emerge from "voices in the air"; neither do they belong exclusively to "academic scribblers" as Keynes (1936) put it. Instead, they refer to a broader and more inclusive notion of knowing and its interdependence with power (Davoudi, 2015:10).

This paper aims to explore the role of ideas- understood as sketched above- in the construction of government rationalities, focusing particularly on the changing politics of citizenship and subjectivity. Bevir (2013) identifies two waves of reform in many of the western liberal democracies: the first one led to the spread of markets and networks and was inspired by neoclassical economics and rational choice theory. The second one, inspired by new institutionalism, led to the spread of partnerships and joining-up while maintaining networks. I would argue that since the 1970s, liberal democracies have also been informed by another set of ideas that are rooted in complex systems theory whose influence has grown considerably in the last two decades through the concept of resilience. Advocated by

ecologists, psychologists and disaster specialists, resilience is increasingly colonizing various arenas of public policy, as an alternative rationality for governing complexity and uncertainty. However, I would argue that it is a particular interpretation of resilience that is co-opted into and reinforced by policy discourses; one which is in tune with the liberal framing of freedom and responsibility and the conservative value of maintaining the status quo. The former is reflected in the promotion of self-reliance as a key measure of resilient self and the latter is manifested in the emphasis on bouncing back to normal orders and negating the transformative opportunities that emerge from complexity, uncertainty and contingency.

The paper is structured under five sections. After this introduction, section two provides an outline of governmentality and the role of ideas in changing modes of government. Section three describes the genealogy of resilience and its multiple meanings. Section four focuses on the selective interpretations of resilience in public policy discourse and their over-emphasis on self-reliance and return to normality. Section five concludes the paper by highlighting the calculative and depoliticizing nature of this discourse in contemporary governance.

Governmentality and the role of ideas

A key contribution of Foucault's concept of governmentality is its rejection of the state-centric analysis of political authority. It offers a non-essentialized understanding of the state as a specific, dynamic and historic way in which societal power relations are now codified (Lemke, 2000; Rose and Miller, 1992). Governmentality positions the state within

the wider field of government and points to the existence of diverse and diffused forms of power in everyday life. Defining governmentality as "the conduct of conduct" implies a complex web of power / knowledge relations in which knowing and governing the self is intertwined with knowing and governing others. It implies that we are both subjects of power and play our part in its operation. Foucault coined the concept of governmentality in his lecture on the "genealogy of modern state" (on the 5th of April 1978 quoted in Lemke, 2000:2) to draw attention to the purpose of governmental actions and the means by which they are operationalized. Governmentality refers to political rationalities (ends) and technologies (means) of governance as they are played out in the context of specific governing "traditions and dilemmas" (Bevir, 2013). Whereas rationalities are about knowing, constructing and signifying the objects, subjects and goals of government, technologies are about the means by which these are achieved. They are assemblages of strategies, procedures, mechanism, instruments and practices that are enrolled, mobilized and pragmatically adjusted to give effect to governmental ambitions. The relation between rationalities and technologies is not a linear, sequential application of the former by the latter; it constitutes complex interdependencies between them (Davoudi and Madanipour, 2015:81).

What is common in the formation of government rationalities and technologies is the central role played by knowledge, defined broadly as all forms of knowing, doing, experiments, schemes and techniques, as well as the networks of people and processes through which these are conveyed. As Rose and Miller (1992:175) suggest, "government is a domain of cognition, calculation, experimentation and evaluation". However, as I mentioned above, all this "puzzling" is intricately intertwined with "powering"- to paraphrase Hecló (1974) - and cannot be disentangled in the analytic of governance. Ideas are both cognitive

(what to do) and normative (what ought to be done). They speak to "how" policies can solve problems as well as attaching values to and legitimating political action (Schmidt, 2008:307). The exercise of power "both prescribes what is to be done and codifies what is to be known" (Davoudi, 2015:10). It shapes our sense of "what counts as self-evident, universal and necessary" (Foucault, 1991:76). Although ideas are not exclusive to "experts", being identified as such provides experts with greater authority and influence. They become key agents for steering the learning process in policy making toward a particular direction. Traditionally, policy experts operated largely from within the state institutions and included a great number of officials and civil servants. Since the late 1970s, expertise has been increasingly outsourced. Today, there is an enlarging marketplace of ideas within which a myriad of institutions and think tanks do the puzzling (and powering) in the policy making processes. Social scientists, for example, have provided a repertoire of theories, ideas and knowhow that have influenced the changing modes of governance. They have defined policy problems, framed policy dilemmas, identified policy solutions (Bevir, 2013) and played a major part in the "intellectual machinery" of governing. They have helped in "rendering the world thinkable, (and) taming its intractable reality by subjecting it to the disciplined analyses of thought" (Rose & Miller, 1992:182). The intellectual machinery has influenced, and been influenced by, all aspects of the problematic of government such as: how to govern, for what purpose, to what end, and with what means. As regards government rationality, it has (re)defined and legitimated political rationalities and (re)produced the ideals and principles that a "good" government should aspire to such as: justice, freedom, responsibility, resilience, growth and austerity. It has (re)defined the nature and characteristics of the objects and subjects that are to be governed such as: economy, society, communities, individuals and

citizens. As regards government technologies, the intellectual machinery has created and renewed policies, instruments and techniques such as: social insurance, performance indicators, audits, and resilience building programs. It has also come up with new idioms, languages, metaphors, "yardsticks" (Rorty, 1999) and "pseudo-concepts" which simultaneously "describe" and prescribe perceived realities and dilemmas (Bourdieu, 2003: 85) and make them thinkable and amenable to political deliberations.

Schmidt (2008) suggests that ideas operate at three levels of generality: specific policies, broader programs and "public philosophies". Policy and programmatic ideas are seen as foreground because they are regularly revisited and changed while philosophical ideas are seen as background because they constitute the underlying principles, values, beliefs and worldviews that are often left unarticulated, taken for granted, and unamenable to scrutiny (Campbell, 2004). Along a somewhat similar line of argument, Hall (1993:278) suggests that policymaking is a process that involves three variables: overarching goals, policy instruments and the settings for these instruments. Like Schmidt, he argues that instruments and settings can be reformulated frequently, but only when the overarching goals are also radically transformed, we can speak of a new "policy paradigm" (ibid). He refers to the shift from Keynesian to monetarist forms of macroeconomic regulations in 1980s' Britain as an example of such a wholesale change, arguing that officials and experts played a greater role in policy transformation than politicians. Consequently, inflation replaced unemployment as the primary goal of policy makers, and this led to a focus on achieving a balanced budget and a reduction in direct taxation and on using monetary instead of fiscal policy as the main policy instrument.

From a governmentality perspective, both Schmidt's "core philosophical ideas" and Hall's "overarching goals" are considered as government rationalities (the ends), while their policy instruments, programs and setting are seen as government technologies (the means). Thus, the 1980s' "paradigm shift" in macro-economic policy in Britain is interpreted as one-albeit significant- part of a broader shift in the mentality and technologies of government with far reaching implications for not only economic policy, but also the ways in which the relationship between citizens and the state were reconfigured. More specifically, it was a shift from one form of liberalism (known as welfarism) to another (known as neoliberalism), and from one set of ideas about the state, liberty, economy, society, and individuals to another (Davoudi and Madanipour, 2015). In the following account I will focus on a particular set of ideas that although dating back to 1970s' complex systems theory have only recently (since the 2000s) entered public policy discourses and largely through the concept of resilience.

Genealogy of resilience and complex systems theory

Resilience has a unique genealogy with multiple roots in systems theory, engineering, ecology, psychology and disaster studies. The term itself comes from the Latin root (*resi-lire*) which *means* literally to spring back. As I have discussed in more details elsewhere (Davoudi, 2012a), it was used by physical scientists and engineers to define stability and resistance to external shocks. It denoted persistent, "efficiency, constancy and predictability"; i.e. qualities sought for "a fail-safe" engineering design (Holling, 1996:31). In the early 1970s, resilience entered the field of ecology particularly through the pioneering

work of the Canadian ecologist, Crawford Stanley (Buzz) Holling. In his 1973 article, he made a distinction between engineering and ecological resilience at the centre of which was the idea of equilibrium (Holling, 1973). He defined engineering resilience as the ability of a system to return to equilibrium after a disturbance with the critical factor being the speed by which (time taken) the system returns to a pre-existing equilibrium. Built into this definition are two assumptions: one is about the inevitability of return and the other the existence of equilibrium; both are seen as desirable features and indicators of long term persistence and stability. This equilibrium-based return to a steady state is embedded in the Newtonian view of the world as an orderly mechanical device whose behaviour can be explained and predicted by mathematical rules and positivist science (Davoudi, 2012b). Complexity was recognized (notably through Werner Heisenberg's quantum mechanics) but in a mechanical and deterministic way, underpinned by a belief that the only limit to knowing the unknowns is the scientific / epistemic limit (Chandler, 2014). The unknowns themselves were believed to be the underlying, hidden laws that determine how the world works. It was this image of deterministic science that thrust the formalization of economics in the late 19th century and its promise of creating a "prosperous equilibrium" whereby free market transactions would be "the embodiment of freedom" (Robbins, 1961:104) and the guarantor of liberty. For classical liberals, liberty was defined not simply as the freedom to obtain private property, but as best protected by it. Neoclassical economics and its holy grail of achieving *Pareto* efficiency is still based on some elusive systems' equilibrium. Another example of the quest for equilibrium is the modernist visions of the influential Charter of Athens which considered a "good" city as having a "state of equilibrium among all its respective functions" (CIAM, 1933, no pagination) with the "power of plan" as the tool to achieve it (Davoudi and

Madanipour, 2012). The modernist view of knowledge as capable of knowing what is to be known informed the rationality of the post-war, liberal governments and their top-down, centralized command and control technologies.

Challenging this engineering and equilibristic perspective, Holling defined ecological resilience as the “persistence of relationships within a system” and the ability of systems “to absorb changes of state variables, and parameters, and still persist” (Holling 1973:17). The emphasis here is not on “*how long* it takes for systems to bounce back after a shock, but *how much* disturbance they can take and remain within critical thresholds” (Davoudi, 2012a: 300). The significance of Holling’s work lies in his departure from Newtonian and mechanistic assertions of equilibrium - typical of the post-war cybernetics and closed systems theory - and his adoption of complexity science in the field of ecology. By then, the epistemic understanding of complexity had moved on to acknowledging *emergent* complexity (Bryan and Callaghan, 2014) where the emphasis is on the prevalence of the unexpected and on not simply epistemic limit to, but also logical impossibility of knowing the unknowns (the so called unknown unknowns). According to the emergent complexity theory, “contingent outcomes only reveal concrete causality after the event and are impossible to know beforehand” (Chandler, 2014: 50). They emerge in a non-deterministic and also non-arbitrary fashion in open systems such as life itself and social relations. Lyotard, writing at the same time as Holling in the 1970s, captured the significance of this paradigm shift.

Classical determinism continues to work within the framework of the unreachable – but conceivable – limit of the total knowledge of a system [...]. Quantum theory and microphysics require a far more radical revision of the idea of a continuous and

predictable path. The quest for precision is not limited by its cost, but by the very nature of matter (Lyotard, 1984:55)

Holling's response to the dilemma of governing emergent complexity was to advocate the need for "a qualitative capacity to devise systems that can absorb and accommodate future events in whatever unexpected form they may take" (Holling, 1973: 21). This implies that complex life can no longer be governed by advanced (planned) intervention or direction and instead should rely on its own capacities for adaptation and survival. In his later work, Holling and his fellow ecologists in the Resilience Alliance (a Stockholm University-based network with global influence which works closely with the (Beijer) International Institute of Ecological Economics) expanded resilience thinking beyond ecology and into the realm of society to advocate a total complex system in which resilience is "integral to the co-evolution of societies and ecosystems" (Walker and Cooper, 2011:147). The move was reflected in changing the name of Resilience Alliance journal from *Conservation Ecology* to *Ecology and Society*. They began to use the term socio-ecological resilience (Folke *et al.*, 2010) or evolutionary resilience (Davoudi, 2012a; Simmie and Martin, 2010). Evolutionary resilience challenges notions of order, stasis and equilibrium. It suggests that the behaviour of complex systems cannot be explained by a single "attractor" and a linear and proportional cause and effect relationship; that complex systems involve multiple attractors and unpredictable shifts can happen with or without external disturbance and with or without linear causal links. This implies that, "small scale changes in systems can amplify and cascade into major shifts while large interventions may have little or no effect" (Davoudi, 2012a:303), and "past behaviour of the system is no longer a reliable predictor of future behaviour even when circumstances are similar" (Duit *et al.*, 2010:367). Resilience in this context is not necessarily about a return

to normality. It is about the ability of systems to change, adapt, and transform in response to stress (Carpenter *et al.*, 2005). The self-organising (Berkes and Folke, 1998:12) characteristic of complex systems means that they can “actively shift stability landscape” (Holling *et al.*, 2002:14) and adapt to or transform in the face of stress. The Resilience Alliance has expanded evolutionary resilience from being a property of ecosystems to being a general systems theory that can integrate society, economy and ecology into a total complex system (Walker and Cooper, 2011). The totality is called the "Panarchy" and is defined as:

the structure in which systems, including those of nature (e.g. forests) and of humans (e.g. capitalism), as well as combined human-natural systems (e.g. institutions that govern natural resources use such as the Forest Service), are interlinked in continual adaptive cycles of growth, accumulation, restructuring, and renewal (Gunderson and Holling, 2002, cover text).

Proponents suggest that this general systems theory can be approached heuristically as a non-linear iteration of an adaptive cycle with four distinct phases: exploitation or growth, conservation or accumulation, renewal or "creative destruction" and reorganization. “The first loop of the cycle relates to the emergence, development and stabilization of systems’ structure and functions, while the second loop relates to their eventual rigidification and decline, and at the same time the opening up of new and unpredictable possibilities” (Davoudi, 2012a:302). It is the second loop which challenges the equilibrium-based approaches of traditional systems theory and classical systems ecology because it emphasizes that growth (r) and stable equilibrium (k) phases are inevitably followed by an Omega phase of collapse and then spontaneous reorganization that leads to a new, Alpha phase of growth and renewal. Although the Omega phase is the time of greatest uncertainty, it is

simultaneously a time of high resilience with opportunities for innovation and transformation (Gunderson and Holling, 2002).

Evolutionary resilience is a great step forward in systems thinking and a reflection of the paradigm shift in science where nothing is considered certain except uncertainty itself. The concept of resilience has now moved beyond ecology and found considerable prominence in social sciences. This is evident in the 400 percent rise in the number of annual references to resilience (albeit not necessarily evolutionary resilience) as a topic in the *Social Science Citation Index* between 1997 and 2007 (Swanstrom, 2008:4). Resilience thinking has influenced the work of scholars in regional economics (Simmie and Martin, 2010), socio-technical studies (Janssen *et al.*, 2006), public policy theories (John, 2003), disaster studies (Vale and Campanella, 2005), spatial planning (Davoudi, 2012a; Wilkinson, 2012; Coaffee, 2013) and climate change adaptation (Davoudi *et al.*, 2013). Resilience has also found a central place in the rationalities and technologies of contemporary governance. Its speedy and wide spread reception in multiple areas of public policy begs the question, why? I address this in the following account.

Resilience as an alternative rationality of governance

Following Bevir (2013), modes of governing change in the face of new policy dilemmas while the direction of change is shaped by the past experiences and new ideas. However, although ideas matter in the narrative of change their leverage depends on firstly, their enacted credibility in the framing of policy problems and secondly, their perceived alignment with traditional values and political rationalities.

As we entered the 21st century, the dilemma of governing emergent complexity became more visible as a result of a number of high profile events such as post 9/11 terrorism, trans-species epidemics and climate change-related disasters (Anderson, 2010:779). They shared a number of common features such as, perceived imminence, catastrophic consequences, and illusive and undiscernible causes of threats. As the shift to neoliberalism was legitimated by the failure of welfare state to deal with the social and economic storms of the 1970s, these events signaled the crisis of neoliberal states in governing complexity and legitimated the call for alternative rationalities and technologies. Faced with the inadequacies of modernist framing, emergent complexity appeared “to be the leading contender as an alternative ontological vision of the world – of how life can be alternatively conceived as the object of governance” (Chandlers, 2014:51). Resilience thinking appeared to offer a distinct way of governing the unknowability of complex life; one that is based on evolutionary adaptation of self-organized systems (be it individuals, communities, cities, companies, institutions or ecologies). The perceived credibility of resilience in offering solutions to new policy conundrums was coupled with its alignment with the political rationalities of contemporary governance and more specifically the liberal understanding of freedom and responsibility (the state-citizen relationship) and the conservative value of resisting radical change. The former explains the over-emphasis on self-organizing character of complex systems in public policy discourse, and the latter explains the underplaying of the transformative potentials of contingent life. Both are evident in the highly selective interpretation of resilience which centres on prioritizing and mobilizing two specific "yardsticks" as measures of resilience. One is self-reliance (translated from self-organization in evolutionary resilience) and the other is bounce-back-ability

(appropriated from engineering resilience). The former puts the moral responsibility to cope with emergent complexity on the resilient self with little or no state interventions; the latter privileges a return to normality without questioning the desirability of the "normal" or, seeking a "new normal" (Davoudi, 2012a). I elaborate on these in turn.

1. The responsabilized, self-reliant and resilient self

The concept of freedom has been used by successive governments in Britain, especially after the late 1970s, to justify a variety of policies including decentralization, devolution, community- and place-based actions and localism. The new Labour government drew on the ideal of freedom to embark on a series of “reforms to enhance choice, diversify supply and devolve control”, so that “the Government moves from a centralized command and control model to what has been called new localism” (Milburn, March 2004: no page). The Coalition government promises to “be strong in defence of freedom” and “believes that the British state has become too authoritarian, and that over the past decade it has abused and eroded fundamental human freedoms and historic civil liberties”. It claims “to restore the rights of individuals in the face of encroaching state power, in keeping with Britain’s tradition of freedom and fairness” (HM Government, 2010a: 11). Rhetoric aside, different meanings are attached to freedom and liberty. Defining what constitutes liberty has been the subject of much debate among liberal philosophers. At the centre of debate is the question of how much government is too much government or, in the language of the Coalition government, what is the balance between "big society" and "big government". The governmentality perspective, however, is concerned less with the question of *how much* government and more with the questions of *what type* of government, *to what end* and *by what means* (Davoudi and Madanipour, 2015).

Thus, the challenge for liberal modes of governing is how to govern the civil society - itself construed by Classical liberals as a "non-political" and "private" realm- without obliterating its endowed freedom and rights. In addressing this challenge, contemporary governance seeks to shape the conduct of the subjects by acting upon: "the possible fields of their action" (Foucault, 1982:221), their network of relations, and the environment within which they operate (Rose *et al.*, 2009; Dean, 1999; Lemke, 2000). The aim is "to align the aspirations of free and autonomous individuals [...] with those of government in such a way that their self-fulfillment coincide with the fulfilment of government goals" (Davoudi and Madanipour, 2015:83). In other words, "the focus is less on players and more on the rules of the game" (ibid). This does not necessarily mean less government but rather *different* forms of governing; ones which foreground "governing at a distance" (Miller and Rose 1990 inspired by Latour's "action at a distance") and combining direct mechanisms of control with indirect technologies of steering, incentivizing, nudging, enabling and auditing performances. A prominent example of the latter is the establishment of a Behavioural Insights Team (nick named the "Nudge Unit") by the UK Prime Minister in 2010 to improve policy design and delivery. The Unit which began its life in the Cabinet Office is now a company owned partly by the government. The ideas underpinning their work derive from behavioural economics (and particularly Sunstein and Thaler, 2008) which is playing an increasingly influential role in "changing the way Britain's regulators think about the markets they regulate" (*The Economist*, 2014:33). In 2014, "an OECD Report declared Britain a world leader in applying behavioural economics to regulation" (ibid, 34).

Freedom in liberal mentality is seen not as the opposite of coercion or the site of struggle for utopian emancipation but as an instrument or, as Hayek (1976:163 original

emphasis) puts it, “*an artefact*” that can be co-opted in the technologies of government and used to achieve certain governmental goals. Instead of being merely obedient subjects governed from the top, people fulfil governmental ends by conducting themselves freely yet in a responsible way (Foucault, 1982). “*Responsibilization*, therefore, is at the heart of the liberal way of governing the self” (Davoudi and Madanipour, 2015: 84 original emphasis). It is a key technology by which the boundaries of citizenship are (re)drawn and individual freedom is steered towards pre-defined social norms and desired outcomes. The idea is that, with freedom comes choice, so people ought to be responsible for the choices they make even though their choices may be constrained by structural forces that are beyond their control. What distinguishes different modes of liberalism from one another is their approach to questions such as, responsible *to whom*, *for whom*, and *to what end*.

The post-war welfare state considered citizens as free individuals yet firmly “bound into a system of solidarity and mutual inter-dependency” (Rose and Miller, 1992:196). Such interdependency was constructed through a set of governmental technologies, notably the social insurance system, which became exemplified in William Beveridge’s social contract. The state was conceived of as the necessary regulator and keeper of the social order, albeit for the sake of the market economy. Its relationship with responsibilized citizens was reciprocal. Welfare provisions aimed to create a sense of “ontological security” (Giddens, 1990) in which citizens expected to be supported by the state at times of hardship and adversity. The 1970s’ neoliberal states reformulated this reciprocal relationship. On the one hand, “the social” as the embodiment of collectivity was criticized “by those who contingently coalesced around concerns over (its) homogenizing, universalizing, alienating and disempowering tendencies” (Davoudi & Madanipour, 2015:89). On the other hand,

citizens were re-defined as “moral individuals” and “atomised actors” whose conducts were determined by their own morality and that of their imagined and self-selected communities rather than by society as a whole (Rose 1996:334; Davoudi and Madanipour, 2015). Politics was, therefore, colonized by “an unguarded faith in the individual and free market as deliverer of freedom” (Stedman Jones, 2012:19). Since then, citizens, who are increasingly identified as customers with free consumer choices, are made responsible *for* and *towards* themselves first; and only then, and in a strict moral order, for their families, neighbours and associations. Mrs. Thatcher (1987:10) said it all, “...people must look to themselves first. It is our duty to look after ourselves, and then to look after our neighbour”.

The individualization of responsibility has been coupled with a desire to replace the role of the state in providing welfare and maintaining social orders with another regulating entity, the market, because big government is seen as inefficient, ineffective, morally dangerous and leading to a dependency culture that destroys individual freedom. As Raco (2009) states, the move from the welfare to neoliberal modes of government has created and been enabled by a change from "expectational citizenship" to "aspirational citizenship" with the defining character of the latter being entrepreneurialism and competitiveness. The discourses of the UK Coalition government are peppered with the liberal advocacy of responsibility but one aimed at, above all, entrepreneurship.

What is my mission? It is actually social recovery ... to mend the broken society. that's what the Big Society is all about... *responsibility* is the absolute key, giving people more control to improve their lives and their communities, so people can actually do more and take more power [...] But above all, it's *entrepreneurship* that is going to make this agenda work (Cameron, 2011, no pagination, emphasis added).

The principle of self-organization, extracted from the emergent complexity theory, offers a convenient match with liberal understanding of responsibility and the freedom from state interference. It is also in tune with the traditional conservative value of self-help. Self-organization is a particularly powerful narrative because it generates a contingently common platform from across the political spectrum for the critique of global capitalism. It pays homage not only to the neoliberal understanding of the free and responsabilized citizen, but also to the grassroots', communitarians' and anarchists' advocacy of self-sufficiency and self-reliance as an alternative to capitalist global markets and stultifying states. It is, therefore, not surprising that self-reliance is widely advocated as a common sense, neutral and universal measure of the resilient self; one that a responsible citizen should aspire to in the face of radical uncertainties.

However, its intuitive fit with neoliberal values is anything but coincidental. As the detailed account by Walker and Cooper (2011) demonstrates, the genealogy of resilience and the ideas that influenced the birth of neoliberalism run in parallel. Like Holling, Fredrich Hayek and his contemporary group of Viennese economists who fueled the intellectual machinery of neoliberal governmentality in the 1970s, were also influenced by complex systems theory. Members of the Mont Pelerin Society, along with its offspring think-tanks (such as the Institute for Economic Affairs which was established in 1955 in London), combined the classical liberal's moral critique of big government with the economic critique of Keynesianism to denounce the welfare state for its ineffective fiscal interventions and its *dirigiste*, excessive and centralized power (Stedman Jones, 2012). However, contrary to the common conflation of neoliberalism with the expansion of neoclassical equilibrium theory to all aspects of social life, the Viennese group (unlike the Chicago School) was highly critical

of equilibrium analysis. This is particularly the case with regard to Hayek's ideas which were emerging at the same time as Holling was writing his seminal paper on ecological resilience in the early 1970s. Like Holling, Hayek drew on complex systems theory to embark on a sustained criticism of not only "the state-engineered equilibria of Keynesian demand management", but also "the equilibrium formulae of the neoclassical economists" of the Chicago School (Walker and Cooper, 2011:149). In his Nobel Prize speech he declared that "the social sciences, like much of biology but unlike most fields of the physical sciences, have to deal with structures of *essential* complexity" (Hayek, 1974 no pagination, original emphasis).

Similar to the idea of self-organization in complex systems, Hayek's theory of "spontaneous order" advocates that, social order emerges from the interaction of self-serving individuals who rationally utilize the price systems to adjust their plans (Hayek, 1976). He called for a reform of "all social institutions in accordance with the self-organizing dynamic of the market" (Walker and Cooper, 2011:150) which he believed was a more effective regulator and keeper of social order. Hayek's disdain of state planning was not based on its occasional failure in predicting, preventing, or managing risks, but the logical impossibility of prediction in complex systems. Although these ideas, among others, have been added to rationalities and mixed technologies of government since the 1980s, they have not overruled the need for "social engineering"; a term used by Douglass North in his Nobel Prize speech (2005:162) and in response to Hayek. "Policy activism" remained "necessary despite the limited knowability of social interactions and the constitution of institutional forms" (Chandler, 2014: 54). However, resilience thinking calls for a shift of focus in government technologies towards much less state intervention and much more responsabilization of the

subjects. The idea is to let people self-organize and deal with the "unknown unknowns" (a term popularized by Donald Rumsfeld, the former US Secretary of Defense) as they emerge. Policy in this context is a reactionary one, and learning happens *post hoc*. As Chandler (2014:62) advocates, "governance thereby works 'backwards' – from the problem- not forward to achieve some collective policy-goal".

Reflecting on the influence of complexity theory on new public management, Cook and Muir (2012) argue that governments should not try to solve problems but enable those involved to solve them for themselves. In this scheme, self-reliance is prescribed as a primary measure of resilience and a key "existential yardstick" (Rorty, 1999). It reflects and reproduces the broader process of "*existential politics*" by which "selective meanings and understanding of human subjectivity" is identified and institutionalized (Raco, 2009: 437 original emphasis). People are, therefore, expected to "carry the weight of the world on their shoulders" and become "responsible for themselves as a way of being" (Sartre, 1957:51). "The resilient subject is a subject which must permanently struggle to accommodate itself to the (ever changing) world" (Evans and Reid, 2013:83). It is claimed that, resilience, seen as an innate capacity of the biological species will diminish if people are exposed too much to dependency-inducing state welfare.

The emphasis on self-reliance is actively pursued in the discursive practices of a growing number of policy frameworks, think tank reports and government guidelines in the UK, especially in relation to community resilience building. For example, a government-funded report on community resilience uses a so called "system dynamic diagram" to argue that, "if the Government takes greater responsibility for risks in the community, it may feel under pressure to take increasingly more responsibility, thereby eroding community

resilience” (RRAC, 2009:6). Similarly, the *Strategic National Framework on Community Resilience* stresses that people should take “responsibility for their own resilience and recovery” (Cabinet Office, 2010: 7). Bulley (2013) provides a detailed analysis of the UK Cabinet Office’s three-year community resilience program to show how particular meanings of the concepts of "resilience" and "community" are fixed, while Doty (1993: 303) shows how power is exercised to “create various kinds of subjects and simultaneously position these subjects vis-à-vis one another”

The resilient self has become a measure of the fitness of people (and places) to survive in the "runaway world" of insecurity (Giddens, 1990) and emergent complexity. The emphasis on self-reliance reiterates the Darwinian law of natural selection which is often translated into the survival of the fittest. It corresponds with the liberal view of society as the sum of the individuals. As Norberto Bobbio (1990, 43) puts it, liberal individualism “amputates the individual from the organic body [...] plunges him into the unknown and perilous world of the struggle for survival”. The discourses of self-organization, self-help and self-reliance reflect and amplify the replacement of social responsibility with a “neoliberalised care for the self” (Evans and Reid, 2013: 85) because as Mrs. Thatcher (1987:10) once claimed, “there is no such thing as society”.

2. The return to "normal"

The influence of complexity on the field of biology goes back to the beginning of the 20th century when the notion of self-organization was adopted as a key attribute of what it means to be a living being (Jacob, 1989). Based on Stuart Kauffman’s (2000) influential ideas, emergence and contingency were seen as key characteristics of life as biological being. He argued that, “no one designed and built the biosphere. The biosphere got itself constructed

by the emergence and persistent coevolution of autonomous agents” (Kauffman, 2000:3). Similar to Holling’s resilience ideas, Kauffman suggested that complex adaptation within the biosphere (the space of biological transactions) produces unpredictable and self-organizing changes and diversification. So, “contingency is itself constitutive of what it means to be a living thing. If life, understood as biological being, is to be secured, such life cannot therefore be *secured from contingency*” Dillon (2008: 314 original emphasis). This creates a dilemma for contemporary governance: how to secure complex life without destroying its essence as emergent being. If the self-fashioning of responsible citizens is to be safeguarded and enabled, “liberal life must be open to the unanticipated” because uncertainty is a source of threat as well as opportunity; “both that which much be secured against and that which must be enabled” (Anderson, 2010: 782).

Resilience has arguably offered a solution to this conundrum because, contrary to precautionary and pre-emptive strategies which seek to prevent uncertain futures or reduce their impacts, resilience seeks to enhance our capacity to live with and even flourish from them (Anderson, 2010; Grove, 2014). This is based on the idea that the Omega phase of collapse in the Panarchical adaptive cycle opens up a window of opportunity for a radical new beginning. However, the selective appropriation of resilience thinking in public policy discourse overrides such transformative potentials, and privileges a narrow engineering perspective which is premised on a return to equilibrium. The emphasis is on bouncing back to the normal order; on “*preserving* what we have and *recovering* to where we were” (Davoudi, 2012a: 302, original emphasis). In line with conservative values, accepting, adapting to and maintaining the status quo is prioritized over the transformative opportunities that are inherent in complex life. Exposure to threats is considered as inevitable

and a constitutive process of life, so rather than securing life against the unknowns or seeking potential opportunities from them, a resilient self can (and should) adapt to them and carry on as usual. Like self-reliance, the ability to return to a pre-defined "normal" is advocated as the hallmark of a resilient self (Bonanno, 2004). This bounce-back-ability is also actively pursued in public policy discourses. For example, the former government's first Intelligence and Security Coordinator defined resilience as "the capacity to absorb shocks and to bounce back into functioning shape, or at the least, sufficient resilience to prevent [...] system collapse" (D. Omand, quoted in Edwards, 2009:18). When launching Scottish Resilience, the former Cabinet Secretary suggested that public sector reorganization had to "take all practicable steps to [...] respond and cope with major shocks so we can bounce back quickly" (J. K. MacAskill, quoted in Edwards, 2009:18). The preferred option is to return to the existing social order, construed as normal, and negate the potential for transformation. The aim is to ensure that emergent life does not spiral out of control and lead to "undesirable" surprises (Derrida, 2003). Grove's account of disaster resilience programs show how they attempt "to immunize neoliberal order against unchecked adaptations by engineering artificial forms of adaptive capacity" and disavow possible interruptions of novelty and surprise. By doing so, they "turn life against its own vital force" (Grove, 2014: 252) - contingency - and stifle potentials for alternative trajectories.

Much has been made of the empowering potential of resilience thinking and its emphasis on agency. However, as Foucault suggests empowerment is itself a form of power relations (Cruikshank, 1999) and "freedom consists in realizing one's true self, that is in the actualization of one's capacity to be rational" (Rorty, 1999:114). So, agency in resilience is defined and prescribed as the will of responsible individual who has an innate capacity to

make rational adaptation choices; with the rationality defined and prescribed as the return to a pre-conceived normal. The empowerment aims to enable and enhance a particular form of rationality that does not aspire to radical transformation. Based on the analysis of the UK Community Resilience Programme, mentioned above, Bulley (2013:273) suggests that,

‘the approach is fundamentally about producing and governing community behaviour through the development of resilience. The passing over of responsibility to local volunteers, "champions" and organisations is not about empowerment per se, but forming subjects, placing them in a hierarchy, drilling (and scaring) them into more manageable, directable (and resilient) individuals and communities. This is about spreading a mentality of government throughout society, channeling and guiding behaviour "at a distance"’.

A corollary to the discourse of speedy return to normality is the elevation of emergency planning and the need for urgent action (Davoudi, 2014). Feeding from each other, resilience, urgency and emergency legitimate the evacuation of "the political". As suggested by Calhoun (2004:376) they “represent as sudden, unpredictable and short-term what are usually gradually developing, predictable and enduring clusters of events and interactions”. This is reflected in the following statement by Demos - a UK think-tank once close to New Labour government-

“Individually and as a society we have a choice. If we want to continue to lead complicated lives based on a vulnerable national infrastructure in an environment of extremes then we must accept there will be major shocks, disruptions and stresses to the system. As the credit crunch and global recession has proved, few national and

global finance systems anticipated and were equipped to respond to the major shock of the sub-prime fallout in the US” (Edwards, 2009: 32).

This statement frames the 2008 financial crises as abnormal and sudden acts that are challenging the global order of which the crises are exceptions rather than outcomes. By provoking the need for emergency action for a speedy return to a pre-defined normality, the selective interpretations of resilience override the demand for inclusivity, renounce or displace social conflicts and “foreclose a proper political framing” (Swyngedouw, 2010:2019). They crowd out the space for raising questions such as, “resilience from what to what, and who gets to decide?” (Davoudi and Porter, 2012:331). What facilitates such de-politicization is the foregrounding of: calculative practices, technical-rational risk assessments, and resilience engineering. In the caldron of this highly selective resilience discourse, creative potentials become stifled by formulaic procedures. As Evans and Reid (2013:85) suggest, “building resilient subjects involves the deliberate disabling of the political habits, tendencies and capacities of peoples and replacing them with adaptive ones”.

Conclusion

Ideas matter in shaping government mentalities and technologies. The ones that are perceived as offering credible framing of policy dilemmas and matching the dominant political rationalities are likely to have a greater leverage in policy reforms. Resilience seems to score high on both accounts. Its growing influence lies in its ability to present a temporary match between the cognitive rationality of complexity science and the normative values of neoliberal mentality in relation to responsibility and self-reliance. Paradoxically, its appropriation in public policy discourse is also based on the alignment between its

engineering interpretation and a return to equilibrium and the conservative values of the defence of status quo. The outcome is an alternative way of governing insecurities which although is influenced by complexity theory and resilience thinking, it remains highly selective in the definition, calibration and mobilization of them. In some ways, the selectivity reflects the difficulties of disentangling powering from puzzling in the narrative of change.

As mentioned above, the focus of the governmentality perspective is not on how practices conform to particular rationalities, but what type of rationality they use and “how forms of rationality inscribe themselves in practices” (Foucault, 1991:79). In this paper I have tried to show how liberal rationalities of freedom and responsibility are used to inscribe a particular interpretation of resilience in practice; one that considers vulnerability as self-inflicted and self-reliance as the best way to a resilient self, capable of adapting to crisis and returning to the "normal" order. The contours of citizenship are being redrawn to incorporate the resilient self as one of the main existential yardsticks to which free and responsabilized citizens have to measure up. Resilience has, therefore, become a key site where new links are forged between governing others and governing the self so that people become both the *target* of resilience programming and its voluntary *partner*. The process is enabled and regulated *at a distance* through technocratic and calculative technologies of resilience engineering whose goals include the negation of transformative possibilities. Through a complex process of identification and responsabilization, self-reliant individuals are deemed to act rationally in reducing their own vulnerabilities but, in such a way that their adaptation is aligned with governmental goals of returning to "normal" and maintaining the status quo. Governing through the resilient self appears to be the liberal response to the dilemma of governing complex and contingent life.

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