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Governance and resilience: A case of re-development after a bushfire disaster



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ABSTRACT

The case study on the re-building program of the Victoria bushfire disaster of 7th Feb 2009 provides insights on the relationship between governance structures in post-disaster re-development and the goal of building sustainable and resilient communities. The paper links 'governance' to 'resilience' using Stage VI of Turner's 1976 model as a theoretical lens. A qualitative research strategy was utilized to elicit descriptive qualitative responses from which research goals were addressed. The findings show that the design of governance structures for rebuilding after a disaster impacts the ability to secure resilience. Also, several resilience aspects seem to be impacted by governance issues relating to: the balance between urgency vs. need of space; the role of formal and informal stakeholders; the social-psychological dimension in information sharing as well as entrepreneurial opportunities in rebuilding, and economic sustainability.

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1. Introduction

'Governance' is a key aspect of building 'disaster resilience' (Tierney, 2012; Ahrens and Rudolph, 2006). Governance and disaster resilience both have context specific meanings and create complexity in developing an understanding of the impact of 'governance' on 'disaster resilience'. In this paper, we deconstruct the concepts of 'resilience' and 'governance' to analyze how the latter influence the former in the context of post-disaster rebuilding. We use the Australian bushfire community recovery and rebuilding program after the Black Saturday bushfires of 7th February 2009 as a case study.

Despite a long recorded history of catastrophic bushfires in Australia (see for example, Buxton et al., 2011; Johnson et al., 2012) and decades of collective learning and preparedness in the light of recent disasters in Australia, it is still not possible to address all vulnerabilities. The socio-political and governance perspective, along with multiple social realities and interests, require context-specific understanding of disaster responses which is critical for addressing vulnerabilities and building community resilience. Beatson and McLennan (2011) showed that different contextual issues influence post disaster rebuilding and re-development in the non-urban context. In addition, the urgent requirement for sustainable recovery and re-building has emerged as an important concept in post-disaster discourse (Guarnacci, 2012).

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Governance in the context of this study is proposed as a social coordination mechanism - which are markets, hierarchies and democracy. Governance is not construed as solely procedural, but best conceptualized as 'reflective' in nature through negotiation, consensus, and coordination among stakeholders (Jessop, 1999). Dietz et al. (2003) suggest that governance is partly about human institutions and the way they organize activities affecting the way they build resilience. Dietz et al. (2003) also identify 'adaptive governance' which is about providing information, dealing with conflict, ensuring rule compliance, providing infrastructure and being prepared for change. Berkes and Ross (2013) also suggest community resilience as a system dealing with adaptive relationships and learning in social–ecological systems across nested levels, with attention to feedback, nonlinearity and unpredictability.

Given the foregoing, this paper takes a governance perspective in analyzing issues and dynamics in the disaster recovery and reconstruction phase of the Black Saturday bushfires of Feb 7, 2009 in Australia. This study focuses on the question: How does governance influence community resilience in the context of post disaster reconstruction? In the context of the question the aim of the study is to:

- (1) Analyze the influence of governance as a social coordination mechanism on resilience of post disaster rebuilding using the Australian bushfire community recovery and rebuilding program after the Black Saturday bushfires as a case study; and
- (2) Analyze the nexus and interactions of various stakeholders that define and guide future possible 'resilience' trajectories when rebuilding communities after disaster.

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The rest of the paper is structured as follows: First, we deconstruct the concept of resilience. Second, we define and discuss governance and adaptive governance in the light of Stage VI of Turner (1976a,b)'s model (see Appendix 1). Third, we discuss the conceptual model, research design and method used in the research. Fourth, we discuss findings of the research by highlighting latent issues of competing discourses, human agency, political mobilization as well as path dependencies of the community recovery and rebuilding programme after the bushfires. We also discuss the interactions of a range of stakeholders including government decision-makers and their interests as well as the parameters that define and guide future possible 'resilience' trajectories when rebuilding communities after disaster. Fifth, we summarize the paper and present conclusions based on findings. We also highlight the paper's contributions to theory and implications for policy and practice.

2. Resilience in the context of 'disasters'

Scholars have approached the concept of resilience from a range of disciplines and perspectives such as ecology (Gómez-Baggethun et al., 2012; Turton, 2012; Allenby and Fink, 2005); physics (Woods and Cook, 2006); and mathematics (Gordon, 1978) as well as from a range of social science disciplines (e.g. Linnenluecke, 2015; Weine, 2013; Link et al., 2013; Berman et al., 2012; Comfort et al., 2010; Norris et al., 2008) including organizational studies (e.g. Gibson and Tarrant, 2010). However, while 'resilience' has been an increasingly common theme in academic research, public policy and business practice, its conceptualization and operationalization have been varied across studies (Linnenluecke, 2015). Hence, it may be said that the concept of resilience is diverse in application, and may be understood, and addressed at different levels of analysis and contexts (Linnenluecke, 2015). As a result of such diversity Manyena (2006) and Klein et al. (2003) have argued that in order for resilience to be a useful and valid concept, it is necessary to have a deeper understanding of the origin of the concept and how it is defined, by which variables it is determined, and how it can be assessed, maintained, and improved over time.

In the social sciences, the term resilience is used to describe the capacity of a material, community, or system to return to equilibrium after a displacement. Resilience perspectives have been around for very long, and often used in the context of human communities i.e. 'community resilience' (e.g. Poortinga, 2012; Paton, 2008; Cutter et al., 2008; Godschalk, 2003). Resilience has also been linked in research to other psychological and sociological concepts such as 'human agency', 'collective efficacy' and 'personal efficacy' (Bristow and Healy, 2014; Brown and Westaway, 2011; Bandura, 2000, 2002). Generally, resilience seems to be perceived as a desirable characteristic for a community and its members to possess in order to deal with various types of adversity. The number and value of scientific publications on the study of resilience is immense (Kim and Marcouiller, 2016; Berkes and Ross, 2013; Windle, 2011). As a result, the concept seems to have become central to approaches to addressing all types of disasters, and to embedding resilience in human communities.

2.1. Disaster resilience

The United Nations International Strategy has defined disaster resilience for Disaster Reduction as 'the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, and recover from the effects of a hazard in a timely and efficient manner'. Disaster resilience is similarly defined by the Resilience Alliance as "the capacity of a system to absorb disturbance and reorganize while undergoing change". Norris et al. (2008) defines resilience as "a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance" (p.130).

Doğulu et al. (2016) indicate that resilience in a post-disaster environment is influenced by appropriate recovery services being

distributed through good governance and availability of financial resources and faith. However, resilience is improved by pre-disaster characteristics of awareness, preparedness, mitigation, and social solidarity.

Berkes and Ross (2013) identify two strands of resilience namely, social-ecological systems and the mental health perspective, both converging into community resilience similar to Gibbs et al. (2013) who focused on mental health resilience in the context of social connectedness within the community. We integrate these two domains resulting in a strand that addresses community resilience as: (a) a system concept characterized by adaptation; (b) identification and development of community strengths; and (c) agency assistance and self-organizing capacity. Such integrative approach emphasizes social strength, and connections to place activated by agency and self-organizing.

Other studies identified a number of indicators of resilience, including community resilience such as: social capital and trust, effective communication, collective efficacy, personal efficacy, sense of community and community competency, resource dependency and equality in economic development, place attachment, and leadership (e.g. Norris et al., 2008; Leykin et al., 2013; Khalili et al., 2015; Spialek and Houston, 2016).

Scholars have advocated a broader, deeper and longer term approach to research on resilience. Windle (2011) in his systematic literature review argued for a life course approach to understanding resilience, i.e. examining evidence derived from research across the lifespan of a stressor event 'in order to inform research, policy and practice' (p.152). Windle (2011) also argued for a clear identification of the antecedents, defining attributes, and consequences of resilience (P.152). Through such a process, he defined resilience as the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma along its life cycle. Windle (2011) also argued that across the life course of the management of a stressor, the experience of resilience or lack of resilience would vary, hence his call for a life cycle approach to research on resilience such as a stressor's antecedents.

Windle (2011) critiqued selected research on resilience on the basis that much of it is rooted and developed within the context of responding to the early stages of a stressor event. He argued that a major contribution to resilience research could be made through studies that examine the dynamics of resilience across the whole course or lifespan of an event because resilience is a process. As such, studies need to focus on understanding the mechanisms by which resilience might operate, or fail at different phases of the lifecycle of the stressor event. Boon et al. (2012) and Gibbs et al. (2013) seem to have also taken a similar view to Windle (2011) in this respect.

2.2. Turners model in the context of disaster resilience

Turner's (1976a,b) six stage model on the organizational and interorganizational development of disasters and the sequence model of intelligence failure for the analysis of the origins of disasters seem to be of a similar logic to Windle (2011), Boon et al. (2012) and Gibbs et al. (2013) in taking a phased and/or whole life-cycle approach to the analysis of disasters (see Appendix 1). Turner's (1976a,b) model explores and analyses the reasons for failures in various phases such as foresight, warning, command and control as well as drastic departures from the goals that have been initially set to prevent and manage disaster events. Turner's (1976a,b) model analyses how failures at the various phases of his model contribute to disasters in a prolonged incubation period and provides a valuable context for understanding resilience form different phases to disaster cycle.

Thus, this paper is focused on governance aspects influencing resilience in the context of post disaster reconstruction. It is a first step towards heeding the calls of Windle (2011) and others, and building upon current understanding of Stage VI of Turner's (1976a,b) model.

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