

16

RESILIENCE

A right-wingers' ploy?

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5 It is often said that cities and regions, their populations, and their governance structures increas-
 6 ingly have to respond to major challenges and a vast range of contemporary risks resulting from
 7 environmental change, threats to national and international security, and an array of issues asso-
 8 ciated with international migration and growing global economic turbulence. In the short term,
 9 at least in the global North, local communities, cities, and regions have to tackle and mitigate
 10 the impact of the global financial and economic crisis. In the medium term, they ought to be
 11 equipped to manage the pressures of an ageing and declining population. In the long run, the
 12 capacity and systemic capabilities of the critical urban infrastructure in major population centres
 13 must be enhanced to cope with potentially cataclysmic consequences of climate change.
 14 'Resilience' is a conceptual framework which purportedly offers its adherents a set of mecha-
 15 nisms to confront these monumental challenges of the modern age.

16 In this chapter, I discuss the impact of resilience as a popular way of thinking about humans
 17 and society at large. It is often argued that the market forces unleashed through the neoliberal
 18 globalization reforms of the 1980s and 1990s, combined with growing political turbulence fol-
 19 lowing the global financial crisis of 2008, enhanced a sense of personal and collective insecurity,
 20 particularly in the West (Birch and Mykhnenko 2010). Consequently, some critics of the resil-
 21 ience thinking have linked its supposed ascendance with the perceived desire by the major
 22 Western governments, international financial institutions (IFIs), and bilateral donors to respond
 23 to such major challenges by shifting the burden of responsibility onto individual citizens and
 24 local communities. Within this context, I initially set out differing definitions and approaches to
 25 the study of resilience. Consequently, I deal with the somewhat 'elastic' quality of resilience as
 26 a political agenda. In turn, I address the question of how influential resilience theory really is in
 27 terms of its appeal to academic scholarship as well as the public policy-making. In particular,
 28 I focus on the failed attempt by the British Conservative Party-led coalition government to
 29 enact some of the resilience thinking during its 2010–15 term in office. I conclude this chapter
 30 with an overall assessment of resilience, its strengths, and weaknesses.

Resilience: 'fuzzy', functional, formulaic?

31
 32 'Resilience means different things to different persons': that was the conclusion of the first ever
 33 literature review on resilience conducted in 1947 by J.H. Dillon for *Textile Research Journal*

1 (Hoffman 1948: 141). In what was most probably the scientific community's first attempt to
2 arrive at an agreed definition, Hoffman noticed a paradox involving resilience: the term could
3 easily describe an inherent property of such different substances as rubber, wool, and quartz.
4 To state that these materials were resilient was 'all at least partially true but, at the same time
5 inconsistent' (ibid.). His suggestion of a generalized concept of resilience as rebound elasticity
6 encompassed the focus on stress, strain, and time, so prevalent in physical sciences. This para-
7 digmatic view of the so-called *engineering resilience* as the ability of a material to absorb and
8 withstand compressive stress without suffering permanent deformation has been shaping both
9 theoretical and empirical investigations of the phenomenon ever since. In 1973, the ecologist
10 C.S. (Buzz) Holling was the first to reject the notion of resilience as a 'bounce back' from a
11 shock by developing the so-called *ecological perspective* on resilience, defining it as 'shock absorp-
12 tion' or 'stress resistance'. Holling's research has framed the debates on resilience in ecology
13 and environmental sciences, spilling over into business and economics, public administration,
14 and other social sciences (see Table 16.1). In the early 2000s, psychologists, mental health
15 practitioners, and early education professionals (Folke 2006) proposed a new – social-evolu-
16 tionary – reading of resilience as 'positive adaptability'. A 'bounce forward' is the metaphor
17 used in describing *evolutionary resilience* as a transformation and attainment of 'good outcomes'
18 under adversity (see Table 16.1). Nevertheless, 65 years after Hoffman's seminal paper in mate-
19 rials science, a fresh review of the literature on the topic declared that 'resilience, we now know,
20 has no agreed definition and is many things', with the only constant in all the elaborate
21 definitions being 'a concern with the response to undesirable changes' (Downes *et al.* 2013:
22 1–2). Thus, resilience continues to be a sufficiently undefined – 'fuzzy' – concept (see Pendall
23 *et al.* 2010).

24 Markusen (2003: 702) memorably defines fuzzy concepts as 'characterizations lacking con-
25 ceptual clarity and difficult to operationalize'; those which possess 'two or more alternative
26 meanings and thus cannot be reliably identified or applied by different readers or scholars'.
27 A number of representative definitions of resilience collated in Table 16.1 illustrate the 'fuzzi-
28 ness' of the term: contradictory opinions about the term are common not just across different
29 disciplines, but within them. The fundamental ambiguity of defining the concept in physical
30 sciences as elastic resilience (or 'bounce-back-ability'), on the one hand, and shock resistance
31 (or 'perseverance'), on the other hand, was uncovered as early as the 1940s. The new paradox
32 of resilience, identified in the 2000s, involves the nature of changes following a shock to the
33 system: a post-crisis recovery understood as a restoration of normality differs from 'positive
34 adaptation' – a transformative process leading, in the words of Martin and Sunley (2015: 13), to
35 a 'new sustainable path characterized by a fuller and more productive use of... physical, human
36 and environmental resources'. Finally, the fourth reading of resilience, which is popular in busi-
37 ness studies and disaster management, puts the emphasis not (just) on recovery, but rather on
38 preparedness and anticipatory adaptability. According to one management guru, 'zero trauma'
39 – a culture of automatic, spontaneous, and reflexive responsiveness to shifting circumstances
40 should become the new ethos of all large organizations, willing to survive (Hamel and Välikan-
41 gas 2003).

42 Resilience, thus, emerges as a complex and contradictory multi-disciplinary concept, with
43 multiple meanings. In addition, a large number of fundamental ontological, epistemological,
44 methodological, and ideological conflicts and inconsistencies in many readings of resilience have
45 been identified in the literature. Downes *et al.* (2013) provide further ammunition to those criti-
46 cal of applying the resilience thinking in social sciences. Finally, Olsson *et al.* (2015) offer the
47 most devastating critique of resilience theory and its complete incommensurability with social
48 sciences. Having conducted a comprehensive review of all the major work on resilience

Table 16.1 Representative definitions of resilience across disciplines

Research area	What is resilience?	Source
Engineering and materials science	'The capability of a substance to return to its original state at some later time after the removal of a deforming stress... Resiliency is a stress-strain-time property of a material, characterizing the completeness of a recovery from deformation and varying in kind with the modulus of elasticity and the rate of recovery'	Hoffman (1948: 141, 148).
Computer science	'The ability to withstand shocks and disturbances and to continue to operate in recognisable form' 'A large-scale, gracefully degradable system can tolerate element failures while providing continued operations... Network resilience... is defined as the maximum number of node failures that can be sustained while the network remains connected with a probability'	Lombardi <i>et al.</i> (2012: viii). Najjar and Gaudiot (1990: 179).
Ecology and environmental studies	'Resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist' 'The capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks' 'In the context of communities and settlements, it refers to their ability to not collapse at first sight of oil or food shortages, and to their ability to respond with adaptability to disturbance' 'Resilience in our personal lives is about lasting, about making it through crises, about inner strength and strong physical constitution... Resilience can be applied to cities. They too need to last, to respond to crises and adapt in a way that may cause them to change and grow differently; cities require an inner strength, a resolve, as well as a strong physical infrastructure and built environment' 'Community resilience [is] our capacity to both mitigate and adapt to the disruptive implications of climate change, peak oil, and ecosystem decline' 'The ability to absorb disturbances, to be changed and then to re-organise and still have the same identity (retain the same basic structure and ways of functioning)'	Holling (1973: 17). Walker <i>et al.</i> (2004: 5). Hopkins (2008: 55). Newman <i>et al.</i> (2009: 1). Lewis and Conaty (2012: 19). Resilience Alliance (2002).
Psychology; medicine and dentistry	'A process whereby people bounce back from adversity and go on with their lives' 'A dynamic process encompassing positive adaptation within the context of significant adversity' 'Reduced vulnerability to environmental risk experiences, the overcoming of a stress or adversity, or a relatively good outcome despite risk experiences'	Dyer and McGuiness (1996: 276). Luthar <i>et al.</i> (2000: 543). Rutter (2012: 336).

Business and economics	<p>'Think of the boxer who has been floored in the ring. A 'knock-out' may be ignored, since it very rarely happens outside the fable of Atlantis that a whole civilization is completely wiped out. The boxer has a certain resiliency which enables him to resume after a shorter or longer time which is determined partly by his physique and determination, partly by the amount of punishment he has already received. In a somewhat similar way there is what may be called economic resiliency which after a crisis endeavours to recover from the series of shocks which industry and commerce have experienced'</p> <p>'Strategic resilience is not... about rebounding from a setback. It's about continuously anticipating and adjusting to deep, secular trends that can permanently impair the earning power of a core business. It's about having the capacity to change before the case for change becomes desperately obvious'</p> <p>'The ability of an economy to (i) recover quickly from harmful external economic shocks; and (ii) withstand the effect of such shocks'</p> <p>'The ability to transform regional outcomes in the face of a challenge'</p> <p>'The region's ability to experience positive economic success that is socially inclusive, works within environmental limits and which can ride global economic punches'</p> <p>'The capacity of a system, enterprise, or a person to maintain its core purpose and integrity in the face of dramatically changed circumstances'</p> <p>'The capacity of a regional or local economy to withstand or recover from market, competitive and environmental shocks to its developmental growth path, if necessary by undergoing adaptive changes to its economic structures and its social and institutional arrangements, so as to maintain or restore its previous developmental path, or transit to a new sustainable path characterized by a fuller and more productive use of its physical, human and environmental resources'</p> <p>'A capacity to address short-term problems in ways that generate long-term success'</p> <p>'The capacity to adapt and to thrive in the face of challenge'</p> <p>'The ability to adapt to changing conditions and prepare for, withstand, and rapidly recover from disruption'</p>	<p>Scott (1930: 291).</p> <p>Hamel and Välikangas (2003: 53–4).</p> <p>Briguglio <i>et al.</i> (2010: 16).</p> <p>Chapple and Lester (2010: 86).</p> <p>Bristow (2010b, 153).</p> <p>Zolli and Healy (2012: 7).</p> <p>Martin and Sunley (2015: 13).</p>
Public administration: social work		<p>MacArthur Foundation (2007: 2)</p> <p>World Resources Institute (2008: ix).</p> <p>Obama (2010: 18).</p>

(Continued)

Table 16.1 Representative definitions of resilience across disciplines (Continued)

Research area	What is resilience?	Source
	<p>‘Communities and individuals harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services’</p> <p>‘The ability of individuals, organizations, systems, and communities to bounce back more strongly from stresses and shocks. Resilience means creating diversity and redundancy in our systems and rewiring their interconnections, which enables their functioning even when individual parts fail’</p> <p>‘Ability of the community, services, area or infrastructure to detect, prevent, and, if necessary to withstand, handle and recover from disruptive challenges’</p> <p>‘Resilience is more than what’s known as bouncebackability. It includes the ability to self-organise, to maintain balance, and to respond to change... Caricatured as getting volunteers to do the jobs we were once paid for, it really touches on deeper issues of neighbourliness and community, turning the typical reaction to a crisis or injustice of “something must be done” to “we must do something”. A socially resilient community doesn’t pass the buck’</p>	<p>Cabinet Office (2011: 4).</p> <p>NYS 2100 (2013: 7).</p> <p>Cabinet Office (2013: 66).</p> <p>Dobson (2011).</p>
Other social sciences	<p>‘Social resilience is defined as the ability of communities to withstand external shocks to their social infrastructure’</p> <p>‘Urban resilience implies a physical capacity to bounce back from a significant obstacle, much like a rubber ball dropped on the pavement. But cities are not rubber balls, nor is a disaster like an asphalt plane, from which a rebound can be definitely predicted by a set of mathematical equations’</p> <p>‘A process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance... Resilience occurs when resources are sufficiently robust, redundant, or rapid to buffer or counteract the effects of the stressor such that a return to functioning, adapted to the altered environment occurs. For human individuals and communities this adaptation is manifest in wellness’</p> <p>‘Rather than viewing resilience as bouncing back to an original state following the external “shock”, the term should be seen in terms of bouncing forward, reacting to crises by changing to a new state that is more sustainable in the current environment’</p>	<p>Adger (2000: 361).</p> <p>Vale and Campanella (2005: 335).</p> <p>Norris <i>et al.</i> (2008: 130).</p> <p>Davoudi <i>et al.</i> (2012: 309).</p>

1 published recently in the top ten natural and social sciences journals, they discovered five major
2 points of contention in the scientific application of resilience. First, they stress *system ontology*:
3 although the notion of ‘system’ is known in social sciences, it is not as essential, conventional or
4 indispensable to them as it is to resilience theory. Indeed, as Downes *et al.* (2013: 5) convinc-
5 ingly demonstrate, 85 per cent of all social science studies of resilience are conducted at the level
6 of individuals or families, not social systems. Second, the critics of the usage of resilience in
7 social sciences emphasize the problem of system boundary: although systems are indispensable
8 to resilience thinking, their boundaries can often be very difficult to demarcate spatially, tempo-
9 rally, or structurally (Olsson *et al.* 2015: 3–4; Martin and Sunley 2015). The third criticism of
10 resilience theory lies in its rather formulaic notions of equilibria, thresholds, and feedback mech-
11 anisms. Social systems are driven by human agency at least to the same degree as by structural
12 forces; thus, any systemic ‘feedback’ is subject to human interpretation and power relations.
13 Fourth, the resilience thinking assumes self-organization of the systems understood in complex-
14 ity theory as a natural propensity. By contrast, in social sciences self-organization refers to a
15 messy societal reaction to power asymmetries and structural inequality, often resulting in the
16 formation of new social movements (Olsson *et al.* 2015: 5). The fifth and final tension between
17 the social and natural sciences’ usage of resilience lies in the understanding of function and func-
18 tionalism – a point raised by many.

19 *Panarchy* – a term devised by Gunderson and Holling (2002) to describe evolving hierarchical
20 systems with many interconnected components – is by far the most significant formalized
21 representation of a functioning ecological–social system. According to the book’s blurb:

22 Panarchy is the structure in which systems, including those of nature (e.g., forests) and
23 of humans (e.g., capitalism), as well as combined human–natural systems (e.g., institu-
24 tions that govern natural resource use such as the Forest Service), are interlinked in
25 continual adaptive cycles of growth, accumulation, restructuring, and renewal. These
26 transformational cycles take place at scales ranging from a drop of water to the bio-
27 sphere, over periods from days to geologic epochs. By understanding these cycles and
28 their scales, researchers can identify the points at which a system is capable of accepting
29 positive change, and can use those leverage points to foster resilience and sustainability
30 within the system.

(Island Press 2012)

32 Graphically, the panarchy model is represented by a lemniscate (i.e. sideways figure 8 sign),
33 mimicking the mathematical symbol of infinity. According to some ecologists, the theory of the
34 adaptive cycle, should only be treated as ‘a useful metaphor and not as a testable hypothesis’
35 (Carpenter *et al.* 2001: 766). Yet, given its grand design and purpose of describing the dynamics
36 of how any ecological system, economic system, or a political system successively gives way to
37 another and gets transformed (Olsson *et al.* 2015: 5), it is not hard to imagine the model to be
38 taken literally as guidance to future developments. Indeed, a number of social scientists claim the
39 panarchy model – with its four *consequential* and *circular* phases of rapid growth and exploitation,
40 conservation, collapse or release (i.e. ‘creative destruction’), and renewal or re-organization –
41 can be used as a set of empirically testable propositions. ‘The adaptive cycle model applies well
42 to regions,’ argue Pendall *et al.* (2010: 77; cf., Simmie and Martin 2010). Nevertheless, others
43 contend that because of its structural functionalism resilience is incommensurable between the
44 natural and social sciences, whereas core concepts and theories in the latter – ‘such as agency,
45 conflict, knowledge, and power – are absent from resilience theory’ (Olsson *et al.* 2015: 9).
46 In terms of politics, Martin and Sunley (2015: 8) stress that resilience as a concept can be ‘easily

1 captured by neoliberal ideology, to prioritize the status quo, and importance of self-reliance,
2 flexibility and role of “self-correcting” market adjustments’.

3 **Elastic politics of resilience: peak oil, climate change, and neoliberalism**

4 Many of the representative definitions of resilience collated in Table 16.1 and discussed in simi-
5 lar reviews elsewhere (e.g., Manyena 2006; Brand and Jax 2007; Norris *et al.* 2008; Downes
6 *et al.* 2013) invariably differ in terms of coherence, conciseness, and precision. However, the
7 most striking variance may be observed in the philosophical predisposition to resilience. Positiv-
8 ism reigns supreme in physical and natural sciences, medical and mental health research, while
9 normative descriptions of resilience are not uncommon in ecology, environmental studies, and
10 geography, and prevail in business and economics, public administration, and other social sci-
11 ences. Yet it is the application of the engineering or ‘bouncing back’ meaning of resilience to
12 social phenomena that has stirred up the biggest controversy. With its appeal to the inherent
13 individual attributes of self-reliance, self-help, and self-organization, the concept of resilience
14 appears vulnerable to abuse by the ‘common sense’ vulgarity of populist ideologies. To some
15 critics, resilience is an essentially Conservative idea, squarely aimed at the maintenance and
16 privileging of existing social relations of global capitalism in the face of externally derived disorder
17 (MacKinnon and Derickson 2013: 258). Indeed, most frequently, the resilience thinking is
18 associated with neoliberalism and Conservative right-wing politics. Walker and Cooper (2011:
19 144) go further to claim that the success of the panarchy model of adaptive cycle ought to be
20 explained by ‘its intuitive ideological fit with a neoliberal philosophy of complex adaptive
21 system... of Friedrich Hayek’. They argue that:

22 The emerging consensus on resilient growth... both reiterates and modifies the Dar-
23 winian law of natural selection. Relying as it does on the non-equilibrium dynamics
24 of complex systems theory, what the resilience perspective demands is not so much
25 progressive adaptation to a continually reinvented norm as permanent adaptability to
26 extremes of turbulence.

27

(*Ibid.*: 156)

28 The number of warnings given by academics to ‘watch out’ for resilience is rather remarkable
29 (e.g. Martin and Sunley 2015: 8; Olsson *et al.* 2015: 6; Pike *et al.* 2010: 66). Davoudi *et al.* (2012:
30 331–2) were among the first to emphasize ‘the slippery slope to a neoliberal discourse of “self-
31 reliance”,’ claiming that the resilience theory may be used to ‘demonise those people or places
32 who are deemed to be “just not resilient enough”,’ with vulnerable communities left to fend for
33 themselves.

34 And yet, I would argue that the main feature of the politics of resilience seems to be its mal-
35 leability: resilience is an elastic concept, politically. As mentioned by MacKinnon and Derickson
36 (2013: 255), resilience is becoming a popular concept among oppositional groups, green
37 campaigners, anti-capitalist activists, and various anarchist-autonomist movements. Hopkins’s
38 *The Transition Handbook: From Oil Dependency to Local Resilience* (2008); Newman, Beatley, and
39 Boyer’s *Resilient Cities: Responding to Peak Oil and Climate Change* (2009); Lewis and Conaty’s
40 *The Resilience Imperative: Cooperative Transitions to a Steady-State Economy* (2012) – all these acces-
41 sible (guide)books to a ‘better future’ are firmly rooted in the concept of resilience as positive
42 adaptability to the disruptive implications of climate change, ‘peak oil’, and ecosystem decline.
43 Indeed, many advocates of ‘green’, ‘post-carbon’, ‘non-capitalist’ development trajectories have
44 fully adopted resilience as their main argument against the free trade, globalization, and

1 neoliberalism (however defined). Some even commend the controversial ‘self-reliance’ aspect of
2 resilience, advocating more ‘closure’ and ‘self-containment’ in the process of building resilient
3 and self-sufficient local and regional economies (Hudson 2010). Devotees of the communitarian
4 believes also cherish autonomy and praise the self-organization of local communities. As one
5 enthusiastic newspaper reporter puts it, ‘Ultimately, a resilient city has to be one in which, in a
6 crisis, people come onto the streets to help one another, not to riot’ (Evans 2014: n.p.).

7 Resilience: an app(e)aling proposition

8 So far this chapter has established that resilience is a multifaceted concept: it is ‘fuzzy’ in some
9 interpretations; it could be prescriptively formulaic in many adaptations; and it is structurally
10 functionalist to the core. I have also shown how malleable and ‘stretchy’ resilience can be in its
11 ideological interpretations, appearing as a dangerously reactionary notion to some, and progres-
12 sively emancipatory in everyday practice to others. The most obvious set of questions to pose
13 here is how influential resilience really is? Are academic scholars increasingly turning to resil-
14 ience as a research agenda? Is resilience replacing any other long-established areas of scientific
15 interest? For instance, has sustainable development or competitiveness actually lost any follow-
16 ing, as predicted earlier (see Bristow 2010b; Davoudi *et al.* 2012)? Furthermore, is resilience
17 public policy relevant? If so, does resilience theory supply practical answers to policy-makers
18 and practitioners responding to acute exogenous shocks and/or chronic, long-term crises – the
19 so-called slow burns?

20 First, this section deals with *academic studies* of resilience. For the bibliometric analysis, I have
21 used the new Thomson Reuters Web of Science™, as the world’s largest collection of scholarly
22 research and citation data. In particular, the Web of Science core collection of Science and Social
23 Sciences Citation Indices was used to search for journal articles and conference proceedings
24 papers published in English between 1 January 1900 and 15 June 2015, with the following terms
25 and Boolean combinations: (1) topic: (resilienc*); (2) topic: (sustainability or ‘sustainable devel-
26 opment’); and (3) topic: (competitiveness). The search produced a list of 24,146 publications on
27 ‘resilience’/‘resiliency’, with the first two articles appearing in 1913. ‘Sustainability’/‘sustainable
28 development’ was the most popular topic among the three, though, with 51,425 records; ‘sus-
29 tainability’ covered 74 per cent of the total aggregate, first appearing as a scientific research topic
30 in 1974. The first academic paper on ‘competitiveness’ appeared fourteen years earlier; neverthe-
31 less, the topic only generated 13,876 publications within the period concerned.

32 Figure 16.1 shows the number of papers published each year on these three topics. Looking
33 at the trends, it seems possible to identify certain trigger events in the popularity trajectories of
34 sustainability, resilience, and competitiveness, respectively. For instance, the role of the United
35 Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, in 1992,
36 was paramount in institutionalizing sustainable development as the key idea in the international
37 debate on development, while the UN World Summit on Sustainable Development held in
38 Johannesburg, South Africa, ten years later, served as yet another mega-event promoting the
39 concept. At the same time, one has to mention that the study of sustainability has undoubtedly
40 benefited from the ever increasing planetary environmental hazards such as global warming and
41 climate change – the topics which generated well over 91,000 articles so far.

42 Unlike sustainability or competitiveness, resilience is a much more multi-dimensional and
43 trans-disciplinary concept: its rise may be accounted for by very different occurrences. Having
44 been studied for over 100 years, resilience became really popular only in the early 1990s,
45 following a couple of influential papers on childhood development and psychopathology
46 (including Masten *et al.* 1990; Werner 2000; Garnezy 1991; Luthar 1991). The terrorist attacks

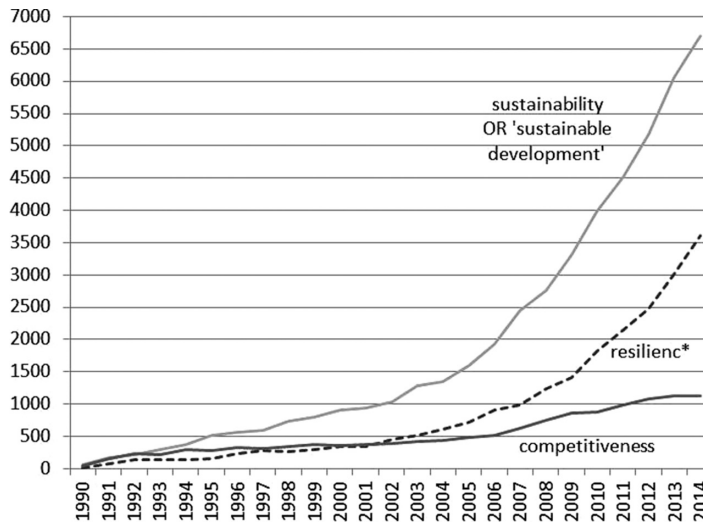


Figure 16.1 Number of articles and proceedings papers published annually on the topics of resilience, sustainable development, and competitiveness

1 of 11 September 2001 upon the USA, the publication of Gunderson and Holling's *Panarchy* in
 2 early 2002, and Hurricane Katrina, that hit the southern Gulf of Mexico states in August 2005,
 3 all could be considered catalysts for resilience research. The global financial crisis of 2007–8 and
 4 Hurricane Sandy in November 2012 provided further impetus. The picture emerging from
 5 Figure 16.1 is that resilience is hardly a match for sustainable development as a popular aca-
 6 demic research topic; however, it has long surpassed neoliberal competitiveness in terms of
 7 popularity – a positive achievement in itself (see Bristow 2010a, 2010b).

8 The total number of articles published on the three topics between 1900 and 2015 should be
 9 handled with caution, however. In a random selection study of 6,548 social science and ecologi-
 10 cal publications on resilience, Downes *et al.* (2013) found that 40.6 per cent of the entries had
 11 to be excluded as irrelevant to the topic. To unpack some of these bibliometric data, Figure 16.2
 12 provides a breakdown of the resilience literature by disciplinary research areas involved (149 in
 13 total); publication duplicates were removed from the total count. Environmental sciences, ecol-
 14 ogy, water sciences, conservation, and the related natural sciences account for almost a half of
 15 all research on resilience, with almost a third covered by psychology, psychiatry, and other
 16 medical and human health-related sciences; another fifth of all the resilience literature was pub-
 17 lished in engineering, technology, and materials sciences. By the mid-2015, the share of social
 18 sciences in resilience research had only reached 10 per cent.

19 I have already discussed the ontological, epistemological, methodological, and ideological
 20 reasons for the relative unattractiveness of resilience thinking to social sciences (for a compre-
 21 hensive review, see Olsson *et al.* 2015). The only area of social sciences, where resilience has
 22 generated some interest, includes business and management studies, economics, and the related
 23 disciplines. Indeed, 'economic resiliency' was the title of the eighth earliest paper ever pub-
 24 lished on the general theme (Scott 1930). Despite a lot of interest, however, the scholars of
 25 business, economics, and economic geography have not been able to agree on a common defi-
 26 nition, with some applying the conservative engineering notion of resilience as a 'bounce
 27 back', while others are keen on exploring resilience as transformational 'adaptability with better
 28 outcomes'.

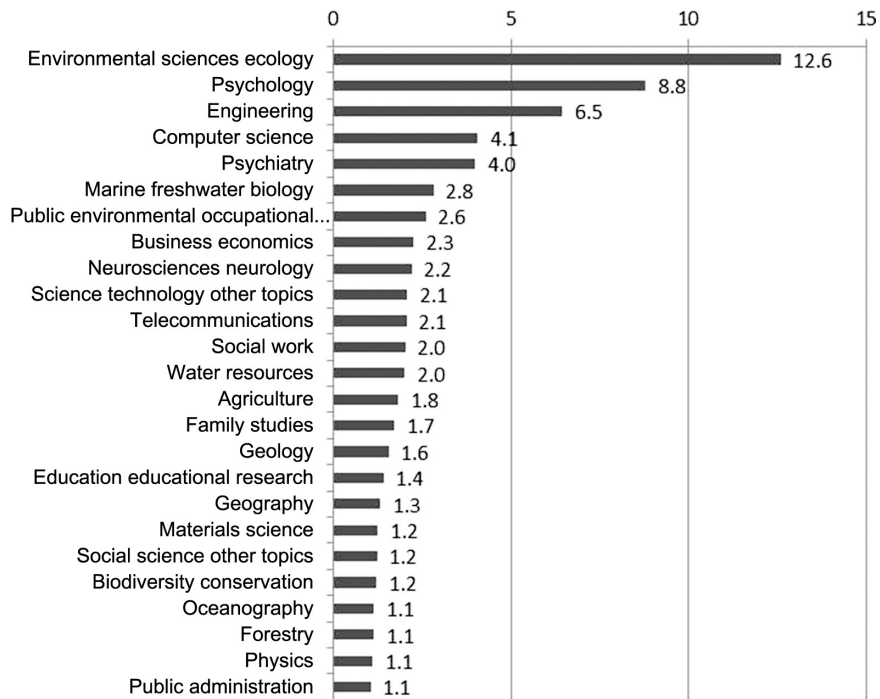


Figure 16.2 Articles and proceedings papers published on resilience

The 'big society': not bouncing back

2 By far the most contentious application of resilience theory, has been in the field of *public admin-*
 3 *istration* and *public policy*. To many critics, the particularly controversial development relates to
 4 the emphasis put by the major Western governments, IFIs, and bilateral donors, on the ability
 5 of local communities and individuals – both in the rich and poor countries – to ‘help themselves’
 6 and ‘thrive in the face of challenge’ (see Table 16.1). As Walker and Copper argue:

7 This is a tacit recognition that ‘development’ for the post-colonial poor now consists
 8 not in achieving First World standards of urban affluence but in surviving – preferably
 9 on the land instead of in slums – the after-effects of industrial modernization, the
 10 Green Revolution and the financial conditions imposed under the Washington
 11 Consensus.

(2011: 155)

13 In the UK, a lot has been made of the entry into the official *Civil Protection Lexicon* in 2009 of
 14 ‘resilience’, seemingly putting the onus of civil contingencies response on local communities
 15 and areas themselves (Cabinet Office 2011, 2013). The term was introduced into the public
 16 domain in a package of civil service-related terms and definitions in preparation for the London
 17 2012 Olympic Games. Sporadically, the British government returns to resilience in the context
 18 of transport and housing infrastructure damage caused by storms and flooding affecting the UK
 19 (Cameron 2014; BBC 2015). Similarly, in the USA, the term was very slow to catch on:
 20 resilience did not feature prominently, if at all, in the aftermath of the 9/11 terrorist attacks on

1 New York or post-Hurricane Katrina: neither the 2002 nor 2006 National Security Strategy
2 signed by President Bush mentioned resilience once. It was only the 2010 National Security
3 Strategy signed by President Obama that endorsed resilience, instructing the US Department of
4 Homeland Security to operationalize the concept. Yet, as the Department openly admitted,
5 2010 was spent discussing the meaning of resilience, before a decision was taken to 'bucket it'
6 within the rubric of 'adapting to changing conditions', 'withstanding disruptions', and 'ensuring
7 rapid recovery' (DHS 2015).

8 The New York State 2100 Commission report on *Recommendations to Improve the Strength and*
9 *Resilience of the Empire State's Infrastructure* in the aftermath of Hurricane Sandy (NYS 2100,
10 2013), and the City of New York Mayor Michael Bloomberg's report on *A Stronger, More Resil-*
11 *ient New York* (2013) have gone much further to provide a comprehensive list of actionable
12 recommendations for: (1) rebuilding the infrastructure and buildings in both the city and the
13 region; (2) rolling out a series of 'forward-looking resiliency' initiatives aimed at upgrading the
14 area's costal defences, mechanical and electrical systems, sewers, and green infrastructure flood-
15 walls; and (3) making the city's power, liquid fuels, telecommunications, transportation, water
16 and wastewater, healthcare, and other networks 'climate-change ready'. A number of high-
17 profile charity-funded civil society and academic research initiatives, including the Rockefeller
18 Foundation's \$100 million *100 Resilient Cities* programme (100RC 2015), and the MacArthur
19 Foundation's *Building Resilient Regions* network at the University of California Berkeley (BRR
20 2015), have managed to expand the public policy debates on resilience from disaster manage-
21 ment, mitigation, and forward planning, into the spheres of the urban and regional economy,
22 public administration, social policy, and social work. The often-heard criticism of such
23 resilience-building initiatives is that they instil a sense of confidence in finding local technocratic
24 solutions to fundamentally global problems like climate change. While no one would deny the
25 need for New York (or any other global city) to prepare for and bounce back from a human-
26 made disaster, the scale of the environmental challenge facing the city travels far beyond the
27 Empire State's boundary, and the nature of the solution lies in the political sphere.

28 To investigate the link between resilience and neoliberal policy-making further, I have ana-
29 lysed all 331 publication records on resilience (including articles, book reviews, proceedings
30 papers, and book chapters) which appeared in English between 1900 and 2015 in the following
31 disciplines: Law, Public Administration, Philosophy, Planning Development, Urban Studies,
32 and Political Science. Figure 16.3 identifies the most popular policy-relevant themes developed
33 under the heading of resilience by presenting a 'word cloud' of these titles, with the words
34 'urban', 'community', 'climate', 'change', 'social', 'building', 'disaster', 'development', 'cities',
35 and 'planning' occupying most of the space.

36 Overall, this analysis does not seem to support the fear expressed by many scholars and com-
37 mentators of resilience as some sort of a Trojan horse of neoliberals used to advance their causes.
38 Note the absence of 'public sector' and 'reform' in Figure 16.3. And yet, arguably, it is in the
39 most recent public policy development in the UK that we have witnessed the most far-reaching
40 attempt to utilize the communitarian ideas of resilience through self-organization, self-help, and
41 self-reliance, to transform the entire nation. The Big Society programme was launched by
42 Prime Minister David Cameron on 18 May 2010, six days after the coalition agreement was
43 reached between the British Conservative and Liberal Democrat parties to form a government.
44 'Big society' was the Prime Minister's core idea, ostensibly aimed at giving 'citizens, communi-
45 ties and local government the power they need to come together and solve the problems they
46 face' (Cabinet Office 2010; Cabinet Office 2010). The term was coined by Jesse Norman, a
47 newly-elected Conservative Member of Parliament for a rural constituency in the south-east of
48 England. In his book on the topic, Norman (2010) boldly proclaimed the 'big society' to be 'the

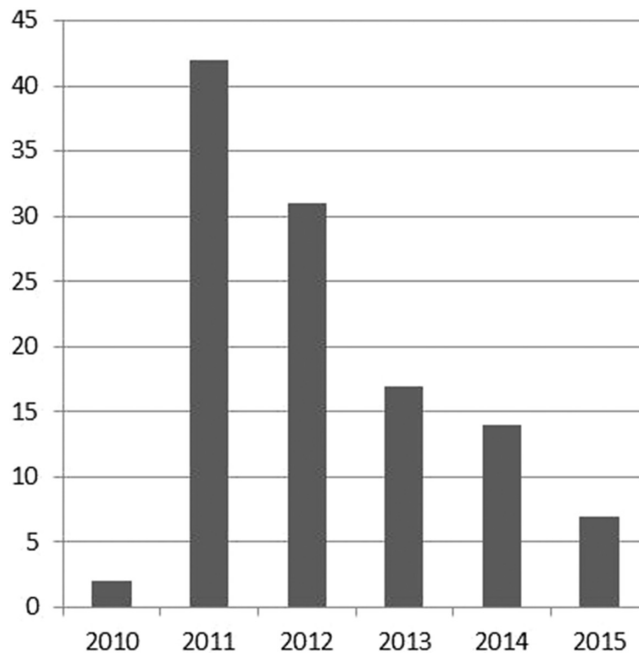


Figure 16.4 Papers published annually in English on the topic of 'big society'

1 lasted just four and a half years. According to an independent investigation, on 27 November
 2 2014, David Cameron's flagship Big Society Network collapsed in debt, having spent *at least*
 3 £2.5 million of government funding with no reported records of charitable activity behind.
 4 The number of applications received by the network for local community improvement proj-
 5 ects (worth £830,000) reached 0.006 per cent of its target: just 64 groups signed up out of the
 6 million initially predicted. The network was subsequently investigated for misused funding and
 7 inappropriate payments to its directors (Wright 2014); it left no electronic trace: the network's
 8 website <http://thebigsociety.co.uk> was closed down and made unavailable.

9

Resilience: what is it good for?

10 This chapter concludes with a summary assessment of the perceived, potential, and actual merits,
 11 flaws, and dangers of the resilience thinking. To make this statement meaningful, I have to limit
 12 the discussion to social sciences (arts, and humanities), given that the concept of resilience is
 13 technically indispensable to engineering, physical, and natural sciences. One of the perceived
 14 merits of resilience is a universal and unifying nature of the concept, which could transcend
 15 disciplinary boundaries and achieve synergies between natural and social sciences. Another per-
 16 ceived merit of the resilience thinking is the opportunity to create a theory of change, which
 17 could encompass the sudden shocks to the system as well as the 'slow burns', thus, expanding
 18 the predictive power of social sciences. Potentially, resilience theory could provide an analytical
 19 framework for studying complex socio-ecological systems and bringing the natural and human-
 20 made environment firmly back into the social science research – an urgent necessity in the
 21 context of cataclysmic climate change. Moreover, resilience theory – with its insistence on the
 22 value of redundant capacities for shock absorption and stress resistance – has the progressive

1 potential to be realized by local community activists, politicians, and decision-makers in advo-
2 cating local empowerment and lobbying for the provision of additional resources of all sorts.
3 The actual merits of the resilience thinking we have observed so far include: (1) the steady
4 process of resilience displacing competitiveness as one of the key categories in applied economic
5 research; (2) an increase in our understanding of how local communities and regional econo-
6 mies respond to shocks and disturbances, what determines that response, and how 'better out-
7 comes' can be ensured, interpreted, and narrated; (3) the enhanced institutional capacity and a
8 higher degree of preparedness to disasters across many public sector organizations and private
9 firms. A lot of research illustrates how politically charged, symbolic, and necessary the narrative
10 of resilience has always been for society to build anew in the wake of disaster (Vale and
11 Campanella 2005). The fact that resilience thinking has been adopted by various green socialists,
12 anti-capitalist environmentalists, 'slow town' and 'zero carbon' transition movements indicates
13 its potential for progressive change.

14 The major actual flaws of resilience theory as applied in social sciences concern the system
15 ontology, the system boundary, structural functionalism of the resilience thinking. Furthermore,
16 the overall technocratic and naturalizing tendencies of resilience theory may cloud one's think-
17 ing by providing false hopes and generating erroneous forecasts (e.g. on climate change mitiga-
18 tion). In addition, power, interests, conflicts, and human passions are all perceived to be absent
19 from the social science-related resilience theory. There is some evidence of resilience being
20 pushed as an apolitical, even post-political, agenda, especially in US policy circles, where the
21 concept is 'imbued with American values of heroic individualism, self-reliance', and self-help 'in
22 the face of adversity (Pike *et al.* 2010: 66). Nevertheless, as this chapter has illustrated, the per-
23 ceived danger of resilience theory to be (ab)used by reactionary political forces and neoliberal
24 ideologues world-wide is highly exaggerated. The potential for passing the buck for dealing with
25 economic crises or environmental disasters to the vulnerable communities themselves *does* exist.
26 However, the ideas of the 'invisible hand', *laissez faire*, and 'rugged individualism' – most often
27 invoked by neoliberals and free-marketeers of all sorts – predate the resilience thinking by two
28 centuries. In reality, even as simplistic a dichotomy as 'the big society versus the big government'
29 has failed to provide the British Tories with a constructive narrative for their austerity politics.
30 When the high complexity of resilience theory meets the long-established anti-intellectualism of
31 the populist Conservative Right, it would appear extremely unlikely that resilience could gain
32 much traction with the politicians, busy protecting the power of monopoly-finance capital.

Acknowledgements

33
34 I am grateful to the editors of this volume for their constructive leadership and productive sug-
35 gestions regarding the text. Consequently, I would like to thank Peter Lee and James D. Sid-
36 away for the many engaging discussions of resilience we have had at the University of
37 Birmingham. This research was supported by Shrink Smart: The Governance of Shrinkage
38 within a European Context (Project no. 225193), funded by the 7th Framework Programme
39 (Socio-economic Sciences and Humanities) of the European Commission.

References

- 40
41 100RC. 2015. *100 Resilient Cities: Pioneered by the Rockefeller Foundation (100RC)*. 100 Resilient Cities
42 2015. Retrieved from <http://www.100resilientcities.org/>
43 Adger, W.N. 2000. Social and Ecological Resilience: Are They Related? *Progress in Human Geography*,
44 24.3: 347–64.

- 1 BBC. 2015. David Cameron says Okehampton Railway Line is ‘Most Resilient’. *BBC Local News*, 30
2 January 2015.
- 3 Birch, K., and Mykhnenko, V. eds. 2010. *The Rise and Fall of Neoliberalism: The Collapse of an Economic*
4 *Order?* London and New York: Zed Books.
- 5 Bloomberg, M.R. 2013. *A Stronger, More Resilient New York*. New York: City of New York Mayor’s
6 Office.
- 7 Brand, F.S., and Jax, K. 2007. Focusing the Meaning(s) of Resilience: Resilience as a Descriptive Concept
8 and a Boundary Object. *Ecology and Society*, 12.1: 23.
- 9 Briguglio, L., Cordina, G., Vella, S., and Vigilance, C. eds. 2010. *Profiling Vulnerability and Resilience: A*
10 *Manual for Small States*. London: Commonwealth Secretariat.
- 11 Bristow, G. 2010a. *Critical Reflections on Regional Competitiveness : Theory, Policy and Practice*. London: Routledge.
12 —. 2010b. Resilient Regions: Re-‘Place’ing Regional Competitiveness. *Cambridge Journal of Regions,*
13 *Economy and Society*, 3.1: 153–67.
- 14 BRR. 2015. *Building Resilient Regions: Harnessing the Power of Metropolitan Regions*. Berkeley: The Institute
15 of Governmental Studies at the University of California. Retrieved from <http://brr.berkeley.edu/>
- 16 Cabinet Office. 2010. *Building the Big Society*, 3. London: Cabinet Office.
- 17 —. 2011. *Strategic National Framework on Community Resilience*, 28. London: Cabinet Office.
- 18 —. 2013. *Lexicon of UK Civil Protection Terminology: Version 2.1.1*. London: Cabinet Office.
- 19 Cameron, D. 2014. *Statement by the Prime Minister on the Storms and Flooding Affecting the United Kingdom*.
20 London: Cabinet Office and Office of the Prime Minister.
- 21 Carpenter, S., Walker, B., Anderies, J.M., and Abel, N. 2001. From Metaphor to Measurement: Resilience
22 of What to What? *Ecosystems*, 4.8: 765–81.
- 23 Chapple, K. and T.W. Lester (2010) The Resilient Regional Labour Market? The US Case. *Cambridge*
24 *Journal of Regions, Economy and Society*, 3: 85–104.
- 25 Davoudi, S., Shaw, K., Haider, L.J., Quinlan, A.E., Peterson, G.D., Wilkinson, C., Fünfgeld, H., McEvoy,
26 D., Porter, L. and Davoudi, S. 2012. Resilience: A Bridging Concept or a Dead End? ‘Reframing’
27 Resilience: Challenges for Planning Theory and Practice Interacting Traps: Resilience Assessment of a
28 Pasture Management System in Northern Afghanistan Urban Resilience: What Does it Mean in
29 Planning Practice? Resilience as a Useful Concept for Climate Change Adaptation? The Politics of
30 Resilience for Planning: A Cautionary Note. *Planning Theory & Practice*, 13.2: 299–333.
- 31 DHS. 2015. *Resilience*. Washington, DC: United States Department of Homeland Security. Retrieved
32 from <http://www.dhs.gov/quadrennial-homeland-security-review>
- 33 Dobson, J. 2011. *From a Big Society to a Resilient Society*. Sheffield: Urban Pollinators.
- 34 Downes, B.J., Fiona, M., Jon, B., Alena, G., and Heidi, E. 2013. How do we Know About Resilience?
35 An Analysis of Empirical Research on Resilience, and Implications for Interdisciplinary Praxis.
36 *Environmental Research Letters*, 8.1: 1–8.
- 37 Dyer, J.G., and McGuinness, T.M. 1996. Resilience: Analysis of the Concept. *Archives of Psychiatric Nursing*,
38 10.5: 276–82.
- 39 Evans, J. 2014. Future-Proofing Cities: Bristol Starts Planning for a More Resilient Character. *The*
40 *Guardian*, 6 March.
- 41 Folke, C. 2006. Resilience: The Emergence of a Perspective for Social–Ecological Systems Analyses.
42 *Global Environmental Change*, 16.3: 253–67.
- 43 Garmezy, N. 1991. Resiliency and Vulnerability to Adverse Developmental Outcomes Associated With
44 Poverty. *American Behavioral Scientist*, 34.4: 416–30.
- 45 Glover, J. 2010. As the Left Falls into a Negative Sulk, the Centre-Right Have Become the Optimists. *The*
46 *Guardian*, 21 November.
- 47 Gunderson, L.H., and Holling, C.S. eds. 2002. *Panarchy: Understanding Transformations in Human and*
48 *Natural Systems*. Washington, DC, and London: Island Press.
- 49 Hamel, G., and Välikangas, L. 2003. *The Quest for Resilience*. *Harvard Business Review*, 81.9: 52–63.
- 50 Hoffman, R.M. 1948. A Generalized Concept of Resilience. *Textile Research Journal*, 18.3: 141–8.
- 51 Holling, C.S. 1973. Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics*,
52 4: 1–23.
- 53 Hopkins, R. 2008. *The Transition Handbook: From Oil Dependency to Local Resilience*. Totnes: Green Books.
- 54 Hudson, R. 2010. Resilient Regions in an Uncertain World: Wishful Thinking or a Practical Reality?
55 *Cambridge Journal of Regions, Economy and Society*, 3: 11–25.
- 56 Island Press. 2012. *Panarchy: Understanding Transformations in Human and Natural Systems*. Washington, DC:
57 Island Press. Retrieved 24 June 2015 from <http://islandpress.org/panarchy>

- 1 Lewis, M., and Conaty, P. 2012. *The Resilience Imperative: Cooperative Transitions to a Steady-State Economy*.
2 Gabriola Island: New Society.
- 3 Lombardi, D.R., J.M. Leach, C.D.F. Rogers, and Aston, R. 2012. *Designing Resilient Cities: A Guide to*
4 *Good Practice*. Bracknell: IHS BRE Press.
- 5 Luthar, S.S. 1991. Vulnerability and Resilience: A Study of High-Risk Adolescents. *Child Development*,
6 62.3: 600–16.
- 7 Luthar, S.S., Cicchetti, D., and Becker, B. 2000. The Construct of Resilience: A Critical Evaluation and
8 Guidelines for Future Work. *Child Development*, 71.3: 543–62.
- 9 MacArthur Foundation. 2007. *Network on Building Resilient Regions*, ed. E. Poethig. Chicago: John D. and
10 Catherine T. MacArthur Foundation: 2.
- 11 MacKinnon, D., and Derickson, K.D. 2013. From Resilience to Resourcefulness: A Critique of Resilience
12 Policy and Activism. *Progress in Human Geography*, 37.2: 253–70.
- 13 Markusen, A. 2003. Fuzzy Concepts, Scanty Evidence, Policy Distance: The Case for Rigour and Policy
14 Relevance in Critical Regional Studies. *Regional Studies*, 37.6–7: 701–17.
- 15 Martin, R., and Sunley, P. 2015. On the Notion of Regional Economic Resilience: Conceptualization
16 and Explanation. *Journal of Economic Geography*, 15.1: 1–42.
- 17 Masten, A.S., Best, K.M., and Garmezy, N. 1990. Resilience and Development: Contributions from the
18 Study of Children who Overcome Adversity. *Development and Psychopathology*, 2.4: 425–44.
- 19 Manyena, S.B. 2006. The Concept of Resilience Revisited. *Disasters*, 30.4: 433–50.
- 20 Najjar, W., and Gaudiot, J.L. 1990. Network Resilience: A Measure of Network Fault Tolerance.
21 *Computers, IEEE Transactions on*, 39.2: 174–81.
- 22 Newman, P., Beatley, T., and Boyer, H. 2009. *Resilient Cities: Responding to Peak Oil and Climate Change*.
23 Washington, DC: Island Press.
- 24 Norman, J. 2010. *The Big Society: The Anatomy of the New Politics*. Buckingham: University of Buckingham
25 Press.
- 26 Norris, F., Stevens, S., Pfefferbaum, B., Wyche, K., and Pfefferbaum, R. 2008. Community Resilience as
27 a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of*
28 *Community Psychology*, 41.1–2: 127–50.
- 29 NYS 2100. 2013. *Recommendations to Improve the Strength and Resilience of the Empire State's Infrastructure*, 205.
30 Albany: NYS 2100 Commission.
- 31 Obama, B. 2010. *National Security Strategy*, 52. Washington, DC: Office of the President of the United
32 States.
- 33 Olsson, L., Jerneck, A., Thoren, H., Persson, J., and O'Byrne, D. 2015. Why Resilience is Unappealing
34 to Social Science: Theoretical and Empirical Investigations of the Scientific Use of Resilience. *Science*
35 *Advances*, 1.4: 1–11.
- 36 Pattie, C., and Johnston, R. 2011. How Big is the Big Society? *Parliamentary Affairs*, 64.3: 403–24.
- 37 Pendall, R., Foster, K.A., and Cowell, M. 2010. Resilience and Regions: Building Understanding of the
38 Metaphor. *Cambridge Journal of Regions Economy and Society*, 3.1: 71–84.
- 39 Pike, A., Dawley, S., and Tomaney, J. 2010. Resilience, Adaptation and Adaptability. *Cambridge Journal of*
40 *Regions, Economy and Society*, 3.1: 59–70.
- 41 Prime Minister's Office. 2015. *Government Launches Big Society Programme*. London: Office of the Prime
42 Minister. Retrieved from [http://www.gov.uk/government/news/government-launches-big-society-](http://www.gov.uk/government/news/government-launches-big-society-programme--2)
43 [programme--2](http://www.gov.uk/government/news/government-launches-big-society-programme--2)
- 44 Resilience Alliance. 2002. Key concepts[web page]. *The Resilience Alliance*. Retrieved 23 June 2015 from
45 http://www.resalliance.org/index.php/key_concepts
- 46 Rutter, M. 2012. Resilience as a Dynamic Concept. *Development and Psychopathology*, 24: 335–44.
- 47 Scott, W.R. 1930. Economic Resiliency. *The Economic History Review*, 2.2: 291–9.
- 48 Simmie, J., and Martin, R. 2010. The Economic Resilience of Regions: Towards an Evolutionary
49 Approach. *Cambridge Journal of Regions Economy and Society*, 3.1: 27–43.
- 50 Smith, M.J. 2010. From Big Government to Big Society: Changing the State–Society Balance. *Parliamentary*
51 *Affairs*, 63.4: 818–33.
- 52 Vale, L.J., and Campanella, T.J. 2005. Conclusion: Axioms of Resilience, in Vale, L.J., and Campanella,
53 T.J., eds. *The Resilient City: How Modern Cities Recover From Disaster*. New York and Oxford: Oxford
54 University Press: 335–61.
- 55 Walker, B.H., Holling, C.S., Carpenter, S.R., and Kinzig, A. 2004. Resilience, Adaptability and
56 Transformability in Social–Ecological Systems. *Ecology and Society*, 9: 5.

- 1 Walker, J., and Cooper, M. 2011. Genealogies of Resilience: From Systems Ecology to the Political
2 Economy of Crisis Adaptation. *Security Dialogue*, 42.2: 143–60.
- 3 Werner, E.E. 2000. Protective Factors and Individual Resilience, in Shonkoff, J.P., and Meisels, S.J., eds.
4 *Handbook of Early Childhood Intervention*. Cambridge: Cambridge University Press: 115–32.
- 5 WRI. 2008. *World Resources 2008: Roots of Resilience: Growing the Wealth of the Poor*. Washington, DC:
6 World Resources Institute (WRI) with the United Nations Development Programme, United Nations
7 Environment Programme, and the World Bank.
- 8 Wright, O. 2014. PM's Office Ignored Official Advice to Stop Funding Failing Big Society Charity. *The
9 Independent*, 27 November.
- 10 Zolli, A., and Healy, A.M. 2012. *Resilience*. London: Headline, Business Plus.

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