

Acknowledging structural variances of communities to aid in communicating risk information

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Given the serious risk that bushfire poses to Australian communities, an understanding of how people mobilise social networks as resources for dealing with the threat of bushfire is crucial. Social networks as an object of study constitute the pathways through which people offer and obtain information, forge relationships and engage in pursuits or interactions. These networks indicate ways people are able to process and share significant information, thus highlighting avenues for safety agencies to best reach target audiences and effectively provide emergency services.

The primary focus of this paper centres on methods to communicate future risks, by discussing two outcomes of combining applied anthropological methods with the discipline of Emergency Management. Using field data obtained from a comparative ethnography conducted in two different Victorian (AU) regions, these outcomes include:

- 1) evidence of network constructions in bushfire-risk areas that are highly influenced by elements of physical and social landscapes, and
- 2) presentation of insights on selection processes that influence how people (in these particular landscapes) are able to share, receive, and importantly, accept, different types of information.

These outcomes indicate the significance of assessing at-risk areas independently, as social landscapes will differ in construction despite similarities or differences in physical environments.

Introduction

Ah, “risk”. A term that can be applied to a variety of settings, contexts and magnitudes, yet suggests one overarching certainty – there exists a looming problem, which may, one day, need to be addressed in order to mitigate a negative impact (Blaikie et al., 1994; Douglas and Wildavsky, 1983).

With all the potential for “risk” that exist in our lived environments, how do Emergency Managers communicate the gravity of potential risks, and discuss the most appropriate mitigation methods available (Beer et al., 2004; Clarke and Short, 1993; Caplan, 2000)? This paper addresses the very issue by discussing two outcomes of combining qualitative, applied anthropological methods with the discipline of Emergency Management. These methods include a comparative ethnography, where qualitative data was collected through the use of semi-structured interviews and participant observation. Utilising comparative, qualitative research assists technical and applied disciplines with understanding social behaviour in different settings, providing insights into how people experience and interact with the environments around them (Ely et al., 1997; Goetz, 1981; Ritchie and Spencer, 1994; Silverman, 2004). The following discussion presents the significance of acknowledging structural variances of community networks, which suggests that social landscapes will differ in construction despite similarities or differences in physical environments. Using this approach demystifies the issue of how to communicate risks by eliminating the idea that Emergency Management occurs in a vacuum, set apart from ongoing social processes (Buckle, 2001; Head, 2007; Houghton et al., 2006). Communication is an animated practice that evolves with the surrounds, and as such, is an empirical process that should be addressed with a flexible approach. It is as fluid and unique as the people we meet, and most effective when social variables are taken into account. Though the fundamental complexities involved in such an adaptive approach are likely to be many, I recognise the need for Emergency Managers to create standards for quality control. However, it is imperative that aspirations for standardised approaches should not overshadow the latitude necessary for a range of fluid approaches (Betts, 2007; Walia, 2008).

The methods for analysis included using field data obtained from a comparative ethnography conducted in two different bushfire-risk regions in Victoria, Australia. The dual outcomes of this component of the research study focus on: 1) evidence of network constructions in bushfire-risk regions that are highly influenced by elements of physical and social landscapes; and 2) presentation of insights on selection processes that influence how people, in these particular landscapes, are able to share, receive, and importantly, accept, a myriad of information from others. These outcomes address what I consider to be structural variances of communities, which are differences in the ways social networks are structured, and how these structures are influenced or utilised (Huber, 2012; Vayda, 1983). Significantly, researching structural variances discerns the multitude of vital and influential impacts that social networks can have on the way people position themselves relative to environments.

Commencing with the first outcome involving network constructions, I present two key social landscape characterisations that arose from the field, where comparative, regional-level analyses provided examples of relationships observed in these areas. These characterisations establish a foundation for discussing what it means to be “connected”

within and across such varied social landscapes. Unique differences have assisted with the comparison of the two areas, allowing for the examination of each to develop as a region of “fractures” or a region of “enclaves”, respectively. As this paper focuses on the types of network connections established in these social landscapes, detail on how to analyse character landscapes is not as essential to this discussion as is emphasising the more critical import of defining *selection* (Site One fieldnotes: 10 August, 2010 - 30 January, 2011; Site Two fieldnotes: 16 March, 2011 - 20 August, 2011).

The process of selection is how people become a recognised part of a particular social landscape (Bogenhold, 2013; Dijkstra et al., 2013; Lennon et al., 2012; Morrill et al., 2007; Steglich et al., 2010). Stated plainly, selection defines how people become engaged with one another, and to what level those engagements occur, which, in turn, can improve our knowledge of how to interact and engage more proactively in different types of community structures we encounter. In this particular analysis, the processes of inclusionary and exclusionary selection were identified as the primary modes of selection. These modes indicated how people from the two fieldsites engaged with others and subsequently defined their social networks. The awareness of these approaches, in a broader sense, can indicate prevailing modes of selection in other areas that share similar patterns of network construction and character qualities (Morrill et al., 2007; Site One fieldnotes: 10 August, 2010 - 30 January, 2011; Site Two fieldnotes: 16 March, 2011 - 20 August, 2011).

Through the exploration of these two outcomes, the data reveals how people make associations within and across different types of social and physical landscapes. By acknowledging and employing these outcomes, Emergency Managers can potentially adjust their approaches to communicate risk, by improving their knowledge of how to interact and engage with people when manufacturing and communicating vital risk information (Melhuus et al., 2009).

Comparative context and key terminology

It is likely not surprising that once compared, the data collected from the two different bushfire-risk fieldsites were noticeably distinct in regional character (ABC News, 2009). It may, however, be less immediately obvious to suggest that data collected from *within* these regions was just as disparate. Often it may be presumed that a uniform character applies across a particular regional area. Yet this generalisation can only apply on the surface until inconsistencies become visible. Generalising for a single geographic region is no more plausible than generalising between two obviously different regions. Thus, the issue of how to “communicate” risk in any particular region should avoid conventional labels attributed to the geography of that area, looking instead at the holistic character landscape of any particular region. For though technical risks may be consistent within and across physical environments, the way people understand and respond to the presence of those risks are experienced differently among accompanied, yet ultimately varied, social structures (Beggs, 1996; Clarke and Short, 1993; Rogers, 1992; Van den Eeckhaut et al., 2010).

From the data collected throughout the comparative analysis, the first fieldsite was classified as having a “fractured” character, whilst the second embodied a character of “enclaves” (Site One fieldnotes: 10 August, 2010 - 30 January, 2011; Site Two fieldnotes: 16 March, 2011 - 20 August, 2011). Bear in mind that that whilst I discuss qualities and characteristics of social and physical landscapes that may have implications for similarly defined areas, no two

spaces will ever be exact replicas. Nevertheless, they can replicate and display uncanny similarities that *guide* our awareness and the resultant communicative approaches when engaging people in other areas. Furthermore, there are likely to be additional classifications of character structures observed in other regions besides that of “fractured” and “enclave”, which is why any approach to communicating risk must be flexible in development and application. That aside, certain network influences that establish and maintain the character developments taking place in any two areas may become visible through identification of analogous qualities. And those common threads can inform appropriate understandings of how relationships manifest within related regions and/or communities (Barnes, 1972; Epstein, 1969; Paton et al., 2008).

Furthermore, when referring to “community”, this term is reflective of an abstract social structure that develops through the connection of individuals, and these networks are not constrained by a particular location or space. Though communities can often overlay or be associated with physical boundaries (i.e. towns, geographical regions, etc.), they are not limited to these margins (Dickinson, 2012; Lewicka, 2010). As I explore the structural variances of communities as identified from the data analysis, each landscape is discussed from observations recorded in a physical place, but is expected to overlay and extend across multiple physical boundaries.

Outcome One: Variances in network structures

Having established a baseline context for understanding terminology, I move on now to discuss critical elements of the findings, where Site One outwardly presents the appearance of a united front. This means that collectively, the area maintains the appearance of a uniform lifestyle quality and ideology. Upon closer inspection, however, there exist rifts in the communicative structures of the region, lending this region to be considered “fractured”. This is observed through the existence of what can be considered a “local divide” – a discernable gap in the perceived “community”, between those who are considered vested in the area (i.e. resident and home-owners) versus those who traditionally are presumed to have minimal vested interest (i.e. tourists, holiday-seekers) (Site One fieldnotes: 10 August, 2010 - 30 January, 2011). Further polarisation occurs among the “vested” side of the local divide, with exclusive cliques or clusters forming within the broader social landscape, supporting the “fractured” identifier on an even deeper level (Gross and Brown, 2006; Mitchell, 1969; Scannell and Gifford, 2010, Site One fieldnotes: 10 August, 2010 - 30 January, 2011).

In fractured communities, connections within social networks are limited, and in some cases entirely closed between people who are aware and have often acknowledged the existence of others. There are groups, or associations, of people that congregate or associate with this specific area, but have further narrowed, or fractured, their associations within their own networks. This description portrays how abstract fractured regions display limited movements between social network structures despite witnessing and initially acknowledging those pervading amongst them (Barth, 1969; Laumann, 1976; White, 2011).

In Site Two, a constant stream of “unknown” inhabitants and visitors silhouette movements of social networks in this area, allowing membership to remain relatively anonymous. This idea of anonymity suggests that people are overlooked from the outset. In contrast to Site One, people in this region are relatively unaware of the movements of others, establishing connections through purposeful involvement via similar ideas and/or activities. This type of

structural engagement defines this particular area as a region of “enclaves” (Site Two fieldnotes: 16 March, 2011 - 20 August, 2011).

Enclave communities are areas where the platforms for establishing and maintaining connections are not predicated on the mere presence of people, who would otherwise remain relatively autonomous. Instead, enclave communities are defined through membership of select factions that share and engage in specific interests and pursuits. These areas are defined by a dependence on developing enclaves, for the anonymous character of the area inhibits awareness of others’ movements. Thus, associations are created on the basis of shared interests, and connections must be *accepted* in order to broaden the span of any community structures (Brown et al., 2003; Coombs, 1973; Holloway and Jefferson, 2004).

In review, fractured communities are areas where people generate network divisions that require a certain level of navigation to engage. In contrast, enclave communities are spotted with specialist areas of membership, which require access before any sort of navigation ensues. Importantly, the existence of variations in how people engage with different types of network structures indicates that - a) by acknowledging that variations in structures exist; and b) by observing how people make associations within and across different types of regions - Emergency Managers can improve their knowledge of how to interact and engage more proactively with people in different types of community structures.

Outcome Two: Variances in modes of selection

Having identified the importance of the structural variations for understanding how people engage with others and their environment, the next issue to address is how acknowledging the existence of various regional structures matters, especially in regards to communicating risk. This outcome is of critical significance because identifying how relationships are established and maintained in different regions indicates the prevailing methods of social *selection* employed in those regions (Passy and Giugni, 2001; Silberbauer, 2003).

Selection, in this context, can be understood as the process through which people define or become a part of the social landscape (Bogenhold, 2013; Dijkstra et al., 2013; Lennon et al., 2012; Morrill et al., 2007; Steglich et al., 2010). Stated plainly, selection defines how people become engaged with one another, and to what level those engagements occur. There will of course be many layers and levels of selection occurring simultaneously, for the operation itself is perpetual and occurs at any stage where networks and environments converge, regardless whether the persons in question are new to the social landscape or have been part of the social landscape for a significant period of time. Yet for the purpose of explaining the process in its purest form, I will only elaborate on selection in a singular state.

Focusing on modes of selection employed within the frameworks of “fractured” and “enclave” communities, I now present the relevance of exclusive and inclusive selection. Of note, there should not be any negative connotations associated with the nomenclature of the terms, for though the words “exclusionary” and “inclusionary” can suggest certain levels of social acceptance in different contexts, this is not the case for this discussion. The application of these terms is indicative only of how the process of selection is employed, as opposed to how members are viewed by others in any network.

In the case of a “fractured” community (as observed in Site One), selection processes are marked by a tendency towards *exclusionary selection*, where a particular social landscape defines membership through the closure or limitation of networks (Site One fieldnotes: 10 August, 2010 - 30 January, 2011; Site Two fieldnotes: 16 March, 2011 - 20 August, 2011). Exclusionary selection is defined by an initial acknowledgement of one’s presence in the social landscape, followed by the passive assessment that a member’s presence is/is not distinguished among the social landscape. In this sense, the selection process is exclusionary because members are included in the social landscape until they are not. This suggests that selection is based on the identification of those who can or cannot remain a part of the social landscape in the same way as initially defined (Dijkstra et al., 2013; Lewicka, 2005; Stratford, 2009).

This form of selection is best understood through the following example, from the vantage of an existing resident living in a particular region. Participant A – hereafter referred to as Sally - became a resident of a town five years previously, and immediately felt right at home, becoming an active member of many social groups, one in particular being a member of the “community” group charged with local social event planning. Things began to shift however once Sally’s spouse took on a new job that required a significant amount of travel, impacting how often Sally could take part in her usual planning activities, as her attention was dedicated more towards managing responsibilities at home. As a result, the planning team no longer called upon Sally. This omission from subsequent planning activities and social contact with members of that perceived “community” highlights the process of exclusionary selection, as Sally was no longer considered a vital member of that group. Significantly, this exclusion occurred only in *one* aspect of her regular social interactions, and her involvement with the other social groups mentioned previously remained consistent.

This illustration demonstrates how Sally became “excluded” from one particular faction once there was a reduced need or desire to have as direct a role in the social landscape. She was part of the structure until it was deemed she could no longer be recognised by the network in the same way as before.

In the case of enclave communities (as observed in Site Two), where members are essentially autonomous and rely on areas of compatibility to become part of the social landscape, the process of selection is quite different. In these instances, membership is not presumed at the outset. Instead, all people are initially treated as equally detached from the landscape. Becoming part of the social landscape requires an active engagement. This form of selection is considered an inclusionary process, where people need to solicit or be drawn in/encouraged to become embedded in the social landscape. Those who actively seek or respond to opportunities for connections are, subsequently, *included* (Dijkstra et al., 2013; Lewicka, 2005; Site One fieldnotes: 10 August, 2010 - 30 January, 2011; Site Two fieldnotes: 16 March, 2011 - 20 August, 2011; Stratford, 2009).

To illustrate this form of selection, I present an example from the view of an initial engagement within a generic social landscape. Participant B - hereafter known as Harry - frequents the same café every morning over a three-month period. Harry exchanges pleasantries with staff and patrons, but does not become directly engaged with anyone in that particular network. One day Harry asks a staff member if they know where he could go to hear live music. The staff member tells Harry where to go, and invites him to come to the

next live music showcase scheduled the following Wednesday, for which Harry happily complies.

In this scenario, it was not enough for Harry to simply be present on a repeated basis for him to become part of the social landscape. It was only when there was an *active* attempt made to engage within the social landscape that an invitation was extended, and Harry was included. Thus, inclusionary selection is observed through his deliberate appeal for membership and the staff member's reciprocation through inclusion.

Identifying selection processes enables outsiders to understand ways target audiences engage with one another. This is a vital outcome for the issue of sharing risk information, as methods of dissemination and sharing can potentially be adjusted to suit the prevailing forms of selection in any particular area. For this research study, the prevailing modes of selection were exclusionary and exclusionary. Thus, when these modes are understood relative to the prevailing social landscape, others can better identify and navigate through limited networks (in exclusionary contexts) or actively source direct engagements with organised networks (in inclusionary contexts), thus establishing effective, meaningful connections among specific target audiences.

Conclusion: Acknowledging structural variances to aid in communicating risk information

Given the serious risk that bushfire poses to Australian communities, an understanding of how people mobilise social networks as resources for dealing with the threat of bushfire is crucial (Hughes and Mercer, 2009). Social networks as an object of study constitute the pathways through which people offer and obtain information, forge relationships and actively engage in pursuits or interactions (Heimer, 1998). These networks indicate ways people are able to process and share significant information, thus highlighting avenues for safety agencies to best reach target audiences and effectively provide emergency services.

In summary of the outcomes discussed today, key differences in the abstract structures of regions are useful to identify how networks are constructed in different regions. Additionally, the selection of networks, defined as either exclusionary or inclusionary in this comparative study, can indicate the best methods for reaching target audiences.

This research is thoroughly significant in an applied sense because it recognises the complexities that face many Emergency Managers and contributors as they try to construct a single, generalised way of communicating interactively with the public (Bravo et al., 2012; Kamuya et al., 2013). Specifically dealing with the communication of bushfire risk and mitigation measures, this research calls attention to where problems often arise in the transmission and absorption of risk information, signalling prospective ways to address communication of these issues.

Principally, this paper has sought to broaden our understanding of how communicative processes are established and utilised within particular settings, and has revealed that by understanding how people make associations within and across different types of regions, Emergency Managers can improve their knowledge of ways to interact and engage with people in those areas when manufacturing and communicating vital risk information.

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