Putting it together: mapping narratives of bushfire and place in two Australian communities

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Outline of presentation

• Background and major research outcomes

• Emerging theory:
  – social and ecological memory
  – ‘mapping’ place narratives
Aims of the research

• to understand the intersection between:
  ecological, biophysical knowledge of bushfire
  (rational knowledge)
  &
  place-based local knowledge
  (factual and intuitive)
• to learn whether mapping “place” is a useful tool for:
  connecting rational and intuitive knowing
  &
  engaging communities

Case study sites: Adelaide Hills, Southern Grampians
Intuitive knowing
Linked to experience of place
- shared stories
- memory/collective memory
- social meanings
- traditional practices

"Cues" in the landscape
(deeply held, hard to access)

Rational knowing
Objective, universal, abstracted from place
- science-based
- engineering resilience
- the “black box”

Documents/databases
- journals, policy, procedure, chain of command
(easier to access)

Two domains are linked, but how?

Participants (agency staff and residents)
“mud map” their social & ecological worlds at multiple scales

In depth interview probes for stories & memories that underpin “cues” in the maps

Trace the links between knowledge domains

Participants and researchers reflect on new ways to “see” landscape and management

Data collection

Data analysis
Major findings

Understandings of risk

• no apparent information deficit among participants
  – high levels of risk recognition (fire is “inevitable”)
  – some understanding of fire behaviour and prior experience of fire (especially Southern Grampians)
• most people have fire plans, few plan to leave
• many people expect to be surprised:
  – low risk day but local ignition, fast moving fire
  – leaving early not an option in this scenario
  – many have multiple fire plans for different scenarios
Major Findings
Social construction of place: making “home”

• “home” is more than your house
• house is where you live, *home is how you live in the landscape*
• linked to identity, who we are and how we want the world to see us
• making a place “home” is an on-going practice
Major Findings

“Home-making” practices

– choice to live in Adelaide Hills about a “sense of space”
– gardening (eg. presenting a “cared for” landscape, creating a haven for relaxation away from work etc.)
– extension of gardening into wider landscape (using indigenous species, participating in restoration activities)
– walking (“my walking tracks”, knowing and naming what you see on your walks)
– maintenance of family and tradition
– home is more than the house, it’s the Hills, the mountains, the Red Gums.....
Major Findings

Social construction of place: making “home”

• being at home or *returning home* during fire risk is about protecting values greater than the ‘house’

• tension between homeowner responsibility for mitigation *before* a fire and lack of control *during* a fire
Major Findings

There’s something about memory...

- most participants could locate risk in their landscape (eg. from north on a hot windy day)
- *but*, sometimes the same participants told stories of fires that came from somewhere else (eg. from the south)
- the ways people order, prioritise, construct memory is important
Other important research outcomes

1. Collaboration with DEWNR and Adelaide Hills community (‘The Hut’)
   - trained DEWNR fire manager and community volunteer in research & analysis

2. End User “Place Mapping” Workshops (Melbourne, Adelaide)
   - assess the value of the method as a tool for community engagement
   - assist land and fire managers to see landscape in new ways
Mnemosyne (Rosetti, 1881)  
Greek Goddess of Memory

• to forget, or  
• to remember, or  
• to construct?

• social and ecological memory  
• collective memory  
• place and memory  
• capturing the practices of memory  
  – the ‘mapping narratives’
Resilience thinking and the Adaptive Cycle

- social and ecological memory – the stewardship practices and traditional knowledge that carry ecological practices (Barthel et al. 2010)

- social and ecological memory are actively negotiated in response to place, its vegetation, topography, social and cultural meanings (Beilin, Sysak and Reichelt, in press)
Ecological memory

• Ecological memory on its own may not be that meaningful, but in conjunction with the social, provides imagery and impetus for changing and managing the landscape where the history of what came before contributes to imagining the future.
Social memory

McIntosh (2002 in Folke et al., 2002, p. 72) as ‘the accumulation of experiences concerning management practices and rules-in-use that ensure the capacity of social systems to monitor change and to build institutions (formal and informal norms and rules) that enable appropriate responses to signals from the environment’.

Social memory can be invoked to say what belongs in the landscape and the rules on how to manage the landscape or what to expect from likely disturbances such as fire or flood.
Collective memory

The individual calls recollections to mind by relying on the frameworks of social memory..... There are surely many facts, and many details..., that the individual would forget if others did not keep their memory alive for him. But, on the other hand, society can live only if there is sufficient unity of outlooks among the individuals and groups comprising it....

This is why society tends to erase from its memory all that might separate individuals, or that might distance groups from each other. It is also why society, in each period, rearranges its recollections in such a way as to adjust them to the variable conditions of its equilibrium (1925).

Halbwachs (1877-1945)
Zerubavel (1997) says individual remembering does not take place in a social vacuum; that others help us to remember, and to forget; and that there are social rules of remembering, which determine what we are to remember, and what we are to forget.

Through a process of mnemonic socialization, we acquire new memories when we enter social environments; our communities are communities of thought, comprising a fund of social knowledge and a body of social memory.

As members of mnemonic communities, we remember things we never experienced, and come to identify, as group members, with a collective past. (p.52)
• Places become embedded in life’s experiences not as physical aspects of environment but as ‘setting’ and part of memory (Riley, 1992:19).
Social construction of memory

• The historical study of memory would be the study of how families, larger gatherings of people, and formal organizations selected and interpreted identifying memories to serve changing needs. It would explore how people together search for common memories to meet present needs, how they first recognized such a memory and then agreed, disagreed, or negotiated over its meaning, and finally how they preserved and absorbed that meaning into their ongoing concerns.

• Thelen (1989, p. 1123)
Social construction of memory

• Memory is an interplay between events, time, society and the individual. Memories are manipulated to fit our life history, our own views about ourselves. They are also manipulated by society, by the ways in which external information is transmitted to us (Wertsh, 2002)
Social frameworks of memory

• As an example of "the social frameworks of memory", Halbwachs pointed to "the collective memory of the family": that there are events shared only by family members, and events known only to family members. Halbwachs’ views have been championed by cognitive sociologists, who view memory as a social construction.
Mapping Stories

• David Lowenthal in Bodnar (2000:1201) said: the “contingent and discontinuous facts of the past become intelligible only when woven together as stories”. They organised “the past for both the historical actor and the interviewer who attempted to understand it”.
The Physical Connection

• Sharot (2012) argues that memory from a neurological perspective, is designed to ‘flexibly construct future scenarios in our minds’. Details can be deleted and others inserted!

• Sharot hypothesizes that to think positively in this way requires that we imagine the future in a form of cognitive time travel. We can move back and forth between past and present constructing likely scenarios. We can use these scenarios to figure out likely future outcomes. They also found that people considered adverse events more positively if they relegated them to the past.
• How is it that people maintain a rosy bias even when information challenging our upbeat forecasts is so readily available?—and the answer is that in the learning process, people encode positive outcomes and fail to incorporate information they do not like or perceive as negative. (Sharot, 2012)

• Memory is as much a forward construction as it is a reconstruction of the past!
Maps

- maps as a mnemonic – a memory aid
- maps as a tool to connect intuitive knowing with rational knowing
- maps as a platform for negotiating spaces and understanding landscapes

The method seems to trigger a memory response:

- the sights and smells as I walk my trail
- what I think about when I look at the mountains
- things I hear sitting on my porch at night
- recall how things (e.g., species composition) change over time
Implications for managers

– where residents already have a basic understanding of risk, consider tweaking the fire safety message
  • fire behaviour
  • manage uncertainty
– to incorporate an understanding of “home” that encompasses a sense of the landscape as well as the housing “assets”
– new ways to work with engaged communities
  • “place mapping” as a tool for engagement
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