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BOUNCING BACK: A COMMENTARY ON RESILIENCE IN SUSTAINABILITY NARRATIVES

Peter Jones and Daphne Comfort

Abstract

Resilience is an increasingly common element in the sustainability and sustainable growth narratives of a growing number of companies and organisations. At the same time a number of meanings are claimed for resilience and the relationship between resilience and sustainability has been depicted in a number of ways. With these thoughts in mind this short commentary paper outlines the characteristic features of the concept of resilience, provides some illustrations of how a number of companies and organisations are harnessing the concept as an integral part of their sustainability strategies and policies, offers some general reflections on the application of the concept and concludes with some thoughts on how public relations and communications professionals can contribute to resilience planning.

Introduction

Resilience is an increasingly common element in the sustainability and sustainable growth narratives of a growing number of companies and organisations at a variety of levels. In promoting its Global Sustainable Development Goals (SDGs), the United Nations (2015) used the banner headline *'Integrating Resilience and Sustainable Development in 2015 and Beyond.'* The 2016 sustainability reports published by the multinational corporations BHP Billiton (2016) and Anglo American (2017) were titled *'Integrity Resilience and Growth'* and *'Delivering Change Building Resilience'* respectively. At the national level within the UK, for example, the National Flood Resilience Review (HM Government 2016) reported that *'the magnitude of events in recent years means that it is important to reassure ourselves that we understand the scale of the risk that the country is currently facing from river and coastal flooding and to take more immediate steps to improve the resilience of the country to such flooding.'* At the city level the 100 Resilient Cities Network initiative, sponsored by the Rockefeller Foundation, looks to help cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. Being sustainable, namely seeing *'the city and region prosper within environmental limits through adopting new behaviours and technologies'* is a central element in the Bristol Resilience Strategy (Bristol City Council 2017). With these thoughts in mind, this short commentary paper outlines the characteristic features of the concept of resilience, provides some illustrations of how a number of companies and organisation are harnessing the concept as an integral part of their sustainability strategies and policies and offers some general reflections on the application of the concept.

The Concept of Resilience

In everyday language, resilience is seen as the ability to withstand or to bounce back from adversity and disruption. However, in the professional and academic world a number of meanings can be identified and Sharifi and Yamagata (2014) argued that *'despite the abundance of research on resilience there is still no single, universally accepted definition for*

it.’ Indeed a number of origins and meanings are claimed for resilience. Hassler and Kohler (2014), for example, claimed that *‘resilience as a design principle, was an implicit part of construction knowledge before the nineteenth century’* and Sharifi and Yamagata (2014) suggested that *‘the concept of resilience has traditionally been used in physics and psychology.’* Davoudi (2012 et al.) acknowledged that *‘resilience was first used by physical scientists’* and argued that in the 1960’s *‘resilience entered the field of ecology.’* MacKinnon and Derickson (2012) suggested that *‘the concept of resilience has migrated from the natural and physical sciences to the social sciences and public policy, as the identification of global threats such as economic crisis, climate change and international terrorism has focused attention on the responsive capacities of places and social systems.’*

Holling (1995) drew a distinction between *‘engineering resilience’* and *‘ecological resilience.’* Mehmood (2016), for example, argued that *‘whereas engineering resilience gives the optimal design features in which an entity could recover back into its original form after a certain level of disturbance, ecological resistance explains the situation of multiple equilibria in which a system could adapt to change by bouncing forth into a slightly different form.’* Adger (2000) defined social resilience as *‘the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change.’* Ambler, Beagent and Thurley (2017) stressed the importance of *‘balancing economic and environmental resilience’* and this call emphasises the growing importance of resilience within the corporate world. PricewaterhouseCoopers (2017a) emphasised their belief that *‘enterprise resilience is the most important capability in business today.’* Here enterprise resilience is defined as *‘an organisation’s capacity to anticipate and react to change, not only to survive, but also to evolve’* (PricewaterhouseCoopers 2017b) and it is the survival dimension that can often be the most pressing and continuing priority for many small and medium business enterprises.

The nature of relationship between the concepts of resilience and sustainability has been depicted in a number of ways. In some cases, the two terms have been use almost interchangeably while Weichselgartner and Kelman (2014) suggested that resilience has begun to replace sustainability as a guiding principle in development planning. Adger (2000) suggested that *‘resilience is the key to sustainability’* while, more ambitiously but with slightly less certainty, the Center for Resilience (2017) suggested that *‘resilience- resisting disorder- may be the key to global sustainability.’* Perhaps, more equivocally Espiner et al. (2017) argued that *‘resilience and sustainability have features that are conceptually similar, but are distinct and largely (but not necessarily) complementary.’* While Redman (2014) recognised *‘it has become common for sustainability science and resilience theory to be considered complimentary approaches’* and that *‘occasionally the terms have been used interchangeably’* he argued that *‘they are based on some distinct assumptions about the operation of systems and how we can best guide these systems in the future.’* In a similar vein in examining the relationship between resilience and sustainability of ecological-economic systems, Derissen et al. (2011) concluded that resilience is *‘a purely descriptive concept of system dynamics’* while sustainability is *‘a normative concept’* which looks to

capture *‘basic ideas of intergenerational justice when human well-being depends on natural capital and services.’*

Integrating Resilience into Corporate and Organisational Strategies and Policies

A wide range of companies and organisations have looked to integrate resilience into their strategic planning. At the multinational corporate level, for example, HPB Billiton’s corporate strategy is focused upon the *‘discovery, acquisition, development and marketing of natural resources’* and this strategy looks to *‘own and operate large, long-life, low cost, expendable, upstream assets diversified by commodity, geography and market’* (HPB Billiton 2016). In addressing climate change as a key element in its approach to sustainability the company reported on its commitment to *‘building and managing a resilient portfolio’* (HPB Billiton 2016). The company’s approach to climate change is built around looking to reduce greenhouse gas emissions, taking measures to adapt to the impact of climate change and working in partnership with governments, industry and the academic community to enhance the global response to climate change. The company emphasised its belief that industry has a vital role to play in working in partnership with governments, investors, peer companies and non-governmental organisations, for example, in developing a long term policy framework to deliver a measured transition to a lower carbon economy. Further the company argued that such a policy framework should include a price on carbon, support for the development of low emissions technology and measures to build resilience.

More specifically HPB Billiton reported that its approach to climate change embraced four areas of activity namely, mitigation; adaptation: the development and deployment of low emissions technology; and portfolio evaluation. In addressing mitigation, for example, the company reported a significant reduction in greenhouse gas emissions between 2015 and 2016 and that it had set itself challenging targets for future reductions. HPB Billiton claimed that setting ambitious greenhouse gas emission targets encouraged the company to improve its energy efficiency and to increase productivity. The development of low emissions technologies is also a priority and the company reported on its investment in carbon capture and storage technologies and high efficiency/low emissions power generation and transportation. At the same time BHP Billiton reported continuing to work to identify and assess the impact of climate change on its portfolio. More specifically the company have identified four scenarios, which assess the timing and implementation of a range of government policy changes, emissions reduction targets and technology developments. In a positive conclusion to an outline of the company’s approach to scenario planning HPB Billiton (2016) claimed that its *‘diversified portfolio of high-quality, low-cost assets is robust under both an orderly and a more rapid transition’* to a world where increases in global warming are limited to 2 degree Celsius.

Amec Foster Wheeler, a British multinational engineering and project management company focused on oil, gas, chemicals, mining, power, environmental and infrastructure markets, reported that *‘Resilient World is our sustainability strategy for solving tomorrow’s natural resource challenges together’* (Amec Foster Wheeler 2017). The company claim to be contributing to a *‘resilient world’* by *‘acting on our passion to solve challenges through*

innovation, ingenuity and expertise, by connecting our global knowledge, expertise and skills and embedding sustainability into the core of our business practices, projects and solutions.' Here again climate change is a major issue and the company reported on embedding climate resilience into all its projects to manage risk and to ensure the long-term viability of its client's operations and activities. More specifically Amec Foster Wheeler argued that systematically building climate resilience into investment and operational decisions ensures the provision of a platform, which will enable quick recovery from shocks and stresses, minimise potential loss of income and reduce both disruption to service provision and the risk of economic and environmental damage.

At the national level, the concept of resilience is an increasingly important element in the policies of governments, public bodies and public-private sector partnerships across a range of activities within the UK. The UK Government (GOV. UK 2014), for example, provides guidance on *'resilience in society: infrastructure, communities and businesses.'* In addressing infrastructure resilience, for example, advice is provided on standards of resilience, identifying and assessing risks from natural hazards, business continuity and corporate governance, sharing information and understanding interdependencies. At the same time government departments sponsoring each infrastructure sector have to produce annual sector resilience plans. In addressing finance in the 2016 Sector Security and Resilience Plans, the Cabinet Office (2016) reported that *'over the past year, the finance sector has made good progress in improving its resilience to a range of threats and hazards, reflecting a mature approach to resilience and ongoing investment by firms.'* In addition the Cabinet Office (2016) claimed that *'over the next year HM Treasury, the Bank of England and the Financial Conduct Authority will deliver a comprehensive work plan to continue to build resilience to cyber and operational risks in the financial sector.'*

Resilience also features in planning policies at the national level within the UK. The National Policy Planning Framework (Department for Communities and Local Government 2012) argued that *'planning plays a key role in helping shape places, to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development.'* The National Policy Planning Framework (Department for Communities and Local Government 2012) also advised local planning authorities to *'take into account the most up to date information about higher risk sites in their area, for malicious threats and natural hazards, including steps that can be taken to reduce vulnerability and increase resilience.'* One of the *'core values'* of the Scottish Planning Service is that it should *'play a key role in facilitating sustainable economic growth, particularly the creation of new jobs and the strengthening of economic capacity within communities'* and one of the desired outcomes of the Scottish Planning System is a spatial strategy *'which aims to build resilience and promotes protection and sustainable use of our world class environmental assets'* (The Scottish Government 2014). In Wales development plans should look *'to locate development in locations that are resilient to the effects of*

climate change’ and ‘where development takes place in areas of known risk, ensure that development is designed to be resilient over its whole lifetime’ (Welsh Government 2016).

In July 2017 the European Commission (2017a) put forward *‘strategies for resilient, inclusive and sustainable growth’* to strengthen innovation in Europe's regions. Here the challenge for regions within the European Union was seen to be the ability to compete at the global level with both advanced and emerging economies in an increasingly competitive global business environment. While there was clear recognition that many regions within Europe were able to compete at the global level, concern was expressed about vulnerable regions in Southern, Central and Eastern Europe. The European Commission's (2017a) strategy looks to *‘identify the potential of these regions and focusing on reinforcing their local strengths, narrowing development gaps, and boosting competitiveness’* in an attempt to *‘strengthen their resilience to globalisation.’* At the same time the European Commission (2017b).recommended that *‘special attention should also be paid to the resilience of rural areas, which are at risk of being left behind by globalisation and demographic change’* (European Commission 2017b).

At the city level, Bristol is one of five UK members of the 100 Resilient Cities Network. The *‘Bristol Resilience Strategy’* (Bristol City Council 2017) recognised that the city *‘faces challenges from a growing and changing population, climate change, resource scarcity, ageing infrastructure, changing patterns of world markets and employment, disruptive technologies and social and health inequalities.’* More pointedly, Bristol City Council (2017) argued that that the city is on a trajectory that it will be unable to sustain if it continues to expand. The vision seen to reflect the need for change, is that *‘By 2066 Bristol is a flourishing, welcoming city which inspires confidence in local and global investors, and our success is shared by all. Our neighbourhoods are affordable, attractive, healthy and well connected places where people of all ages and backgrounds trust and help each other. Our infrastructure and services are flexibly designed and managed to cope with uncertainty’* (Bristol City Council 2017).

In moving towards this vision and in *‘reimagining the city’* (Bristol City Council 2017) the focus is upon people, place, organisations, and prosperity and worth. In addressing people, for example, the focus included tackling homelessness, cultural engagement to build social cohesion and social action volunteering, while new models of housing delivery, repurposing neighbourhood partnerships, establishing a resilient city financing structure, managing the city's future flood risk and a climate change action plan are key components in the focus on place. In operationalizing the vision of a Resilient Bristol five ways of working are identified namely:

- building on the city's physical, human and social capital;
- tackling housing, neighbourhood conditions and access to jobs as an effective way of tackling disparities in health and social and racial inequalities;
- co-creation, namely bringing individuals, communities and businesses together to jointly produce a mutually valued outcome;

- disrupting, defined as challenging the ‘business as usual’ approach to move more effectively towards a resilient future; and
- learning from, and reflecting on, past decisions to inform future decisions.

Discussion

The concept of resilience is increasingly being employed to inform, and in many cases to underpin, sustainability and sustainable growth strategies and policies at a wide range of scales. However, despite the growing popularity of resilience a number of issues merit discussion and reflection. Firstly there are problems of definition in that as outlined earlier resilience has a range of meanings and has been used in a variety of contexts and as such it can be seen to mean all things to all people and therefore to have little genuine meaning. Davoudi et al. (2012) argued that *‘it is not quite clear what resilience means, beyond the simple assumption that it is good to be resilient’* and posed the question *‘is resilience in danger of becoming just another buzzword.’* While Weichselgartner and Kelman (2015) acknowledged that the *‘elasticity of the term’* and the *‘flexibility of the concept’* help to explain its popularity they argued that *‘there is an inherent danger that the term becomes an empty signifier that can easily be filled with any meaning to justify any specific goal.’* Arguably more critically, Schipper and Langston (2015) argued that resilience *‘runs the risk of being used and abused to the point that it becomes meaningless.’*

Secondly, notwithstanding the issue discussed above, if companies and organisations are to employ the concept of resilience to frame their strategies and policies and to report publicly on progress in fulfilling these strategies and policies, then measuring resilience is an important issue. However measuring resilience faces a number of conceptual and methodological challenges. Conceptually, different definitions of resilience do not make measurement an easy task and given that resilience is generally seen as being both time and place specific, then it is difficult to establish generic measures which facilitate comparisons over time and space. Methodologically the collection of reliable and meaningful data, particularly in environments and communities, which have suffered shocks, crises and threats, may prove difficult and here companies, organisations and researchers may resort to using available and/or surrogate data rather than looking to collect original data in the field. That said a number of resilient measurement frameworks have been developed. Schipper and Langston (2015), for example, listed 17 such frameworks but variations in their aims, scale and method of analysis make comparisons difficult.

Thirdly, there are a set of issues around distributional equity and though the literature on these issues relates principally to socio-ecological and urban resilience, it has a wider relevance. Meerow and Newell (2016), for example, argued that in the policy discourses of urban resilience the *‘underlying politics of resilience have been ignored’* and have stressed the importance of questioning what they describe as *‘the five w’s of urban resilience’* namely resilience for whom, of what, when, where and why. In addressing the question of resilience for whom, Vale (2013) argued that *‘the significance of resilience depends on whose resilience is being described.’* Further Vale (2013) suggested that many governments and corporations, for example, may seek to claim the term, but asked *‘how do*

they decide whose resilience to care about?’ and ‘whose resilience is omitted in the process?’ In analysing the resilience of food security to climate change in Huehuetenango in north western Guatemala, Herrera (2017) revealed that many of the solutions reflected the views of a minority of stakeholders and effectively ignored the views of the farmers. In outlining the importance of the ‘when’ question, Meerow and Newell (2016) questioned whether the primary goal is to *‘build resistance to short term disruptions (e.g. hurricanes) or long term stress (e.g. precipitation changes caused by climatic change)’*

Finally, there are issues surrounding development and change. On the one hand resilience is seen as being progressive and integral to sustainable development and growth as depicted at the global scale in the sustainability reports published, for example by Anglo American and in the United Nations’ SDGs. In a review of the SDGs, the UK’s Overseas Development Institute (2015), for example, argued that *‘a focus on strengthening resilience can protect development gains and ensure people have the resources and capacities to reduce, prevent, anticipate, absorb and adapt to a range of shocks, stresses, risks and uncertainties.’* In a similar vein, The United Nations Office for Disaster Risk Reduction (2015) argued that *‘building disaster resilience is critical to achieving the goal of poverty reduction’* and that *‘there is an urgent need to build and strengthen the resilience of poor communities to prevent future events drawing more people into poverty, and to protect their livelihoods and assets to help them recover.’*

On the other hand, Martin and Sunley (2014), for example, argued that the *‘concept of resilience privileges the idea of return to normal’* while MacKinnon and Derickson (2013) suggested that *‘the concept of resilience, derived from ecology and systems theory, is conservative when applied to the social sphere.’* As such, resilience might be seen to favour the status quo and to work against progressive social change. By way of an illustrative example, Zellmer and Gunderson’s (2008) comparative analysis of ecological restoration in Glen Canyon and the Everglades in the US, revealed that *‘resilience may not always be a good thing, particularly when it exhibits itself as entrenched stakeholder interests or institutions that do not embrace change.’* Arguably more contentiously, some critics have argued that popular conceptions of resilience privileges existing social framework of production, distribution, exchange and consumption and more specifically the capitalist mode of production. Martin and Sunley (2014) argued that *‘the concept of resilience is easily captured by neoliberal ideology, to prioritise the status quo, and the importance of self-reliance, flexibility and the role of self-correcting market adjustments.’* More pointedly, MacKinnon and Derickson (2013) concluded *‘resilience thinking has become implicated within the hegemonic modes of thought that support global capitalism.’*

Conclusions

There are variations in how the concept of resilience has been defined and, as outlined above, the ways it has been employed and applied are contested within the academic community. That said the concept seems to offer an increasingly attractive framework for both corporate strategists and public policy makers looking to address how businesses and organisations can adapt and respond to environmental, economic and social changes. More generally, in the face of continuing environmental risks and uncertainties,

particularly climate change, the concept of resilience seems likely to attract increasing attention within the public arena. This, in turn, begs questions about the role of public relations, public affairs and communications professionals in contributing to resilience planning and about how they can help companies and organisations to raise widespread awareness and to build resilience.

In general terms, Speath (2012), writing under the banner of the Public Relations Society of America argued that *'the next quality that public relations professionals should be prepared to champion is resilience.'* Speath also stressed the importance of keeping employees, donors and the news media engaged at a time of crisis. Here one focus, for example, might be on integrating risk and organisational strategies into sustainability plans and policies and on helping organisations to assess risks and vulnerabilities and developing programmes to embed resilience thinking throughout organisations. Within the UK The Chartered Institute for Public Relations Local Public Services Group (2015) stressed the importance of personal resilience training and welcomed the fact that many public service communications staff were joining front line colleagues on resilience training programmes.

At the corporate level, as illustrated earlier in this paper, many large companies look to communicate their approach to resilience planning in their annual corporate social responsibility and sustainability reports. That said such reports rarely have a large public audience, indeed such reports are usually not written primarily with the public in mind, and they are often pejoratively criticised as marketing and public relations exercises. However Benn et al. (2010) has suggested that public relations professionals should be more positively involved in corporate strategic planning. More specifically Benn et al. (2010) looked to address how both the theory and the practice of public relations can provide both direction and support for corporate social responsibility and sustainability and concluded that *'the public relations profession needs to develop a greater understanding of senior management approaches to the development and dissemination of corporate social responsibility activities.'*

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