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The power of connection: Navigating the constraints of community engagement for disaster risk reduction

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ABSTRACT

Community engagement for disaster risk reduction has become central to participatory emergency management. In neoliberal contexts, publics are increasingly portrayed as responsible for preparing and responding to disasters, while at the same time and contradictorily, they are engaged by the state to encourage compliance with top-down policies and directives. This is happening while incremental budget cuts reinforce the operationalisation of community engagement as information dissemination and service delivery. In this paper we scrutinize the ways in which community engagement for disaster risk reduction has been governed and translated into practice in Australia, focusing on the experiences of the practitioners and community representatives doing community engagement in a peri-urban and multi-hazard area of Victoria. We identify and discuss the role of connectors-individuals fostering connections within and among state-led emergency services, local government, and publics-in negotiating change and building relationships. Our analysis shows how the political economy of state-led emergency management hinders the efforts of connectors, contributing to disconnection between publics, community representatives, and emergency agencies. In navigating the bureaucratic, temporal, and financial constraints of state-led community engagement, the emergency sector is missing opportunities to listen, learn, and work with connectors. The result is missed opportunities to build meaningful connections with publics for disaster risk reduction.

1. Introduction

In recent decades, *community engagement* has emerged as central to disaster risk reduction (DRR), becoming an integral part of emergency management, policy discourse, and practice around the globe (see e.g., Hyogo Framework for Action and Sendai Framework for DRR; [1,2]).² This transition emphasizes the role of publics in responding to and preparing for disasters in a climate changing world. We use the term 'publics' to denote the heterogeneous groups and individuals drawn together or separated by their changing social, material and natural environments, and technological interactions ([3]; 1041). To date, there is no consensus over *what* community engagement entails and *how* it should be implemented across scale [2,4]. For instance, the United Nations Brisbane Declaration ([5]; 1) defined community engagement as:

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of

Reduction,

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² We use DRR in reference to all the actions taken to reduce disaster risk, and emergency management in relation to state-led formalised/policy-based management of disaster prevention, preparedness, response, and recovery.

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"A two-way process: by which the aspirations, concerns, needs, and values of citizens and communities are incorporated at all levels and in all sectors in policy development, planning, decision-making, service delivery and assessment; and by which governments and other business and civil society organisations involve citizens, clients, communities and other stakeholders in these processes".

However, how to 'incorporate' communities has remained unclear. The term *community*, frequently used to denote groups of people by their geography, sense of belonging, and/or network(s) of social interactions, has also been widely criticised for enforcing bounded, fixed, and homogenous imaginaries of places and people [6,7]. Indeed, communities comprise a range of individuals, partially organised groups, collectives, and civil society organisations whose capacities and interests in DRR may vary considerably ([8]; 444). In this paper, we examine the complexities and experiences of *doing community engagement* for DRR in a neoliberal context.

Community engagement for DRR has been pursued as an alternative to hierarchical, top-down command and control approaches that frame publics as homogenous and passive recipients of emergency services and information [9,10]. This transition to engagement promotes 'people-centred approaches' and the sharing of DRR responsibilities among the state, private sectors, and publics, of-ten under the banner of disaster or community resilience [4,11]. This reflects a shift from government to governance, with the emergence of people-centred approaches coinciding with the reduction of government services via outsourcing and privatisation [12,13]. In theory, people-centred approaches foreground more participatory and democratic DRR, relying on public-private partnerships to redistribute decision-making power [8,14]. In practice, however, these approaches are largely subordinated to the economic interests and timeframes of powerful state and private actors [2,15].

In Australia, community engagement has emerged as a 'soft skill' complementary to the delivery of emergency response and technical support [8,15]. With few exceptions, this framing perpetuates the one-way and top-down transfer of information between stateled emergency agencies and publics, feeding into a logic of "we are from the government, and we are going to engage you" ([15]; 94). In this context, engagement has largely focused on informing publics how to prepare and respond for disasters, thus overlooking the relevance of building long-term and meaningful relationships amongst DRR actors and publics [8]. The limited integration of publics was brought into sharp relief following the devastating 2019-20 Black Summer bushfires, as well as with the ongoing response to the COVID-19 pandemic [16,17]. These events expose the substantial, yet often unacknowledged, contributions made by *connectors*, a term we borrow from participants in this project. Connectors are volunteers and paid employees who work in public and private sectors and/or who are involved in community or civil society groups that foster connection among emergency services, local government, and publics for DRR.

1.1. Connectors and community engagement

In responding to sudden-onset disasters, voluntary groups and individuals often mobilise in support of search and rescue activities, offer technical assistance, organise the distribution of relief supplies, and oversee the provision of food and shelter [18,19]. These responses tend to be presented as emergent and short-term, concealing their embeddedness in the historical, long-term practices of connection and active solidarity networks [20,21]. Indeed, millions of volunteers around the globe are involved with first response organisations [22]. For example, an approximate 13.7 million volunteer workforce underpins the International Federation of Red Cross and Red Crescent Societies, reaching 32.9 million people with disaster response and recovery programmes in 2017 ([23]; 11). Situated alongside global and domestic non-government organisations (NGOs) are community groups and volunteers affiliated with state-led organisations. These individuals perform critical and sometimes overlooked functions that include: first response, search and rescue, coordination and mobilisation of support, first aid and emotional assistance, and damage and needs assessment [18,24].

In this paper we advance connectors, as a grassroots concept, in connection to community engagement for DRR. Connectors, as a term differs from that of brokers, influencers, gatekeepers, community mobilizers, and disaster/community champions,³ because it refers to those individuals whose lived experiences and daily practices have granted them in-depth understanding and skills to navigate complex and changing socio-cultural and institutional contexts. This knowledge is also shaped by their own understandings of place, intertwined with the memory of past disaster events and the history of impacts and risks faced by publics (see Ref. [25] on memory). Although to some extent connectors know '*how to play the game*', we reveal how their efforts are constantly obstructed by the political economy of state-led emergency management.

This paper examines the ways in which state-led emergency management bounds community engagement for DRR in Australia. We underline the tensions between the use of top-down approaches for community engagement in neoliberal contexts, where individuals and communities are expected to play an active role in the sharing of responsibilities. Moreover, we argue that incremental financial, temporal, and human resource constraints co-produce *how* community engagement is translated into practice by state-led agencies. We focus on the Whittlesea Local Government Area (LGA), a highly heterogeneous socio-cultural and socio-economic area that covers the outer northern suburbs of Melbourne, Victoria. Our analysis examines and contrasts the ways in which community engagement was perceived and practiced by the City of Whittlesea Council (hereafter 'the Council'), state-led emergency service personnel, and representatives of community groups. We conducted semi-structured interviews and secondary data analysis. We draw on

³ For instance, *brokers* is often used in reference to individuals that play a structural role connecting two nodes within a social network, facilitating the exchange and distribution of resources within and between communities [71,72] *influencers*, denote individuals promoting behaviour change based on the viral diffusion of messages in social media [73]; *gatekeepers*, describe individuals that control access to institutions, communities, and other groups, and the dissemination of information [74]; *disaster champions*, define individuals that adopt leadership roles during a disaster event [75], while *community champions* stands for individuals involved in solving and raising awareness of problems and mobilising action within their own communities; similarly, *community mobilizers*, is used to describe trusted and politically active individuals who play a leading role advocating for particular causes and influencing behaviours [76]; community mobilizers and champions are also widely used in reference to recruited individuals that are paid to raise awareness and support program implementation (Guillespie et al., 2016; [77].

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this data to offer a historical account of emergency management for DRR in Australia and its relation to community engagement since the 1970s. Then, we analyse the practices of community engagement for DRR in the Whittlesea LGA, examining the constraints, synergies, and frustrations experienced by practitioners from the Council, state-led emergency services, and community representatives. We discuss the role of *connectors* working amongst public and private sectors and community groups, showing how they do community engagement for DRR. We examine their largely unrecognised yet critical role in building ongoing relationships among actors, acknowledging their empowerment of marginalised groups. Finally, we reveal how connectors are often curtailed as 'professional' emergency management attempts to bring their practices into alignment with how state-led emergency agencies imagine community engagement. Our analysis proposes a transition from top-down DRR towards community engagement that works collaboratively with connectors and publics in Australia.

2. Methodology

This research is part of the Community Engagement for Disaster Risk Reduction (CEDRR) project, which aims to evaluate the effectiveness of building ongoing relationships to support public preparedness for disasters. The project challenges the persistence of short-term, one-way, and top-down interactions between emergency services and publics [26]. We focused on community engagement for DRR in the Whittlesea LGA, because it is a rapidly growing municipality that covers both rural (about 70%) and expanding urban areas. Urban growth in this LGA has been supported by extension of a train line (opened in August 2018) and new housing developments linked to the availability of land resulting from the area being designated as an Urban Growth Zone. As described by the Place Profiles Report from the Council [27], residents at the Whittlesea LGA have diverse cultural and linguistic backgrounds, which encompasses varied religions, genders, ages, occupations, types of housing, and property ownership. This is also a geographically heterogenous area, which encompasses flood-, bushfire-, and grassfire-prone areas. Thus, local emergency agencies face the challenge of supporting diverse and growing publics as they prepare for and respond to a myriad of potential disasters, while operating within expanding urbanising spaces in a context of neoliberal policies.

To situate the research, policy documents, reports, and academic literature were consulted. Primary data was drawn from 38 semi-structured interviews with volunteer and paid personnel from state-led emergency agencies, local government, and community groups. Participant recruitment combined purposive and snow-ball sampling, focusing on interviewing participants involved in community engagement for DRR. These interviews were conducted during two phases: the first phase took place between April and May 2013 (n = 24: emergency agencies (3), local government (19), and community representatives (2)) in which interviewees discussed emergency management and DRR in Australia and Whittlesea, and the distribution of responsibilities between the emergency agencies, state and local government, and publics. The second phase was between December 2017 and September 2018 (n = 14: emergency services (5), local government (5), and community representatives (4), including two participants from the first phase). The two phases were undertaken 5 years apart to allow for a temporal analysis of perceptions and governance of community engagement in a rapidly growing LGA, which was heavily impacted by the devastating 2009 Black Saturday Bushfires. Importantly, between the first and second phases several significant hazards affected this LGA, including the 2013 and 2015 Epping grassfires and 2016 flash flooding [26]. We intended to interview the same respondents in both phases, however only two individuals remained in their respective positions, which we found to be at least in part the result of the precarity of short-term contracts and regular restructuring of local government. The interviews explored the emergence of community engagement and the role that publics and experts play in preparing for disasters. Participants were asked to reflect on the differences between engagement and education, the effectiveness and weaknesses of community engagement strategies, and possible solutions to emerging problems.

Analysis of the interview data was conducted in NVivo, using both descriptive and thematic coding. We generated a library of themes linked to how community engagement is understood, governed (including the policy and institutional frameworks), financed, and translated into practice. These themes were analysed in order to contrast the perspectives of key actors, focusing on their experiences. We acknowledge that this analysis is centred on a particular place and history of disaster governance, which is only one of the myriad of experiences of doing community engagement for DRR in Australia. However, we focus on shared threads and concerns, which we unpack and contrast with the literature to discuss the ways in which 'professional' emergency management bounds the efforts of connectors and limits opportunities to empower communities.

3. Emergency management and community engagement in Australia

The increasing frequency and severity of natural hazards in Australia raises critical questions about the roles and responsibilities of state-led agencies, local governments, and publics, particularly after the 2019-20 bushfires, subsequent flooding, and the current global COVID-19 pandemic [28–30]. Since the 1970s, there has been a gradual transition from command and control towards shared-responsibilities and people-centred approaches. Central to this transition was the international Hyogo Framework of Action (2005–2015), which positioned DRR as a national priority and pushed for the development of institutional and policy frameworks for the implementation of DRR strategies. One of the main considerations of this framework is the empowerment of communities and local authorities. This was superseded by the Sendai Framework of Action (2015–2030), which supports a neoliberal approach by emphasising the need for shared-responsibilities in terms of "all-of-society engagement and partnership" for DRR (see Ref. [31]). In this section we review this transition, examining key moments and policy changes that have positioned community engagement as imperative for DRR, specifically in the state of Victoria.

In responding to disasters, command and control approaches have dominated Australia's colonial history, informing the development of a top-down and hierarchical approach in the 1970s following the devastating impacts of four major disasters between 1967 and 1974 [32]. The management of the different phases of disasters—prevention, preparedness, response, and recovery—falls under

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the legal jurisdiction of State and Territory Governments, with Federal support provided on request or in exceptional circumstances ([32]; See Fig. 1). State Control Centres are established during disasters, whereby state-led agencies hold the authority and responsibility to coordinate the delivery of emergency services [33]. The current approach designates state-led emergency agencies as responsible for the development and implementation of emergency policies and strategies, frequently only interacting with publics to promote information transfer with an expectation of risk reducing behavioural changes [9,34].

In the 1970s, funding and commonwealth grants to local councils increased, which were directed to expand welfare services [35]. In the mid-1980s and 1990s, a push for privatising state services facilitated the outsourcing of emergency services, including ambulance, communication, and most aged care services [15]. During this period, consistent funding was withdrawn under the assumption that market deregulation, privatisation, industrial relations, and grants would cover local programs and operations [35]. Although councils are not considered an emergency agency per se, they play a central role supporting and coordinating relief and recovery efforts. Neoliberal policy reforms increased local autonomy, however, these changes also made councils' operations more restrictive in terms of accountability and performance. Indeed, they became performance-oriented and focused on increasing operational and economic efficiency [36]. This prompted the adoption of corporate management practices, including the development of enterprise bargaining and public-private partnerships [37]. There was a greater emphasis on local participation and transparency, though without the transfer of financial and political power to the local level [35,37]. This increased the complexity and diversity of roles and responsibilities for both paid and volunteer personnel across scales of government and across sectors [12,38].

In Victoria, this transition supported the development of the 'Prepare, Stay and Defend or Leave Early' (also known as the Stay or Go) policy, endorsed nationally in 2005. The push for preparedness was shaped by international frameworks for DRR and involved a shift towards a 'community safety paradigm', which foreground the role of the emergency sector and publics in DRR. The overall assumption was that publics could develop capacities to respond and mitigate the impacts of disaster events (see Hyogo Framework; [40]). 'Measurable' accounts of preparedness have tried to articulate the actions that could be considered as *preparing*, including differentiated measures for households, businesses, and the emergency sector [41]. The practical and economic premise behind the Stay or Go policy was that publics should rely less on emergency services to ensure their bushfire safety. Embedded is an assumption of increased self-reliance-where individuals have the emotional, social, cultural, financial, and material capacity to prepare, respond, and recover from disaster events with limited support from emergency agencies [4]. Crosweller and Tschakert ([42]; 9) suggest this neoliberal approach to DRR re-defines individuals "from a political subject with needs and rights to an economic agent with much more pronounced responsibility for their own safety and security through choice preferences". In February 2009, Victoria experienced the deadliest bushfire in the colonial history of Australia, known as Black Saturday, which took the lives of 173 individuals and challenged the effectiveness of the Stay or Go policy [43]. A Royal Commission, which is a formal public inquiry with quasi-judicial powers, was established to investigate these deaths, highlighting in 2010 the need to increase the role of state-led agencies and LGAs in DRR. The findings stated that: "Shared responsibility does not mean equal responsibility. There are some areas in which the State should assume greater responsibility than the community" [44].



Fig. 1. Organizational structure of Australia's emergency management (adapted from Ref. [39]; 6).

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The Royal Commission prompted a more deliberate shift towards a people-centred approach that builds on resilience and preparedness using *community engagement* as a central strategy [4,32]. Here, community engagement is a process that involves a diverse set of activities used by state-led emergency agencies to prepare publics to respond and mitigate the impacts of disasters, defined by the Australian Institute for Disaster Resilience as "working together to build resilience through collaborative action, shared capacity building and the development of strong relationships built on mutual trust and respect" ([45]; 2). The paradigm shift to a peoplecentred approach informed the development of a National Strategy for Disaster Resilience (NSDR), adopted in 2011. While the NSDR continued to promote the notion of 'shared responsibility' it also called for greater state involvement in 'empowering' communities. This change positioned emergency agencies as responsible for educating publics on how to prepare and respond in order to protect and limit the harms associated with an individual's own actions/inactions [31]. In Victoria, the Stay or Go policy changed in 2014 to 'Prepare, Act, Survive' and 'Leave and Live', focusing on encouraging publics to leave early rather than 'wait and see' how to respond to bushfires [46]. This transition emphasised the importance of volunteers and community groups in strengthening publics' disaster resilience [31,38].

A national grant system was developed to support the implementation of NSDR, which targeted state government departments and agencies (including local councils), volunteer, private, and non-profit organisations, subsidising some of the costs of community resilience projects (i.e., Natural Disaster Resilience Grants Scheme from the Commonwealth Government). However, in 2014, the Productivity Commission Inquiry into Natural Disaster Funding Arrangements (Point 4), revealed that the policy direction to build community resilience endorsed by both the NSDR and the Victorian Emergency Management Reform White Paper (2012) was not supported by Victoria's emergency management funding arrangements [79,80]. This highlights the lack of political will to invest in community engagement for DRR. For instance, government agencies often rely on an organisational approach that draws on the International Association for Public Participation (IAP2), which simplifies engagement as a continuum where impact progressively increases from informing, consulting, involving, collaborating, and empowering publics (see Ref. [41]).⁴ Yet, due to short-term funding schemes, most efforts within the emergency sector remain transactional, primarily limited to information transfer [47].

Following the 2019–2020 Black Summer bushfires, another Royal Commission was held concerning National Natural Disaster Arrangements. Similar to the educative approach to 'empowerment' embedded in the NDSR [31], the Commission report focused heavily on the transfer of information for preparedness. However, the report emphasised the importance of local knowledge, stating that "education and engagement programs should account for changing risk profiles and community demographics to ensure they are fit for purpose". Similarly, the report suggested recovery required locally led approaches and "deep engagement' with affected communities" ([48]; 21). Details of the newly established National Recovery and Resilience Agency (May 2021) and allocation of \$600 million in funding for the *Preparing Australia Program* in response to the Commission are forthcoming. Overall, community engagement strategies were, and continue to be, dependent on short-term grant schemes and external funding opportunities that are unevenly distributed, and fail to support the long-term sustainability of programmes (see, e.g. Ref. [49], criticism of bushfire grants allocation).

3.1. Local government and emergency agencies

The role of local governments in DRR has received little focus in the literature, despite growing international attention [50]. Publics in Australia interact with local councils and state-led emergency agencies through the delivery of multiple services, including: (council) health and safety, waste management, environmental protection, community centres; (emergency agencies) emergency response, road crash rescue, and emergency traffic management. However, the role of councils in relation to DRR is often unclear, and as noted by Beccari ([50]; 21) "capacities ... to implement the functions assigned to them vary significantly". Councils are central to the implementation of State and Territory policies, the development of local emergency management plans, and the delivery of emergency information to publics [32]. In Whittlesea LGA, the Municipal Emergency Agencies (e.g., Country Fire Authority (CFA), Victoria State Emergency Service (VicSES)), Ambulance Victoria, the Metropolitan Fire and Emergency Services Board, and other relevant State Government Departments and agencies. It documents prevention, preparedness, response, mitigation, and recovery arrangements. It also oversees the development of emergency management plans. Subcommittees have been established to tackle specific tasks and report back to the MEMPC, including the Community Subcommittee, which brings together emergency agencies, the Council, and community representatives to discuss the implementation of emergency management plans (see Fig. 2, a).

The provision of emergency services and DRR is part of a long chain of command, dictated by policies and procedures developed at the state level, constraining the autonomy of local governments in responding to specific publics' needs. As a Council staff member noted:

"If we were acting in isolation, if we were just some autonomous unit, we could develop policies and procedures in-house that would just have an impact within the Council. But Emergency Management is not acting in isolation, it's acting in a long chain of command. Different tiers of response and responsibility. So, we—as local government, there's something like 132 acts of parliament that we're statutorily bound to deliver on and one of them is the Emergency Management Act ... Every three years, we're audited against that ... [the] things that we'll have to report against that don't make sense at the local government level. So, that's frustrating." (WC1_131217).

This quote highlights frustrations within the Council of being unable to act because of the ways in which the *Emergency Manage*ment Act has bounded their autonomy and agency. Similar concerns were shared by all Council participants during both phases of this

⁴ Other frameworks understand community engagement as relational, a triad of information, consultation, and participation (see Ref. [78].

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Fig. 2. a) Governance structure of community engagement for DRR within the Council; b) scheme of the organizational structure of community engagement in VicSES.

research. The regulatory framework is there to assist the coordination of emergency management, while also limiting opportunities within the Council to develop policies and frameworks that respond to local realities. Indeed, practitioners within the Council are required to follow state policies and emergency management guidelines, as well as demonstrate adherence to those policies through time consuming audits. Funds are directed primarily towards operational cost-effectiveness and the implementation of prescriptive actions, which also limits the possibilities of investing time and labour into more effective DRR [9,10]. Pervading rigid structures and cultures of bureaucratic, top-down, command-and-control emergency management (despite language to the contrary), scarcely enables both staff and publics' diverse knowledge and experiences to influence higher levels of the chain of command [24].

Among the different state-led emergency agencies in Victoria, the CFA focuses on fires and VicSES on floods, storms, tsunamis, and earthquakes, as well as supporting road crash rescue. Both operate under the jurisdiction of the Victorian Government. Two independent organisations also operate within Victoria, under a memorandum of understanding with VicSES. These are volunteer-based agencies supported by a limited paid workforce responsible for diverse forms of disaster response, mitigation, adaptation, community engagement, and education [7,32]. There are at least 500,000 emergency agency volunteers in Australia [51]. Units or Brigades are comprised of highly trained volunteers who conduct operational emergency response activities (e.g., sandbagging, road crash rescue, traffic management, search and rescue functions), as well as non-operational administrative and management tasks (e.g., fundraising, public relations, community engagement, and education). Emergency agencies follow a command-and-control approach that aligns with the Emergency Management Act. They use different approaches to community engagement, for example VicSES largely relies on partnerships to support community engagement programs mostly centred on community education and awareness programs; comparatively, CFA has developed their own model of community engagement, which divides publics into levels of involvement, with targeted engagement activities per level (see Ref. [52]). Within the sector there is a push for the development of indicators and baselines to evaluate these programs and measure engagement. Some report the number of activities, outputs, door knocked properties, and information sessions as a proxy to community engagement. However, there is a lack of formal evaluation guidelines, as well as funds, paid or volunteer workforce, and time to run these assessments [41,52]; 87–88).

Emergency management for DRR in Australia positions publics as responsible for preparing and responding to emergencies, while they are also engaged by the Council and state-led emergency agencies to ensure that they comply with state guidelines. Although a 'shared responsibility' approach is purported, publics continue to be approached in a top-down, one-way manner that does not match this goal [4,53]. Unsurprisingly, improving communication with communities remains one of the most prevalent themes in the recommendations provided by post-event inquiries and reports ([54]: from 2009 to 2015 at least 20.4% recommendations and findings identified issues with communication). The review of 300 community education, awareness and engagement programs in Australia developed by Elsworth et al. [40] identifies issues with poor funding, low priority in comparison with other management activities, restricted audiences, sporadicity, and lack of evaluation. The report emphasizes the diversity of contexts and recommends active and open community participation. In reviewing a trial of a multi-hazard warning system program run in three localities in rural Victoria, one in a peri-urban area similar to Whittlesea, the report stresses the organisational and technological complexities faced by the program, highlighting the importance of tending to the diverse needs for information within the community, including those with Cul-

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turally and Linguistically Diverse (CALD) backgrounds ([40]; 35–41). In the following section we examine the experiences of doing community engagement for DRR in the Whittlesea LGA.

4. Doing community engagement

The Black Saturday Bushfire (in 2009) triggered major changes in the ways that disasters are managed in Victoria, particularly in recognising how previous approaches were overloaded and failed to support the needs of publics [4,46]. There was an overall acknowledgement that local councils, emergency agencies, and publics were not prepared to respond to large-scale events, prompting the elevation of community engagement as central to working together and supporting prevention, preparedness, response, and recovery practices. Many of these changes were ratified by the *2013 Emergency Management Act*. As a Council staff member explained:

"After the 2009 fires, the state government really could clearly see that it wasn't quite working well, the way we looked after emergencies in Victoria. So, they pretty much threw out all the old rules and started new ones, and one of the main rules was how we engage with the community. Prior to that, local government would march in and go we'll fix everything, and forget what the community actually needs and not ask them. The Emergency Management Act changed to reflect that there needed to be more and more community involvement" (WC2_060718).

In other words, the push for reforming the Emergency Management Act came from the struggle within the emergency sector to respond and support communities during the 2009 bushfires using a top-down approach.

Importantly, multiple perspectives and understandings about what community engagement entails and how it should be translated into practice have emerged, even within the Council. One participant in a senior position expressed having limited interactions with publics, defining community engagement as a tool to receive feedback and transfer preparedness information:

"The sole purpose of community engagement is to harness community leaders and essentially have input from those community leaders into our policy positions, but also, to get those community leaders to help to communicate messages to their communities." (WC3_290518).

Other staff members, particularly those involved in more direct interactions with community representatives (13 in total), saw community engagement as a strategy to connect and work together with publics to improve emergency management strategies, although undertones of information transfer were still evident. As one explained:

"I think it's different for every level of organisation that's in the emergency management area. In my role, it's about understanding who's in our community, what services are already being delivered. It's mapping out who's there and then trying to find a workable way to connect with those people ... It's having our message right and simple and easy to understand. Identifying who the community connectors are, so we can then feed out from there ... working with the community Some of the council understand and appreciate that, but a lot of them are also coming back from that provision of equipment and services." (WC2_060718).

The preceding quote highlights the need to identify connectors and to work with them to diffuse key messages, while also noting the tensions within top-down and people-centred approaches to community engagement within the Council. The Chief Executive Officer (CEO), for instance, was keen to support community engagement strategies, while directors and managers conceived of 'community connectors' as vehicles for the transfer of information (9 in total). In contrast, staff members who interacted directly with community representatives were aware of the importance of connectors in creating points of connection and collaboration for DRR. The tension between managerial and operative perspectives is partly driven by the aforementioned auditing requirements of legally binding emergency management policy.

The Council 'does' community engagement through holding meetings, face-to-face education sessions, the circulation of newsletters (printed and digital), and the sharing of information on social media, all of which aim to promote awareness and ideally trigger behaviour change. However, all Council participants acknowledged the limitations of this approach. Its limitations were deemed especially acute in terms of the heterogeneity of risks within peri-urban and multi-hazard contexts and in terms of the complexity of transferring information within CALD populations (i.e., in 2014, 41.6% of the Whittlesea LGA population were born overseas and 48.8% spoke a language other than English at home, see Ref. [55]). Directors and managers may be guided by public interests, but their roles are output driven, operate with tight budgets and timeframes, and must comply with strict regulations, as articulated by a Council staff member:

"CEO and above ... [they are] very keen and eager about community engagement. The next level down with our directors, they have tight budgets. So, when you mention engagement directly with the community, they go, how much is it going to cost me? What does that mean? Timeframe? The managers tend to follow that, because they're basically swamped with the workloads. They go, 'oh no, we don't have time or the money to do that" (WC2_060718).

As such, the financial bounding of community engagement for DRR within the Council limits the scope for alternative approaches. Here, information transfer emerges as a time and cost-effective strategy rather than an ideal pathway for impact. Indeed, the underlying economic efficiency rhetoric pushes the Council to do more with less, in terms of costs and services, functioning with fewer staff, outsourcing services, and squeezing in new and more functions without allocating funding [56]. This perpetuates community engagement practices that fail to listen to communities and at times act in detriment to their own needs (see Ref. [46]). One such anecdote emerged from a staff member who had been with the Council during the aftermath of Black Saturday, where grant money was required to be spent in a bushfire memorial within a given timeframe, as they recalled:

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"There were bushfire memorial grants. So, we went out to the community and said well, we've got this grant, we'd like to put up a memorial. They said we don't want the memorial yet. It's your grant, you go and do what you like with it. We said no, it's meant to be inclusive and a way of bringing community together. They said we don't want it, we're building stuff, we don't want to remember yet. So, we forced a memorial on them." (WC1_131217).

This quote reveals the ways in which the chain-of-command fails to consider the needs and desires of communities, even to the point of ignoring public grief and ways of mourning. Besides, prioritising money spending within specific timeframes affects the temporality and type of engagement.

Emergency agencies also face challenges conducting community engagement, explored in the following paragraphs, focusing on VicSES. *Fostering connections* became one of the three strategic objectives of the *VicSES Community Resilience Strategy 2016–2019* for the implementation of the NSDR [81]. Engagement efforts are directed by the Community Connections Team, which aims to foster connection, capacity, and collaboration, operating at state level within the Community Resilience and Communications Directorate (see Fig. 2, b). Other VicSES Directorates (i.e., Chief Officer of Operations, Corporate Services, and Human resources) focus on emergency response, operational duties, and technical training. The Team is responsible for the creation, development, implementation, measurement, and evaluation of community engagement actions, working closely with Regional Offices to support community engagement strategies implemented by local volunteer units. One Team member defined community engagement as:

"Being part of the community and being connected to the community as an emergency service organisation. There are a lot of different ways to do that, and I think that with the way we engage we need to be very clear about why we're engaging, because we might be engaging with community because we want more volunteers, donations, to publicise something ... preparedness, DRR, recovery, or response" (ES1_011018).

Connections and the building of relationships have been integral to community engagement at both state and regional levels, as depicted by a regional manager:

"It is really building trust with your community, building the relationships with your community. It's about getting to know your community members, who they are, how you can help each other should there be an emergency or a disaster" (ES2_210918).

The quotes above offer an understanding of community engagement centred on the building of connection and trust with communities, yet engagement is understood and practiced as a tool centred on serving the interests of VicSES.

At least one trained volunteer acts as a Community Education Facilitator in each unit, leading community education efforts, including attending public relations events, organising education sessions, door-knocking or handing out pamphlets in public spaces to promote flood and storm awareness, and social media interactions with publics (often run by a Social Media Officer). Training to be a Facilitator requires a large commitment which can be challenging for time constrained volunteers. Facilitators can run different engagement projects; however, the majority of volunteers are not trained to negotiate community engagement strategies with publics. They also do not have access to funding and human resources for the long-term implementation and assessment of these initiatives. Internally, units hold diverse views on engagement, however, many support an operational focus with volunteers predominately engaging publics for the delivery of information and services, as one volunteer noted:

"When people physically see us, and we hand stuff out there. Often, it's those people that come and might ask you a question or might even take away a pamphlet. Not because we've given it to them, but because they were interested in it again it's the ripple effect" (ES-3_100918).

Indeed, all our conversations with VicSES staff and volunteers revealed the prevalence of top-down information transfer as a strategy for community engagement, with a few exceptions. Alternative strategies face significant bureaucratic and financial limitations, being reliant on grants and external sources of funding to operate.

In the past decade, acquiring funding for operations has also become a major source of stress at the unit level, pushing volunteers and unit controllers to act as 'business managers'. Volunteers are increasingly required to allocate time to grant applications to cover basic operational costs, in the words of a volunteer:

"Every unit gets \$32,000 from the state government but a lot of councils gave some in-kind support like fuel cards or a vehicle ... But slowly they're all withdrawing that because of the Emergency Management Act. We are getting \$20,000 as a grant ... that kind of covers our running costs. But that leaves us with nothing to put in the bank. SES in their policies ... they want the four-wheel drive vehicles changed over every five years ... but we need to find the money" (ES4_100918).

The financial responsibilities and constraints noted by this volunteer also reduce the amount of time available to undertake community engagement and apply for grants to support community engagement projects. There is also a lack of incentives for volunteers to undertake training in non-technical/operational areas linked to community engagement (e.g., conflict management, communication, and language barriers; see Ref. [57]). All this happens in detriment of fostering connection and disaster preparedness.

Both the Council and VicSES experience time and financial constraints that limit the development and implementation of more effective community engagement practices. Although there is interest in community engagement for DRR, particularly in terms of increasing preparedness, it is secondary to response duties and technical training. We now explore the creative ways in which connectors from the Council, emergency agencies, and community groups undertake more participatory forms of community engagement despite the constraints examined above.

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4.1. Connectors-the building of connection

In integrating publics to the Council and emergency agencies, the Whittlesea LGA Community Subcommittee has emerged as a place of encounter between different connectors, a space used for the sharing of information, developing and sharing contacts, and developing strategies to navigate the myriad of emergency policies. The Subcommittee fosters interactions between local government, emergency agencies, and civil society organisations not only focusing on DRR, but also on other aspects of community needs and desires. This, however, has not always been the case. For the first two years after the Black Saturday Bushfire, quarterly meetings were held, bringing together emergency actors, including community representatives, with the aim of introducing each other and discussing their DRR initiatives. The initial approach was top-down, in service of local government interests. Two years later, a new Council staff member became involved in the Subcommittee, seeing it as an opportunity to connect the Council with the existing and long-term community networks within the Whittlesea LGA. In their interview in 2013, this connector described their role and approach to engagement:

"This is about trying to engage with the community at quite a deep level about emergency readiness and awareness of what risks are. Changing the culture inside Council too about how to engage with the community in emergency readiness ... all the stuff we do beforehand it's really important! So, better partnerships, more understanding, more collaboration. Then, when things happen it won't be so difficult to recover. That's my philosophy." (WC4_240413).

This quote emphasizes the importance of changing the culture within the Council to engage with publics in meaningful ways, focused on fostering collaboration and awareness. As a connector, they transformed the Subcommittee meetings, turning them into a space of encounter between community representatives and connectors within the Council and emergency services. While this connector, who we interviewed during the first phase, was not working in the Council during the second phase, in 2017, two staff members reflected on the work of this connector:

"The sub-committee wasn't very successful. Because they had the local government hat on, where they would tell what community members had to do ... A colleague looked at the community subcommittee in a different way and actually looked at what was already in the community. Because **they already had their networks**. They already knew what was happening in the community and **brought them together in what they needed**, rather than what local government needed (WC2_060718).

"They [the connector] actually did the antithesis of holding a meeting; they went to where someone else was already meeting and worked that way. That was good but impossible to measure how effective it was" (WC1_131217)

These quotes elucidate the impact that this connector had, not only in running the community subcommittee but inspiring their peers. Their impact lingered, with peers speaking highly of the effort required to shift the culture within the Council to foster connection. The first quote positions this connector as part of the community—they had their own networks, which granted them deep understanding of the context and community struggles. Moreover, the last quote emphasizes the impossibility of measuring the success of effective community engagement practices.

Issues with monitoring and evaluating are critical for understanding the dissonance between the 'official' DRR system and the community-connecting activities needed for DRR. For example, the auditing of engagement practices focus on the number of meetings organised, yet the connector's engagements would not be captured by those metrics. They worked with a team supporting CALD groups, including newly arrived families and refugees, to facilitate preparation and planning for potential emergencies. During their time at the Council, the connector pushed for more flexible ways of interacting with diverse groups and challenged information transfer as a form of community engagement. Their work emphasised building relationships with other connectors, often outside of normal working hours; they also encouraged groups to hold discussions about emergency preparedness. Interestingly, preparedness was not discussed on an individual basis or in isolation from the experiences of each collective. Instead, these efforts became an integral aspect of relationship building efforts among community groups, the Council, and emergency agencies. The work of this connector, as well as their collaborations with other connectors within the Council, prompted interest from various community representatives involved in the Whittlesea Community Leadership Network and the Multicultural Unit, particularly those who perceived their groups as potentially vulnerable to disaster events. Some joined the Subcommittee, progressively enabling the meetings to become more community driven.

Regardless of the efforts of the connectors involved in the subcommittee, the meetings continued to be held during working hours at the Council premises. This excluded groups who experience tight working schedules, limited mobilities, social and geographic isolation, and low socio-economic status. Worryingly, these groups were also identified by all participants as vulnerable. In this context, connectors contributed to relations beyond the official subcommittee meetings. Importantly, their efforts contrast with the rigidity of official Council working hours and top-down community engagement strategies. For instance, community representatives, emergency agents, and Council staff raised concerns during subcommittee meetings regarding the effectiveness of current emergency management policies, including the lack of support for community engagement strategies. Yet, these discussions took place in a vacuum, failing to translate to higher levels of the chain-of-command. In the words of a community connector discussing the work of the Subcommittee:

"It was almost establishing connection and recognising that community plans could be better delivered collaboratively. I think a negative of that is that I'm not sure that it filtered all the way through the Council or hasn't filtered all the way through the agencies and the changes in the Emergency Management Act" (C1_120618).

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This connector reveals how building connections within the Subcommittee is *disconnected* from the way in which emergency management organises its own financial and bureaucratic practices. Connection in the Subcommittee did not emerge because but, rather, despite the systemic constraints. The lack of official support for building meaningful connections, combined with the perceived impossibility of changing policy and management, has increased frustration among connectors from the Council and amongst community representatives interested in emergency management in the Whittlesea LGA. This has also been inhibited by the Council's high staff turnover, which we encountered during our second round of interviews, where the connectors we identified were no longer working at the Council. This was either because they were hired with grant funds on short-term contracts or with Council funds, both of which are shaped by internal Council politics.

This neoliberal context reduces the ability to build long-term relationships, while the loss of connectors contributes to growing disconnection between publics, community representatives, and emergency agencies. However, there are significant and often unrecognised outcomes from the work that connectors do. For instance, a group of connectors involved in the Whittlesea Community Subcommittee, the Leadership Network, and the Multicultural Unit, have developed initiatives outside of the official remit of the Council. Their disconnection from formal accountability mechanisms allows them to overcome the Council's bureaucratic constraints, focusing instead on facilitating disaster preparedness practices. Each of the community connectors who we interviewed have learnt to navigate the grant system and have become successful at accessing funding opportunities. Their initiatives have contributed to their communities by building connections, which intersect with the complex and long-term relations that shape their work relations. Indeed, they engage the Council and emergency agencies' during standard working hours, while outside these hours they take part in their social groups' socio-cultural practices (e.g., playing footy, having computer classes, playing domino).

A number of these initiatives have emerged from the Whittlesea *University of the Third Age (U3A)*, a seniors' organisation where members run courses and participate in educational, recreational, and social programmes. The U3A welcomes members from diverse linguistic and cultural groups, some of whom assist with classes and activities, host events, and facilitate the building of relationships between and within various groups. Many of these connectors also translate and mediate interactions between different languages and cultural contexts. Whittlesea U3A has grown from 10 tutors and 30 members meeting at a library in 2002, to more than 800 members and 60 tutors, offering 100 courses in two main campuses in 2018. One connector in U3A, involved in the Subcommittee and with experience working in the emergency sector, has been inspired by the BlazeAid grassroots organisation. BlazeAid emerged after Black Saturday to help rebuild fences and other structures damaged during the bushfires. This connector sees U3A as an opportunity to create a different and more effective approach to preparing seniors for disasters, in their words:

"That's much the same as BlazeAid did ... they created a model that was effective and timely and with **no bureaucracy**, **no bullshit**, they just got on with it and **it was really people helping people**" (C1_060918).

The emergence of the BlazeAid emerged as a counter-response to the way in which community engagement is done within the system; connectors that have created alternatives to do the work—build connections and support their communities.

Another connector from U3A has played a central role building relationships between community representatives and Council staff working in the Whittlesea Community Subcommittee, Multicultural Unit, and Community Leadership Network. The research team was also engaged by this connector to discuss ways in which we could support the U3A's innovative community engagement approaches. As highlighted by a Council staff member, who actively supports U3A community connection initiatives:

"[The U3A connector] was on the community Subcommittee. I then joined their other group, the Whittlesea Community Leadership Network ... We continue to do some other projects through their role with U3A. So, we continue to keep in touch and look at how we can build community connection. Because we know that by building connection within the community, half the job of recovery is already done" (WC2_060718).

As this quote highlights, by positioning connection and relationships at the core of the recovery process, connectors in U3A and their allies within the public sector challenge the transfer of information as a form of engagement. Instead U3A initiatives promote inclusion and collaboration in service of collective outcomes (e.g., the U3A Partnership Toolkit project), integral to doing community engagement for DRR. Their work seeks to foster two-way communications between communities, the Council, and state-led emergency agencies. As another community connector highlighted, this process is grounded on empathy and respect/recognition for community organisations and structures. These initiatives are funded by project-based grants from the network of U3As and the Council. One such initiative involved the establishment of a program and room on the main U3A campus for the discussion of Red Cross emergency management plans, a place where Red Cross volunteers can meet with interested U3A members and engage in conversations about disaster preparedness. Connectors at U3A have also worked to identify individuals at risk of isolation in the Whittlesea LGA, trying to find ways to prompt their involvement in social activities. As one connector explained:

"I've started to find that you've got individuals who, through interests, activities, where they live, or what they're involved in have empathy and can sense someone's becoming disconnected. We're building up profiles of all types of people, if you come across a person that fits this sort of profile, you know that they are likely to be able to identify where to find those that have a particular issue" (C2_120618).

These efforts are rooted in knowing the community, identifying their needs, and connecting with groups and individuals who are isolated. Here, connection emerges as DRR.

Our research indicates that, in the Whittlesea LGA, connectors use a wide range of tools and practices to facilitate long-term connection, voluntarily attending social gatherings and courses, and organising events and projects. This volunteerism challenges the lack of political and financial will within the Council and emergency agencies to support more participatory forms of community en-

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gagement. However, the bureaucratic, time, and financial constraints within the emergency management, foster disconnection, hindering opportunities to work with and learn from connectors.

5. Discussion-the power of connection

Connectors draw on their knowledge to build *meaningful* relationships within their communities and with other connectors across public, private, and non-profit sectors. They are *aware of the resources* (i.e., skills, knowledge, material, connections) available within their communities, applying them to foster *long-term collaboration, coordination, and co-production of knowledge,* which is centred on empowering marginalised groups and creating ways to respond to specific needs and desires. By *meaningful* we emphasize the intentionality of connection, which is committed to caring for and listening to communities. Contrasting with state-led community engagement, the efforts of connectors are not prescribed or about metrics (e.g., number of meetings/participants, grants, and outputs, see Ref. [58]), rather they are about the connectors' own beliefs and values. They mobilise actions and knowledge that matter to communities because it also matters to them. This involves acknowledging their own positionality and using a *reflexive* approach to their own actions, which allows them to shift and strategically redirect efforts when things are not working, or mistakes are made. As an attribute, meaningful connection is flexible and adaptive, it fosters change, despite systemic constraints, countering the overreliance of state-led agencies on top-down, reactive, and techno-centric approaches to DRR [9,10].

The actions of connectors challenge power relations while enabling the negotiation of particular problems, making community engagement deeply political. Importantly, however, not all publics are represented by connectors, and not all connectors have access or opportunities to build connections and negotiate with the state-led emergency sector, thus intersecting with existing forms of social and economic exclusion (see Ref. [59]). Efforts to redistribute power are not supported by state-led emergency management, which foregrounds community engagement that is top-down and economically driven, where publics are largely represented as misinformed, disengaged, and vulnerable. This results in engagement that is top-down and beholden to auditing metrics [60]. In the chainof-command, the meetings organised by local councils and emergency agencies, along with short-term grant schemes, are arrangements that work towards making community connectors subservient to top-down emergency management [61]. Indeed, state-led community engagement and participatory approaches are often presented as radically open, yet to a large extent they curtail conflict and dissent while prioritising techno-managerial solutions [62,63]. The transformation of state-led participatory spaces into points of connection like the Community Subcommittee emerges as an exception, one that is precariously sustained and threatened by the growing casualisation of labour within the emergency sector and local government [64].

Time emerges as a central force in engagement practices. This is partly because building relationships is often perceived as gendered and a 'soft-skill' that requires ongoing engagement to build trust and nurture experiences of care and solidarity [65]. Time also governs the possibilities of encounter between emergency agencies and publics where community engagement practices are predominately constrained to the 8-h workday.

Insufficient human, financial and time resources within the state-led emergency sector reinforce the implementation of community engagement as complementary to emergency response activities, exposing a lack of political will from Federal and State emergency management to listen to publics. While the guidelines and regulations support accountability, they also foster disconnection. Moreover, the use of bureaucratic and predefined auditing requirements fails to account for the diverse actions that shape meaningful connection, while pushing local governments and emergency agencies to prioritise actions that can be evaluated and for which funds can be justified. Although the impacts of these efforts could be measured, the system and its expectations do not allow for the consideration of these alternative approaches. Lessons from Flood Action Groups in the UK highlight the impossibility of taking a one-size fits all approach to community engagement. Rather, mixed methods are used to evaluate the impacts of projects, allowing groups to identify their own activities and outcomes, while creating opportunities to build networks and co-produce knowledge (see Ref. [66]. We are not advocating for the formalisation and auditing of the work of connectors. As McLennan et al. [67]; 13–14) warn:

"The closer governments get to citizen and voluntary initiatives, the more likely they are to 'kill or mutate' them (Brandsen 2016, 349), providing a counter-warning for the Australian emergency management sector not to 'overdo' affiliation and formalisation of outsider emergency volunteering".

We recognise that improving financial arrangements, a larger workforce, and better working conditions within the state-led emergency sector on their own, or combined, would merely be a band-aid solution if there is no political will to reform current top-down emergency management. A redistribution of power is needed, through processes that are "opened, negotiated, and reworked" ([68]; 13).

6. Concluding remarks on working with connectors

The stories of connectors offer an entry point to the multiplicity of strategies used to subvert tokenistic forms of engagement, enabling lived experiences to guide the transition towards more just and equitable practices of connection and risk reduction [69]. In challenging the neoliberal individualisation of DRR, the localised efforts of connectors disrupt the political economy of emergency management, shaping their actions beyond capitalist ideas and values, while positioning *meaningful connection* as a radical alternative [62]. These forms of connection are intergenerational, informed by localised knowledges and practices that move beyond technocentric understandings of disasters and risks [25]. Initiatives like those emerging from connectors at the U3A expose the active interest that publics have in DRR, with connectors deeply embedded in complex networks and long-term relationships. In the context of the current COVID-19 the work of these connectors has been essential, they have managed to train at least 200 senior volunteers in using Zoom to teach other seniors on how to keep in contact with their families, socialise, and attend classes digitally, becoming part of the

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Australia wide *Be Connected Initiative*. Earlier this year, in between lockdowns in Melbourne we were able to catch up with these connectors who are also interested in doing research to expand their understanding and impact on DRR, we have also become part of their collaborative networks, which they strategically use to access research grant funds, seeking to do research that matters to their communities.

We acknowledge that the experiences and approaches to community engagement used by connectors in this study cannot be 'made' or 'replicated'. There is a myriad of approaches that are connected to the multiple realities and risks faced by publics. In focusing on community engagement, our findings show that the current governance and political economy of emergency management constrains meaningful engagement for DRR and can contribute to disconnection between local councils, emergency agencies, and publics. We highlight the need to learn and listen to different approaches and to reimagine and push for policy reforms that redistribute power. In this paper, we have identified some of the characteristics of connectors for this specific case, we are interested in opening dialogues about what connectors bring to DRR elsewhere and understand their important and essential role for community engagement. The challenge, then, is opening possibilities for connectors and the alternative futures that they create in ways that move beyond the need for alignment (see Ref. [70])—despite the obstacles—into the fostering practises of connection, negotiation, and encounter between publics and the emergency sector.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- [1] E. Coles, P. Buckle, Developing community resilience as a foundation for effective disaster recovery, Aust. J. Emerg. Manag. 19 (2004) 6–15.
- [2] J. Wiseman, L. Williamson, J. Fritze, Community engagement and climate change: learning from recent Australian experience, International Journal of Climate Change Strategies and Management 2 (2010) 134–147.
- [3] F. Domínguez Rubio, U. Fogué, Technifying public space and publicizing infrastructures: exploring new urban political ecologies through the square of general Vara del Rey, Int. J. Urban Reg. Res. 37 (3) (2013) 1035–1052.
- [4] B.J. McLennan, J. Handmer, Reframing responsibility-sharing for bushfire risk management in Australia after Black Saturday, Environ. Hazards 11 (2012) 1–15.
- [5] United Nations, The Brisbane Declaration on Community Engagement, International Conference on Engaging Communities, Brisbane, 2005.
- [6] S.E. Dempsey, Critiquing community engagement, Manag. Commun. Q. 24 (2010) 359-390.
- [7] P. Fairbrother, M. Tyler, A. Hart, B. Mees, R. Phillips, J. Stratford, K. Toh, Creating 'community'? Preparing for bushfire in rural Victoria, Rural Sociol. 78 (2013) 186–209.
- [8] B.W. Head, Community engagement: participation on whose terms? Aust. J. Polit. Sci. 42 (2007) 441–454.
- [9] A. Scolobig, T. Prior, D. Schröter, J. Jörin, A. Patt, Towards people-centred approaches for effective disaster risk management: balancing rhetoric with reality, International Journal of Disaster Risk Reduction 12 (2015) 202–212.
- [10] B.R. Cook, MdL. Melo Zurita, Planning to learn: an insurgency for disaster risk reduction (DRR), International Journal of Disaster Risk Reduction 19 (2016) 265–272.
- [11] A. Chandra, J. Acosta, S. Howard, L. Uscher-Pines, M. Williams, D. Yeung, J. Garnett, L.S. Meredith, Building community resilience to disasters. A way forward to enhance national health security, Rand health quarterly 1 (1) (2011) 6.
- [12] W. Mitchell, B. Cook, V. Quirk, The Impact on Community Services of Staff and Service Reductions, Privatisation and Outsourcing of Public Services in Australian States, CPSU/CSA, Perth, 2012.
- [13] K. Tierney, Resilience and the neoliberal project, Am. Behav. Sci. 59 (10) (2015) 1327–1342.
- [14] K. Sassa, ISDR-ICL Sendai Partnerships 2015–2025 for global promotion of understanding and reducing landslide disaster risk, Landslides 12 (2015) 631–640.
 [15] J.M. Cavaye, Governance and community engagement, in: W.R. Lovan, M. Murray, R. Shaffer (Eds.), The Australian Experience in Participatory Governance: *Planning, Conflict Mediation and Public Decision Making in Civil Society*, Ashgate Publishing, UK, 2004, pp. 85–102.
- [16] A.I. Filkov, T. Ngo, S. Matthews, S. Telfer, T.D. Penman, Impact of Australia's catastrophic 2019/20 bushfire season on communities and environment. Retrospective analysis and current trends, Journal of Safety Science and Resilience 1 (1) (2020) 44–56.
- [17] E.R. Power, D. Rogers, J. Kadi, Public housing and COVID-19: contestation, challenge and change, International Journal Of Housing Policy 20 (3) (2020) 313–319.
- [18] M. Crane, The invisibles: the role of volunteer emergency service members in human health emergency response, Global Biosecurity 1 (1) (2019) 116–118.

[19] S. West, D.C. Visentin, A. Neil, R. Kornhaber, V. Ingham, M. Cleary, Forging, protecting, and repairing community resilience informed by the 2019-2020 Australian bushfires, J. Adv. Nurs. 76 (5) (2020) 1095–1097.

- [20] R. Simsa, P. Rameder, A. Aghamanoukjan, M. Totter, Spontaneous volunteering in social crises: self-organization and coordination, Nonprofit Voluntary Sect. Q. (2018) 0899764018785472.
- [21] J. Twigg, I. Mosel, Emergent groups and spontaneous volunteers in urban disaster response, Environ. Urbanization 29 (2017) 443-458.
- [22] R.N. Britton, Permanent disaster volunteers: where do they fit? Nonprofit Voluntary Sect. Q. 20 (1991) 395–414.
- [23] IFRC, Everyone Counts, International Federation of Red Cross and Red Crescent Societies, Geneva, 2019.
- [24] J. Whittaker, B. McLennan, J. Handmer, A review of informal volunteerism in emergencies and disasters: definition, opportunities and challenges, International Journal of Disaster Risk Reduction 13 (2015) 358–368.
- [25] L. McEwen, J. Garde-Hansen, A. Holmes, O. Jones, F. Krause, Sustainable flood memories, lay knowledges and the development of community resilience to future flood risk, Trans. Inst. Br. Geogr. 42 (1) (2017) 14–28.
- [26] I.C. Cornes, B. Cook, P. Satizábal, MdL. Melo Zurita, '(In) action': rethinking traditional understandings of disaster risk reduction, Aust. J. Emerg. Manag. 34 (2019) 52–57.
- [27] City of Whittlesea, Place Profiles: Demographic Profiles of Precinct Areas in the City of Whittlesea, Victoria, Whittlesea: City of Whittlesea, 2018.

P. Satizábal et al.

International Journal of Disaster Risk Reduction xxx (xxxx) xxx

- [28] L. Chester, The 2019–2020 Australian bushfires: a potent mix of climate change, problematization, indigenous disregard, a fractured federation, volunteerism, social media, and more, Review of Evolutionary Political Economy 1 (2020) 245–264.
- [29] V. Cooper, P. Fairbrother, G. Elliott, M. Walker, H.-Y. Ch'ng, Shared responsibility and community engagement: community narratives of bushfire risk information in Victoria, Australia, J. Rural Stud. 80 (2020) 259–297.
- [30] K. Moloney, S. Moloney, Australian quarantine policy: from centralization to coordination with mid-Pandemic COVID-19 shifts, Publ. Adm. Rev. 80 (4) (2020) 671–682.
- [31] A. Lukasiewicz, S. Dovers, M. Eburn, Shared responsibility: the who, what and how, Environ. Hazards 16 (4) (2017) 291-313.
- [32] MdL. Melo Zurita, B.R. Cook, L. Harms, A. March, Towards new disaster governance: subsidiarity as a critical tool, Environmental Policy and Governance 25 (2015) 386–398.
- [33] N.R. Britton, R. Wettenhall, Evolution of a disaster 'focal point': Australia's natural disasters organization, Int. J. Mass Emergencies Disasters 8 (1990) 237–274.
- [34] B.R. Cook, MdL. Melo Zurita, Fulfilling the promise of participation by not resuscitating the deficit model, Global Environ. Change 56 (2019) 56–65.
- [35] N. Marshall, Reforming Australian local government: efficiency, consolidation—and the question of governance, Int. Rev. Adm. Sci. 64 (1998) 643–662.
- [36] R. Hallam, Minister's Review of Local Government in 1995, in: First Fruits of Reform, Minister for Local Government, Victoria, 1995.
- [37] M. Tonts, F. Haslam-McKenzie, Neoliberalism and changing regional policy in Australia, Int. Plann. Stud. 10 (2005) 183-200.
- [38] B.J. McLennan, J. Whittaker, J. Handmer, The changing landscape of disaster volunteering: opportunities, responses and gaps in Australia, Nat. Hazards 84 (2016) 2031–2048.
- [39] Commonwealth of Australia, Background Paper–National Natural Disaster Arrangements to the Royal Commission into National Natural Disaster Arrangements, 2020. https://naturaldisaster.royalcommission.gov.au/system/files/2020-05/Background%20Paper%20-%20National%20Natural% 20Disaster%20Arrangements.pdf. (Accessed 16 September 2021).
- [40] G. Elsworth, J. Gilbert, K. Stevens, C. Rowe, P. Robinson, Guidelines for the development of communication education awareness and engagement programs, in: Manual 45. Commonwealth of Australia: Australian Disaster Resilience Handbook Collection, 2010.
- [41] K.A. Johnston, B. Ryan, M. Talor, Mapping approaches to community engagement for preparedness in Australia, Publ. Relat. Rev. 46 (2019) 101903.
- [42] M. Crosweller, P. Tschakert, Disaster management and the need for a reinstated social contract of shared responsibility, International Journal of Disaster Risk Reduction 63 (2021) 102440.
- [43] J. Whittaker, K. Haynes, J. Handmer, J. McLennan, Community safety during the 2009 Australian 'Black Saturday' bushfires: an analysis of household preparedness and response, Int. J. Wildland Fire 22 (2013) 841–849.
- [44] Victorian Royal Bushfires Commission, Volume II Fire Preparation, Response and Recovery, 2010, Final Report. https://bit.ly/2YEyDm9. (Accessed 21 October 2020).
- [45] AIDR, National Strategy for Disaster Resilience. Community Engagement Framework, 2013, Handbook 6. https://knowledge.aidr.org.au/media/1761/ handbook-6-national-strategy-for-disaster-resilience-kh-final.pdf. (Accessed 1 September 2020).
- [46] J. Handmer, S. O'Neill, Examining bushfire policy in action: preparedness and behaviour in the 2009 Black Saturday fires, Environ. Sci. Pol. 63 (2016) 55–62.
 [47] F. Bowen, A. Newenham-Kahindi, I. Herremans, When suits meet roots: the antecedents and consequences of community engagement strategy, J. Bus. Ethics 95 (2) (2010) 297–318
- [48] Commonwealth of Australia, Royal Commission into National Natural Disaster Arrangements Report, Commonwealth of Australia, Canberra, 2020.
- [49] D. Hurst, Labor Steps up Criticism of Bushfire Grants after Damage Report by Federal Agency Revealed, The Guardian, 2021, February 15. https:// www.theguardian.com/australia-news/2021/feb/15/labor-steps-up-criticism-of-bushfire-grants-after-damage-report-by-federal-agency-revealed. (Accessed 16 September 2021).
- [50] B. Beccari, When do local governments reduce risk?: knowledge gaps and a research agenda, Aust. J. Emerg. Manag. 35 (3) (2020) 20–24.
- [51] Commonwealth of Australia, Report on Government Services: Volume D-Emergency Management Sector Overview, Commonwealth of Australia, Canberra, 2016.
- [52] Inspector General for Emergency Management, Review of Connecting with and Preparing Communities for Major Emergencies in Victoria, Victoria Government, Melbourne, 2016.
- [53] K.A. Johnston, M. Talor, B. Ryan, Emergency Management Communication: the Paradox of Public Communication for Preparedness, Bushfire and Natural Hazards CRC, 2020, Report No. 514.2019.
- [54] B. Ryan, The significance of communication in emergency management: what's changed since 2009? Aust. J. Emerg. Manag. 32 (1) (2017) 24–31.
- [55] ABS, 2016 Census Quickstats—Whittlesea (C), 2017. https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/ LGA27070. (Accessed 16 September 2020).
- [56] B. Pocock, M. Sexton, L. Wilson, Doing More, with Less: Tension and Change at Work in South Australian Local Government. Report of the Equity, Enterprise Bargaining and Employment Outcomes in South Australia Local Government Project, Australian Services Union and the Australian Workers Union, Adelaide, 2001.
- [57] C. Young, R. Jones, M. Kumnick, The Long Road: Building Effective Diversity and Inclusion in Emergency Management Organisations. Case Study Synthesis and Draft Framework Report No. 363.2018, Bushfire and Natural Hazards CRC, Melbourne, 2018.
- [58] AIDR, Community Engagement for Disaster Resilience: Australian Disaster Resilience Handbook Collection, 2020. www.knowledge.aidr.org.au/resources/ handbook-community-engagement. (Accessed 1 September 2020).
- [59] S. Skerratt, A. Steiner, Working with communities-of-place: complexities of empowerment, Local Econ. 28 (3) (2013) 320-338.
- [60] S.N. Lane, C. Landström, S.J. Whatmore, Imagining flood futures: risk assessment and management in practice, Phil. Trans. Roy. Soc. Lond.: Mathematical, Physical and Engineering Sciences 369 (1942) (2011) 1784–1806.
- [61] R. Parsons, We are all stakeholders now, Crit. Perspect. Int. Bus. 4 (2/3) (2008) 99–126.
- [62] R. Cretney, 'An opportunity to hope and dream': disaster politics and the emergence of possibility through community-led recovery, Antipode 51 (2) (2019) 497–516.
- [63] E. Swyngedouw, Apocalypse forever? Post-political populism and the spectre of climate change, Theor. Cult. Soc. 27 (2/3) (2010) 213–232.
- [64] B. Anderson, Governing emergencies: the politics of delay and the logic of response, Trans. Inst. Br. Geogr. 41 (1) (2015) 14–16.
- [65] D. Baines, T. Daly, Borrowed time and solidarity: the multi-scalar politics of time and gendered care work, in: Social Politics: International Studies in Gender, State & Society jxz017, 2019.
- [66] S. Maskrey, S. Priest, N. Mount, Towards evaluation criteria in participatory flood risk management, Journal of Flood Risk Management 12 (2) (2018) e12462.
 [67] B.J. McLennan, J. Whittaker, T. Kruger, J. Handmer, Navigating authority and legitimacy when 'outsider' volunteers co-produce emergency management services, Environ. Hazards (2020), https://doi.org/10.1080/17477891.2020.1727829.
- [68] P. Adey, B. Anderson, S. Graham, Governing emergencies: beyond exceptionality, Theor. Cult. Soc. 32 (2) (2015) 3–17.
- [69] N. Castree, P. Chatterton, N. Heynen, W. Larner, M.W. Wright, The point is to change it: geographies of hope and survival in an age of crisis, in: Antipode Book Series, Wiley-Blackwell, Malden, 2010.
- [70] K. Grove, Adaptation machines and the parasitic politics of life in Jamaican disaster resilience, Antipode 46 (3) (2013) 611–628.
- [71] E.S. Spiro, R.M. Acton, C.T. Butts, Extended structures of mediation: Re-examining brokerage in dynamic networks, Soc. Network. 35 (2013) 130–143.
- [72] T.A. Williams, D.A. Shepherd, To the rescue!? Brokering a rapid, scaled and customized compassionate response to suffering after disaster, J. Manag. Stud. 55 (6) (2018) 910–942.
- [73] C. Archer, K. Wolf, J. Nalloor, Capitalising on Chaos–Exploring the Impact and Future of Social Media Influencer Engagement during the Early Stages of a Global Pandemic, Media International Australia 1329878X20958157, 2020.
- [74] S. Singh, D.R. Wassenaar, Contextualising the role of the gatekeeper in social science research, South African Journal of Bioethics and Law 9 (1) (2016) 42–46.
- [75] MdL. Melo Zurita, B. Cook, D.C. Thomsen, P.G. Munro, T.F. Smith, J. Gallina, Living with disasters: social capital for disaster governance, Disasters 42 (3) (2017) 571–589.

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- [76] A.M. Gillespie, R. Obregon, R. El Asawi, Social mobilization and community engagement central to the Ebola response in west Africa: lessons for future public health emergencies, Glob Health Sci Pract 4 (2016) 626–646.
- [77] H. Reid, S. Huq, L. Murray, Community Champions: Adapting to Climate Challenges, IIED, London, 2010.
- [78] K.A. Johnston, Community engagement: exploring a relational approach to consultation and collaborative practice in Australia, J. Promot. Manag. 16 (1) (2010) 217-234.
- Productivity Commission, Natural Disaster Funding Arrangements. Inquiry Report No. 74, Commonwealth of Australia, Canberra, 2014. State of Victoria, Victorian Emergency Management Reform, White Paper. Victorian Government, Melbourne, 2012. [79]
- [80]
- [81] VicSES, Community Resilience Strategy 2016-2019, 2016. https://www.ses.vic.gov.au/documents/112015/128034/VICSES+-+ Community + Resilience + Strategy + 2016-2019-pdf + -print + friendly + version + - + 2MB-/689981bc-4125-4ed7-9f35-c25b8743e451. (Accessed 1 December 2020).