

Working Papers in Sustainable Organisations and Work

**Gender matters: Applying a
gendered analysis to bushfire
research in Australia**

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Centre for Sustainable
Organisations and Work

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Bushfire Discussion Paper Edition



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Bushfire Discussion Paper - Edition No.1

This Working Paper is part of a three-year (2010-2013) research initiative led by the Centre for Sustainable Organisations and Work for the Bushfire Cooperative Research Centre (CRC). This special edition represents the first in a series of papers which seek to identify and explore literature relevant to the 'Effective Communication: Communities and Bushfire' project.

Further information about the Bushfire CRC, including details of other research projects and initiatives, can be obtained from <http://www.bushfirecrc.com>

The Effective Communication: Communities and Bushfire Project

Effective communication is dependent upon the degree of social cohesion or fragmentation that characterises a community. This project explores community networks and how they may facilitate the understanding of, and response to, communication.

The Effective Communication: Communities and Bushfire Project aims to:

- Increase community resilience to bushfires by developing a robust and analytic understanding of cohesion and fragmentation.
- Shape communication strategies, preparedness education, messages and delivery modes to increase bushfire preparedness.
- The themes will be addressed in 12 case study sites across four states.

The project will generate critical knowledge and theory of effective strategies and options for communication in bushfire-prone communities as well as provide an understanding of the bases of community and its mobilisation around risk.

The Effective Communication: Communities and Bushfire research team can be contacted via Sam Carroll-Bell on (61) 3 9925 5940 or sam.carroll-bell@rmit.edu.au

The Bushfire Discussion Paper Editions

This discussion series aims to identify and explore key literature that is relevant to the Effective Communication: Communities and Bushfire Project. The series will cover a variety of research areas including, community, communication, the urban-rural interface, education, gender, resilience, knowledge management, and the State and power. Each discussion paper will include an overview of the relevant leading academic literature in a particular area, evaluate international debates, and relate these back to the Australian context.

The aim of the series is to provide a theoretical and conceptual base for the Effective Communication: Communities and Bushfire Project as well as facilitating the publication of the project's outcomes. The discussion papers are to be written and structured in such a way that they will be accessible to end-users, agencies and policy makers. Finally, the series also aims to provide a basis for debate within the academic study of bushfire and the social sciences more broadly.

Gender matters: Applying a gendered analysis to bushfire research in Australia.

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Introduction

The study of gender and associated questions about the social construction of masculinity and femininity have become established as important elements of social science research. While gender has often been a focus in disciplines such as sociology and anthropology, the social construction of gender is now analysed in areas ranging from criminology to international political economy. The importance of gender is also recognised in the trend towards 'gender mainstreaming' evident in many national and international policy discourses (Walby 2005). Disaster studies adopted the use of gendered analysis quite late, however, and it was not until the late 1990s that the influential collection *The Gendered Terrain of Disaster* (Enarson & Morrow 1998) was published. Since then, there has been a steady increase in international literature dealing with the relationship between gender and disaster. Australian research on bushfire has yet to make use of the insights from this literature and this discussion paper offers ways in which a gendered analysis of bushfire in Australia might be developed.

There is a very limited amount of work which mentions gender in the context of bushfire in Australia (Poiner 1990; Cox 1998; Beaston & McLennan 2005; Beaston et al. 2008; DeLaine et al. 2008; Maleta 2009; Eriksen et al. 2010) and, for the most part, gender is a peripheral rather than central theme (cf. Eriksen et al. 2010). Given the lack of available research dealing with the Australian context, this discussion paper draws on two other major areas of literature that are likely to provide the most suitable frameworks for applying gendered analyses. The first is the critical, academic literature on gender and disaster which is still rather limited in volume but has strong conceptual grounding. The second is literature on gender and rurality which is fed by the disciplines of

rural sociology and gender studies. Both are relatively new areas of academic interest and feature significant research gaps which would be suitable for further study. This discussion paper aims to draw on the international literature regarding gender, disaster, masculinity and rurality and suggest ways in which insights from these areas may be used to better understand bushfire preparedness, communication, response and recovery in Australia as well as avenues for future research. The latter sections of this paper offer ways of developing a theoretical framework to understand how and why bushfire preparation, response and recovery are heavily gendered in the Australian context. This aims to move beyond simply looking at women and bushfire, and instead adopting an understanding that gender is fundamentally relational. This approach means men and masculinity must become part of the analysis as well. The paper concludes by considering how bushfires in Australia have become socially constructed as 'men's business'.

Gender and disaster

A distinct theme in social science writing is developing an understanding of the way social life is constructed by relations between people and social entities. Hence, the study of gender and disaster draws attention to the way that men and women deal with, and prepare for, a disaster event and its aftermath. The academic literature on gender and disaster is still relatively new. In one of the first comprehensive edited collections in the area, *The Gendered Terrain of Disaster: Through women's eyes* (Enarson & Morrow 1998), there are frequent references to the dearth of available research in the area. While an increasing amount of literature has been published in the intervening decade or so, the literature dealing with affluent or developed nations still tends to focus on specific case studies of discrete disaster events and 'the individual woman and her socially constructed vulnerabilities – especially those that are psychological...' (Enarson 2009, p. xvi). This is often at the cost of considering the wider cultural construction of men's and women's roles in a given society and an understanding of gender as relational. Indeed, research into gender and disaster in affluent nations lags significantly behind research dealing with gender and disaster in the developing world.

This lack of research on the structural aspects of gender and disaster in developed nations is certainly reflected in the very limited literature on gender and bushfires in Australia. While there has been some attempt to make room for 'women's voices' and consider women's experiences of

bushfire in Australia (e.g. Cox 1998), there has been almost no attempt to understand how this relates more broadly to the social construction of gender and the institutionalised inequality between men and women particularly evident in rural areas (cf. Eriksen et al. 2010). However, the relationship between the social construction of gender inequality and its relevance to disaster has been explored further in other research, most often that which is focused on disaster response and recovery in developing countries (Enarson 2009). Overall, the available research suggests that women are more vulnerable to the effects of disaster and the various dimensions of this are explained in the following sections.

There is evidence to suggest that, globally, women are at greater risk from the effects of disaster. It is often theorised that this difference stems from institutionalised inequalities between men and women which leave women more vulnerable in a number of ways. Enarson and Morrow (1998) suggest that there are important gender dimensions to the following nine stages of disaster:

1. Exposure to risk
2. Perception of risk
3. Preparedness behaviour
4. Warning communication and response
5. Physical impacts
6. Psychological impacts
7. Emergency response
8. Recovery
9. Reconstruction

Of particular interest in this discussion paper is how the existing trends in research regarding each of these phases either highlights or contradicts trends evident in the available research on Australian bushfires.

Risk

Both exposure to risk and risk perception have been explored to some extent in the literature on gender and disaster. It is important to note that rather than emanating from any innate or biological differences between men and women it is likely that differences in risk perception and risk exposure are a result of socio-political factors (Finucane et al. 2000). That is, the social construction of gender norms means that women are often especially

vulnerable in emergency situations. This is particularly evident in developing nations where women are significantly over-represented in natural disaster death-tolls (Ariyabandu 2009). This can be due to a range of factors, including gendered restrictions on movement in public, dress codes, access to information and child-caring responsibilities (Enarson & Morrow 1998). But women's increased vulnerability has also been documented in wealthier nations such as Japan, where women, particularly socially marginalised women – such as single mothers – are more likely to be injured or killed during earthquakes (Masai et al. 2009). In contrast, this pattern of women's increased vulnerability is not reflected with regard to bushfire in Australia where, over the last hundred years, it is men who have been over-represented in death-tolls (Haynes et al. 2010).

Significant gendered differences in risk perception have also been documented in international disaster research, and it is possible that a clearly delineated division of labour, especially in regard to women's care-giving responsibilities, tend to make women more risk averse. Stemming from this, some scholars and disaster relief agencies argue for recognising and enhancing the importance of women's role as risk managers (Enarson 2009). In the Australian context, however, rather than trying to promote or harness women's tendency to be risk averse in the context of bushfire, there is evidence that women are encouraged to learn and re-create more 'masculine' risk-taking behaviour (e.g. DeLaine et al. 2008). That is, women are seen as needing to be taught 'correct' risk perception rather than recognising that, due at least in part to the social construction of gender, men and women often have differing perceptions of risk. There is no program of note at this stage, however, which confronts the construction of men's role as risk takers. This gap fits with existing critiques about the common gender-blindness of disaster research and policy in the developed world (Fothergill 1998; Enarson & Meyreles 2004; Enarson 2009) as well as the invisibility of masculinity as a social construct more generally (Campbell & Bell 2000). This is an important avenue for future research and is discussed in greater depth in the next section.

Preparedness and communication

Alice Fothergill notes that 'there is limited data on women's role in [disaster] preparedness on the community level' (1998, p. 15) but that gendered differences in preparedness are clearly evident at the level of the household or family unit. For a number of reasons (connections outside the household,

gendered division of labour, literacy etc.), men in a given household often have greater knowledge of formal emergency procedures than women, making them better prepared in a disaster event. Why there is a lack of knowledge transfer within the family / household unit is rather unclear. The lack of knowledge transfer on the domestic level is likely to apply to some extent in the case of Australian bushfires and household preparedness, especially as bushfires are traditionally seen as 'men's business' (Poiner 1990; Eriksen et al. 2010).

There are also examples from disasters in the developed world of a gendered preference for the type of disaster preparation. The evidence, mostly from instances of floods and earthquakes – although supported by case studies of forest fire as well – indicates that women are much more likely to favour preparation for evacuation, while men are more likely to want to stay in an area of danger (Scanlon et al. 1996; Bolin et al. 1998; Mozumder 2008). Women's preference for evacuation has been similarly noted in work on bushfires in Australia (Proudley 2008) but this has not yet been supported by extensive data or in-depth research.

Warning communication also has several gendered elements, some of which may relate to Australian bushfire preparedness and response. Communication between formal organisations and citizens can pose a significant problem with regard to disasters. In places where illiteracy rates are still high, for example, women are much more likely to be illiterate and are therefore left especially vulnerable in disasters due to a lack of official warnings or a lack of understanding of available official warnings (Ariyabandu 2009). Even in instances where the warnings may potentially be understood by women, there are issues of access as official warnings are often distributed by men, in public spaces, dominated by other men (Chakrabarti & Walia 2009). On the other hand, the 'material illustrates that women are more likely to receive risk communication, due to their social networks' (Fothergill 1998, p. 16). In both developed and developing countries, it appears that if women do receive and understand disaster warnings that they play an important and often unrecognised role in spreading the message through informal social networks (Enarson 2009). Women, especially wives, can be a crucial link in risk communication between the family unit and the community (Fothergill 1998). Again, this may be a useful area for bushfire research related to communication and community.

Different expectations and restrictions on men and women can also impact upon responses to disaster warnings. Women's vulnerability is exacerbated in this sense by common cultural restrictions on women's movement in public spaces (Baden et al. 1994). In some instances, particularly in heavily religious areas, rural areas, and less affluent countries, women may even be prevented from responding appropriately to a disaster warning. For example, in some areas due to gendered social restrictions, if women do not have a male relative to accompany them they are left house-bound and unable to evacuate (Ariyabandu 2009). More evident in affluent or developed nations is the issue of women's status in relation to family or household decision-making after a disaster warning. Women are more likely to respond to disaster warnings with protective actions such as evacuation but it is men's preferences that generally have the strongest influence on family decisions. That is, while it is common for women to be more likely to favour evacuation than men, when there is disagreement in a household and a male member of a family (especially a husband) does not want to evacuate, his decision is the overriding one (Fothergill 1998).

The gendered preference for evacuation (mainly women) or remaining in the danger area (mainly men) is certainly relevant in terms of bushfires in Australia. The available research on bushfire related deaths resulting from *The Black Saturday Fires* in Victoria, for example, shows a notable difference between women's desire to leave during a bushfire threat and men's desire to stay and defend the family home. In a number of reported incidences, disagreements between men and women over the appropriate response to a bushfire event resulted in the eventual decision to stay in an area of danger. Many of these instances resulted in individual deaths and in some cases even the death of entire families (Handmer et al. 2010). The gendered element of this decision-making process and its consequences are yet to be explored in any depth in academic literature and seem particularly important to pursue in the context of Australian bushfires.

Physical and psychological impacts

There is less literature on women's experiences of the physical effects of disaster and how this may differ from men's experiences. There is evidence that women, globally speaking, are more likely to die as a result of natural disasters, although there is notable gender variation in mortality and morbidity depending on the type of disaster and the location (Fisher 2009, p. 339). Following the Asian tsunami in 2004, for example, women made up as much

as 80 per cent of the dead in certain parts of Indonesia, India and Sri Lanka (Ariyabandu 2009, p. 11). Here too, the marked difference can be seen as related to gendered expectations and inequalities. In case studies of the tsunami, women's often cumbersome traditional clothing, lack of swimming skills, and attempts to carry children and others to safety, were significant contributors to the higher death-toll for women (Ariyabandu 2009). Women's overall lower socio-economic status has also been seen as a factor in higher female death-tolls in earthquakes, for example, where women, especially single mothers, have been found to be more likely to live in sub-standard housing (Masai et al. 2009). The higher mortality rate for women, however, does not hold in the case of Australian bushfires. While the rate of women dying in bushfires has increased over the last 50 years in Australia, and the rate of men dying has decreased, men are still significantly over-represented in civilian bushfire related deaths (Haynes et al. 2010). This is an interesting point of difference and requires further investigation.¹

There has been slightly more written about the psychological effects of disaster on women and again, women's greater vulnerability in this area is often linked to greater care-giving responsibilities (Fothergill 1998; Reinsch 2009). Women are believed to experience higher rates of post-traumatic stress after disasters and this may be a result of the psychological burden of looking after the emotional and physical wellbeing of other family members. The gendered division of care-giving responsibilities is therefore thought to contribute to a higher rate of mental stress and even mental illness among female survivors of disaster (Ollenburger & Tobin 1998).

There is also a significant lack of research on men's psychological distress after disasters and the effects that constructions of masculinity may have on help-seeking behaviours. It is also possible, for example, that mental distress and mental illness are under-reported among male survivors of disaster events due to cultural expectations surrounding masculine norms and emotion. This may make the gendered differences in rates of mental distress appear greater than they actually are (Ollenburger & Tobin 1998). At this stage, the possibility of gender differences in post-disaster psychological experience has not been systematically explored in the context of Australian bushfires.

¹ Speculatively, this may be because over the past 100 years, with the exception of some extreme bushfire events, a house has been a relatively safe place to stay (Handmer & Tibbits 2005). As the house / family home is constructed, particularly in Australian rural communities, as 'women's domain' and the outdoors / nature as 'men's domain' (Poiner 1990) this may have made men more vulnerable to death as a result of bushfire. In other instances of natural disaster, however, women's connection to the house or restrictions on leaving the house have made them more vulnerable to the effects of disaster.

Response, recovery and reconstruction

Gendered differences in emergency and disaster response have received considerably more attention than other phases of disaster. Across both developed and developing nations there is a noticeable trend of men making up the bulk of official disaster / emergency response efforts while women's contributions remain largely informal (Fothergill 1998; Ariyabandu 2009; Mishra 2009). This gendered division of labour has resulted in a lack of recognition of women's contribution to emergency response efforts, an issue that is currently being addressed in research and policy in developing countries but is notably still absent in most policy approaches in the developed world. The gendered division of labour is clearly evident in the example of Australian bushfire emergency response. Bushfire response agencies are overwhelmingly male dominated, with women making up less than a quarter of volunteers in Australia (Beaston & McLennan 2005). Furthermore, these volunteers are mostly placed in non-operational or supportive roles (Beaston & McLennan 2005). Indeed, the emergency management sector could accurately be described as an 'old boys' network' in many countries (Scanlon 1998) and Australia is no exception (Fothergill 1998, p. 16; Robertson 1998). Not only does this make women's (generally) informal contributions largely invisible, it also tends to exclude women from the types of formal education and training which may help them prepare for and survive a disaster event.

In terms of recovery and reconstruction women's role cannot be overstated (Enarson 2009). There is generally an increased burden of care-giving in the recovery and reconstruction phases and this is disproportionately shouldered by women. The often informal processes of rebuilding a sense of safety, community and resilience are also largely undertaken by women (Fothergill 1998). The post-disaster disruption of daily life is similarly thought to disproportionately affect women as domestic life is often disrupted to a greater degree than (paid) working life. That is, the disruption to housing arrangements or household activities often continues long after most members of the community who are in paid employment have returned to work. As women are more likely to be responsible for the domestic life of the family unit, the disruption of the disaster may have longer-lasting consequences for women. Women are also particularly vulnerable to domestic violence during the recovery phase (Wilson et al. 1998; Houghton 2009). At this stage there appears to be no academic research into women's experiences of domestic violence after bushfire events in Australia despite the appearance of an increasing amount of international literature that focuses

women's vulnerability to violence after disaster. There are, however, anecdotal accounts from newspaper reports about an increase in men's violence against women following bushfire events, including Black Saturday (Bachelard 2009).

Summary

In summary, the structural inequalities of gender need to be taken into account in order for a more accurate and comprehensive understanding of disaster preparedness, response and effects to be achieved. There are several areas of possible research into Australian bushfires in relation to the existing literature on gender and disaster. Firstly, while women globally are at greater risk of death from disaster, this is not the case in regard to Australian bushfires specifically. Why men are more likely to die during a bushfire event and why the number of men dying in bushfire events is declining while the number of women is increasing, are certainly areas which warrant further investigation. Secondly, the gender differences in regard to preference for evacuation have been noted elsewhere in the international literature but are yet to be fully explored in the context of Australian bushfires. This area is likely to be especially relevant to the recent Royal Commission into the Black Saturday bushfires in Victoria and the associated reviews of household decision-making processes and the official 'stay or go' policy for bushfire preparedness. Thirdly, there is a greater need for research which investigates women's contributions in bushfire events. Some work has been done on women's marginalisation in formal agencies, for example, volunteer fire brigades (Beaston & McLennan 2005), but little has yet been written on how women do actually contribute in more informal ways. This dearth of local research is out of step with the international literature on disaster preparation and response which has moved towards recognising women's roles and highlighting their importance as communicators and risk managers (Enarson 2009). Fourthly, there appears to be no academic literature on women's vulnerability to domestic violence after bushfire events in Australia. This should be an important area for further research and policy development especially given the international literature which suggests women are especially vulnerable to domestic violence in the recovery and reconstruction phases following disasters. Finally, and more broadly, the cultural context of bushfire and gender in Australia still requires investigation. There is literature that notes the importance of bushfire in shaping Australian identity (Pyne 1991; Collins 2006) but the limited literature on gender and bushfire in Australia suggests that bushfires are seen specifically as 'men's business' (Poiner 1990; Eriksen et

al. 2010). As yet, there has been no comprehensive exploration of the ways in which the cultural construction of bushfires as men's domain may affect policy and practice. The following section makes some suggestions towards ways in which research in this area may link into existing bodies of literature on gender, rurality and masculinity.

Gender, rurality and masculinity

'A gender sensitive analysis of bushfires needs to go beyond understanding 'gendered vulnerabilities' and examine how the socially constructed societal expectations of women and men that underpin traditional views of bushfire management as 'men's business' persist today'

(Eriksen et al. 2010, p. 3)

Research in relation to gender roles and bushfires in Australia is likely to intersect considerably with existing work on rural masculinities as well as rural sociology and gender studies more broadly. Bushfires mostly affect non-urban and rural areas in Australia (although the urban-rural interface is an increasingly important focus of research as well) and bushfires are still constructed as being 'men's business' (Eriksen et al. 2010). It is therefore important to understand the gendered dynamics of rural living. Research on rural masculinities and gendered power relations in rural areas suggests that 'rural life is typically highly patriarchal' (Campbell et al. 2006, p. 5) and that there is often a particularly clear divide between men's and women's roles and activities in rural settings (Pini 2006, p. 401). Rural Australia is certainly no exception to this (Poiner 1990; Dempsey 1992). The gender segregation in rural living is also mirrored in emergency management and bushfire response, areas that are especially masculinised and notably exclude women (Cox 1998; Robertson 1998). Despite recognition that emergency management and fire-fighting are militarised and male-dominated institutions (Poiner 1990; Fordham & Ketteridge 1998; Robertson 1998; Scanlon 1998; Baigent 2005), an understanding of this gendered context is still largely lacking in research on bushfire and bushfire response in Australia.

The construction of gender in rural Australia

Gretchen Poiner (1990), in her ethnography of Marulan in rural New South Wales, notes the especially conservative nature of rural living in Australia. Poiner states that although there may appear to be little difference between urban and rural dwellers, the critical point of divergence is that people living in the country identify as 'country people' and 'subscribe strongly to the rural ideology' which she describes as leaning 'heavily on acceptance of both the family in its conservative form and male domination' (p. 136). Women are therefore faced with significant inequalities in both their domestic (family) life and public life in rural areas.

In terms of public inequalities, previous work on gender and local government in Australia has shown 'the way in which traditional and conservative views about gender that are dominant in rural towns, make participation in public leadership problematic for women' (Pini 2006, p. 398). Poiner (1990) and Dempsey (1992) both suggest that this problem is twofold. Firstly, traditional gender roles provide men with a seemingly 'natural authority', positioning them as the decision makers and thus placing women at a disadvantage if and when they try to prove their credentials for leadership positions. Secondly, traditional gender roles require women to provide considerable material and emotional support for their families, a situation which often leaves them with little time to further contribute at the level of formal governance. Dempsey (1992) also argues that these factors affect the make-up of voluntary organisations, such as sporting and business clubs, where women are again excluded not only ideologically on the basis that they are not as capable as men, but also materially, as after performing their unpaid domestic labour they are considerably more time-poor than their male counterparts. Both of these elements may prove relevant to research on gender and bushfires. In particular, the common masculinisation and subsequent exclusion of women from voluntary associations is likely to influence the gendered make up of voluntary fire-fighting organisations.

There are, however, notable exceptions to women's participation in voluntary organisations including groups such as the Rural Women's Network (RWN) and the Country Women's Association (CWA). The CWA is a long-running and generally conservative association which is one of Australia's oldest and largest service organisations. The CWA works to support members of rural communities by lobbying for improved facilities (especially for women and children) and 'enhancing members' domestic skills including crafts, home nursing and improving community interaction...' (Teather 1992, p. 377). These

activities have also extended to helping communities cope and recover during and after disaster events such as bushfire, flood and drought. While the CWA retains a notable public profile, its membership is aging and its relevance to a rapidly changing rural environment is being questioned (Teather 1992; Grace & Lennie 1998). In contrast, the RWN is a relatively new association which consciously works to raise the profile of rural (particularly farming) women. The need for the RWN is underpinned by the kind of exclusion Poiner (1990), Dempsey (1992) and Pini (2006) describe in rural women's experiences. Women often perform unpaid domestic and voluntary labour which goes largely unrecognised and the mainstream associations and clubs are often significantly male dominated. The existence of these women's only organisations shows that many women do seek a public voice but also that the need for women's organisations continues precisely because of the highly-masculinised nature of the rural public-sphere (Grace & Lennie 1998).

While women may experience forms of exclusion from mainstream, public-sphere activities, women also experience disadvantage within the domestic sphere and the power dynamics of the family. Traditional gender roles, which are thought to be more entrenched in the rural context, result in women bearing a more exaggerated double burden. That is, women frequently take on 'men's work' (e.g. work outdoors, or helping on the farm etc.) but it remains rare for men, in return, to take on 'women's work', especially domestic chores and child-rearing (Poiner 1990). Poiner (1990) also notes that the decision-making process in families, and among couples, in rural areas is male dominated. In her ethnography, the only notable exceptions to this, where women had a greater say in decision-making, were in those realms deemed relatively insignificant and 'feminine' by men – areas such as 'purchases of household appliances, furniture and furnishings' (p. 155). The construction of men as the preferred 'decision makers' is likely to give a heavily gendered dimension to household bushfire safety plans and the ultimate decision to evacuate or stay and defend the house during a bushfire event

The impact of traditional gender roles on decision-making in regard to bushfire preparation and response may prove to be an area worthy of significant investigation. There seems to be a degree of role strain in bushfire preparedness and response. For example, while the outside of the house and outdoor work are seen largely as men's domain, women are seen as responsible for the inside of the house and the care of the children (Poiner 1990; Dempsey 1992). All of these elements are important in bushfire

preparedness and exactly who is responsible for what, and which elements take precedence in the bushfire preparation / response plan, has not yet been analysed in relation to gender. From preliminary research, it appears as though conflict does often arise within families in regard to evacuation and the safety of children. That is, while decisions regarding the wellbeing of the children would usually be 'women's work', perhaps the fact that bushfires are constructed as being 'men's business' trumps this usual state of affairs. Given that there are several documented instances during the Black Saturday fires where women wanted to evacuate early and men did not, and that this delay or eventual decision to stay resulted one or more deaths (Handmer et al. 2010), looking into the gendered dynamics of family decision-making should be seen as imperative.

Gender roles and masculinities

Understanding the gendered dynamics of rural living must involve a consideration of both women's and men's roles. While focusing on women is certainly important, particularly when trying to highlight how women have been marginalised or excluded from analysis (such as areas where women's labour has been overlooked), it is also important to avoid holding women up as 'the other' to a supposedly objective but implicitly male / masculine standard of normality. As many scholars writing in the area of masculinity studies have pointed out, norms are often based on a male standard but the male aspect of the norm generally remains invisible (Campbell & Bell 2000; Campbell et al. 2006). Thus, what men do becomes held up as the universal norm. As Campbell and Bell explain in 'The question of rural masculinities' (2000), masculinity is generally a 'generic, unmarked category of power' and, as a result, masculinity remains invisible 'while femininity is continually marked for special emphasis' (p. 536). The need to consider masculinity is also intertwined with the understanding that gender is relational, that is, gender roles are constructed in relation to each other rather than existing autonomously. Campbell (2006) explains this further by stating that: 'rural masculinity is equally an aspect of the lives of men and women ... The way rural men conduct their lives has a huge impact on how rural women live their lives, for gender is a relational matter' (p. 2). It is therefore important to make masculinity visible and to look at both the construction of both masculinity and femininity when considering the impact of gender.

The 'invisibility of masculinity' as a problem is certainly evident in some existing research on bushfire and gender. One of the most prominent examples of this

is the representation of women's preference for evacuation as irrational or ill-informed (e.g. Beringer 2000; DeLaine 2008). When considered in isolation this representation may seem plausible – women often proclaim to know little about fighting bushfires and therefore may be more prone to unfounded fears about a bushfire threat. However, women's preferences are not judged on the basis of an objective analysis of threat but rather tend to be judged based on a comparison with men's assumed 'rational' and 'informed' preference for staying to defend a house (e.g. DeLaine 2008). Indeed, previous studies on risk perception have shown that white men are likely to rank a variety of risks significantly lower than women and minority groups and it has been theorised that this is due to socio-political factors rather than a lack of understanding or education among minority groups and women (Finucane et al. 2000). Furthermore, Finucane and others (2000) suggest that understanding these socio-political factors is important as they may 'help explain why attempts to impose the elite view of the world have often failed to improve public acceptance of risks' (p. 162). This level of analysis has not yet been applied in Australian bushfire research and may help to explain why a top-down model of understanding bushfire risk and communication has been insufficient and often ineffective.

The cultural context of bushfires and bushfire-fighting in Australia

At the time of writing, there is almost no available academic literature which deals with the cultural construction of bushfires as 'men's business' in Australia and how this may create an implicit male standard of bushfire response (c.f. Eriksen et al., 2010). Both policy and practice for bushfire response are largely assumed to have emanated from objective and empirical, if not scientific, bases, but this does not take into account the fact that emergency management, bushfire response and fire fighting remain overwhelmingly male dominated areas (Poiner 1990; Robertson 1998; Beaston & McLennan 2005; Eriksen et al. 2010). Furthermore, while these areas may be materially dominated by men they are also culturally masculinised (Poiner 1990; Eriksen et al. 2010). That is, they are associated with traditionally masculine attributes and are likely to exclude women. The area of emergency management, for example, has been described by Robertson (1998), as being: '[b]y tradition if not by right, a male prerogative in Australia. Emergency services organisations, so similar in nature and activity to the military, were regarded as very much a male domain' (p. 201). It seems that little has changed. Indeed, emergency and disaster management organisations are often highlighted as having military-based histories and continuing to maintain a

militaristic, 'command and control' style of operation (Fordham & Ketteridge 1998). This is an important point as the military is a particularly prominent site for the construction and reproduction of hegemonic masculinity (Agostino, 2003). Moreover, masculinity and the exclusion of women are embedded into the institutional culture of the military (Enloe 1983; Connell 2003). Given the masculinised and militarised nature of emergency management and disaster response it is misleading to consider them through a gender-neutral lens. They must (instead) be understood as heavily intertwined with dominant constructions of masculinity.

Fire-fighting and especially bushfire-fighting are likely to appear at the more extreme end of the militarised / masculinised emergency services organisations. Fire-fighting is 'by any measure ... a male dominated occupation' and '[c]ulturally speaking, the work of firefighting is extremely masculinised' (Baigent 2005, p. 45). It is not only that fire-fighting is associated with traditional characteristics of masculinity, such as physical strength, mateship, courage and aggression (Maleta 2009), but that the concept of fire-fighting is seen as so inextricably linked with men that 'the notion of women fighting fires still does not fit into society's picture of fire fighting' (Baigent 2005, p. 60). This aspect of militarisation in fire-fighting is especially clear in regard to bushfire-fighting in Australia. Militarisation is not only evident in the history and structure of rural volunteer fire services such as the CFA (Murray & White 1995) but also in the cultural representations of bushfire-fighting. In reference to the Ash Wednesday fires in South Australia and Victoria in 1983, for example, Cox (1998) explains that:

'[i]mages of war and the ANZAC spirit are replete in media accounts of the fire, which has a front, and armies of volunteers, mostly young men, who battle the flames in a "spirit of mateship and defiance".'

(p. 132)

Despite the strikingly masculinised nature of bushfire-fighting, its importance for constructing and recreating gender roles in Australia is 'rarely discussed' and gender-blind policy still dominates (Eriksen et al. 2010, p. 2). Uncovering the gendered nature of bushfire related policy in Australia is therefore an important avenue for further research.

Rural hegemonic masculinity in Australia

If official approaches to bushfire are likely to rest on an unacknowledged male standard, it is important to consider the relationship between approaches to bushfire safety and the social construction of masculinities, in particular, rural masculinities. The now widely employed concept of hegemonic masculinity, which allows for the understanding of a dominant or overarching construction of masculinity, first put forward by Connell (1995), is likely to be of most use here. As the fields of gender and masculinity studies have evolved, there has been a shift away from talking about 'masculinity' to 'masculinities' (Campbell & Bell 2000; Donaldson & Tomsen 2003). While this shift may add nuance and complexity overall, applying the concept of multiple masculinities may not be helpful when seeking to analyse dominant cultural constructions of masculinity specifically. Connell's concept of hegemonic masculinity (1995) is particularly useful, therefore, as it acknowledges that there is not only one construction of the masculine but it also highlights that in any set of gender relations some constructions of masculinity have more cultural weight than others. Connell (2003) states that hegemonic masculinity is 'the most honoured or desired ... it is connected with prominent institutions and cultural forms, such as business and sport, and is extensively promoted in the mass media' (p. 15). Campbell and Bell (2000) expand on Connell's original understanding and state that '[h]egemonic masculinity is therefore the version of masculinity that is considered legitimate, 'natural' or unquestionable' (p. 535). With increasing scholarship in the field of rural studies, the concept of a hegemonic masculinity specific to the rural context has also been put forward (Campbell & Bell 2000; Campbell et al. 2006; Carrington & Scott 2008).

As Pease (2001) has pointed out, much of the literature on Australian masculinities has tended to rely on broad generalisations about masculinity in the West. Pease argues that while it is sometimes important to understand the similarities across cultures and geographical spaces, we must still make room for understanding masculinities in specific contexts. Indeed, Pease states that the specificities of Australian masculinity must be understood so that it can be usefully compared to constructions of masculinity elsewhere. Therefore, the next section draws on the available literature dealing with Australian masculinities specifically as well as rural masculinities more generally. From this literature, three main categories emerge which are central to what could be termed Australian hegemonic rural masculinity: the frontier mentality and the idea of (colonial) man against nature, the importance of physical strength, and the valorisation of risk taking. These aspects can all be seen as important

in relation to the context of bushfires and bushfire safety, and each will be discussed in turn.

The frontier mentality

The history of colonialism and the existence of a 'frontier mentality' are important when attempting to understand dominant constructions of Australian masculinity (Pease 2001; Connell 2003). Colonial or frontier masculinities are not only evident in settler societies, such as Australia and the United States, but often revered. As Carrington and Scott argue:

'[i]n frontier societies such as Australia ... exploitation and colonization allowed for the development of the idea of specific 'frontier' masculinities, which achieved their own kind of symbolic ascendancy in colonial societies.'

(2008, p. 650)

The most prominent aspect of this colonial / frontier masculinity is a fight against and desire to control nature. Carrington and Scott (2008) state that the 'real strength' of rural men is taken to be 'their ability to control the environment rather than being controlled by it' (p. 650). This fits well with the construction of men's roles during bushfires and the overall construction of bushfires as 'men's business'. That is, if 'real men' are supposed to fight and control nature it is not surprising that fighting bushfires is seen as a male domain and that men are more likely to 'stay and defend' during a bushfire threat than women. This may also help to explain the prestige which is afforded to those who fight bushfires. Poiner (1990) notes that men's work in fighting bushfires is held in especially high esteem, certainly much higher than the 'auxiliary' roles assigned to women during bushfire threats. She explains that this social appreciation afforded to men is important in maintaining rigid gender roles in rural communities (p. 181) and it can also be seen as reinforcing hegemonic rural masculinity.

Mateship is also often referenced as being an important element of Australian masculinity fostered by a history of colonialism and kept alive by an ongoing frontier mentality. Robert Bell (1973), for instance, argues that while male bonding and camaraderie can be seen as central to masculinity in many cultures, the Australian context offers a particularly extreme example. He states that mateship in Australia operates 'almost as if Australian men were constantly in a state of emergency where they needed one another' (p. 9). This strong sense of male bonding, often prefaced on the exclusion of

women, has been both lauded and pilloried (Page 2002). It is sometimes held up as a virtue, even a defining characteristic of Australian national identity, but the reality of mateship has also drawn strong critiques. Page (2002) suggests mateship encourages a kind of masculinity that breeds and sustains militarism, Pease (2001) asserts that it encourages homophobia and violence against women, while Marston (1994) argues that it 'cripples the full potential of men and their relationships' (p. 14). Whether mateship is a virtue or a curse, it is undeniably an important element in understanding both Australian rural masculinity and Australian gender relations more broadly (Pease 2001). This may be especially true in terms of understanding gender and bushfire as notions of mateship are often especially glorified through emergency situations, sport and war (Pease 2001; Page 2002). Therefore, there may be a heightened focus on the attainment of hegemonic masculinity – through mateship – in times of crisis and disaster.

Physical strength

Physical strength is commonly linked to concepts of hegemonic masculinity and especially rural masculinity (Poiner 1990; Carrington & Scott 2008). The importance of physical strength in constructions of rural hegemonic masculinity is also often related to the idealisation of controlling nature. Carrington and Scott (2008) give the example of the valorised 'rural warrior hero' who is constructed as a man 'who can exert physical force to survive in extreme environmental conditions and harsh landscapes' (p. 653). Gender is relational, however, so not only is a norm established in this way that says men should possess these characteristics, but that women should not, or cannot. With regard to bushfires in rural Australia, for example, Poiner (1990) states that:

'Everyone knows and accepts the reason [that women cannot fight fires]: the task is challenging and strenuous, one requiring strength, stamina, grit and guts, qualities which are stereotypically male, and therefore antithetically exclusive of females.'

(p. 172)

This binary construction of men's and women's abilities may help to explain the continuing exclusion of women from bushfire-fighting organisations as well as the continuing prominence of the image of the 'rural warrior', the heroic, strong man battling nature to save his home and family. Following the Black Saturday bushfires in Victoria, for example, Sheridan (2009) wrote in *The Australian* newspaper, that: '[t]hey breed them tough in the Australian bush

... none tougher than the men, who fight like tigers to save their homes until it's too late, and then fight to save their families'. The problem with this representation, however, is that it obscures the fact that the very act of 'fighting like tigers until it's too late' can be a contributing factor to putting the family in danger in the first place. As the Black Saturday fires made abundantly clear, the decision to stay and fight rather than evacuate is inherently dangerous and can be deadly (Handmer et al. 2010) but in the construction of the 'rural warrior' taking this risk, if it is indeed acknowledged as a risk, is celebrated rather than decried.

Risk-taking

Risk-taking is also a prominent aspect of Western masculinities (Meier-Pesti & Penz 2008) and may be especially important in a specifically rural context. Campbell and others (2006) note, for example, that rural men take more risks, when compared with urban men, and that this is 'perhaps in part, because of a tough-guy vision of masculinity...' (p. 7). They also add that this sort of risk-taking leads men to neglect their own wellbeing and health, citing the example of refusing to wear sunscreen lotion when exposed to the sun, even when aware of the risks. This behaviour, on one level, appears almost irrational, as it is not that men are not aware that they are putting themselves at risk. It is that the construction of being a 'tough' or 'real man' overrides the awareness that the act is risky. Indeed, the act is made all the more masculine by the fact that it is known to be risky. Iaccone (2005) has noted similar attitudes regarding masculinity and occupational health and safety in the Australian construction industry: that actively seeking to maintain personal safety is seen as weak and feminised while actively seeking risky or dangerous situations is seen as strong and manly. In this context, risk-taking is actually emphasised as a positive – it proves that a man is a 'real man' – by conforming to standards of hegemonic masculinity.

Hegemonic masculinity has not yet been considered comprehensively in any literature on bushfires, yet the parallels between norms of rural hegemonic masculinity and bushfire-fighting are striking. Staying to defend a home in a bushfire is a risky activity; it is also promoted as a heroic and masculine activity. Defending the home and fighting the fire necessitate facing risk, using physical strength and controlling (or at least attempting to control) nature – all elements of rural hegemonic masculinity. Men are thus socially rewarded for performing these roles in a bushfire event, not in spite of the risk involved, but at least, in part, because of it. The links between hegemonic masculinity and 'staying and defending' may significantly influence an

individual man's decision to stay, as well as potentially influencing family decisions. Leaving is seen as weak and feminine in an environment where being weak and feminine is definitely at the lower end of the pecking order (Poiner 1990; Dempsey 1992; Connell 2003). Staying is therefore socially elevated to a position above leaving, to a point where it may be seen as the 'correct' or 'right' decision. The clear preference for 'staying' in the 'stay or go' policy which existed in several Australian states prior to Black Saturday, cannot be properly understood outside this gendered cultural context.

The construction of hegemonic masculinity has also been overlooked in bushfire research. The male dominated nature of emergency response and bushfire-fighting has meant that what is held up as an objective or neutral norm is actually gendered. Given the importance of concepts such as risk-taking and 'man against nature' to the construction of frontier and rural masculinities, it is not difficult to see how this cultural background could influence assumptions underpinning policy on bushfire-fighting – an essentially risky activity which involves fighting a 'natural force'. A further consideration of the construction of hegemonic masculinity in relation to the 'stay or go' policy is certainly an avenue for further research, as is a qualitative content analysis of media coverage of Black Saturday and depictions / descriptions reifying Australian rural hegemonic masculinity. The first-person accounts given at the Royal Commission into the Black Saturday fires may also provide useful data to consider through a gendered content analysis. Ultimately, a consideration of gender and bushfire will lead to not only a better understanding of how gender affects conceptions of, and reactions to, bushfire but also how bushfire shapes and reinforces gendered power dynamics in rural communities.

Conclusions

Much like international disaster literature from decades past, most research on bushfires in Australia tends to focus on the 'scientific' rather than social aspects of crisis. This has led, not only to a significant gap in the available literature, but also a fundamental gap in the understanding of the social context of bushfire events. It is important to remember that all disasters, including bushfires, are 'complex and quintessentially social events' which 'reveal community, regional and global power structures, as well as power relations within intimate relationships' (Enarson & Morrow 1998, pp. 1-2). Studying the gendered aspects of bushfire preparedness, response and recovery is fundamentally about better understanding the social context in

which bushfires occur. Without understanding socio-political factors such as gender, current research is inadequate and policy is likely to be narrow and ineffective (Finucane et al. 2000). Current research and policy on bushfire in Australia generally does not take gender into account and certainly does not make gender a focus. This is a prominent omission from a social science perspective given the highly gender segregated nature of rural living in Australia and the highly masculinised nature of emergency services and fire-fighting.

It is not only gender segregation that is important, however, but also the power dynamics that underpin it. It is not simply that women and men are placed differently in the social structure (the so-called 'diversity' model) of rural communities, but that they are placed unequally. Women face inequalities in both public and private life. Women's lack of participation in formal governance institutions and masculinised voluntary organisations (e.g. Rotary, rural fire services) has an impact on their ability to be heard and to influence policy (Dempsey 1992; Pini 2006). More informally, the role of men as 'decision makers' often functions to exclude women from these organisations as well as de-valuing their opinions on a domestic level, within the family unit. This is a serious issue in regard to bushfire preparedness and response, where there is evidence that when heterosexual couples disagree over a course of action during a bushfire event, the man's preference tends to take precedence even when it is the riskier or less well advised course of action (Handmer et al. 2010).

Thus, gender matters in disaster research, including that of bushfires. It is striking that so little research has been undertaken in Australia on this theme to date. The challenge therefore is to employ a gendered analysis in undertaking bushfire research in Australia and moreover, to learn from its findings.

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