## WE HAVE NOT LIVED LONG ENOUGH: MAKING SENSE AND LEARNING FROM BUSHFIRE IN AUSTRALIA



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### ORGANIZATIONS INCREASINGLY FIND THEMSELVES RESPONDING TO UNPRECEDENTED NATURAL DISASTERS THAT ARE EXPERIENCED AS COMPLEX, UNPREDICTABLE, AND HARMFUL. THIS STUDY EXAMINES HOW ORGANIZATIONS UNDERSTOOD AND LEARNED FROM THESE NOVEL EXPERIENCES BY EXAMINING THREE AUSTRALIAN BUSHFIRES. MY STUDY SHOWS HOW SENSEMAKING AND LEARNING OCCURRED DURING THE PUBLIC INQUIRIES THAT FOLLOWED THESE EVENTS, AND HOW LEARNING CONTINUED IN EMERGENCY MANAGEMENT ORGANIZATIONS.

### INTRODUCTION

- Atmospheric scientists are attributing higher temperatures, wind speeds and moisture deficits to climate change which is cause bushfires in Australia which are more frequent and more damaging.
- Such bushfires continue to prove challenging for emergency management practitioners including government ministers, policymakers, police officers, fire fighters, weather forecasters and geospatial analysts. While often they are well prepared they sometimes struggle to respond when the onset of fires is rapid, unpredictable and on an unprecedented scale.
- Three bushfires (the Black Friday Fires, 1939 (71 lives lost); the Ash Wednesday Fires, 1983 (75 lives lost: 47 in Victoria ad 28 in South Australia); and the Black Saturday Fires, 2009 (173 lives lost) have imposed significant losses and damages on communities across Australia. Nevertheless, and perhaps surprisingly such events have received less scholarly attention than 'man-made' crises in organizational, industrial or political contexts. Hence this study explores how emergency management practitioners make sense and learn from novel situations which unfold from key bushfire events.

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# MODEL 1: PUBLIC INQUIRIES - MAKING SENSE AND LEARNING

- All three fires were interpreted as representing novel conditions that had not been experienced before. Individuals struggled to frame what was going on, recognize cues, and bring their existing knowledge to bear on the situation.
- In each case, the organizations responsible for managing these fires faced conditions that, despite their experience with bushfires, were experienced as surprising, overwhelming, and rare where people who experienced these fires found that the sense of what was unfolding and the means to rebuild that sense collapsed together.
- Inquiry reports argued that such novelty resulted in the failure of exiting systems. Hence the inquiries helped to make sense of the past with a view to safeguarding the future.
- Inquiries resulted in single loop learning (explained what happened and why during each of the fires) and double loop learning (identified the systems that would need to be reevaluated).
- Model 1 suggests that public inquiry sensemaking provides the basis for organizational learning. Initially, sensemaking is high but this decreases as while learning increases. This provides the basis for understanding how sensemaking and learning result in organizational change.

#### MODEL 1: METHODOLOGY

- The reports of the public inquiries were analysed. These reports were augmented with other texts that were related to the 3 public inquiries but produced afterward
- Using Factiva, which is a search engine for newspaper articles, TV and radio transcripts, journals, and so on, I identified 20 publicly available interviews with senior fire fighters, commissioners and politicians, 17 newspaper articles, and four web-blogs. These texts were collected because they provided (albeit subjective) views of whether and how sensemaking and learning occurred both during and after the inquiries.
- An interpretive approach was used toshow how the texts contained evidence of sensemaking and learning and to explore the nature of these processes (see Model 1 above).

### MODEL 2: LEARNING & CHANGE FROM

- At the organizational level, recommendations introduce equivocality.
- Practitioners at each level must embark on understanding what the recommendation means for their organization.
- Practitioners engage insensemaking activities by drawing on their experience and public inquiry artefacts to develop an understanding of recommendations.
- Practitioners engage insensemaking activities such as meetings and fact gathering which enables them to articulate how the organization can learn from the recommendation (initially, sensemaking is high and learning is low).
- Each practitioner group tends to understand the recommendation through their functional orientation. Reconciling these orientations through a process of sensegiving from functional perspectives results in double loop learning whereby the organization is transformed to prepare for future fire events.
- This results in new role identities for practitioners and returns the organization to a sensible state after the disruption caused by a bushfire event.



#### MODEL 2: METHODOLOGY

- 72 interviews with practitioners who had lived through the Black Saturday Fires.
- Using MAX QDA (a qualitative data analysis tool), I developed theoretical categories from interview transcripts that showed how learning emerged from sensemaking by practitioners.
- An interpretive approach was used to analyze how practitioners made sense of the recommendations (which related to Victoria's safety policy, planned burning and land use planning) and how these recommendations resulted in learning and change (see Model 2 above).

#### OVERALL CONCLUSION

- Sensemaking and learning cues (stimuli that gain attention and engender action) from recommendations played a key role in guiding and helping practitioners to identify the changes that they would need to make to their organization to prepare better for the future.
- Finally this research has implications for how future inquiries should be conducted to encourage better learning benefits from major bushfires that can be more effectively transitioned into emergency management organizations by emergency management practitioners.



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HFIRE AND NATURAL HAZARDS CRC 2015

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