Deconstructing 'Resilience' in the Aftermath of Disasters in Australia

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Introduction

In 2011, there were 336 reported natural disasters worldwide, and they accounted for the deaths of more than 31,000 people (almost 20,000 in Japan after 3/11). The costs associated with these events were the highest in 20 years, and totalled an estimated $US350.47 billion in damages ($US203 billion in Japan, $US17 billion in Christchurch, New Zealand). In Australia natural disasters have become a frequent occurrence. While not approaching either the mortality rates or the financial costs associated with overseas disasters, in recent years Australia had a very high incidence of natural disasters. The natural disasters that struck Australia between November 2010 and February 2011 saw more than 99% of Queensland disaster-declared, with 37 lives lost. During the same period, all other Australian states and the Northern Territory experienced severe weather events or other natural disasters, such as bushfires, floods, storms, and droughts. Queensland and New South Wales experienced floods in December 2010 and January 2011, Victoria was devastated by floods in January and February 2011, Category 5 Tropical Cyclone Yasi ravaged North Queensland in February 2011, and bushfires were out of control in Victoria in February 2011. The total cost attributed to these disasters was $3 billion.[1] The costs included rebuilding physical infrastructure, re-establishing services, and reinvigorating damaged communities. All levels of government are conscious of the budget implications of the impacts of disasters.

Media responses to disasters invariably have yielded commentary about the role of people's 'character', or 'resilience' in maintaining community cohesion and morale in the face of near indescribable destruction.[2] In fact 'resilience' has become one of the buzzwords associated with post disaster scenarios. Communities are called upon to be resilient, to be resourceful, and to mobilise this resilience to resist the destabilising and at times dehumanising impacts of natural disasters, and to rebuild their lives, preferably where they are. Inevitably parochialism is writ

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1 Figures provided by the Australian Bureau of Statistics, website accessed May 2, 2013.
(http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1301.0Main+Features1952012)

2 See the section below, Resilience and the Media, for examples of such reporting.

large in these descriptions of 'character': whether it be regional character (Queenslanders are 'tough', Tasmanians are 'hardy' and so on) or national character (we are a nation of 'battlers'), stories of people's capacity to overcome obstacles become ostensible motivation for recovery, and in theory, for building resilience.

In this context of recovering from the effects of numerous recent disasters, the word 'resilience' has also been used extensively by Federal, state and local government agencies, NGOs, and community groups. This word appears closely linked with aspects of a philosophy that has permeated government departments, political parties, and insurance companies; that is, that 'resilience' is a crucial component in fostering survival and recovery in areas that have experienced natural disasters.[3] Along with this assumption goes a second inference – that despite the rhetoric of media, state et al., people need to become *more* resilient.

The excessive use of the term 'resilience' has led to a phenomenon within post-disaster communities that I label 'resilience burn-out'. That is, with the saturation coverage of 'resilient' communities in the media, and pressure from government workers and agencies to spread the message that communities and people need to 'become resilient' (to what exactly, and how, remains unstated, as does the 'lack' of resilience that is implied in such messages) the limits of people's patience in the ability of those in power to understand their circumstances wears thin. This paper attempts to break down the term 'resilience' and examine some of its implications in the context of communities recovering from disasters.

Deconstructing resilience

'Resilience' has a multitude of meanings depending on the context in which it is used, and it is not the intention of this paper to deconstruct the term in the etymological sense. This paper is more concerned with its uses in three specific contexts: in the context of government (policy), media reporting incorporating the term, and community responses.[4] What then are some of the implications of using the term 'resilience'? We have seen above that a major issue associated with resilience, from both the state and the communities' perspectives is that communities need to build more of it. This is a puzzling base position, when measured against the on-the-ground responses to disasters, post-disaster rebuilding and recovery, and long-term prognoses for areas that have been hit by significant natural disasters in recent years. Indeed, as we see below, the Federal and State governments have promoted the existence, and even dominance of a 'resilient

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[3] To locate the concept of 'resilience' within this context, we should recognise the impact that discussions about social capital have had at the highest government levels. That is, social capital both within communities and between states and communities is seen to be of great importance in ensuring communities continue to survive in a post-disaster scenario. The potential of developed social capital networks to mitigate some of the costs associated with recovering from disasters, conceptually, is key to understanding this approach. In the current uncertain economic climate, the concept of 'resilience' is increasingly tied to the concept of social capital, which in turn is tied to the concept of 'responsible budget management'.

[4] For a more discipline specific breakdown of the term, see Boon et al. (2012:384-6), and see Prosser and Peters (2010) for an assessment of the term in Australian disaster management.

national/state character', something that media have been quick to draw upon in the aftermath of disasters. But clearly, given the attention that resilience has drawn, and the funding opportunities for 'experts' (supplied by government) to 'build' it, there is a problem with the lack of it. Or is there a problem?

Over a three-month period from December 2010 to February 2011, Australia's emergency services were stretched to their limits in attempting to respond to those affected by natural disasters. Many Australians were forced to engage circumstances they had not imagined before and to respond to new threats. In the aftermath of the disasters, the Australian government chose to respond by producing a website that discusses Australia's engagement with disasters, emphasising the essentialist nature of the parochial and stereotyped Australian person. Under the heading 'The resilience of Australians is often most apparent in times of crisis' the Australian government website reinforces the myth of the Australian character. On this webpage, a psychologist says the typically Australian 'she'll be right' mentality is invaluable in time of crisis, and Australian's are 'pretty bloody resilient'.[5] The Government website continues the theme of tough, pragmatic imagery that defines the population, and uses an article by Louise Milligan, 'The Plucky Country', to illustrate this. In the article she points out that victims of disasters in Australia tend to adopt the attitude that 'the main thing is we're alive - it's only bricks and mortar'.[6] Auxiliary Bishop of Canberra and Goulburn, Pat Power, who has a similar view is also cited: 'I have been a priest 38 years and I stand in awe of the resilience of human nature in situations of personal tragedy. Just to see people retaining their sense of humour and a sense of camaraderie, and the public responding so generously - it's something that makes me proud to be an Australian'.[7] The website develops this position, being even more specific about the relationship between Australians' character and their environment: 'This Australian character of showing resilience in the face of natural disaster and the natural cycle of drought, fire and floods has helped define our language and sense of humour as well as our music, poetry, literature and comedy'.[8]

It is apparent from the website that the Australian government believes, or appears to believe, that Australians are defined by their resilient spirit. However, on the other hand, the government also seems to believe that Australians are not resilient enough. This attitude is reflected in the National Strategy for Disaster Resilience, a whole-of-government approach to disaster relief that was authorised in 2009, and adopted by the Council of Australian Governments in February 2011.[9] It recognises that a national, coordinated and cooperative effort

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[5] http://australia.gov.au/about-australia/australian-story/natural-disasters

[6] http://australia.gov.au/about-australia/australian-story/natural-disasters

[7] The Australian, 20 January 2003 – reported on the Government website (http://australia.gov.au/about-australia/australian-story/natural-disasters).

[8] http://australia.gov.au/about-australia/australian-story/natural-disasters

[9] All state governments in Australia have adopted the blueprint, and all have links to the PDF of the blueprint on their official government websites. The attached links is to the Federal government site: http://www.ag.gov.au/EmergencyManagement/Pages/NationalStrategyForDisasterResilience.aspx.

is needed to enhance Australia's capacity to prepare for, withstand and recover from disasters. The purpose of the Strategy is to provide high-level guidance on disaster management to federal, state, territory and local governments, business and community leaders and the not-for-profit sector. Explicitly targeted by the strategy is the issue of building resilience.[10] While the strategy focuses on priority areas to build disaster resilient communities across Australia, it also recognises that disaster resilience is a shared responsibility for individuals, households, businesses and communities, as well as for governments. The strategy is the first step in a long-term, evolving process to deliver sustained behavioural change and enduring partnerships (Australian Government, Attorney-General's Department, Australian Emergency Management Institute, 2011).[11] Implicit in the statements above is one of the more serious aspects of the development of such a strategy: the transferral of responsibility for surviving and recovering from disasters from the state/s to individuals, households, businesses, and communities.

We have seen in this very brief account above that the concept of resilience is seen to be: 1. something that Australians have a lot of, and it in fact defines the 'Australian character'; and 2. something that Australians do not have enough of, and in fact all state and territory governments have gone so far as to support a national strategy to improve the nation's resilience to the impacts of natural disasters. This leaves us at a political and semantic impasse, and also leaves us with the need to answer the question: how then, with respect to disaster readiness, response, and recovery, is resilience used, by whom, and why? These questions are deceptively complex largely because there are so many actors involved in the process of 'mitigating disasters'. However, there are significant differences between how resilience is framed in policy, in media, and through the lived experience of 'being resilient' (i.e., having survived a natural disaster). In the next section of this paper, I turn my attention to media constructions of 'resilience'. These are important because for most of us it is what we read or observe in various media that influences our perceptions of ourselves, of our neighbours, and of our communities.

Media and Resilience

I would like to look at some examples of media reporting in Queensland of post-disaster societies; in the following examples, drawn from Brisbane's ubiquitous and politically conservative *Courier-Mail*, the capacity of Australians to respond positively to daunting circumstances is articulated as the value of 'resilience'.

Repair Teams Swamp Area - Locals' resilience with their badly damaged homes is heartwarming to rescue workers (Courier Mail (Brisbane, Australia) - Wednesday, March 22, 2006)

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[10] Australian Government, Attorney-General's Department, Australian Emergency Management Institute, 2011; http://www.em.gov.au/Publications/Program%20publications/Pages/NationalStrategyforDisasterResilience. aspx

[11] http://www.em.gov.au/Publications/Program%20publications/Pages/NationalStrategyforDisasterResilience. aspx

LESS than 48 hours after Cyclone Larry smashed the North Queensland coast, hundreds of relief workers are on the ground, putting tarpaulins on roofs and helping re-establish essential services. Innisfail and surrounding towns have been swamped with army, SES and Queensland Fire and Rescue service workers, in the wake of Queensland's worst cyclone for 80 years. They spent yesterday helping erect the tarpaulins in Innisfail and surrounding towns devastated by the 290km/h fury of the category five cyclone.

At Miriwinni, which received substantial damage in the cyclone, holes in roofs were covered to prevent further household damage. "The trees on the hills are completely denuded," Mr McGeachin said. "They are stripped of foliage and look like a piece of cane." He said the resilience and attitude of locals, in the face of their badly damaged homes, was heartwarming for the rescue workers. "They say 'we'll do okay, look after Innisfail'," Mr McGeachin said.

North Praised for Resilience (Courier Mail (Brisbane, Australia) - Monday, February 14, 2011 (TULLY)

ONE thing that doesn't need rebuilding in north Queensland in the wake of Cyclone Yasi is the community spirit…There were smiles through the tears as the tight-knit community was reassured it had not been forgotten only 11 days after the disaster.

Police Commissioner Bob Atkinson said: "The resilience (of locals) is just marvellous and the spirit is great, but . . . we can't underestimate the challenges people face, the economic loss, the personal loss," he said. "Some people will really struggle and we need to be there in the long-term to support them as well.
"Despite the terrible devastation in terms of loss . . . nowhere are Australian values more evident than they are here in north Queensland."

The Tireless Work of the Mud Army is One Memory We Should all be Proud of (Courier Mail (Brisbane, Australia) - Saturday, January 12, 2013)

TWO years ago today, as rising floodwaters swamped the suburbs of Brisbane and Ipswich, this column focused on hope. It was of the hope that the renowned Queensland spirit would come to the fore despite the tragedy we knew our community was about to endure; that out of the adversity that was inevitably ours as a community in the coming days was the chance to define the character of 21st century Queensland as positive and resilient.

Today, we can all take a moment to proudly reflect that our community rose to that challenge, and more. And we can celebrate that it is not the statistics alone that will be the enduring memory of those disastrous days. Two years on, it can proudly be reported that the enduring story of the great floods of 2010-11 is one of triumph of our community.

It is the story of the tens of thousands of volunteers who spontaneously emerged as the floodwaters subsided, of those unforgettable scenes as battalions of strangers fanned out across Queensland - shovels and buckets in gloved hands - to help.

Today all Queenslanders can reflect with pride on our success. We were knocked down. But we got up again.

The Flood that Taught Us to Float (Courier Mail, The (Brisbane, Australia) - Saturday, January 12, 2013)

TWO years ago today, an area of Queensland equivalent to western Europe was largely under water, the death toll had reached beyond 35 and thousands were bracing for a muddy brown tide surging down the Brisbane River.

Premier Anna Bligh's tremulous voice the day after the Brisbane River peaked exemplified the collective emotional impact of a historic catastrophe. "We are Queenslanders," she said. "We're the people that they breed tough, north of the border. We're the ones that they knock down, and we get up again." And we did.

These stories exemplify a media approach to reporting disasters in Australia's vernacular media. That is they highlight community resilience – what must be perceived amongst readers as the ability of communities to help each other out in times of crisis.[12] This is entirely consistent with the Australian government's self-assessment of Australians' character, and strongly informs public perceptions of the nature of resilience.

The above are just a few of the many accounts of how Australians survived disasters in recent years. Along with stories of survival against the odds, the emphasis of these and other kinds of writing is on the resilience of Australians; that is, their ability to withstand hardship. Indeed, as the article below tells us, the 'rest of the world' sends observers to Australia to learn how to make *their* communities more resilient.

Floods and Pride (Courier Mail, The (Brisbane Australia), Monday January 14, 2013)

Two years on, many still live in temporary accommodation and struggle to get their lives back on track. But at the macro level, Queenslanders made a stunningly successful effort to re-group, rebuild and re-invigorate an economy that for a few days had ground to a shuddering halt.

The Mud Army that materialised in the days following the floods armed with buckets and

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[12] As we see in a later section, this corresponds to populist – and government – perceptions of the basis for social capital formation; that is, bonding social capital between people in small communities.

brooms was soon reflected in a bureaucracy that shed much of its box-ticking pedantry and rolled up its sleeves. Forming itself into a fighting unit known as the Queensland Reconstruction Authority, and led by bosses Mick Slater and later Dick Wilson, the state's private and public sectors showed they knew how to "get back on the tools".

Even the World Bank, which sent a team of 15 to help out, ended up staying on to learn more about the art of renewal. World Bank director for the Pacific Ferid Belhaj was, by mid-2011, expressing his admiration for the state's positive attitude under Bligh and announcing a partnership with Queensland to help teach other countries how to face down a life-changing disaster. "It (the flood) has created opportunities for sharing Queensland's knowledge and experience in developing a highly effective relief approach with other disaster -prone countries," he said.

From the above news report it is apparent that not only are Australians (in this case, Queenslanders) highly resourceful, resilient, and capable, they are also held out as international models to be emulated of 'the art of renewal'. Stories of survival from the bushfires in Victoria and Tasmania echo similar sentiments. People who have lost everything are able to rebuild their lives in ways that draw on the community and their own spirit – their resilience is at the forefront of efforts to get their lives and communities back on track. And others from other parts of the globe come to Australia to learn how to be more resilient.

Government, NGOs, and resilience

Despite the 'world-leading' response to disasters, and the surfeit of resilience that resides within disaster-hit communities in Australia, it appears that government requires Australians to build yet more resilience. This is reflected in the National Strategy for Disaster Resilience, mentioned above. Some states have taken other measures to engage the issues of disasters and resilience. Queensland, for example, has created a Local Government, Community Recovery and Resilience portfolio in the aftermath of multiple natural disasters (current Minister David Crisafulli). This portfolio is to develop policy, to coordinate and to fund initiatives to make Queensland more resilient in the face of an increasing number of natural disasters. Most initiatives that emerge from this portfolio are at the community or local council level and involve the development of better networks of information, community leadership, and/or physical infrastructure development.[13]

Following the succession of natural disasters in 2010-11, the passage of the Queensland Reconstruction Authority Act in 2011[14] saw the establishment of the Queensland Reconstruction

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[13] See the ministry's website for detailed information about the nature of the brief of the ministry. http://www.dlg.qld.gov.au/local-government/index.php

[14] http://www.qldreconstruction.org.au/publications-guides/reconstruction-plans/state-plan-update

Authority with a clear mandate to improve the state's responses to disasters. Under the heading 'Current Resilience Initiatives' the QRA states that it attempts to ensure the following values are in place:

· Communities and community members that support each other to deal with the impact of disasters and their aftermath.
· Communities that have the information, skills and expertise to take appropriate action before, during and after disaster events.
· Where there is strong leadership and networks to support co-operative partnerships across communities, the not-for-profit sector, industry, the private sector and tiers of government.
· An economy, including a government sector, that has the frameworks and systems in place to ensure business continuity and the security of our food, power, transport and telecommunications networks.
· That the infrastructure and resources our economy relies upon can adapt to the adverse impacts of disasters and can be returned to business-as-usual efficiently and effectively.
· Where disaster risk assessment and mitigation planning are adopted, land use planning and building standards are suitable, and disaster management agencies have appropriate operational capability.
· A resilient environment, in which our terrestrial, aquatic and marine ecosystems and natural resources have the capacity to withstand and naturally recover from the impacts of disaster, and continue to provide long-term benefits for Queenslanders. (QRA website: http://www.qldreconstruction.org.au/ Accessed May 17, 2013)

Queensland has certainly had its share of natural disasters in the past 10 years, and in the last two years in particular the damage to infrastructure, environment, communities, and individuals has been extreme.[15] The intention of the portfolio above is to centralise the relief efforts, and to build 'better systems' to prepare for and engage disasters. This is consistent with messages that come from Australia's Emergency Management Policy Branch, though the central agency has more coordination control through the National Emergency Management Committee. National and regional emergency management plans incorporate the following points, which are collapsed into an acronym – PPRR – Prevention, Preparedness, Response and Recovery:

· Prevention: to hinder, deter and mitigate disasters, while maintaining readiness to deal with disaster events.

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[15] In fact, according to Volunteers Queensland, Queensland is twice as likely as any other state to have natural disaster emergencies.

・Preparedness: to protect our people, assets, infrastructure and institutions from disaster events; and to establish, train and exercise arrangements to respond to, and recover from a disaster event.

・Response: to respond rapidly and decisively to a disaster event and manage its immediate consequences.

・Recovery: to return national and community life to normal as quickly as possible after a disaster event, through the restoration of social, economic, physical and environmental wellbeing (Prosser and Peters, 2010).

Such activities are seminal – in terms of responding to the threat of natural disasters – and are expensive; yet they need to be funded. The funding implications are significant and raise the question of whether the notion of resilience needs to be the cachet under which all responses to disasters are framed. As we see below, the emphasis on the term resilience has some other implications, particularly when we introduce the concept of social capital into the equation.

It is also noteworthy that this approach to disaster management is about bureaucratic engagement with the issue of managing disasters, assessment of disaster scenarios, and the creation of regulations to govern admissible and inadmissable cases of need. In other words, it is written from the perspective of the 'outsider' and 'expert'; that is, it is consistent with many assessments of how to intervene in disaster-prone communities.[16] What is absent from such approaches is engagement with on-the-ground communities' needs, or indeed a comprehensive understanding of the roles that local councils should play in the event of disasters.[17] The needs of individual communities are subsumed by the expectations that all communities share similar basic needs, and that organisations like the above are able to organise others to meet these needs. Regardless of the appropriateness of such philosophies, these initiatives cost money.

One way in which states have been able to mitigate some of the costs associated with disaster prevention, intervention and recovery is through the involvement of NGOs and other voluntary organisations. In Queensland, for example, a number of NGOs are involved in supplying support – physical and financial – to communities that have been damaged by natural events. Queensland, like all other Australian states and territories, relies heavily on volunteer organisations to respond to disasters in the first instance, and to train individuals and communities to be prepared for, and respond appropriately to natural disasters. These organisations – the State Emergency Service (SES), Rural Fire Service (RFS), local Ambulance

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[16] See, for example, Klein, R., Nicholls, R. and Thomalla, F. (2004) and Norris, F., Tracy, M. and Galea, S. (2009).

[17] See Cassowary Coast Regional Council (2012) for an assessment of the limitations of federal and state government decision-making in responding to disasters.

Committees, and other emergency response organisations[18] – are the 'front line' in responding to disasters. In Queensland in 2013 there are 1.2 million regular volunteers, who are prepared to respond in cases of emergency.[19] This is from a total population of approximately 4.6 million.[20] Collectively volunteers make up the nation's most significant capacity to respond to disasters, yet are often under-funded, and under-appreciated by states and policy-makers.

An example of effective, not-for-profit organisations is Volunteering Queensland, an organisation that incorporates Emergency Volunteering, a high-profile group that provides volunteers from the private sector to help people who have been overlooked by the initial sweeps through areas by state-based support mechanisms, or those whose requirements are more complex or specific. On their website they have three discrete sections: Emergency Volunteering, Disaster Resilience, and Your Community. Under Emergency Volunteering there are a number of categories: what's it like being an emergency volunteer, how do I register, what do I need to know, volunteer stories, and current volunteering opportunities. In the Disaster Resilience section, the place of individuals in the community, in the local region, and the importance of individuals being prepared, and knowing what to do in an emergency are highlighted. These themes are pursued in the Your Community section, with an emphasis on how individuals should secure their families and immediate vicinity first then begin to expand their interest to ensure others in the nearby community are safe.[21]

By advertising opportunities to volunteer, and by using people's skills appropriately in the field, Emergency Volunteering provides an invaluable and ongoing resource for interested and at-risk communities. It also provides what can be termed bridging social capital; that is, it provides human resources and knowledge that can connect at-risk communities with others from other communities in positions to help those in need. It does this at no cost to either the state, or to consumers. And this factor alone makes the role of NGOs indispensable in responding to disasters.

Social capital and resilience
In the immediate post-disaster periods, when the links between the state and the affected communities are weak (what Putnam (2000) refers to as weak 'bridging social capital'), there

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[18] One organisation that has had a considerable impact, and which has been largely overlooked in media reporting on post disaster assistance is Blaze Aid, a volunteer organisation that was developed as a response to the Victorian bushfires of 2009. This group has expanded its volunteer activities to include providing volunteer labour and equipment for other forms of natural disaster relief around the country.

[19] Data are from Volunteering Queensland, an independent NGO which acts as a central organising facility for coordinating volunteer activities in the state.

[20] Queensland Treasury and Trade (http://www.oesr.qld.gov.au/products/briefs/pop-growth-qld/qld-pop-counter.php). Accessed May 17, 2013.

[21] See the Emergency Volunteering website (http://www.emergencyvolunteering.com.au/home/) for further detail on these classifications, including a video presentation, and other detailed information for specifically at-risk communities.

appears a need for other forms of social capital to be engaged in its place. Social capital, as it is used in the following description, is based around Coleman (1988, 1990) and Putnam's (1993, 2000) understanding of the term; that is in simple terms, that social relationships have value. Putnam expanded on Coleman's more restricted ideas of social capital (typically confined to an organisation, union, institution etc) to incorporate a wider understanding of the term in the context of communities. He suggests that social capital is typified by the value of 'social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit'.[22] In Australia's north the bonding and bridging forms of social capital[23] appear less 'resilient' in times of significant stress than early literature on the phenomenon suggests, and rather difficult to assess in their entirety.[24]

In the perceived absence of adequate forms of support from within the community and locality for those in need (the 'lack' of resilience that is referred to above), the federal and state governments, NGOs, and the Australia-wide community are required to invest in producing positive outcomes. This situation is less than ideal because it devalues intra community support, is expensive for governments of all levels, and the dependence on external people for support damages coherence within the communities at risk. Therefore from the state's perspective, it makes sense to inculcate in communities that are or have been at risk from natural disasters a sense of coherence and purpose – particularly in response to disasters. At its most basic, it is a cost-saving mechanism; that is, if the community takes substantive responsibility for rebuilding and recovering from natural disasters, the state saves significant sums associated with government, military, and other forms of intervention. In this context the rhetoric of 'resilience' is less about building 'resilient' communities, and more about transferring costs from states to private individuals.

Social capital has been examined in a number of disaster-hit communities over recent years.[25] Reasons for examining its impact are varied, but there is a common thread that the notion of social capital is important in assessing how communities recover from natural disasters.[26] Putnam (2000) has written that bonding social capital (that is, the social capital that enables individuals to cohere with others in their community) is a crucially important component in determining how communities work or do not work as collectivities. In the context of natural

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[22] This is from Putnam's paper, 'Bowling Alone: America's declining social capital', published in *Journal of Democracy*, January 1995, cited in Hallberg and Lund, 'The Business of Apocalypse: Robert Putnam and diversity', *Race and Class*, 46:53-67 (2005).

[23] Bonding social capital is seen as essentially the value of relationships that exist within a given community, while bridging social capital is perceived as the relationships that work across and between communities – including local councils, local aid organisations, and other stores of goodwill.

[24] This is consistent with reports on the aftermath of Hurricane Katrina. See Mathbor (2007), and Rodriguez (2006) for example.

[25] See for example Murphy (2007), Schaft and Brown (2000).

[26] See Beaudouin (2007), Gitell and Vidal (1998), Leonard (2004), Pooley, Cohen, and Pike (2004), for example.

disasters these relationships are of signal importance. That is, the capacity of a community to respond collectively to a shared event can significantly mitigate the circumstances. A good example is the responses in 1985 to the Mexican earthquake, where the immediate engagement with the emergency by local citizens, who started orderly evacuations, rescue work, and food supply for workers, was so surprising for researchers and government officials that it is noteworthy in the context of how social capital can function:

> Survivors called out and identified their family members, workmates, schoolmates, and neighbors who were trapped under the rubble, quickly forming groups of people to lift, piece by piece, chunks of cement and bricks to try and reach them. Volunteer rescuers, who came to be known as "moles," formed teams of people who followed the direction of locals to go into the smallest spaces to try and rescue survivors (Ride and Bretherton, 2011:1-2).

Such responses were also common in Australia in the event of bushfires, cyclones, storms, and floods, as we saw in the section on the media above. That is, people spontaneously chose to help those who were less fortunate than themselves in emergencies of shared experiences. Such inherent resilience, or some other quality that perhaps defies simple definition, seems to occur in many disaster locations; that is, local people come together to respond informally to the on-the-ground situation well before authorities are able to do anything. In these circumstances the store of social capital has various weightings, but in extreme conditions people in communities tend to help each other out (as we saw in the multiple examples above of 'resilience'), particularly if they know each other. This existential and pragmatic use of social capital may well be one of the keys to understanding 'resilience' among some communities.

Living through multiple disasters – is this resilience defined?
On the ground, however, 'resilience' has a different set of implications: it is seen as patronising, offensive, ineffectual, 'government speak' (that is, a meaningless 'weasel word'), and redundant.[27] Those most likely to adopt its government based meanings are local councils and volunteer organisations, which can apply the need to 'develop local resilience' on funding applications.

At this point is would be good to use some practical examples of how the issue of resilience is engaged at the grass-roots level within disaster affected communities. The following case is based on the author's own experience as a survivor of two severe tropical cyclones that have caused substantial physical, financial and psychological damage to property, business and family. Located in far north Queensland, in the wet tropics, Broken Nose Vanilla is a commercial

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[27] All the adjectives have been reported to the author by others in the local community that experienced two cyclones in five years. That is, particularly after Cyclone Yasi in 2011 there was a visceral response to the need to become 'more resilient' or indeed to read about 'our own resilience.'

vanilla plantation established by the author and his family in 2005/6. In March 2006 when Cyclone Larry struck the region, the property was hit by winds of around 300 km/hour, which severely damaged all structures on the property, except the house. Government support was forthcoming in the form of a small grant for all people in the affected region - $2,000 per family, government grants of up to $50,000 for agricultural and other producers to rebuild business capacity, compensation for power outages (the area in which the property is situated had no power for 3 months following the cyclone), and a number of zero-interest, or low-interest loans that were made available to rebuild farms and businesses damaged in the cyclone. Local council was involved in clearing the debris from around houses and on some farms, and farms were taken care of by special funds established by specific growers' organisations. In the immediate aftermath of the cyclone local governments, the state government and the Federal government all provided personnel and services to enable the region to 'bounce back'. Indeed the response from the state was perceived as generally well timed, efficient, and quite comprehensive.

In contrast, the response to Cyclone Yasi in 2011 was far less comprehensive, there was little money available for farmers and businesses, and local communities bore much of the responsibility for the clearing up and rebuilding. There were small amounts of family support available, small amounts of money for the uninsured (up to $5,000 per household) and even temporary work relief, but the centrality of Centrelink, the national unemployment service, in assessing need, and subsequently distributing funds led to many farmers, small business owners, and other newly unemployed being reluctant to use the services offered.[28] The impact of the Category 5 cyclone was severe, though, and in the case of Broken Nose Vanilla, although appropriate cyclone preparations were made – vanilla vines were lowered to the ground, structures were reinforced, etc – 250 km/hour winds destroyed most of the shade structures, the surrounding vegetation, and damaged much of the crop. The cost in financial terms was much more significant for this farm than the previous event, but assistance from the state was notably absent. And in the absence of state government support the local community and volunteer groups helped those in need with machinery and labour to clear properties and help restore the rhythm of life. In this sense, although the scale of the event, and the consequences of the event were as significant as five years previously, the author's small community was required to be largely self-supporting. Few farms were bankrupted as many had learned lessons from the previous cyclone about how to remain solvent in such conditions.[29]

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[28] The stigma of relying on government handouts has been a serious hurdle that many out of work farmers and businesspeople were not able to overcome. The cynicism of Centrelink, combined with the officiousness of the bureaucratic processes employed to assess individuals' needs acted as informal barriers to prevent those who needed financial help receiving it.

[29] In practical terms, farmers, businesspeople, and citizens who experienced a 'direct hit' from a Category 4-5 cyclone were able to learn how to better prepare and survive cyclones in multiple 'Lessons from Cyclone Larry' forums, organised by various NGOs and government bodies. In this sense, their experiences contribute to both their 'resilience' and to the formation of social capital within affected communities.

The example above is indicative of how a set of perceptions about 'resilience' could be framed. That is, the community recovered from one event, then faced and recovered from a second event with much less assistance. Yet although people were able to resume their lives, many suffered severe financial hardship, the banana and sugar cane industries were decimated for the short term, and the population was traumatised. From the perspective of those who went through the trauma associated with severe weather events, the concept of 'resilience' is effectively a redundant concept. That is, our only interest really is on survival and reconstruction in the first instance. Coming to terms with the psychological and emotional dislocation takes some time, and is not within the ambit of 'resilience' as framed by the government's policy makers. Rather than the people being required to 'increase' their resilience, there is a sense within communities like the one above that it is the government, insurance companies, the NGOs, and external agencies that could well develop 'resilience' through the appropriate provision of infrastructure and financial services that can withstand severe weather events so that basic services can be continued, which in turn allows people to rebuild their businesses and their lives.

In the context of those living in communities that have experienced natural disasters the term 'resilience' has limited value then. However, from the perspective of planning for disaster management, for at-risk community preparedness, for the protection of communities, and for recovery from disasters the term has considerable impact. Arguably more importantly 'resilience' also connotes opportunity for those who are experts in providing advice on how to make communities 'sustainable' (in the sense that the term is used by Bronfenbrenner (2005)); that is, to build capacity in communities that enable them to withstand and recover from severe natural weather events. Under the rubric of 'resilience' states have invested heavily in 'encouraging' communities to be more self-reliant, as in the case above. Moreover, in the context of tight government budgets, and an increase in the number and severity of extreme weather-related events in Australia, resilience, conceptually, provides a common sense, and obvious means for states to save money in disaster relief and mitigation processes.

The climate change elephant in the room

A significant factor in the development of the resilience rhetoric is climate change. While the Queensland government is sceptical about both the human impact on the environment, and the legitimacy of climate-change modelling[30] the philosophical position of the state government is irrelevant in the context of the increasing number of natural disasters, which are increasingly likely to strike populated areas.[31] While the government is in denial of the cause of the events – floods, cyclones, bushfires, droughts – the need for these disasters to be accounted for, and

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[30] Queensland's Liberal-National government is currently in the process of disestablishing the Office of Climate Change, and the Premier, Campbell Newman, is on record as a 'climate sceptic' (Brisbane Times, June 8, 2012) (http://www.brisbanetimes.com.au/environment/newman-can-do-climate-science-denial-20120607-1zxh8.html).
[31] CSIRO *State of the Climate*, 2012.

mitigated remains the state's responsibility. It is worth examining briefly the nature of climate change that is occurring at the moment, and the impacts that this has on Australia's largely seaboard lifestyle.

Most climate modelling predicts sea level temperature rises on Australia's north-eastern coastline of between 1 and 5 degrees by 2070. Australia's east coast has experienced almost a 1 degree rise in surface sea temperature since 1950 (CSIRO, 2012), and there are established predictions for more significant surface sea temperature rises. These will generate subsequent changes in climate and in weather events over the next 30 years. Rainfall will change – probably becoming drier on the east coast, and wetter inland; storms and cyclones will probably intensify and are likely to occur more often; 'high end' extremes will be more likely and are likely to last longer (heatwaves, drought, fires, hail, floods); while 'low end' extremes will generally decline (e.g. frosts) (Cliffe, 2013). The upshot of such predictions is that there is a clear understanding that Australia will have to face more numerous, and more severe weather related events in the years to come.

From the states' perspectives, there are significant implications that relate to both support and paying for that support. In the tropics, for example, what were one-in-twenty year events have become less predictable, more frequent, and more severe.[32] The impacts of recent severe cyclones were unable to be mitigated in terms of the initial effects. Southeast Queensland has been inundated by unprecedented rainfall in two successive years, and in each case the existing flood prevention infrastructure was unable to contain the damage to properties, lives and businesses. Power, water, sewage, transport, and communications infrastructure is susceptible to damage from severe climate-change related weather events, and it is the state's responsibility to maintain and develop such infrastructure. And while governments continue to provide funding to improve aspects of infrastructural weakness, the state's ability to bolster individual, psychological and personal resilience to such events is limited, particularly as events happen more frequently, with estimated associated costs rising with every event.

Climate change – whether it officially exists or not – has led to a situation where the states are increasingly interested in the ability of communities to develop 'more' resilience, as a means of obviating some of the costs associated with community preparedness for, survival of, and recovery from extreme natural disasters.[33] The development of social capital, then, in the context of climate change is increasingly attractive to states interested in transferring costs from the state to the citizen. Fostering the development of both bridging and bonding social capital through supporting volunteering organisations is one way that governments can encourage such a trend. Other mechanisms they employ are to provide funds for government departments,

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[32] CSIRO *State of the Climate*, 2012.

[33] See, for example, Chia, J. (2010), Engaging communities before an emergency: developing community capacity through social capital investment, *The Australian Journal of Emergency Management*, 25 (1), pp.18-22.

NGOs, private sector consultants, and academics to investigate and report on how social capital can be developed as a means for engaging natural disasters – in short, 'building resilience'. Beneath the rhetoric of resilience, then lie a number of subtexts, including the social capital implications and the implications of having to deal with more and increasingly severe disasters.

Conclusion

In Australia today the Federal and the state governments are attempting to mitigate some of the costs of engaging natural disasters through building social capital. As we saw above, climate change is a serious consideration here; that is, there is a high potential for climate-based severe weather events to continue at an accelerated pace, and to cost increasing amounts of money to mitigate. The Queensland government, while denying the 'truth' of climate change, proposed in May 2013 to add a new annual levy to all land-owners in the state of $135 per household, with the intention of raising $2 billion over four years to pay for developing infrastructure that can reduce the impacts of flooding in Southeast Queensland.[34] The rationale for such action is that the state anticipates that more such events will occur within a reasonably narrow time frame; it may not be climate change that is responsible for the increasing number and severity of weather-related events, but it is certainly an expensive business, and the state would like the citizens of the state to pay more to make the state more resilient.[35]

This paper has shown that in the context of natural disasters in Australia there are multiple readings of the term 'resilience' that do not have a high degree of fit. On one hand the Federal and state governments have waxed lyrical about how the 'Australian character' is one forged through overcoming hardships, and through specifically being 'resilient' in the face of natural and other disasters. On the other hand, both the Federal and state governments are emphatic that Australians' resilience is inadequate; if there were adequate resilience then surely the states would not agitate for its development, nor would they provide significant funding, and impose significant financial burdens on the general population to achieve this end. We have what appears a discursive and political impasse. But is it really an impasse?

The states have an obligation to respond to natural disasters in ways that are consistent with their responsibilities as providers of welfare support for their citizens. In relatively constrained economic times, the states believe there is a need to mitigate some of the costs of disasters, and are in the process of transferring as much of the costs as possible to local councils, the private sector and to individuals who have been victims of these events. Insurance companies, very important players in post disaster scenarios, have primarily focused on their own prudential risk management; there is high risk associated with insuring homes and

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[34] The fact that the Federal government paid out $6 billion in 2012 for precisely this purpose is mildly concerning.

[35] It is also noteworthy that the proposed levy will be added to local government rates, transferring the responsibility once more to the local communities.

businesses that are located in areas that insurance companies have already classified as 'climate risk' areas. As a result of numerous internal audits, in North Queensland only a few insurers will insure property, farms and businesses; and the premiums have increased four-fold since 2006. In the absence of government support, and in the absence of insurance, what choices do citizens have other than to become resilient? But of course the governments recognise that they *are* resilient. This is logically a conundrum.

The term, resilience, is used by the state, by volunteer organisations, by NGOs, and by almost all media outlets to define, to identify, and to assign responsibility to individuals and communities to 'bounce back' from natural disasters, which are increasing in frequency and severity. The rhetoric of 'resilience' then demonstrates a number of characteristics of social capital formation within communities at risk or affected by natural disasters. There are certainly advantages of using resilience as a marker for social capital formation: it provides a catch-all to enable communities and individuals to apply for federal and state funding to support projects that conform to the values of the national plan for building resilience in at-risk communities; it provides incentives for the development of better relations within communities, particularly if funded leadership positions flow from applications; it provides opportunities for communities to develop infrastructure, facilities, social and other skills in a funded environment; and it provides opportunities for at-risk communities – often from quite different natural threats – to convene and learn from best practices in other contexts, through the sharing of the 'resilience' labelling.

Negatively though, resilience when used as a marker for social capital generates some problems: the category itself is redundant by definition – that is, people who stay in disaster zones and rebuild do so out of a complex suite of reasons, rather than because they are 'resilient'. Notions of resilience are linked to 'character', Australia, culture, and so on. But the implications for individuals are that they need to 'harden up' and become '*more* Australian'. This is literally impossible. Either one is, or one isn't 'Australian'. Seen in this way, resilience is therefore an aspirational rhetorical device used by outsiders to describe an inside situation. Perhaps even more importantly it allows outsiders to transfer costs from the state to the private sector in the event of a natural disaster; preparedness, survival and reconstruction are all potentially costly, particularly in at-risk communities (flood prone, earthquake prone, cyclone prone, bushfire prone etc). Resilience also provides a rhetorical marker for insurance companies to get individuals and companies to take responsibility for reducing risk.

While the state, its advisors and consultants encourage the development of the quality of 'community resilience', and in doing so emphasise the infrastructural impact of their interventions, in practice there are serious issues that this hollow talk elides. One serious implication revolves around genuine notions of resilience; that is, with respect to how individuals survive, and come to terms with coping with the aftermath of disasters. While insurance companies may pay out claims to physically repair property, businesses and even the bodies of those who are affected directly by disasters, and the state may help in reconstructing the physical infrastructure, the long-term impact psychologically on those who have gone through extreme

events is significant, and in Australia under-researched.[36] In this context resilience is certainly relevant; the existence of social capital networks can help to alleviate some of the more negative impacts of severe events through people's capacity to talk through trauma, through others' help in re-establishing housing, businesses and other hard property lost in the disaster, and through the continuation or establishment of long term friendships and support networks.

However, more than *social* capital, *hard* capital is essential, and it appears that in Australia at the moment, states are attempting to avoid their responsibilities in this, and are using the label 'resilience' as what appears an insincere effort to transfer the responsibility of being victimised from the state (which could otherwise be charged with inadequate provision of infrastructure, inadequate warning systems, inadequate climate change information, inadequate post-disaster responses) to those who have been subjected to natural disasters. Individuals carry the cost of disasters personally, financially, and, in psychological terms, stress, depression, anxiety, and despair are constant companions for many. The lack of congruence between states' discourses about the need to make communities more resilient, and the reality of the states' on-the-ground reduction of physical, financial, and personnel resources that could arguably help achieve such goals, remains one of the more significant obstacles to developing appropriate responses to the rapidly increasing and largely unpredictable nature of natural disasters.

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[36] This is not the case with respect to the US research on natural disasters and the responses. See, for example, Cutter et al (2013), Elliott, Haney and Sams-Abiodun (2010), Moyo and Moldovan (2008), Rodriguez, Trainor, and Quarantelli (2006), and Sastry (2009).

References cited

Australian Bureau of Statistics. 'Australian Data Sets'. Available at:

(http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1301.0Main+Features1952012). Accessed May 14, 2013.

Australian Government. 'Natural Disasters in Australia'. Available at:

(http://australia.gov.au/about-australia/australian-story/natural-disasters). Accessed May 12, 2013.

Australian Government, Attorney-General's Department. 'Australian Emergency Management Institute'. Available at:

(http://www.em.gov.au/Publications/Program%20publications/Pages/NationalStrategyforDisaster Resilience.aspx). Accessed March 21, 2013.

Australian Government: *National Strategy for Disaster Resilience*. Available at:

(http://www.ag.gov.au/EmergencyManagement/Pages/NationalStrategyForDisasterResilience.aspx). Accessed May 20, 2013.

Beaudouin, C. (2007) 'News, social capital and health in the context of Katrina', *Journal of Health Care for the Poor and Undeserved*, 18:2. 418-30.

Boon, H., Cottrell, A., King, D., Stevenson, R. and Millar, J. (2012) 'Bronfenbrenner's bioecological theory for modelling community resilience to natural disasters', *Natural Hazards*, 60. 381-408.

Bronfenbrenner, U. (2005) *Making human beings human: bioecological perspectives on human development*. Thousand Oaks: Sage.

Cassowary Coast Regional Council (2012) *Cassowary Coast Disaster Risk Reduction and Resilience Decision Support System: Informing decision making for disaster risk management*. Appendix A. Innisfail: Cassowary Coast Regional Council.

Chia, J. (2010) 'Engaging communities before an emergency: developing community capacity through social capital investment', *The Australian Journal of Emergency Management*, 25:1. 18-22.

Cliffe, N. (2013) 'Adapting to Climate Change'. Paper given to the Industry Advisory Group at Innisfail, North Queensland.

Coleman, J. (1988) 'Social capital in the creation of human capital', *American Journal of Sociology*, 94:S1. 95-120.

Coleman, J. (1990) *Foundations of Social Theory*, Cambridge: Harvard University Press.

CSIRO and Australian Bureau of Meteorology (2012). 'State of the Climate', Canberra. Available online at: http://www.csiro.au/files/files/pvfo.pdf

Cutter, S., Ahearn, J., Amadei, B., Crawford, P., Eide, E., Galloway, G., Goodchild, M., Kunreuther, H., Li-Vollmer, M., Schoch-Spana, M., Scrimshaw, S., Stanley, E., Whitney, G. and Zoback, M. (2013) *Disaster Resilience: A National Imperative, Environment: Science and Policy for Sustainable Development*, 55:2, 25-29.

Elliott, J., Haney, T., and Sams-Abiodun, P. (2010) 'Limits to social capital: comparing network assistance in two New Orleans neighborhoods devastated by Hurricane Katrina', *Sociological Quarterly*, 51:4. 624-48.

Gitell, R. and Vidal, A. (1998) *Community Organizing: Building Social Capital as a Development Strategy*. Newbury Park: Sage.

Hallberg, P. and Lund, J. (2005) 'The Business of Apocalypse: Robert Putnam and diversity', *Race and Class*,

46. 53-67.

Klein, R., Nicholls, R. and Thomalla, F. (2004), 'Resilience to natural hazards: how useful is this concept?' *Global Environmental Change: environmental hazards*, 5:2. 35-45.

Leonard, M. (2004) 'Bonding and bridging social capital: Reflections from Belfast', *Sociology*, 38:5. 927-944.

Mathbor, G. (2007) 'Enhancement of community preparedness for natural disasters: the role of social work in building social capital for sustainable disaster relief and management', *International Social Work*, 50:3. 357-69.

Milligan, L. (2003) 'The Plucky Country'. *The Australian*, 20 January – reported on the Government website (http://australia.gov.au/about-australia/australian-story/natural-disasters). Accessed May 2, 2013.

Moyo, O. and Moldovan, V. (2008)'Lessons for social workers: Hurricane Katrina as a social disaster', *Social Development Issues. Special Issue: Disasters and Development*, 30:1. 1-12.

Norris, F., Tracy, M. & Galea, S. (2009), 'Looking for resilience: understanding the longditudinal trajectories of responses to stress', *Social Science and Medicine*, 68. 2190-2198.

Queensland Government, Ministry of Local Government, Community Recovery and Resilience website: (http://www.dlg.qld.gov.au/local-government/index.php). Accessed May 17, 2013.

Queensland Government, Queensland Treasury and Trade. 'Queensland's Population Growth Statistics'. Available at: (http://www.oesr.qld.gov.au/products/briefs/pop-growth-qld/qld-pop-counter.php). Accessed March 21, 2013.

Queensland Reconstruction Authority website: (http://www.qldreconstruction.org.au/). Accessed May 17, 2013.

Pooley, J., Cohen, L. and Pike, L. (2004) 'Can sense of community inform social capital?' *Social Science Journal*, 42:1. 71-9.

Prosser, B., and Peters, C. (2010) 'Directions in disaster relief policy', *The Australian Journal of Emergency Management*, 25:3. 8-11.

Putnam, R. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.

Putnam, R. (1995) 'Bowling Alone: America's declining social capital', *Journal of Democracy*, 6:1. 65-78.

Putnam, R. (2000) *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon and Schuster.

Ride, A. and Bretherton, D. (eds) (2011) *Community Resilience in Natural Disasters*. London: Macmillan.

Rodriguez, H., Trainor, J. and Quarantelli, E. (2006) 'Rising to the challenges of a catastrophe: The emergent and prosocial behavior following Hurricane Katrina', *Annals of the American Academy of Political and Social Science*, 604:82. 82-101.

Sastry, N. (2009) 'Displaced New Orleans residents in the aftermath of Hurricane Katrina: Results from the displaced Now Orleans residents pilot study', *Organization and Environment*, 22:4. 395-409.