Northumbria Research Link

Managing for Local Resilience: Towards a Strategic Approach

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Introduction: The Rise of Resilience

Originally used by engineers to describe the ability of a material to return to a pre-existing state after being stressed, the term resilience emerged within the ecological sciences, where it was used to describe the capacity of an eco-system to return to equilibrium after a displacement or disturbance (Holling, 1973). Resilience also became an established part of the literature on disaster management, particularly in the context of developing measures to meet emergency situations, including environmental disaster, disruption to energy supplies or terrorist attack (Coaffee et al, 2008; Manyena, 2006). The emphasis on 'bouncing back' after external 'disturbance' has more recently been taken up within the social sciences, with the virtues of enhanced resilience increasingly seen as crucial if individuals, communities and organisations are to cope in the face of economic, environmental, and social 'shocks' (McInroy and Longlands, 2010; Adger, 2010a; Bacon et al, 2010; Young Foundation, 2009). In this interpretation, the emphasis on resilience has been viewed as a 'response to a generalized contemporary sense of uncertainty and insecurity and a search for formulas for adaptation and survival' (Christopherson et al, 2010, p 3).

The concept of resilience is also increasingly being used in public policy and management debates to both capture the challenges facing public sector organisations in an era of austerity, (Harrow, 2009), and to emphasise the need for new approaches to management and public sector leadership (Shaw, 2011; Grint,

2009; Marcos and Macaulay, 2008). Increasingly, such applications often draw upon what are seen as the desirable characteristics of resilient management including: the 'ability to improvise' (Coutu, 2002, p 48); the use of 'requisite imagination' (Adamski and Westrum, 2003); the capacity to learn (Gunderson, 1999); viewing crises as 'providing windows of opportunity' (Brown, 2011, p 6); and, crucially, the flexibility to 'adapt to changed circumstances, to change, rather than to continue doing the same thing' (Adger, 2010b, p 1). Adaptation is closely linked to developing a strategic approach to the management of risk, in which being resilient involves operating in a 'state of constant preparedness' in order to respond to unforeseen events and surprises (Grotan et al, 2008, p 2), and even 'having the capacity to change before the case for change becomes desperately obvious' (Hamel and Valikangas, 2003, p 2). One account neatly summarises the distinctiveness of the resilience agenda (when compared to conventional policy approaches), as a contrast between the former's focus on 'flexibility, diversity and adaptive learning as key responses to real-world dynamics', and the latter's emphasis on 'optimality, efficiency, stability, risk management and control' (STEP, 2008, pp 1-2).

As the definitions of resilience have continued to proliferate (Plodineck, 2009), so have concerns that the concept remains 'fuzzy' and open to a myriad of interpretations (Pendall et al, 2010). Thus, the 'lingering concerns' of researchers focus

> '....on disagreements as to the definition of resilience, whether resilience
> is an outcome or a process, what type of resilience is being addressed
> (economic systems, infrastructure systems, ecological systems, or
> community systems), and which policy realm (counterterrorism; climate

change; emergency management; long-term disaster recovery; environmental restoration) it should target' (Cutter et al, 2010, p 1).

In applying the concept to governance there are, as yet, unanswered questions as to who defines the resilience agenda, which - in turn - relates to the distributional impact of promoting resilience and the key question of 'who benefits' ? (Morrow, 2008). There are also problems in seeing resilience in normative terms: as something always to be desired. Thus, the growing popularity of the term may result in the search for resilience being seen as a panacea for organisations and managers confronting a variety of external 'threats'. Indeed, some see the term in danger of exhibiting 'viral spread', partly due to it 'being deployed by a range of different actors and interests via a range of different networks and across geographical boundaries' and also because it 'appears to cut across the so-called 'grey area' between academic, policy and practice discourse' (Bristow, 2010, p 163).

Resilience Discourses

The utilisation of the term discourse is a reminder that 'discourse analysis has much to offer to our understanding of policy' (Atkinson, 2000, p 212) and that resilience can be usefully understood as comprising a number of discourses, each with their own set of values, normative assertions, problem definitions, and policy prescriptions which structure how the concept is understood and applied in the real world (Hajer, 1995). Reframing resilience as discourse allows us to capture the contested nature of the term, its appropriation by a range of academic disciplines and policy practitioners, and to highlight the term's political, ideological and normative

underpinnings which serve to obfuscate key questions such as, 'resilience from whose point of view?, resilience of what?, and resilience for what purpose?' (Jasanoff, 2008, p 13). Thus, from this perspective, while resilience can be viewed in one sense as informing policy realities on the ground, it is also important to view it as a politically-laden term, 'enwrapped with power relations and enabling some effects while closing down others' (STEP, 2008, p 4).

A number of different terminologies have been employed in the literature to distinguish between resilience discourses. These include contrasts between: 'ecological and constructionist' (Ungar, 2004); 'engineering and ecological' (Simmie and Martin, 2009); and 'conservative and radical' (Raco and Sweet, 2009). Further examination of the different approaches suggests a more general classification between two particular discourses on resilience.

Firstly, the term's roots in ecological sciences and, particularly, in disaster management, suggest the centrality of the 'survival' discourse. Within this, vulnerable individuals, groups or organisations look to 'recover, bounce-back and persist after a crisis', through 'taking timely action before the misfortune has a chance to wreck havoc' (Välikangas, 2010 p 19). Embedded in such a view are linkages to conservative political values that highlight a return to the status quo ('business as usual'). As one account of leadership and resilience notes

> '....while coping with crises, withstanding pressures, and reducing vulnerabilities can be admired, what if we become so resilient that we 'withstand forces that ought to lead to change and ought not to be resisted' (Grint, 2009, p 3).

Resilience as 'survival' is also shaped by more traditional, top-down, responses to dealing with 'threats' to security, and by the dominance of managerial or technical 'solutions' to problems based on disaster or risk reduction strategies. As one account notes

> 'the resilience approach is in danger of a realignment towards interventions that subsumes politics and economics into a neutral realm of ecosystem management, and which depoliticises the causal processes inherent in putting people at risk' (Cannon and Muller-Mahn, 2010, p)

Secondly, an alternative discourse 'involves attending to possibilities for life, not just survival' (Jasanoff, 2008, p 13). Such a view holds out the possibility of replacing 'pessimistic' narratives of fear, anxiety and powerlessness with 'optimistic' alternatives centred on hope, renewal and adaptation (STEP, 2008, p 4). From this perspective, several writers have argued that resilience has the potential to develop as a more radical agenda that opens up opportunities for political voice, resistance, and the challenging of power structures and accepted ways of thinking (Bay Localize, 2009; Owen, 2009; Howarth, 2010). Resilience is increasingly linked to progressive community-led environmental initiatives such as Transition Towns (Hopkins, 2008), and approaches to climate change that argue for resilience as a 'de-centred, de-commodified and de-carbonised alternative' (Brown, 2011, p 14). The term is also applied to approaches to sub-national economic development that highlight alternatives to the predominant neo-liberal discourse on growth and competitiveness (Bristow, 2010). Similarly, an analysis of post-recession urban development in London and Hong Kong, argues that

'…rather than seeing resilience as a process of bouncing back, a more radical deployment would view it as a dynamic process in which change and constant re-invention provide the grounds for social, economic, and/or environmental strength' (Raco and Sweet, 2009, p 6).

In further indentifying this fault line within different resilience discourses, Maguire and Cartwright usefully distinguish between resilience as 'recovery' or as 'transformation'. The former involves bouncing backing from a 'change or stressor to return to its original state', while the latter involves 'changing to a new state that is more sustainable in the current environment', rather than 'simply returning to a pre-existing state': thus, transformation involves responding to disturbance 'adaptively' and using the opportunity to 'innovate and do new things' (2008, pp 4-5). This classification will be utilised to reframe resilience in the empirical sections that follow.

Resilience: an Empirical Study

Many of the recent accounts applying resilience to public policy and management issues in the UK, are largely conceptual reviews or initial expositions on the terms utility (Harrow, 2009; Pike et al, 2010; Shaw and Theobald, 2011). There is scope therefore, to consider how the concept can be usefully situated within contemporary debates in public policy and management on the basis of a new empirical study. This is important in an area, 'still ripe for empirical testing, experimentation and for further research' (Moser, 2009, p 38), and where researchers have been advised to proceed with caution and ensure that 'policy fixes do not exceed the capability of the research base to justify them' (Christopherson et al, 2010 p 9).

Such an empirical focus is particularly important given the term's increasingly wide usage in, and often uncritical application to, policy practice. If the term is to be successfully utilised, it at least requires a measure of agreement over what resilience *is*, and what it *is not.* As Harrow points out,

> 'the understandings of the definitional moving target that is resilience, with its dual connotations of durability and soundness, yet dynamism and change, can only gain as the term moves even more centrally into the public policy discourse' (2009, p.6).

Hence, there is a need for a more critical examination of

> '…how 'resilience' as a mobile term, is moving and 'bedding down' in different contexts, and what it means for particular groups of people and their dilemmas and conflicts, and for ethics, politics and notions of justice' (STEP, 2008, p 3).

Drawing upon original research undertaken in the North East of England, this article aims to contribute to a more open and wide-ranging debate taking place within, and between, local authorities and other external stakeholders on the resilience agenda. It focuses on how local managers, in two related areas, have understood and interpreted resilience, how they view the terms relevance and application to their work, and whether resilience is viewed as offering a more strategic approach to dealing with major external challenges. Given that resilience is closely associated with such characteristics as dealing with external shocks, managing risk, and adapting to changed circumstances, it can be argued that an empirical study of local approaches in two areas, climate change and emergency planning, are of particular relevance.

In the case of the former, a large literature now exists on the important role played by sub-national bodies in tackling climate change (Bulkley and Kern, 2006; Pearce and Cooper, 2009; Gibbs, 2010). While initial attempts have also been made to assess how a focus on resilient local approaches to climate change can potentially offer important insights on: the creative use of discretionary powers; a holistic approach to managing risk; futurity planning; organisational learning; and promoting environmental justice (Shaw and Theobald, 2011). In a similar vein, Adger sees a resilient approach to climate change being centered on 'active and empowered local government able to promote social capital and social learning between civil society and government' (2010b, p 5). In the case of the article's focus on emergency planning, this reflects both its role in dealing with local environmental disasters, such as severe weather or flooding, and the direct use of the term 'resilience' within the statutory context of Civil Contingencies and National Emergency Preparedness. This is also true of the creation of Local Resilience Forums (LRFs) which co-ordinate multi-agency responses to major civil emergencies and produce Community Risk Registers (Cabinet Office, 2011a).

The research, undertaken in late 2010 and early 2011, involved: 30 semi-structured interviews with climate change officers and emergency planning or civil contingencies officers in all 12 local authorities in the North East; climate change or emergency planning officers at the sub-regional and regional levels; and with a sample of relevant environmental stakeholders in the public, private, and voluntary sectors. While emergency planning officers would be conversant with the term (through the statutory resilience function), its more recent application to debates on climate change adaptation (and its status as a 'fuzzy' concept) required the provision

of a detailed briefing note to all participants prior to the interviews. The briefing note aimed to clarify the particular approach to resilience adopted within the research; an important issue, given that the term is used across a 'range of disciplines and is promoted by different government, non-governmental organisations and think-tanks' (Brown, 2011, p 3). The briefing note outlined that the particular focus of the research was to capture perceptions of resilience as a *process* and policy *outcome* at the local level in the areas of emergency planning and climate change. Such an approach reflects the view that resilience is 'the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances' (Masten et al, 1990 p 426). In addition, the first element of the semi-structured interviews involved the use of a definitional check list of key terms (see Figure 1) which allowed for a collaborative discussion of the range of meanings at an early stage of the interview.

The research findings suggest that while there are still doubts amongst managers as to the terms relevance, and tensions between climate change and emergency planning officers in relation to how the resilience narrative is interpreted, there were clear signs of a growing interest in the term, some appreciation of how resilience could add value to a range of local policy responses, and an emerging view on the wider organisational benefits of promoting resilience. Building on the distinction between resilience as *recovery* and as *transformation*, the article also considers how reframing resilience as discourse can inform our understanding of how the term has been interpreted by local managers. The article concludes by considering how a more integrated approach to resilience in local climate change and emergency planning might be devised, promoted and implemented.

Managing in Hard Times: Perceptions of Resilience

Those officers that worked in the statutory area of emergency planning/civil contingencies – and who were involved in the work of the Local Resilience Forums – were, not surprisingly, 'very familiar' with the term. Indeed, one officer noted how the change in title of their local authority's emergency planning officer (to resilience manager) had served to 'enhance the term's visibility and embed the term within the council's decision-making'.

In contrast, the general view was that the term had not (as yet) become fully absorbed within the climate change agenda. Indeed, one local climate change officer acknowledged that, 'while I know it is important, I'm not really sure what it means'. Another officer commented that

> 'I don't encounter resilience very much in my everyday work, although it does depend who you speak to. When I'm talking to the Civil Contingencies Unit it crops up with relation to emergency planning and business continuity'.

In considering why resilience had not been more effectively utilised within the context of climate change strategies, some felt that this related, more generally, to the overall political priority given to climate change. One officer recognised that,

> 'If something is not high on the Council's agenda then it will not be strategically significant...at the moment climate change is not high up the list of priorities which means that resilience is unlikely to be'.

While for another officer, resilience 'is of little strategic significance because it is allied to the emergency planning agenda, which has little currency in the Council'.

Others saw the lack of 'buy-in' from some senior managers as detrimental to the promotion of a wider resilience agenda,

'In order for resilience to be taken seriously, you need to get your stakeholders to better understand climate change. Often heads of service or those who work in non-climate services do not understand the timeframes associated with climate change'.

Others pointed to the problem of engaging elected members: 'I don't think that Councillors are up to speed with the environment portfolio in the same way that some officers are. I haven't been able to use resilience in the past to my advantage with any local politicians'.

When questioned further, those more critical of the term's usage felt that resilience merely added further complexity to an already confusing area: hence resilience has become the 'latest in a long line of terms' associated with the policy debates on the environmental challenges facing contemporary societies. These include, inter alia, Local Agenda 21, Sustainable Development, Environmental Sustainability, Climate Change, and the Low Carbon Economy. For one climate change officer, it was merely another 'buzz word', while for another, 'resilience, like sustainability, is too difficult to define to have much currency'. Several respondents also highlighted the danger of resilience being interpreted defensively and inflexibly, and, in the words of one, that resilience 'could be a problem if it involves resistance to all change'.

The majority of those interviewed however, were more positive about the potential to use the term in their work. For some, it was the appropriate term for our times as, 'Society is in a vulnerable place at the moment and resilience conveys a sense of unity, strength, and a common bond'. Another climate change officer noted that the

term 'was easier to understand than adaptation. If I was to talk to my colleagues about resilience they would understand what I meant'. The political dimension was also noted by a small number of respondents, one of whom commented that, compared to sustainable development, 'resilience might have the advantage of being a more politically benign term – less challenging and contentious for local councillors'. While for another, 'talking about the resilience agenda could be more politically neutral than referring to a low carbon agenda'.

Terms such as 'climate change adaptation' or 'low carbon approaches' have been viewed as acting as barriers to public understanding and, to some extent, led to consumers 'switching-off' when exhorted to reduce their own 'ecological footprints' (IPPR, 2009). In contrast, resilience was seen, by some, as a more 'everyday term' with generally positive connotations, which places climate change within a more cohesive agenda of individual and community actions in a period of uncertainty. As one respondent noted, 'it conjures up the wartime spirit and draws a community together'. In this sense, resilience may be seen as a 'publicly acceptable word that assumes proactive government, and is slightly less scary than "emergency management" or "dealing with crisis" '(Adger, 2010b, p 5).

In the discussion of how a focus on resilience can enhance local approaches to climate change, respondents also touched upon how the term can be applied in the context of the traditional distinction been mitigation and adaptation. The former involves actions to permanently remove or reduce the long term hazards of climate change, the latter relates to the capacity of a system to adjust to climate change and to cope with the consequences (IPCC, 2007). While one officer continued to feel that

the distinction between mitigation and adaptation is a useful one, because it 'helps to make the specific actions that I am responsible for more easily understood to the public', a number of others felt that the use of resilience could help reconcile mitigation and adaptation. According to one officer, 'it could be a useful way of uniting the two approaches under the same umbrella – the two separate terms often cause confusion'. While for another, since 'adaptation has lagged behind mitigation, resilience could be a way in which we advance it a bit faster.' One respondent felt that

> 'The separation of mitigation and adaptation is frustrating as responding to climate change is best viewed as one multi-faceted initiative. Perhaps a focus on resilience can help to break down the often false contrast between the two, i.e. to be resilient you need to encompass all types of response. You cannot cherry pick or say that you are concentrating on one rather than the other'.

A number of interviewees also underscored the difficulty they had in making the distinction between these two approaches accessible to the general public. If this difference is difficult to grasp, then it can be argued that there is room for an alternative concept which is more accessible and which translates more clearly across different policy agendas. There was also concern that addressing climate change requires a holistic approach which includes both adaptation and mitigation activities; artificially dividing the two concepts makes it more difficult to address climate change in the most appropriate way.

Discourses of 'Recovery' and 'Transformation'

To provide a more detailed exploration of how resilience was understood by participants, those interviewed were provided with a list of 20 terms closely associated with, and emblematic of, the main interpretations of resilience in the literature. Respondents were then asked to identify the 10 terms which they associated with their understanding of resilience, and to then rank those ten in order of importance. The results (Figure 1) show the top ten-ranked responses for each of the terms. The association of resilience with adaptation (as opposed to mitigation) is clear, as are the links with emergency planning, disaster management, managing risk, flexibility and durability.
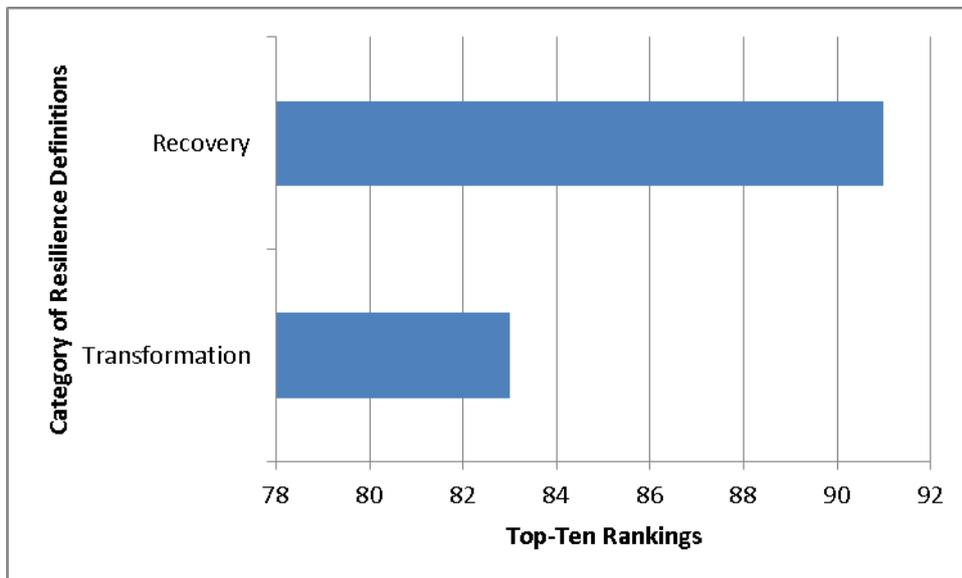
Figure 1: Interpreting Resilience
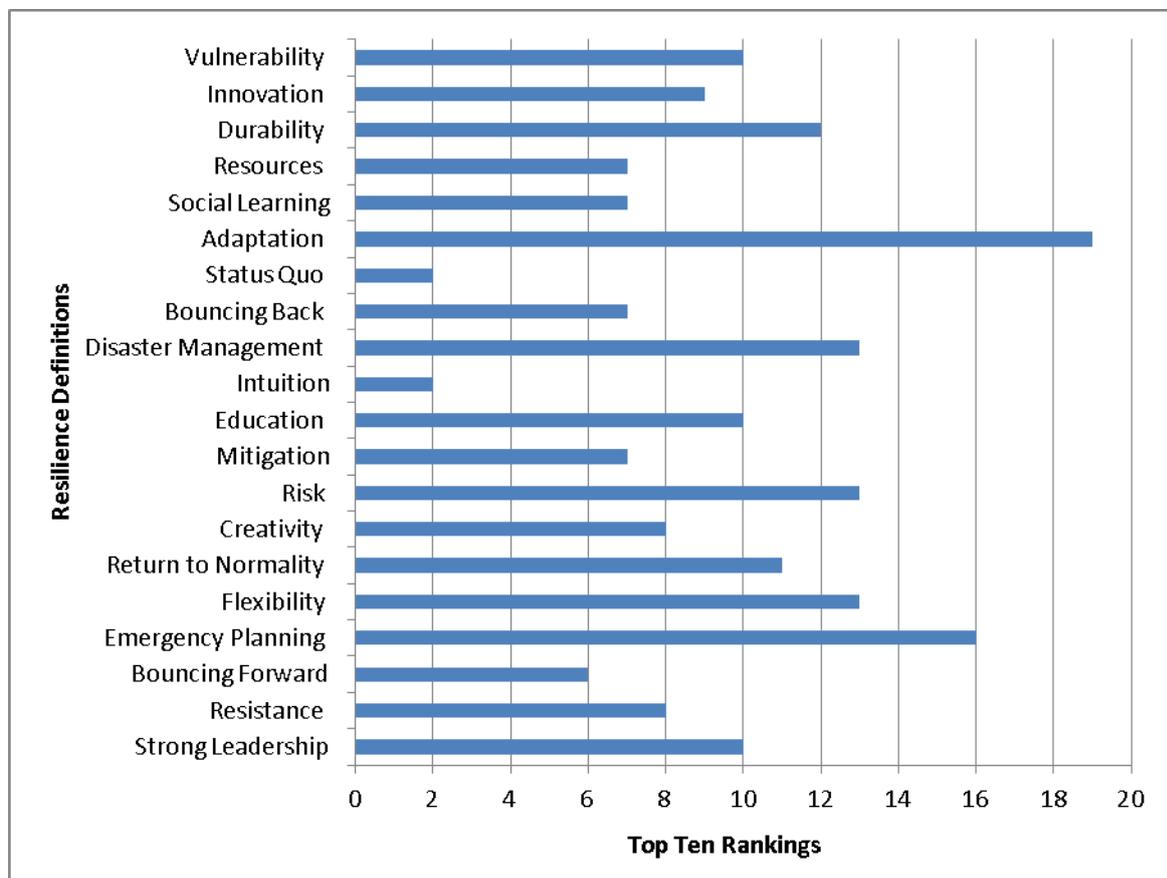
In analysing the different responses, it is useful to reframe the debate in terms of discourses of 'recovery' and discourses of 'transformation' outlined earlier (Maguire and Cartwright, 2008).

The first of the two dimensions highlighted, is essentially a conservative, safety-first approach which places the emphasis on identifying short to medium-term risk, addressing the problems which arise, and rebuilding ('bouncing back') as quickly as possible within the parameters of the original model. It can be argued that this interpretation captures the predominant viewpoint developed within emergency planning, where resilience is seen in terms of withstanding or recovering from adversity, defined in terms of threats and hazards, and involves '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' (Cabinet Office, 2011b).

Within the second of the dimensions above, the emphasis is on identifying short, medium and long-term risks and thinking creatively about how to rebuild ('bounce forward') in ways that improve upon the original status quo. Thus, in a 'resilient social-ecological system, disturbance has the potential to create opportunity for doing new things, for innovation and for development' (Folke et al 2005). In contrast to the first, this dimension of resilience can also be viewed as of greater relevance to the particular, long-term, challenges of climate change adaptation (Shaw and Theobald, 2011), and highlights the scale of change needed to create '...a fundamentally new and different socio-ecological system' (Hudson, 2010, p 5).

Figure 2 offers a more nuanced view of how resilience is being interpreted in practice, as the individual terms selected by the respondents (above) have been located within two main categories (recovery and transformation) on the basis of their prior association within these dominant discourses on resilience. The findings illustrate that there was a clear preference for interpretations of resilience as 'recovery', with an emerging understanding of a more transformational approach to resilience.

Figure 2: Resilience Discourses

The influence of an emergency planning interpretation of resilience is further illustrated when interviewees were asked to indicate the policy or service areas in which they saw the term resilience most used (Figure 3). Of the seven broad categories provided, the area of Emergency Planning was the main area identified, and when considered alongside the area of Business Continuity, which is closely linked to the role of Local Resilience Fora, the continuing influence of the 'recovery' discourse is clear.

Figure 3: Applications of Resilience

Emergency Planning	Climate Change	Economic	Community	Business Continuity	Individual/ Psychological	Health
12	9	6	5	4	2	1

Evidence, perhaps, that the scale of the problems facing local authorities has ensured that a more cautious, risk-averse, emphasis on 'resilience as recovery' predominates. In addition, the statutory nature of emergency planning, its well-established professional status, and the prior existence of Local *Resilience* Forums, could also be seen to contribute to the dominance of this interpretation of resilience across the local authority as a whole and, regardless of professional specialism, also influence climate change officers to view resilience as 'surviving' and 'recovering' from natural disasters. In some cases, the lack of engagement of climate change officers with the term resilience, can be interpreted as avoiding 'encroaching' on, what is viewed, as the 'territory' of emergency planners'.

The interviews also highlighted the importance of a small number of key individuals across the region who championed the concept of resilience in their day-to-day work. One such officer aimed 'to get resilience considered in 'every piece of paper that passes the Council's desk', while for another, the term 'usually crops up when you're working closely with someone who has a personal interest in it'. Given the importance of these dissemination and learning networks, it can be argued that the policy documents on civil contingencies produced by central government (Cabinet Office, 2010 a & b), and via well-established professional networks such as the

Emergency Planning Society, have been influential in shaping *both* climate change officers and emergency planners in their understanding of resilience as 'survival'. Indeed, the dominance of such an approach is highlighted by one review, which notes that in the 2004 Civil Contingencies Act

> '…no mention is made of climate change or its link to extreme weather events, therefore the impression given by these documents is that with regard to the environment, more concern and emphasis is placed on terrorism i.e. biological or radioactive contamination of the environment' (Ecocities, 2010, p 25).

A timely reminder that discourses 'determine what can be legitimately included in, and what is excluded from, debates'. A discourse produces its own `regime of truth in which knowledge and power are inextricably bound together' (Atkinson, 1999, p 60).

Beyond 'Recovery': Resilience as a Cross-Cutting Agenda

Figure 3 also highlights how resilience was now being applied outside of the traditional emergency planning area or even beyond the more recent applications to climate change. This development both offers opportunities to join-up local policy-making across a range of areas, and to bring into the debate other interpretations of resilience.

Linking the term to the area of local economic development is particular interesting, given the emerging literature on the subject (Ashby et al, 2008; Simmie and Martin 2009; Bristow, 2010; Pike et al, 2010). For one interviewee, 'environmental resilience is likely to be linked very closely to economic resilience', while for another, resilience

was useful in linking to debates about 'the impact of '"peak oil" on the economic fortunes of more isolated rural areas'. For one climate change officer, the term 'was a useful means of uniting economic and environmental approaches within the context of the low carbon economy'. Such sentiments echo the message in a recent report on climate change in the North East, which argued that

> 'Creating a climate resilient low carbon economy, one that regenerates existing communities and provides for the social needs of existing and future generations in the North East, is a long-term challenge that will require sustained attention over decades'. (Arup and Cambridge Econometrics, 2010, p 4)

One of the earliest reviews of the business plans of 50 local bids to set up Local Enterprise Partnerships (LEPs) in 2010, found that that the second most important local priority selected was the promotion of the low carbon economy (SQW, 2010, p 7). Not only would a focus on resilience be usefully employed to identify the environmental impact of economic development, but it could also provide opportunities for 'transformational' approaches to economic resilience such as promoting local renewable energy businesses, advocating 'food resilience', and new forms of social ownership. As one account of local economic resilience argues,

> '…local places and local government are capable of riding the global economic punches, working within environmental limits, dealing with external changes, bouncing back quickly, and having high levels of social inclusion' (Ashby et al., 2008).

Figure 3 also highlights opportunities to use the emerging resilience agenda to highlight the public health impacts of climate change, (The Lancet/UCL, 2009), and to recognise that 'local public health agencies are uniquely placed to build human resilience to climate-related disasters' (Keim, 2008, p 508). Connections can also be

made between climate change, emergency planning, and public health concerns, as adverse physical and mental health outcomes are also directly associated with extreme events (The Climate Institute, 2011). Bringing together the different components of a resilient approach to public health could also be achieved through the role played by Directors of Public Health on Local Resilience Forums, and also serve as one of the priorities for the new local Health and Well-Being Boards being created as part of the Coalition Government's NHS reforms (Department of Health, 2012).

An important aspect of the responses captured in Figure 3 is the emphasis on community resilience. Involving communities fully in responding to environmental challenges and civil emergencies, was identified as a key issue by the vast majority of those interviewed. On one level, many of the respondents felt that there were clear benefits to using the term resilience as a tool with which to engage the public on questions of climate change. One climate change officer argued that

> 'If you want to get someone's attention, use resilience. Resilience has a very strong impact as a word in a way that sustainability doesn't, plus it has the old-fashioned connotations of community'

For another,

> 'one of the drawbacks with mitigation is that it is a void argument for Joe Public, they think "I'm only one person, what can I do?" but they might respond better to resilience, it can be made more personal and more achievable.'

On another level, the focus on community resilience was viewed as useful in confirming the importance of a 'bottom-up' process of involvement. Hence, as one climate change officer argued, 'resilience cannot be imposed, it must come from

below'. Several respondents also noted the important synergy between raising levels of community resilience and other local engagement agendas 'such as neighbourhood management, climate change schools, and managing business continuity'. For one emergency planner, the development of the community resilience agenda is important both to allow officers to 'understand what communities can do for themselves' and, to 'persuade communities that government cannot protect everyone'. This view reinforces the growing emphasis on community resilience in relation to emergencies (Murphy, 2007), with the Cabinet Office's National Framework on Community Resilience highlighting the importance of both individual and community capacities 'adapting in order to sustain an acceptable level of function, structure, and identity' (Cabinet Office, 2011b, p 4).

The framework also highlights the potential to enhance linkages between emergency planning and climate change approaches to community resilience

> 'The consultation has shown that social capital built through community resilience creates wider benefits for the community. Similarly, the benefits to the community of social capital are best demonstrated in the way in which a community copes during and after an emergency' (Cabinet Office, 2011b, p 11).

A few respondents raised concerns that the link between communities and resilience has not been sufficiently well thought out in their authority. For one emergency planner, while the cabinet office community resilience framework is useful,

> '..there is still too much focus on the organisations who can deliver resilience and not enough being done to acknowledge that resilience starts with the individual…in the event of an emergency, the professionals still come in and push everyone else out'

In confirming the importance of the 'local' in responding to climate change, many of those interviewed were concerned about the major cuts in local government spending and the potential impact these would have on working with communities: 'in the present economic context whose going to provide the resources needed to effect change?' One climate change officer agreed that, 'there is a role for communities, but we are still a long way from getting them to help themselves'. A good summary of the concerns expressed about communities developing their own resilience was provided by one respondent, who felt that,

> '…communities cannot be left to fend for themselves. Local authorities still need to support them, manage problems and provide the resources. I am concerned that there are so many different definitions of community - a place, street, neighbourhood, locality, and this could lead to confusion. I am also concerned that since some communities have high levels of social capital or "natural resilience" this will be used as an excuse for government to step back and leave communities to tackle these problems on their own.'

The focus on the adaptive capacities of communities - rather than merely on their vulnerabilities – and on how communities can change and develop their own resilience, is potentially important in allowing the development of a shared understanding of the role of 'resilient' communities in civil emergencies and within the necessary adaptations and behavioural changes required in relation to Co2 reductions.

Resilience as a Strategic 'Lynchpin'

There was a clear recognition of the distinction between the local authority's statutory role in emergency planning and in local climate change interventions. One

climate change officer spoke for a number of those interviewed, when he confirmed that the debate on wider uses of the resilience framework with emergency planners hadn't yet taken place, as, 'I have enough trouble getting them to understand the difference between mitigation and adaptation, let alone resilience', while for another, climate change and emergency planning officers are still 'divided by a common language'. One climate change officer's view of the Local Resilience Forum was that

> '…it's run by blokes in uniforms and is not suitable at the moment for the wider resilience agenda…this requires a more corporate approach, different individuals, different skills. It might even require a completely different mindset.'

However, a number of respondents (across both areas) felt that reframing how resilience is understood could be helpful in continuing to encourage a dialogue, and enhancing linkage, between the emergency planning and climate change agendas. According to one climate change officer,

> 'Emergency planners don't necessarily care about sustainability, climate change officers don't necessarily care about fire and rescue, but everybody cares about resilience'.

The need for greater integration has been recognised by the Emergency Planning Society, (EPS), who argue that while

> 'Local Resilience Forums already plan for severe weather…climate change projections suggest that in future LRFs may need to consider how the long term changes in climate will affect their capacity to respond… our understanding of how to adapt to climate change is still in the very early stages and much further work is needed (EPS, 2009, p 2).

A small number of authorities in the survey had begun to try and make linkages between key documents such as Community Risk Registers and local Climate Change Adaptation Plans. In one area, climate change officers had 'used the community risk register when drawing up the Climate Change Action Plan'. Such a link was deemed particularly useful when bidding for additional resources as 'you can hang the bid on evidence from both documents'. In one local authority, the Emergency Planning Officer was renamed the Resilience Manager, in another, a more co-ordinated Risk and Resilience Team was set up. There was also evidence that the LRF structures in some areas were being configured to incorporate environmental and community thematic sub-groups (Northumberland LRF, 2011).

In this context, resilience could be used as strategic focus through which to enhance the link between aspects of the emergency planning and climate change approaches that, hitherto, have been dealt with within 'vertical silos'. As part of this debate, one interviewee referred to a focus on resilience as the 'strategic lynchpin' which could help to

> 'mainstream the ideas of adaptation and mitigation, underpin local activities across a range of different service areas, and help us think about adapting the way we provide services to make them more resilient'.

In the interviews, three areas were highlighted where a focus on resilience could contribute to increased integration between emergency planning and climate change interventions at the local level. In the context of resilience 'as discourse' this should be viewed less as the replacement of one discourse (recovery), by another (transformation), and more a reflection of how even different discourses can

interconnect in relation to 'on the ground' policy prescriptions, even if they remain rooted in different values and normative frameworks. Three areas of potential integration were identified.

Firstly, it was felt that a focus on resilience can contribute to stronger links between emergency planning and climate change approaches in relation to a more holistic approach to understanding risk. Emergency planning usually operates according to short to medium-term timescales – immediate relief following a flooding event, or actions that could be taken over the next 5 years to mitigate its effects in the future. Conversely, climate change is usually centred on the medium to long-term – looking ahead 20, 50, 100 years to possible climate impacts. By reframing debates on risk within the context of 'resilience', emergency planning and climate change officers may be able to reconcile some of the timescale-centred planning and risk-management differences which currently stymie greater joint working. For the Emergency Planning Society, there is scope for LRFs to work 'with local authorities and other partners …to strengthen understanding of local risks from long-term climate change' (EPS, 2009, pp 12-13).

Secondly, a clear opportunity to integrate the two approaches lies in bringing together emergency planner's concerns with responding to the immediate effects of 'severe weather events', and climate change officer's focus on the 'average weather in a locality over a thirty year period' (EPS, 2009, p 4). There is already evidence in the North East, that there are opportunities for joint-working through initiatives such as the Community Flood Partnerships. Furthermore, as part of the first UK Climate Change Risk Assessment, climate change officers and related stakeholders have

identified a number of climate-induced risks to the North East, including changes in biodiversity, health and heat waves, river flooding and surface water flooding. Taking a resilient approach to climate change would thus involve a greater awareness of the inter-relationship between the different professions, both in terms of shared data and in bringing together short-term concerns with extreme weather events and more long-term considerations on changes in the climate.

Thirdly, given the general concern amongst those interviewed that resilience would be difficult to measure and assess, a focus on the term does offer a wide range of international and national indicator frameworks that aim to capture and measure resilience. Such approaches include a focus on: economic resilience (Wilkinson, 2010); organisational resilience (Stephenson et al, 2010); and resilient communities (Bay Localize, 2010). One approach that usefully combines emergency planning and climate change approaches, brings together a shared interests in promoting and measuring levels of social capital, and locates resilience in a wider economic context, is that recently developed by Cutter et al (2010) in their study of 'benchmarking' disaster resilience in the South Eastern United States. In addition to defining five dimensions of resilience (Social Resilience, Institutional Resilience, Community Capital, Economic Resilience, and Infrastructure Resilience), the model also establishes over 30 composite indicators, and suggests an operational variable for each indicator and a relevant data source (Cutter et al, 2010, p 7). Given the recent reduction in the number of government targets and nationally defined indicators, and the political emphasis on localism, it can be suggested that the local development of a 'suite' of resilience indicators would both enhance collaborative working and further promote the adaptation agenda.

Conclusion

> 'In reframing resilience...a series of balances need to be struck, between attention to the nuances of different frameworks, and articulating their differences clearly; between conceptual advance, and remaining grounded in empirical settings; and between understanding complexity, and the clarity needed to inform policy and practice. The latter is crucial: policy decisions are being made as a matter of urgency in areas from climate change and energy to agriculture, water and health' (Leach, 2008, p 15).

This article draws upon one of the first empirical studies of the impact of the resilience agenda on public policy and management at the local level in the UK. The study, of how resilience is viewed by a range of climate change and emergency planning officers in the North East of England, suggests that it is still early days: thus, the 'resilient turn' is only just beginning to be felt across a range of UK public policy domains. The study revealed a measure of uncertainty over the term's exact meaning, scepticism as to whether it was here to stay (or merely the latest 'buzzword'), and concerns as to whether resilience was always a good thing if it merely led to the defence of the status quo? There were also clear (and continuing) differences between the approaches to resilience adopted by emergency planners and those adopted by climate change officers, and a general lack of a coherent strategic framework within which the different local dimensions of resilience could be considered and reconciled.

The study was also conducted against a backdrop of public expenditure cuts and the re-organisation of sub-national governance. In the two policy areas studied, local authorities were faced with the deletion (as a central government performance measure) of National Indicator 188, which councils used to embed the management

of climate risks across the local authority and its partners (Pearce and Cooper, 2009). The Coalition Government's abolition of the regional tier throws into doubt the continuation of regional climate change bodies, and there are also concerns that the abolition of Government Offices in the regions (and with it their coordinating role) will lead to increased fragmentation, and the lack of a joined-up approach amongst the different government departments concerned with climate change. There were also concerns expressed that the demise of Regional Resilience Forums will also remove a necessary level of co-ordination and communication in relation to emergency planning. In this context, resilience was associated with more pessimistic narratives of uncertainty, vulnerability and survival.

In establishing a coherent framework within which resilience can be defined and understood, the study also reframed the understanding of resilience to include both a focus on policy prescriptions and the discourses that shape such applications. Embedding the findings within the discourses of 'recovery' or 'transformation', allowed the article to identify that resilience as 'recovery' remains the primary discourse, particularly in the area of emergency planning, and that such an understanding reduces the term's usefulness as a more creative and strategic agenda for climate change adaptation at the local level.

There were signs however, that a 'transformational' narrative on resilience is emerging (albeit as a secondary discourse), but one which holds out the opportunity to integrate more effectively with traditional accounts of resilience as 'survival'. This reframing allows for a more positive interpretation of the research, which highlights: the added value of the term itself in a period of austerity; its ability to integrate, where

appropriate, features of climate change adaptation and emergency planning; and it's ability to act as a 'strategic lynchpin' in relation to other policy areas such as economic resilience. The agenda also chimes with the contemporary focus on localism and offers a range of frameworks through which to monitor and evaluate the sought resilience. In this context, the research supports the contention that, there are 'reasons to be cheerful' in relation to the growing understanding (amongst practitioners) of the positive features of the resilience agenda (Harrow, 2009).

In returning to an examination of resilience as a policy framework, the research also suggests that Local Authorities could usefully incorporate the resilience agenda in a number of ways. These include:

- Using 'resilience' as an overarching strategic framework to bring together a range of relevant documents (such as Adaptation Plans, Risk Registers, Local Economic Assessments and Public Health Strategies) within one, local authority-wide, cross-departmental Local Resilience document. Producing such a document would be an important first step in defining resilience for all officers in the authority and for mainstreaming the idea between departments. .

- Using resilience to help shape local Community Involvement Strategies. Such a development would recognise that while resilience must be 'built from below', support from local government is also vital. In addition to outlining community needs and mechanisms of involvement, a focus on resilience would involve capturing the areas in which the focus on resilient communities would be most useful. These include involvement in short-term emergency planning responses and climate-related weather events, and more medium to long-term issues such as the sustainable use and reuse of resources, economies that circulate wealth and opportunities locally, and community empowerment in public decision-making.

- Using resilience to broaden the focus of Local Resilience Forums, which currently concentrate on the emergency planning aspects of resilience. It would be advantageous for the Forums to include a wider contribution from other policy officers such as climate change or sustainable development officers, in order that they might take a broader approach to risk, and to share ideas for encouraging a resilient approach. A more holistic approach to

training and professional development would also serve to break down barriers.

- Using resilience to maintain mechanisms for collaborating on climate change initiatives across a wider spatial area than just the local authority. While there are good opportunities to cooperate on a 'low carbon' approach to economic development via the LEPS, this is still too narrow a focus for effective climate change adaptation. In this context, local authorities may wish to consider further developing specialist sub-regional networks that mirror the LEPs or even consider the development of more informal regional resilience networks.

- Using resilience indicators to monitor and evaluate local performance. While public agencies in the UK have been relatively slow to develop an understanding of resilience, there are a number of resilience frameworks, index's and 'toolkits' currently used by a number of national and international organisations and communities which (since they cover a range of applications) can, at least, facilitate discussion of the key arguments contained in this report (Hegney, et al, 2008; Eko-Gen, 2009; Cutter, et al 2010; Wilkinson, 2010).

More generally, the study has lessons for the application of resilience to the study of public policy and management. Such a focus can at least help to 'shake up our thinking and make us question some of our basic assumptions and measures of success and failure' (Christopherson et al, 2010, p 4). The term also provides an opportunity to incorporate a multi-disciplinary approach to examining contested issues across a range of policy sectors. It can also be suggested that resilient management would involve a range of necessary attributes, including: making the most of internal capabilities; being flexible and creative in responding to challenges; overcoming organisational 'silos'; a proactive and more corporate approach to managing risk; and developing inclusive approaches to strengthening community resilience.

However, there is still much empirical work to be done on how effective leadership for resilience can be further developed, how managers can best learn about resilience, and the inter-relationship between organisational resilience and other types of resilience, such as that operating at the level of the individual. There is also scope for examining how different policy areas - from local economic development to public health and social care - have interpreted the resilience agenda, and whether there are opportunities for greater cross-service planning. The links between resilient management and the wider debates on governance, such as the focus on promoting 'agile governance' (Demos, 2008), are also worthy of further examination.

In conclusion, the research presented here represents a first step in generating data about the relevance of a resilient approach to local management within the current political and economic climate. It is also an attempt to 'reframe resilience' by looking beyond the discourses dominated by traditional disaster management and emergency-planning interpretations in an attempt to advance a more radical and holistic approach to local resilience. Despite the challenges in confronting a dominant discourse associated with narratives of uncertainty, vulnerability and anxiety, there are signs that a more radical approach is emerging. This approach, which highlights narratives of hope, adaptation and transformation, also holds out the possibility of reframing resilience as an agenda which encompasses 'a spectrum from discursive and deliberative politics, to more antagonistic politics of resistance and struggle; all involve moves away from the managerialism that characterised early resilience approaches, towards conceptualising it in fundamentally political terms' (Leach, 2008, p 15).

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