Abstract: Disaster management for cultural heritage has been gaining recognition as an important issue for the long term management and conservation of these assets. Natural disasters are localised events and have the ability to cause widespread loss and destruction to a community's cultural heritage. The social benefits of heritage preservation are often cited as the justification for developing disaster management plans. These social benefits are generally presented in relation to the disaster recovery phase. However, these benefits are also attributable to the initial stages experienced during a disaster event. Applying these existing arguments to this initial stage may assist to transcend the existing attitudinal barriers and present the issue of disaster management for cultural heritage in a manner which is relevant to the diversity of stakeholders.
The importance of heritage preservation in natural disaster situations

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Abstract

Natural disasters impact on the human-created environment. Affected are both the general built environment as well as those few places that a community cherishes as representing their past achievements, aspirations and tribulations—their cultural heritage sites. Natural disasters are localised events and have the ability to cause extensive loss and destruction to a community’s cultural heritage. Cultural Heritage Management (‘Historic Preservation’) aspires at protecting such places from environmental decay as well as natural disasters; with technical solutions the modus operandi of choice.

Disaster managers have traditionally always regarded the protection of cultural heritage places as very low on their list of priorities. This paper shows the centrality of cultural heritage to the emotional wellbeing of an affected community in the disaster recovery phase and argues that the protection of key cultural heritage items should be regarded akin to the treatment of critical infrastructure.
Introduction

Cultural heritage is a complex social construct, and there is no one standardised definition. In a broad conceptual framing cultural heritage is the result of people’s interaction with their environment and with one another (Pearson & Sullivan 1995). The outcome of these processes is reflected in a number of forms and is generally divided within two typologies of tangible (built environment, sites, landscapes, objects and artefacts) and intangible cultural heritage (language, folklore, skills and customs). Cultural heritage management (in the US: ‘historic preservation’), which is the focus of this paper, is predominantly concerned with the preservation of the tangible cultural environment, and specifically that of places (sites, landscapes etc) and the historic built environment.[1] The values projected onto cultural heritage places by the public are assessed against predetermined criteria to determine their significance (cf. Marquis-Kyle, Walker & Australia ICOMOS 1996; Australian Heritage Commission 1999). This process enables those important aspects of the past to be identified, protected and managed for the benefit of present and future generations.

Natural hazards, such as bushfires, earthquakes, windstorms, floods and volcanic eruptions pose threats to the integrity, and on occasion the very survival, of cultural heritage places (cf. Spennemann 1999). The issue of risk preparedness for cultural heritage has become an integral aspect of ensuring that the past has a future. Disaster management for cultural heritage has long been promoted as essential for the preservation of the past for the future. The establishment of a management regime developed on the principles such as preventative restoration and programmed maintenance (Baldi 1995) have built on conservation foundations and resulted in a discipline within the field of cultural heritage management. Supporting arguments for implementing effective disaster management plans for cultural heritage have been based on the moral obligation that heritage cannot protect itself, and therefore heritage managers as the custodians and stewards must ensure that it is protected.

To date the emphasis on achieving this has been to adopt a resource management approach focussing largely on the effects of disasters (cf. Spennemann 1999) and the physical techniques employed in disaster prevention, hazard mitigation and disaster recovery (Cf. Feilden 1987; Spennemann & Look 1998 and various papers therein). The body of literature on the technical solutions is considerable (cf. Look 1991 and papers therein, Look 1997; Spennemann & Look 1998 and papers therein). The site-specific physical interventions are embedded in and supported by a planning framework for disaster management covering everything from prevention to response and recovery (Nelson 1991, Baldi 1995, Spennemann 2005a). Again,
physical actions are emphasised. Even though recognised as important, disaster planning for heritage places is still not always implemented at the site management level (see a critique of some planning regimes by Spennemann 2005b).

The technophile nature of this approach, however, largely removes the issue from its social foundations. It must not be forgotten that disasters and cultural heritage are both social constructs.

The Social Dimension

Cultural heritage does not exist outside of social processes and it is indeed these processes, which provide the context to develop and assign the values that provide cultural heritage resources with their significance. Likewise, disasters do not exist outside of social processes. Bushfires, earthquakes, floods and volcanic eruptions are reoccurring natural events that impact on the environment. Only where they impact on human society do they become hazards, and only if they have sufficient magnitude to disrupt society, its functioning and livelihood, do they become disasters (cf. Echterling & Wylie 1999).

This relationship between the historic and social environment has been well argued as a benefit of historic preservation in post disaster communities. Elsewhere, Spennemann (1999) has raised the issue that ‘humankind needs tangible evidence of the past as reminders. Heritage sites present people with certainties, familiar surrounds which provide assurances and reassurances.’ In times of political or social upheaval or cultural change a community’s need to express itself in nostalgic activities is just one expression of the same phenomenon (cf. Lowenthal 1985).

Yet when it comes to the responses to disasters, historic properties and other heritage sites are almost invariably deemed of less importance than other aspects of infrastructure and livelihoods. In fact, they rank very low on the scale of priorities by disaster managers. A lack of communication between heritage managers and disaster managers has been deemed responsible for the state of affairs (Spennemann & Look 1998a), with a number of attitudinal barriers identified on both sides (Graham 2002). As we will argue below, a change in perspective is required to view cultural heritage as essential to preservation of life, giving these social benefits greater priority.

While management bodies may have divergent and on occasion almost irreconcilable views on the matter, the general public can bridge the gap in its appreciation of the value of heritage. Bumbaru (1999, p.33), reporting from a Canadian summit on the interface between heritage and disaster management, observed that participants ‘[i]nitially … saw it as a decorative concern (as do many citizens); then it became in their mind a real part of the mandate, a part they had never considered before. Even if the order of procedure in
emergency response is usually to save human life first, then the environment, then property, some of the participants proposed to introduce heritage to the first stage.’

Examining the manner in which disaster management is presented and argued may assist in addressing the current attitudinal barriers (Bumberu 1999; Graham 2002; Roberts 1999; Spennemann 1999) and social benefits, and provide a forum in which to enhance the current level of understanding.

Only if disaster managers fully understand the role that heritage properties play in the psyche of the population, can they appreciate the value of such places to a community as a whole. Once this has occurred, as Stovel (1999,p.228) stated ‘[w]e will be able to deal with catastrophe and its consequences without having to set human life against the worth of cultural heritage; we will recognize that the two are intrinsically linked, part of the one indivisible whole.’

A Time of Disruption

Natural disasters are a time of disruption to the normal processes of life accompanied by a physical change of familiar surroundings and emotional benchmarks. The cultural heritage component of the environment plays an integral role in assisting communities to cope with these events. The psychological profile of our cognitive self seeks out the familiar in our environs (Cuba & Hummon 1993; Dixon 2000; Fullilove 1996; Hidalgo & Hernandez 2001; Manzo 2003; Massey 1994; Proshansky, Fabian & Kaminoff 1983; Twigger-Ross & Uzzell 1996; Vorkinn & Riese 2001) and during a disaster this need is at its greatest (Fullilove 1996; Manock 2001; Raphael 1990).

This reflects the very nature of the development of the discipline of disaster management for cultural heritage as a predominately reactive process. Hence it is not surprising that the social benefits have focused on the recovery phase or after the event. A brief review of the social parameters of disaster management for cultural heritage can assist to review the paradox that benefits are only limited to recovery. The social reasons cited for historic preservation following a disaster event are valid representations of the value of cultural heritage involved in natural disaster situations and illustrate the importance cultural heritage carries. The sudden damage and change to the environment as a result of a natural disaster can detrimentally affect a community and subsequent health issues may arise (Fullilove 1996; Katz et al. 2002; Raphael 1990). Preservation of the historic environment also assists in maintaining the continuum between past and present. Without this continuum attachment to place can be jeopardised, resulting in feelings of displacement and loss. The level of consciousness regarding personal and communal attachment may not be fully realised until post disaster, and by that time it may well be too late.
Placing the protection and recovery of cultural heritage within the first stage disaster response would facilitate recognition of the relationship of heritage to life. Current approaches to disaster management have focused on physical conservation techniques, with any social benefits cited as the justification or outcome of preservation.

**Some Examples**

Social parameters of heritage preservation in disaster situations focus on maintaining a continuum between the past and future. Macro-environmental conditions such as disasters can influence individual and community relationships with the physical surrounds. The loss of these physical resources often results in a strong emotional response (Look & Spennemann 2001). Elements of the historic environment can assist in cognitive processes and enable an individual to place themselves within the landscape which at time of chaos and panic otherwise might seem unfamiliar. Hull, Lam and Vigo (1994) conducted a number of telephone interviews following Hurricane Hugo in the US, the sample consisting of residents in the town of Charleston. Results indicated a sense of loss. Following floods, the Historic Preservation Division of Georgia (1997) found that retaining the historic features of the region assisted in regaining a sense of normalcy. These positive ties from the past also demonstrated that it was possible to build a positive future. Strong emotional responses were demonstrated when a group of residents formed the Citizens Earthquake Group following the 1989 Newcastle earthquake; this group played an important role in the preservation of architectural landmarks (New South Wales, Australia 1989). Reports made shortly after the earthquake confirm the impact that the loss of heritage features had upon the community resulting in outrage and sense of loss (Ellsmore 1991; Henry 1991; Newcastle Hill Resident's Group 2001; Spearritt 1990).

Examination of the long-term social impacts of natural disasters also raises a few issues regarding the importance of cultural heritage. Retaining historic elements affected by a natural disaster also symbolises resilience. Recently Strong (2000) reported on the battle to save the ruins of the former Town Hall as their presence provides a reminder of Cyclone Tracy (Northern Territory, Australia, 1974) and its impact on the community, almost 32 years ago. Similarly Hull, Lam and Vigo (1994) found that the relationships with place can evoke a sense of community, and common bonds bringing people together. In the US, Gruntfest (1995) highlights a number of key concerns regarding long-term impacts of extreme flooding events. A community’s ability to respond is affected by many variables and their ability to unite as a group to forge a new future. This relationship is influenced by their relationship with the environment prior to and following the disaster event.
Discussion

Attachments to cultural heritage may not always occur on a high level of consciousness or awareness; under normal circumstances their presence may be taken for granted. Extreme events such as natural disasters highlight the importance of these assets in maintaining relationships between people and place and the broader contexts of health, identity and community. The social benefits of protecting this relationship have been undervalued.

The development of disaster management plans for cultural heritage sites, which places the onus of preparedness, response and recovery on the heritage managers (Nelson 1991; Spennemann 2005a) is one step. This will ensure that a risk assessment will have been carried out for a range of natural and anthropogenic disasters and steps are being undertaken to mitigate the potential impacts through technical solutions as well as to minimise the impacts through appropriate response mechanisms. Heritage managers can deal with some of these, while others will require assistance from professional disaster response teams. While in the case of small-scale events that will be possible, damage to heritage sites rarely occurs in isolation. As disasters affect these sites as well as a range of non-heritage items and places there will be competing demands on the time and efforts of disaster response professionals.

This is the time when the paradigm shift suggested in this paper has to occur. Incorporating cultural heritage into the disaster recovery phase of disaster management plans provides positive recognition of the importance of the historical and cultural environment. Greater recognition of the social value of cultural heritage could be achieved by placing it within the initial disaster recovery phase, as an essential item that assists communities to cope with these events and contribute to and ensure long-term sustainability. Consideration of the social benefits of historic preservation outline the importance of proactive disaster planning for cultural heritage assets. The implementation of proactive disaster management for cultural heritage assets is essential to ensure the long-term future of these assets.

The Future

Cultural heritage is part of an ongoing process and interaction between people and their environments. Current approaches to disaster management for cultural heritage have developed and utilised a number of well-structured arguments for the inclusion of cultural heritage within the recovery stages of disaster management approaches. Placing greater importance on the preservation of cultural heritage in initial disaster stages provides recognition of the immediate impact the past has on the present, and indeed the future.
To achieve adequate disaster preparedness, cultural heritage must become an integral part of an integrated multi-stakeholder disaster risk assessment and risk reduction process. That implies that disaster managers and heritage managers exchange views and understand each other’s priorities in the disaster preparedness and planning stage (Spennemann & Look 1998b), a matter that is hampered by attitudes and knowledge on both sides (Graham 2002; Graham & Spennemann 2006; Spennemann 2005b), as well as by inadequate planning processes (Laidlaw, Spennemann & Allan in press). Unless we can ensure that a community’s emotional links with place are resilient to the hazard event we will keep placing a community’s disaster recovery at risk.

At the same time, heritage must play a major role during the response phase as well as in the immediate post-disaster recovery phase. There can be no doubt that it would be morally reprehensible to advocate the preservation of cultural heritage places over the saving of human lives. However, we contend that at the next level of prioritisation, the protection of property, the protection of key cultural heritage places should rank highly. We regard these key places as critical for the recovery period as hospitals, telecommunications facilities and fuel storages.

**Endnote**

[1] The management of museum and archival collections is a separate field that has seen much attention (cf. Smithsonian Institution 1993; Söderlund Consulting 2000; Kannan 2001). It differs substantially from the thrust of this paper inasmuch as museum/archival collections exist in a controlled/able environment—unlike the historic built environment around it.

The construct of cultural heritage as the result of humanity’s interaction with the environment separates it from natural heritage, i.e the key elements of the natural environment. The dichotomy between cultural and natural heritage is a social construct that becomes problematic when we consider that much of the earth’s surface has been modified by people in one way or the other, and thus should be considered a cultural landscape rather the ‘natural environment’. For the purposes of this paper, however, we are only concerned with the cultural heritage environment.

Moreover, the authors are cognisant of the fact that cultural heritage management as it relates to disaster management is focussed on the heritage of sedentary communities. Issues of the impact of natural disasters on the cultural heritage of nomadic cultures, as well as the impact of natural disasters on intangible heritage, mainly through psychological stress, are outside the purview of this paper but shall be explored in future research.
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