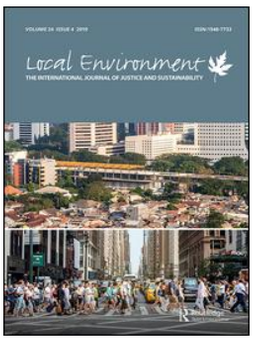

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Shock and place: reorienting resilience thinking

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ABSTRACT

This article employs a place-based resilience approach to support a procedural shift from a focus on specific, tangible outcomes towards a focus on processes that support wellbeing. We draw upon resident experiences of a bushfire event and a security event, later termed a terror event, and use a place-aware analysis to identify intangible yet significant patterns of disruption. A reoriented resilience approach requires innovative community initiatives that foster place-based wellbeing, which may compliment existing "emergency" response approaches without necessarily fitting within the traditional resilience policy purview.

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Introduction

It is clear that we are experiencing multiscalar, unprecedented, and rapid changes across all aspects of human experience, and we see communities, governance institutions, and academia scrambling to make sense of it all. As we write, Sydney, Australia, has endured an extraordinary week covered in bushfire haze. Metaphors of doom abound to describe the lived experiences, including the "end of days" and "Armageddon" (Bungard, Cormack, and Keoghan 2019). In recent work, Carpenter et al. (2019, 23) use the precarity and emotional contrast of the metaphor of "dancing on the volcano" to describe the increasing turbulence of longstanding socio-ecological norms as a new global reality "fraught with both peril and possibility". While these increasing "new normal" events and their meaning are complex, shock and disruption are central to our local environments.

In this study we examine such disruption through two frameworks, or metaphors, resilience and place attachment, as a way of engaging with lived community experiences of shock event disruption. This framework provides an investigative lens beyond the shock event and into the nature of its disruptive impact on resident understandings of themselves, their homes and communities. In engaging with the metaphor of resilience, we tread well-worn ground. Most influentially employed by Norris et al. (2008), the resilience as metaphor approach is embedded into the analytical field of how individuals and communities respond to change (Carpenter et al. 2001; Pickett, Cadenasso, and Grove 2004; Wilkinson, Porter, and Colding 2010). The idea, however, comes with the "danger of fuzziness" (Pendall, Foster, and Cowell 2010, 71) and potential for terminological vagueness (McEvoy, Fünfgeld, and Bosomworth 2013; White and O'Hare 2014). Despite the plethora of definitions and approaches being utilised in increasingly extensive resilience methodologies, "it remains unclear what makes a community or locality resilient and how these factors relate across scales" (Coaffee and Lee 2016, 131). The resilience metaphor retains its utility and popularity despite a general consensus that "it is not quite clear what resilience means, beyond the simple assumption that it is good to be resilient" (Davoudi et al. 2012, 299).

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While far less utilised, "place attachment" is arguably more conceptually and practically cohesive. Unlike resilience, which originated as a positivist term for physical systems before expanding into a social systems metaphor, the place attachment concept has always dealt in human intangibilities. At its simplest, place attachment can be understood as the "emotional and symbolic" (Williams et al. 1992, 29) bond between people and the physical places they experience. As such it is an important component of individual and collective sense of identity, acting to "create meaning in our lives" (Manzo and Devine-Wright 2014: FEP). The specific experience of this bond for individuals and communities is dependent on their relationship to the physical environment, the human dynamics within it, and social/psychological processes experienced within a particular spatial boundary (Stedman 2003). Manzo (2005) employs the metaphor of place as a "bridge to the past" to provide a discursive a point of access for places as significant in connecting individual identity with memories, associations, experiences or values through time. Place attachment is also an entry point to "common ground", or community-level identity, and can be used by planners as a conceptual bridge to engage with and foster the development of physical, social, political, and economic aspects of community (Manzo and Perkins 2006).

This study bases an examination of disrupted urban and peri-urban environments within the context of resilience planning and place attachment, emphasising personal and community understandings of home, belonging and safety. We use this conceptual approach to analyse and compare the experiences of community members after two very different shock events in and around Sydney, Australia: a major bushfire in the Blue Mountains in 2013, and a hostage-taking and siege event, later defined as a terror-related incident, in Sydney's central business district in 2014. We draw on resident focus group discussion to examine the understudied relationship between shock events and place-based disruption, and consider how such an approach can inform existing resilience policy approaches.

This work emerges out of a broader collaborative study between the Authors and Resilient Sydney, a member of "100 Resilient Cities" included in the Rockefeller Foundation's initiative to foster physical, social, and economic urban resilience on a global scale. This project was funded by Emergency New South Wales, and had a policy impetus embedded within the research mandate. A public report entitled "*Anon*" (Anon) details the full findings of this research and the specific recommendations made. This paper is an opportunity to situate other findings around place attachment, wellbeing, and justice (Anon) within the context of resilience planning approaches, and to provide an evidence base for the development and implementation of place-aware strategies that support community resilience.

Resilience and place

The importance of place attachment in urban resilience theory stems from the understanding that an event that disrupts aspects of day-to-day reliability and stability is often deeply upsetting to people. Complex and often traumatic emotions are associated with changes or disruptions to the habitual functioning of a place, as has been found in case study analysis of urban shocks including earthquakes (Cretney 2017; Cretney and Bond 2017), bushfires (Anton and Lawrence 2016) and flood (Mishra, Mazumdar, and Suar 2010). Such experiences stem from material and symbolic disruption to the place-based identity that "gives meaning and value to peoples' lives" (Adger et al. 2011, 1; Brown and Perkins 1992). Disruptive events can negatively impact feelings of security around identity, safety and belonging (Barnett et al. 2016; Carrus et al. 2014). As such, they can underpin ontological anxiety and insecurity (Askland and Bunn 2018; Brown and Perkins 1992). There are countless examples from around the world of "cascading social and environmental problems" following a significant change event, and these can last far beyond the spatial and temporal boundary of the shock event itself (Barnett et al. 2016, 976). These problems vary in scale and character, and include even the most personal intangible values such as the desirability of particular futures (Della Bosca and Gillespie 2018; Schlosberg, Rickards, and Byrne 2017).

Traditional approaches to urban resilience planning tend not to acknowledge, and thus generally fail to respond to, these more nuanced and complex emotional and psychological disruptions from shock events. Most governance agencies employ a "predict and prevent" model of policy making, based primarily on qualitative, technocratic based and/or expert devised approaches (Berry 2013; Head and Alford 2008). The lack of community engagement in the creation, implementation, and evaluation of resilience policy is well noted across the board (Coaffee and Lee 2016; Tierney 2015). Equitable and authentic community engagement has historically been procedurally and theoretically problematic (Few, Brown, and Tompkins 2007; Fung 2015; Parker and Karner 2010) as well as technically challenging to execute (Ryfe and Stalsburg 2012). Techno-rational resilience is a "fail-safe" (Ahern 2011) approach whereby data and patterns are used to predict and control impacts before they happen. This approach is largely incompatible with an urban context characterised by increasing uncertainty, particularly around weather-based and security shock events. There is an emerging acknowledgment that cities need to transition from this fail-safe expectation of urban policy and planning towards a "safe-to-fail" approach (Ahern 2011). This approach accepts that systems may fail, and instead focuses on minimising disruption in such events. While the safe-to-fail approach remains unconventional, its core idea that resilience is about sustaining "desired function" through time may hold the key to reducing the trauma of disruption (Meerow, Newell, and Stults 2016, 45). The key to realising this new approach lies in a policy-focus shift from outcomes to process. Specifically, it requires prioritising community engagement and decision-making processes rather than specific policy outcomes. Such a shift would require that policy makers engage with ways of knowing their constituencies beyond datasets, and finding ways of overcoming the challenges of community engagement so that a more inclusive and accurate understanding of "desired function" can be established. A focus on processes thus requires creative thinking and new ways of engaging with local values and their vulnerability to change (Davidson et al. 2016; Norris et al. 2008; Reyers et al. 2018).

The nature of disruption

Shock events are characterised by their physical threat profiles, shaped by the direct, tangible impact of specific events. They also have distinct disruption profiles, shaped by the indirect, and often intangible impact of these events. The threat profile and the disruption profile of particular events can impact distinct populations, and in different ways. An illustrative example of this distinction can be found in the modern emergence of "terror" events. Siman-Tov, Bodas, and Peleg (2016) suggest that terrorism and other security events have a distinct impact on urban populations due to the presence of a focused agenda, or motivation behind the event, which is solely concerned with disrupting urban life by increasing fear. They also argue that terrorism's main goal is to undermine faith in urban institutions, dismantle public goodwill and encourage social division. Literature on terror defined events reinforces the value of thinking systemically, as the direct harm caused by terror events can be exacerbated by societal responses to the threat itself (Cherney and Murphy 2016). For example, we can see that the global "War on Terror" since 2001 has forcefully – and largely negatively – reshaped Muslim identities in Western nations, including Australia (Poynting and Mason 2008). From a "suspect community" (Cherney and Murphy 2016, 480) to the "face of evil" (Noble 2008, 14), the politicised Muslim identity is one that continues to trigger cultural, social, emotional and even violent disruption even for long-settled migrants across Australia. We can see that terror events have a significant disruption profile despite having a comparatively contained physical threat profile.

By comparison, there is an emerging literature on the disruptive effect of climate change, the underlying threat behind a range of increasingly severe weather, bushfire, and air pollution events in Australia. This literature is increasingly highlighting that the disruptive capacity of such events stems not only from the physical impacts of these events but also on the emotional response of individuals and communities to irreparable changes to their local environments and to their future. Slower environmental changes, such as the bleaching evident in the Great Barrier Reef, can also be included under climate change's disruptive banner, causing an emotional distress described as

"Reef Grief'" (Marshall et al. 2019). Barnett et al. (2016) state that "avoiding losses from climate change requires socially engaged research that explains what people value highly, how climate change imperils these phenomena, and strategies for embracing and managing grief". In focusing on lived values and personal experiences of disruption in place, Barnett et al. (2016) are describing a process-orientied approach to climate resilience. This focus on experiences of ecological grief (Cunsolo and Ellis 2018) and the lived experience of place-based loss (Tschakert et al. 2017) is increasing as extreme weather events continue to dominate lived realities – and the media – in Australia. The expansion of Australian bushfire seasons is focusing public attention on the climate crisis, with political manoeuvring to hide the link between increasing bushfire severity and climate change (Guardian, 13 November 2019), while health concerns rise around bushfire haze (ABC, 6 December 2019). These are clear signs of climate anxiety, ecological grief, and the severity of the collective social impact on lived places.

A resilience approach capable of responding to not only the physical, observable impacts of shock events, but also to their broader disruptive threat requires a deep engagement with community experiences and the values they hold about their homes and themselves. Norris et al. (2008) make a fundamental point that the value of resilience indicators and frameworks lies not in their capacity to quantify or represent the resilience of communities, but to inform interventions that will improve the lived experience of those areas and households and those like them in the future. A place-aware policy approach that listens and responds to complex lived realities allows a decoupling of resilience strategy from specifically defined shock events and offers a more embedded approach to place-support and resilience building at the community level.

Reconsidering resilience

There is an intriguing nascent literature that uses "creative resilience" to refer to innovative and place-based community strategies that engage with wider issues of resilience (Dunn 2020; Mavhunga 2015). Shermer (2012) uses the term creative resilience regarding author Nassim Nicholas Taleb's work on "antifragility", defined beyond resilience as the "the capacity to prosper from randomness, uncertainty and disorder, and to benefit from a variety of shocks". While unconventional, Taleb's work speaks to the academic field of resilience complexity in terms of the non-linearity of complex impacts (Human 2016), non-computable variability (Carpenter et al. 2009), and cascading impacts (Barnett et al. 2016). Taleb identifies the rigidity and unspecific nature of top-down policies as harmful to antifragility. Reflecting on the Anthropocence and its attendant bio-social destabilisation, Carpenter et al. (2019) state that "[d]isruptive change, in the extreme, can potentially reduce our capacity for creative solutions, and so, of course, can the allegiance to overly rigid convention".

Recent resilient studies demonstrate the effectiveness of novel research methods, for example by building community connection and attachment to place post-event through creative public participation (Ryan 2016) or by accessing participant experiences of traumatic shock events through storytelling (East et al. 2010). Place attachment is an increasingly attractive starting point for resilience initiatives specifically because it may support the emotional and practical aspects of disruption (Scannell et al. 2016). Such support is critical in an increasingly uncertain world linked to ontological insecurity, and an increase in anxiety-based behaviours that exacerbate community anguish in the search for "new identities, new moral certainties" (Carpenter et al. 2019, 23).

We now turn to our case studies in order to provide two examples of lived disruption, to demonstrate the value of place-aware analysis, and to provide an evidence-base for the value and need to re-orient resilience approaches to be attentive to lived experiences in place.

Methods

We examine community experiences of two shock events in the central and greater Sydney region – the 2013 Blue Mountains Bushfires and the 2014 Martin Place Siege. These events were chosen because

they are two very different events that correspond to Resilient Sydney's 2016 Preliminary Resilience Assessment, which identified bushfire and security events as representing high threats to Sydney. Participants were recruited from local government areas impacted by either shock events and were local residents who self-identified as impacted. Participants were invited to attend one three-hour focus group (held within the community of the target event), between August and December 2017. All recruitment was conducted by the office of Resilient Sydney through a combination of residential letterbox and community organisation leafletting, and targeted advertising via social media.

2013 Blue Mountains bushfires

On 16 and 17 October 2013, three separate fire fronts broke out in the Blue Mountains, originating in Lithgow, Springwood and Mount Victoria, NSW. 196 homes were destroyed, and there was significant damage to 132 others, totalling $180 million in losses. 65,000 hectares of mostly national parkland were burnt, taking a "dramatic" toll on wildlife (Milman 2013). The State government declared the bushfire areas a natural disaster zone, and the Blue Mountains Council stated that the bushfires were the worst disaster in Blue Mountains history.

Participants included those who had lost their homes, had been evacuated, or who had had to take time off work to care for others. The Blue Mountains focus groups were held in Springwood and were attended by local residents with ages spanning 25–34 to 65+, with annual incomes varying from under $20,799 to over $156,000. All participants were either homeowners or living with home-owning relatives, and the majority had lived in the Blue Mountains for 8 or more years.

2014 Martin Place siege

The Martin Place siege (also referred to as the Sydney Siege, or Lindt Cafe Siege) occurred on 15 and 16 December 2014, and involved a gunman named taking 18 people hostage during a 16-hour stand-off with police at the Lindt Cafe in Martin Place, Sydney. The gunman stated that the act was associated with the Islamic State and led police to believe that that the siege was part of a larger co-ordinated bombing attack of the city centre. The siege ended after the gunman shot a hostage and police stormed the café. Another hostage, as well as the gunman, were killed in the process, and three hostages and a police officer were injured. In the weeks following the event, thousands of floral tributes were placed in Martin Place in commemoration and mourning, and a permanent memorial with the same floral theme was established in Martin Place in 2017. The siege received a high level of media coverage, and the self-proclaimed Islamic affiliation of the gunman prompted significant and contentious public discourse centred on the relationship between security, multiculturalism, Islam, and Australian values and identity (Mikola, Colic-Peisker, and Dekker 2016). For many people the violent intention of the event became associated with the wider Muslim community in Sydney, and led to an increase in racially and politically motivated anti-social behaviours against Muslim residents in Sydney.

We identified participants as Muslim residents of the wider Sydney community. One of the most significant public impacts of the siege was an immediate politicisation of Muslim identity in the mainstream Australian media. With an interest in the systemic urban impacts of this event, we chose to explore the experiences of the Muslim population in Sydney during and following this event. The resident group was drawn from the wider Muslim community in Sydney, and was held in Bass Hill in Western Sydney. This resident group was attended by female Muslim women only, with the majority aged 55–64 and over. Two English-Arabic translators were present who were central to the running of the event.

Case study analysis

Our intention in examining and comparing a bushfire and a terror event under the umbrella of a place-based resilience investigation is not to conflate or ignore the very different experience of

these events at the individual and community level. Rather, it is to provide a platform for the intangible aspects of place-based disruption experienced by residents in broadly disparate shock events, in order to develop an evidence base for place-aware resilience policy and planning for future events. Throughout this analysis, participant discussion is used to identify experiences of loss, and of place-based value disruption – and to examine the similarities and differences of the relationship between place and resilience in the two very different cases. Participants in both groups provided evidence that the ways they related to their homes, relationships, and communities was disrupted in both the short and long term.

Martin Place siege

Participant focus groups from the Martin Place Siege reveal distinct spatial and temporal patterns of place attachment disruption. The meaning and values associated with the physical locations of the event – the Lindt Café, Martin Place, and the CBD – have been significantly reconstructed. However, we can see that for Muslim residents the scale of impact extends well beyond this this space, and that experiences of trauma stemming from the event are felt on a day to day basis in ways that continue to inhibit individual and community well-being.

The power of the siege in symbolically linking Muslim identity with ideas of violence prompted increased incidents of verbal and physical racial abuse, and reduced feelings of public safety for Muslim residents. The participants in our focus groups were predominantly older women, and they shared their personal experiences of Islamophobia – for example, being subject to racial verbal abuse from other park-users at family picnics and being spat on while waiting at a train station. The effect of these negative experiences has reshaped and impaired their day-to-day relationship not only with urban space around Martin Place, but throughout the greater community of Sydney.

> The places I used to visit, like Manly [Beach] as I said, and Sydney Tower and the city and Darling Harbour, I haven't been to there since that incident.

> To me, I feel like safe to go local but sometimes if something happens … – to be honest, sometimes I feel unsafe to go even local. Even local.

As these comments demonstrate, reduced feelings of physical safety were experienced in community environments far away from the site of the event. Indeed, for some participants this fear – and its attendant power of detachment – applied to all public space, and particularly to sites of traditional recreation, such as parks and beaches, as well as to public transportation. The perceived danger of publicly embodying a Muslim identity in a socio-politically hostile environment was associated with increased fear, stress, and anxiety in spaces previously shared. These feelings can be seen to redefine the ways in which participants engaged with, and felt newly excluded from, public space.

> After the siege, and what happened to me, I was too scared to catch transport.

> I don't go by myself. I take my husband or I take my son or I take someone because I'm too scared to go by myself.

This reconstituted relationship between public places and Muslim identity was experienced as a loss of social belonging, and a loss of hard-won acceptance in the Australian community. One participant explains this shift:

> [W]hen we first came to Australia – I came nearly 40 years ago – and I'm sorry to say, people used to call us wogs[1] wherever we go. Wogs, wogs, wogs … anyone with the dark skin, they walk to them, say rubbish to them. So the government made a rule, like you're not allowed to do that. It's racism. Racism. So we become more relaxed, people they can't call you this name any more, you can do a lot of things. We felt like more relief. We settled. We started building our … life and settle and raised our kids and honestly, I never, ever felt it's any different between anybody else till the incident in the city, Martin Place.

> I mean, to my son, like he doesn't care. He says, "It's my country" but I don't feel now this way. All my life, I feel "It's my country". Now I feel, it is my country, but I'm too scared to do what I want.

These comments highlight decreased feelings of social acceptance and belonging as a direct response to the reduced social cohesion in Sydney during and after the siege. There is a strong temporal dimension here, in which the event's role in disrupting Muslim identity associations act as a temporal bridge back to an era of socially acceptable racism. The intersection of female Muslim identity and feelings of heightened racial scrutiny shapes experiences of public space in ways that inhibit well-being.

> No, I don't cover my hair. I'm wearing exactly what I wear. They ask you, "What's your religion?" "Christian".

> Participant 1: Once, when I go to my doctor and I had no one to take me and I said to my husband, how I'm going to go see my doctor? It's very close to my operation. He said, "Come, we decide when we're going to do your operation". So I put a hat, a wool hat …
> Moderator: Like a beanie?
> P1: Like a beanie. And I put a scarf around my neck … and I wear a skivvy and I put a scarf around it, not to show my neck and I have everything and I was in the train, pulling the hat down or my beanie down because people if they see me, they warn, Muslim.

Such comments highlight the day to day changes in behaviour that were seen as necessary by participants, due to the expectations of exclusion, abuse, and potential violence that, post-siege, became associated with embodied Muslim identity in public spaces in Sydney.

In contrast, the power of symbolic action in countering negative public perceptions of Muslim identity was an important point of participant discussion. In this, the floral tribute at Martin Place, and the meaning of that public memorial, again played a central role.

> P2: [A]t that moment, and if you remember, everybody went down and bought flowers. There were more Muslims going down there than anyone else.
> P1: A bride went … Remember, the bride went on her wedding day. Her bouquet, she put it on [the floral tribute in Martin Place]- - -

The awareness of this symbolic refusal to be excluded demonstrates the significance of that action for the entire community. It illustrates the emotional power of the act in reclaiming agency and momentarily replaced associations between Muslim identity and fear with a positive meaning.

Yet, overall, for Muslim participants, the ongoing reality is one of loss – loss of a long-held (and hard-earned) connection to place. The focus group discussion highlighted that one major coping strategy for some participants in the aftermath of the Martin Place siege was to avoid public space altogether. Important here is that this retreat from public life, specifically among older Muslim women, had not abated with time but rather had morphed into long-term habits of isolation. Such detachment was often a result of fear of the repercussions of a negative interaction on other family members, particularly children and grandchildren.

> That's what happened to me last year. My son, he went to Forster and he asked me to go and I said no and I didn't go.

> You don't know what to expect. You don't want to give your son or your daughter or your grandchildren that experience [of a negative public altercation], so I prefer to stay home and I'll be safe at home.

For some participants, this social isolation was negatively impacting relationships within families, contributing to generational dislocation within the wider Muslim community.

> As families … you want to do so much with your grandchildren, but that is – so we want to be able to express that in a way, but at the same time, what solution can we do to break that isolation? And that's something we have to do ourselves, but this is real pain.

These responses suggest community disruption and division along generational lines, and a cumulative experience of loss – of identity, of belonging, of place – now and into the future.

Blue Mountains bushfires

Disruption to place attachment, in terms of both physical place and conception of community over time, was also central to those impacted by the 2013 Blue Mountains bushfires. The experience of our interviewees highlights the relationship between physical disruption and ontological disruption of meaning in place.

It is important to note, as many of our interviewees did, that bushfire is a longstanding and natural event in the eucalyptus forests of the Blue Mountains. Many spoke of their own previous experiences with fires in their lifetimes, and of the stories of their parents, grandparents, and communities over multiple generations of living in the region. These stories made clear that bushfires are understood as part of the natural place of the Blue Mountains, and part of its physical and social identity. They also illustrate that there is a historical role such fires have played in the development of community identity and values – that fire has traditionally brought people closer to both place and each other. And yet, residents talked about a growing fear of the greater coming disruption of fires. They see larger fires coming in historically unique and threatening ways, and have begun to reflect on new fire regimes due to climate change as potentially threatening the nature of the Blue Mountains, the nature of community, and the traditional rebuilding of lives and houses after such events. The anxiety of future loss of both the natural and social place hung over our participants.

These were highly traumatic events. Several participants in our resident focus group lost pets and property as a result of the 2013 fires; some lost their homes after fleeing an oncoming fire, or became trapped and narrowly escaped. Participants communicated long-term emotional impacts associated with the fire, including grief over the loss of pets, anxiety as a result of having to permanently house family members who lost their own homes, stress of dealing with governments and insurance companies in the rebuilding process, and ongoing post-traumatic stress in families. Many lost material objects, from homes to photo albums, of significant emotional value. A participant whose house had burnt down noted the long term impact on their family.

P1: All their good points came out, but long term – … my eldest daughter … hardly ever comes out to the house. She feels really weird.
M: To the new house?
P1: To the new house. We've rebuilt in the same place. But she just doesn't feel like it's home.
P2: She didn't grow up there.
P1: That's not the house she grew up in, yeah. Yeah.

This highlights the ability of place to embody not only memory, but values – in this case, of family identity. The emotional meaning of the original house was not transferred from the old family home to a newly rebuilt one, leading to disrupted experiences of familial belonging and cohesion.

Focus group commentary on the destruction of material objects suggests that experiences of loss are most strongly felt for items with irreplaceable value, a value that is emotionally constructed through memory, identity and belonging in place and through time. Objects such as photo albums and memorabilia and indeed houses themselves may enable these particular emotional connections through time, and "replacements" are never fully embraced. However, the material destruction of the fires was also discussed in comparatively light-hearted ways, highlighting a diversity of emotional response strategies. This was evident in humorous comments on the benefit of fire in "decluttering" efforts, as well as reflections on the potentially positive opportunity to rebuild a more suitable home with insurance money. This contrast highlights the limitation of using physical destruction and damage as a blanket measure for loss, as for some the physical destruction of the bushfires represented severe long-term emotional distress, while others experienced similar physical loss without the same degree of emotional or ontological trauma.

P1: The boys are funny because I had jeans and a denim shirt on and the youngest son who has practised a bit as a stand-up comedian, he came and looked at me and he said, "Oh, dad. Double denim".
M: What are you thinking?

P1: Exactly. Fashion faux pas while my house is burning down. And that's the next thing he said, "What have you done with the house?" … Yeah, we had a bit of fun.

The fire also led to a range of complex reactions to the deeply embedded associations in the Blue Mountains community. Many participants stated that the sense of community cohesion they experienced as a direct result of the fires increased or reinforced their connection to place, with the event emphasising the strong civic life of the community.

> But I guess the good things were how helpful everyone was afterwards. I don't think I've said thank you so many times in my life.

> What made it easier was the fact that we had neighbours who had been through all this before, including someone who had been there in '67, there was a major fire, basically went through the entire suburb. And he was great because he was like, "Don't worry, just do this, do this, wait for this, if this happens" – so that was invaluable, having neighbours who were experienced.

> So in that sense, it's made me very, very happy about where I live because yeah, I have a community life or civic life here that I don't think is available – well, I think it may be available in other places, but I'd never experienced it. I think the fires had a particular role in that in the sense that they made that incredibly apparent. I think the fires didn't create it, but it makes it more visible, like when you drove up and down Hawkesbury Road, it would just be "Thank you RFS, thank you RFS" on every second tree.

This consistency of participant reflections on the strength of community cohesion during and after the fires as a positive aspect of the experience suggests that this bushfire was not perceived as inherently disruptive to place, but instead as a characteristic of Blue Mountains life. Other comments suggested that even though fire is an accepted aspect of living in the Blue Mountains, something was different and particularly threatening about this one.

> … it was just another fire, really. It was just that it was such a big fire and I've never seen a fire event – probably not since 1977 – stretch the resources of the fire brigade and everything so much.

> … it was definitely unprecedented and so a lot of people that have been through many fires behaved or reacted completely different to probably everything they've ever thought they knew how to do.

These comments reflect an understanding of bushfires not as entirely unexpected shocks, but rather as historically present and regular events in the local area. They illustrate that relationship between the physical characteristics of place, experiences of fire, and a sense of historical continuity. Yet they also demonstrate an awareness of difference, marking a break from that history. While some participants viewed the 2013 fires as "just another fire", others expressed a sense of change – that fire is normal, but this event was something different, and it could be seen as an example of a new and more intense fire regime with the potential to upend a long history of fire, recovery, and rebuilding.

> And because I'd lived in the Mountains all my life and had been through lots of bushfires, I thought, "That's okay, I've got this. I know what to do". But that fire was just unprecedented.

P1: … it's all been complacent and the attitude's been, "There's always – every 10 years we get a good fire".
P2: Yeah, you hear them say that.
P1: So you sort of go, "Oh, yeah, it's only five years. I've got a couple more years to worry about that". But no, now I think people are starting to think it's not the same pattern as it used to be.

The ontological significance of place attachment and historical norms around fire influenced community patterns of response. "Stay and defend" behaviours were a by-product of historical experiences, as was "return and rebuild". For several participants, there was no question that they would return to the footprint of their homes and rebuild. For others the experience of this particular fire changed deeply embedded historical relationships with these place-dependent behaviours.

> I've always stayed and fought to defend my house every single time, but as of this year, if a fire comes to my house this year, I'm leaving. I'm not doing it. I won't do it again because yeah, I don't have the emotional stuff to get through it any more.

This reconstitution of the relationship between emotional attachment and future bushfire events is a significant illustration of the fluidity of place attachment. It also provides insight as to how and why highly entrenched place-based behaviours are changing in the face of growing climate change-enhanced events. Some families did not return and rebuild.

> I think the fire has affected a lot of people. A lot of people did move away. I've got a lot of friends who didn't rebuild, but many did and still in the same place. In our street, there's probably about 10 families that didn't come back and their blocks mostly are still empty.

In challenging long established patterns of behaviour around bushfire occurrence, namely "stay and defend" and "return and rebuild", the 2013 fires permanently reconstituted individual and community identities. In the Blue Mountains, resident experiences of the fires reveal that, for many people, bushfires were in the past understood as physically disruptive but ontologically valued and part of the identity of living in place. After the 2013 events, while there was evidence of significant trauma from the physical damage itself, less obvious sources of existential uncertainty about the meaning of place and the future of the community became part of the conversation. Many participants reflected significant changes, not only in their perception of bushfire meaning, but in how they as individuals and as a community intend to and are able to respond to them in the future. These changed understandings of fire and its response is significant in this community, reshaping both the place itself and participant's understanding of their own futures there.

Patterns of disruption

Comparing these very different shock events provides an insight into the nature of disruption. These events were both disruptive to local communities in distinct ways, and yet upon closer inspection impacted participants also reveal similarities in the experience of core value disruption around their sense of home, sense of belonging, and sense of safety.

The bushfire discussion revealed a complex and long-term relationship between Blue Mountains communities and the cyclic experience of bushfires. Despite the threat represented by bushfires, two key aspects of community preparation are seen to have provided comfort in the past. First, community-led and community-based strategies for dealing directly with the physical threat through local firefighting brigades and systems of local fire knowledge. Participant discussion revealed the historical importance of applied and practical engagement with bushfire risk and management at the community and neighbourhood level; these can be seen in neighbourhood fire preparation units, as well as in informal working-bees and fundraising events following the bushfire. Second, community-led and community-based strategies for social and emotional strategies of support and cohesion, evidenced in community initiatives to provide food to fire fighters, and the willingness of community members to help each other. The nature of the threat as undiscriminating combined with established community-based responses supports a sense of shared experience and understanding. The benefit of this comes through as a positive aspect in participant comments about being thankful to their neighbours, and about experiences of kindness in the wake of disaster. A sense of loss is evident in participant comments around feeling that this previous understanding and tentative acceptance of bushfires had been permanently broken, and that the delicate balance of risk and reward represented by mountain life had been disrupted and was no longer worth the anxiety and trauma of increasingly intense and lengthy bushfire seasons.

In comparison, we see that the Martin Place Siege impacts vary widely between identity communities in greater Sydney. The participants we spoke with were not present during the Siege, but have nonetheless suffered from the knock-on effects of event-related racism and vilification, and continue to feel those impacts four years after the event. Their statements suggest that their core expectations of physical safety in public, as well as intangible feelings of belonging in their neighbourhoods, in the city, and in Australia itself, have been permanently disrupted by the Martin Place Siege and the Islamophobic backlash that it triggered. The nuance in the Siege's disruption is that distinct groups

experienced distinct types of fear, which interacted to produce increased racism, conflict, and community fragmentation. In the increased Islamaphobic portion of the population, that fear is directed towards Muslim community members, based on feelings of insecurity and physical threat that stem from the unexpected and malicious nature of terror events intentionally linked to Muslim identity. In the Muslim community, that fear is created through physical or verbal aggression from members of the public in public places. Such exchanges continue to threaten the emotional and physical well-being of the older women we spoke with, a particularly vulnerable portion of the Muslim community.

Disruption to values of home, belonging, and safety

For both the bushfire and siege participants, using a place-attachment approach to identify disruptions to valued dimensions of home, belonging, and safety has uncovered hidden dimensions of vulnerability. We see the complexity of the physical home for Martin Place residents, which acts as a refuge from the possible hostility of public environments, and yet which also represents a confined and reduced sense of freedom. Home, safety, and belonging are now exclusively bound up within an identity community – Muslim friends and family, whereas before we see responses conveying enjoyment and freedom exploring the city, such as the beach. We see the terror event emphasising and isolating the community along a single identity line evident in Islamophobic attacks but also in how these residents can to assess and have agency over their own identity. We see that fear management manifest in strategies around not being alone in public, staying home, and camouflaging a headscarf incorporated into day-to-day routines. Additionally, we also see that valued activities unrelated to being Muslim have been removed from regular routines, such as swimming at the beach and having public picnics. There is thus evidence of a detrimental narrowing of lived experiences for this portion of the Muslim community as a direct result of the Martin Place siege. We can see that social withdrawal has been used as a coping mechanism in response to fear of Islamaphobic incidents for our Martin Place participants. However we also see that this coping mechanism has not only failed to address the core fears around belonging and safety that prompted it, but is negatively affecting community resilience by splintering families along generational lines. As a section of the community who were not brought up in Australia, it may be that feelings of cultural acceptance and belonging are distinct for older Muslim women as compared to the wider Muslim population in Sydney, and thus more easily disrupted.

For Blue Mountains residents, the threat to home, belonging, and safety have a direct and physical dimension. The bushfires present a real and non-discriminant threat to residents in the area, particularly around the loss of human and animal life, and property damage. However, resident comments also reveal that experiences of loss are more complex than the physical. Losing a house can also feel like a disconnection from valued memories and the past, and lead to feelings of incommensurability in replacement homes. In comments about current fear or anxiety around future threats to home, as well as regrets and grief about choices and events of the past fire event, we see a temporal disruption to emotional as well as physical safety. The long-term disruption to ontological stability is particularly evident with respect to expressions of anxiety over future effects and pre-emptive concerns that staying the Blue Mountains may no longer deliver the same lifestyle that it had historically provided. Desires for a more secure and safe environment may intersect with strongly expressed aspects of "local" identity such as self-reliability, hardiness, and collective solidarity in ways that complicate decisions of where to live. We also see that moving away from the area completely is an increasingly likely resilience strategy at the household level, one that is demonstrated in the comments to permanently and negatively disrupt neighbourhood-level stability for those residents that remain.

Disruption and agency

Considering and comparing patterns of disruption in these two cases allows us to examine the policy relevance of place in critical differences and similarities in patterns of resilience in these communities.

The active presence of two distinct pathways in the Blue Mountains community accounting for physical, emotional and social agency in response to bushfire threats suggests a community that is already engaged and participating in their own resilience to this particular threat. So the threat described in the comments above come not from the bushfire specifically, but from the fear that the nature and experience of bushfires in the future will change so dramatically from the those of the past that the conditions that have supported wellbeing in a bushfire-prone area (community cohesion, experience, and preparedness) will no longer be enough to support expectations of a safe and secure home.

For Martin Place participants, the disruptive threat is one of safety and belonging. The experience of these two distinct events boil down to similar core value disruptions to lived well-being. We see distinct forms of agency that result in complex lived realities. In the Blue Mountains, the community has strong and embedded pathways of responses tied to generational traditions, valued and knowledge. However, we see that for those who saw the 2013 as unprecedented, the fear is that in their current form they may not be up to the challenge of providing safety. In Martin Place, we see a culturally distinct community being singled out within the larger urban context, and a corresponding retreat by into the safe boundaries of existing networks of friends and family. As a section of the community who were not brought up in Australia, it may be that feelings of cultural acceptance and belonging are distinct for older Muslim women as compared to the wider Muslim population in Sydney, and thus more easily disrupted. However, we see that this retreat is maladaptive in the long term, leading to social isolation from the wider community, deeply embedded feelings of fear, and disruption even within families.

Re-thinking resilience policy approach

It is a fruitless task to treat complex place-based value disruption as a singular phenomenon that can be addressed via a singular policy approach. To suggest that resilience approaches be reoriented is not to discount the value in using traditional "fail-safe" patterns and tools to plan for disasters. The geographical and demographic identity of particular places impact the statistical likelihood of particular threat occurrences. These distinctions are helpful in establishing the most appropriate form of community resilience strategy. For example, the threats arising from climate-induced disasters are likely to increase over time, increasing the likelihood of severe bushfires and heat-based threats in the Blue Mountains. As such, long term proactive planning and preparation around this issue must be a priority. Conversely, policies in areas of high cultural or ethnic diversity can logically focus on the broad objective of supporting and extending local social networks can improve community wellbeing while simultaneously mitigating a variety of less statistically likely shock event impacts, including those of terror and security incidents.

However, the point that this paper is emphasising is that resilience is a process, indeed resilience *is* the process of creativity in the face of shocks, destruction, and instability. The aim of resilience initiatives remains the same – to support community wellbeing through disaster events in ways that minimise the loss of "desired function" (Meerow, Newell, and Stults 2016). A place attachment approach enables us to more accurately understand the "qualities that make a place special to its inhabitants" (Gee 2010), enabling the intangible aspects of health, home, and wellbeing – and their disruption – to be more accurately established.

The creativity required for a successfully reoriented resilience approach lies in developing ways of genuinely engaging communities to identify their needs and unique capacities. Norris et al. (2008, 144) suggests that in planning to not have a plan, resilience initiatives must provide procedural support for "healthy patterns of behavior, adequate role functioning, and satisfactory quality of life" as central. We suggest that radically shifting from an expectation of resilience approaches as static policy documents, towards the creation of spaces in which individuals and communities are "respected, not shamed; listened to, not ignored; safe, not at risk" (Salverson 2016) is a good place to start. Resilience policies attentive to place attachment must be based on the knowledge and

experience of residents, about both the meaning of place and the meaning of various threats to that place and the identity that sits with it.

Note

1. Racial slur, generally used in Australia to refer to a person of Mediterranean or Middle Eastern heritage.

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