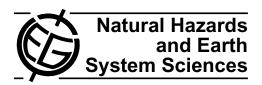
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## **Book Review of "Communities living with hazards"**

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COMMUNITIES LIVING WITH HAZARDS, BY: DAVID KING & ALISON COTTRELL, CENTRE FOR DISASTER STUDIES, JAMES COOK UNIVERSITY, TOWNSVILLE, QUEENSLAND, AUSTRALIA, xii+290 PAGES, ISBN 0-86443-752-8, E-BOOK.

This book is a collection of eleven papers by staff members of the Centre for Disaster Studies at James Cook University in Queensland. It was published to celebrate the 25th anniversary of the Centre, whose development is briefly reviewed in the preface and introductory chapter. The editors chart the development of the centre from a small collection of geographers interested in cyclones, bushfires and other natural hazards, to a multidisciplinary unit that includes humaninduced disasters in its remit. The emphasis is on understanding disasters at the community level: as the editors note in a somewhat understated manner (p. 5), "The need for research on communities and their experiences of hazards is unlikely to decline."

In the first chapter, Alison Cottrell tackles the question of how to define community in the context of hazard. She examines a small, remote settlement in northern Queensland. The task of finding a definition is not easy, and Cottrell presents a table of 94 possible alternatives. Community is distinguished not merely by geographical space and social interaction, but also by common objectives and dynamic relationships.

In the next chapter, David King considers the relationship between government, businesses and civil society organisations. He presents a variant of the "disaster cycle" in which the usual phases (mitigation, preparation, response and recovery) are depicted in terms of time, space and magnitude. The strength of partnerships between different types of organisation determines the success of governance, which is one of the key determinants in managing and recovering from disasters. In the succeeding chapter, King goes on to discuss the cyclical model of disasters in relation to the difficulties of incorporating lessons from past events. He illustrates his theoretical analysis with observations gathered from the impacts of various Australian cyclones. In conclusion, he laments missed opportunities to transfer lessons between widely separated places and different hazards.

In Chapter 4 Douglas Goudie tackles evacuation planning in relation to cyclones, fires and floods, all common hazards in Queensland. Plans with information technology support are used to encourage early self-evacuation of residents to pre-arranged refuge sites. This is regarded as the only viable strategy to enable the complex challenges posed by rapid evacuation in the face of advancing hazards to be overcome.

Chapter 5, by Scott Cunliffe, considers the vulnerability to disasters of areas dependent on the tourist industry, a subject that has generated a considerable literature, which the author reviews. While the vulnerability of tourists and the tourism industry remains high, there are many possible means of increasing the resilience of areas in which tourism is critically important to the economy and protecting the tourists. The question of tourism and hazards is continued in the next chapter, by Yetta Gurtner. Here, the sensitivity of tourism to crisis is noted, and suggestions are made to improve emergency planning for this vital but rather fickle industry. Terrorism and natural hazards in Bali are used as an example – and a very pertinent one - of how careful recovery planning can enable the tourist industry to overcome crises and negative portrayals of what it has to offer. Nevertheless, more could have been done and the response was relatively slow, which is indicative of the Indonesian Government's failure to appreciate the central importance of reviving tourism and portraying its destinations as safe places.



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In Chapter 7 Douglas Goudie studies the oral history of weather extremes recounted by indigenous Australians. Anthropomorphism abounds in tales of storm, lightning, flood and other adversities. This enables the indigenous people to come to terms with nature's violence and also provides a vehicle for teaching children to beware of natural hazards. Goudie concludes that indigenous knowledge can be useful in warning people and ensuring that they remember the lessons of past events. Eddie McLachlan adds further detail by reviewing the memory of Cyclones Ted and Tracy held by indigenous people on Mornington Island in the Gulf of Carpentaria, north of the Australian mainland. In contrast to the stories of the Aborigines, the emphasis here is more practical than spiritual. However, there is the same emphasis on warning and prudence in the face of natural extremes. The focus on Mornington Island is on individual and family resilience.

Next, Jim Monaghan considers bushfire risk in relation to the way of life of Aboriginal peoples on the Cape York Peninsula of northern Australia. He concludes that "fire risk reduction is an abiding principle of bush life." He also finds that indigenous people accept the fire risk more than do the non-indigenous "staff" (i.e. transient, white) populations of agricultural outstations. They have evolved a careful strategy of fire management. The stability of communities and their capacity for autonomous self-organisation are key factors in managing the fire hazard.

In the penultimate chapter, Luke Balcombe discusses that most famous and threatening of Australian hazards, bushfire at the urban-rural interface. He conceptualises the risk in terms of peri-urban settlement that is interfaced, intermixed, occluded or scattered across the rural landscape. In recent years the risk has increased due to the extension of communities into forested areas, the intensification of weather conditions and the inadequacy of local infrastructure for evacuation and fire-fighting. As a result, when fires advance, residents are still faced with the classic dilemma - whether to stay and defend or leave early. In choosing the right answer, much depends on the accuracy of decision-making, which is in turn dependent on the quality and timeliness of information. In this respect, prevention and mitigation need to be improved, above all, at the community level. More generally, Balcombe notes (p. 213) that "the combined efforts of fire protection services, legislators, planners, developers, land owners and homeowners will be required to prevent tragic loss of lives and homes at the interface."

The final chapter, by Sally Bushnell and Alison Cottrell, continue the bushfire theme in terms of a review of the literature on how fire hazards are perceived by people who are especially at risk. They note the attractiveness of areas of high fire risk to residents and the tendency of householders to under-invest in risk mitigation measures. Unfortunately, the lack of a single, ubiquitous solution to the problem has made the bushfire issue highly contentious in Australia. Failure to perceive the risk at the individual and community levels is at the heart of the matter, alternatively by an excessively permissive attitude to personal risk-taking. As with other hazards, newly urbanised rural areas tend to have low levels of community perception and cohesion. The levels may grow with time if the issue remains salient, or they may further decline if not. As an example of how complex the problem is, the creation of personal defensible space (fire risk reduction areas) can reduce community cohesion, but might on the other hand also reduce fire risk. The authors conclude that the complexity of perceptions and attitudes is "fraught with difficulties for service delivery and social research." The book ends with a short glossary.

In synthesis, this book uses as its main theoretical basis the "disaster cycle" model, which it variously identifies as "integrated emergency management" and "preparedness, prevention, response and recovery (PPRR)". This offers a fairly robust framework, although one that is not without problems – that the phases of the cycle may overlap, for instance. Hence, rather than being highly innovative on a theoretical plane, this book makes elegant use of existing models and adapts or extends them in order to increase their explanatory power. The success of this initiative is evident in the wealth of detail and insight in the studies presented. Moreover, there is a welcome emphasis on community disaster risk management, an area in which the Australians have long excelled. To conclude, this book helps redress the balance in favour of southern hemisphere studies of disaster. It offers a nice balance of field investigation, theoretical papers and literature reviews. The hazards covered are those of particular relevance in Australia, but the results are of clear interest to researchers from other parts of the world.