Knowing country, knowing people: Extreme weather events and community resilience in North Queensland, Australia

Gabriele Weichart\textsuperscript{1}, Paul Turnbull\textsuperscript{2}, and Jonathan Richards\textsuperscript{2}

\textsuperscript{1}University of Vienna, Department of Social and Cultural Anthropology – Universitaetsstrasse 7 NIG, 4th floor 1010 Vienna, Austria
\textsuperscript{2}University of Queensland, School of History, Philosophy, Religion and Classics (UQ) – St Lucia, QLD 4072, Australia

Abstract

The aim of our research, which started in late 2012, is to better understand the cultural and historical dimensions of resilience to extreme weather such as cyclones and monsoonal flooding in northern coastal Queensland. This paper will mainly focus on the relation between local environmental knowledge, social networks and community resilience.

The geographical focus of our research is the coastal plain with the Murray and Tully River systems between the Cardwell Range and the town of Tully some forty-four kilometres northwards. They are situated in the southern wet tropics region of coastal North Queensland where monsoonal rains frequently cause severe flooding of a complex network of local waterways. For thousands of years the region has also experienced numerous cyclones of varying severity during the annual monsoonal season. Like in other parts of the continent, the local Indigenous people (Girramay, Jirrbal and Djiru) successfully adapted their subsistence economies and lifestyles to the environmental conditions. They experienced drastic changes when Australians of European descent first settled in region in the mid-19th century and since then have introduced cattle farming, intensive agriculture and other modern industries. While the first century of Indigenous-settler relations was marked by conflicts and violence, the situation improved considerably since the 1970s, and peaceful social interactions, cooperation and communication across ethnic and cultural boundaries are common today.

Knowledge of the local ecology and weather, which includes the ability to predict heavy rains and cyclones and their effects on the environment, and suitable coping strategies were necessary survival skills among Indigenous societies in pre-contact Australia. Extended social networks based on kinship, mutual obligations and land ownership further reduced their vulnerability and enhanced their resilience. Knowledge as well as relations were embedded in a religious belief system which explained and ordered the social and natural universe. The white settlers were also confronted with the need to learn about their new natural and social environment and develop strategies of adaptation. Communication, consultation and knowledge transfer between Indigenous people and settlers about the weather and other environmental issues were not uncommon even in the early days of settlement.

\textsuperscript{*}Speaker
\textsuperscript{†}Corresponding author: p.turnbull1@uq.edu.au
\textsuperscript{‡}Corresponding author: j.richards5@uq.edu.au
Our research has been guided by the hypothesis that such intimate knowledge as well as strong social relations have continued to be crucial factors in the resilience of communities in the research area.

In the proposed paper we will address the topic from a historical as well as anthropological perspective. In this, we will be guided by the following questions:

- Are there significant differences between Indigenous and settler knowledge of country and weather patterns as well as social networks?
- What effects do these resources have on mechanisms of coping with extreme weather events and how do they lead to greater resilience within the communities?

**Keywords:** Adaptive capacity, Local knowledge, Narratives, Social Network, Resilience, Social capital