

# Ecology of community: Māori understandings and values in relation to spatial data

*James Berghan*

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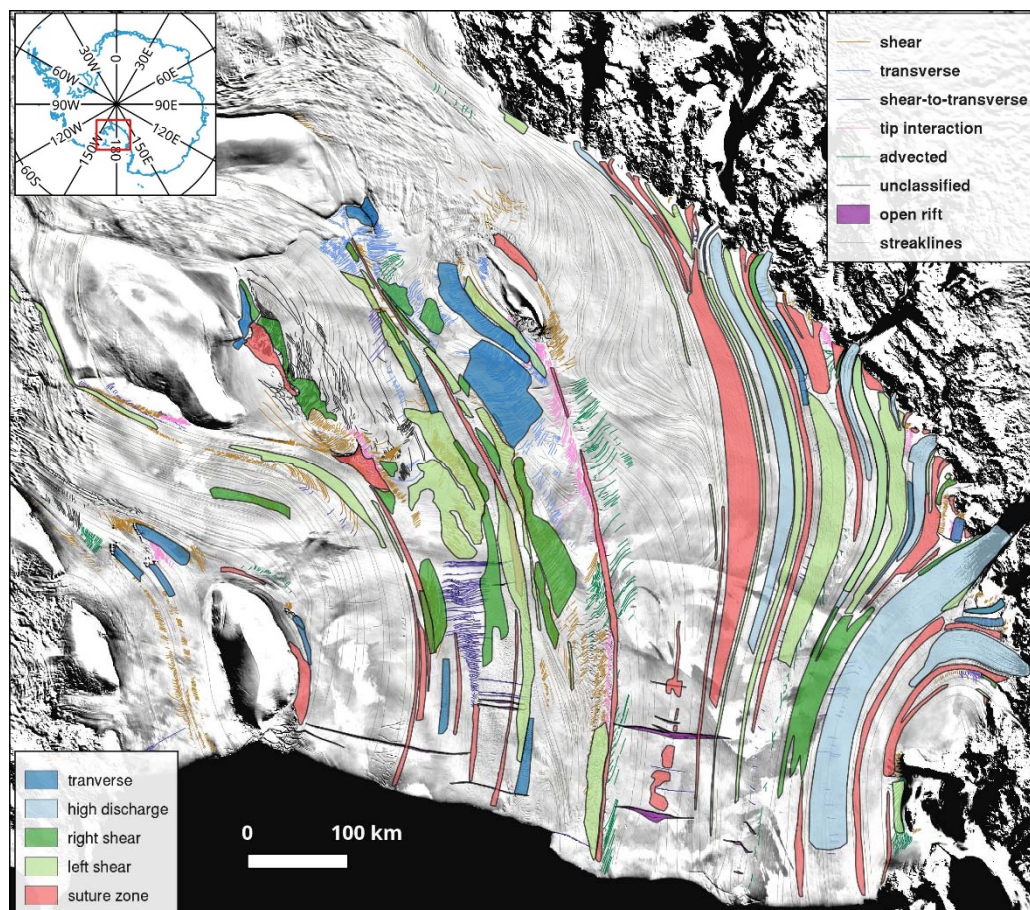
**Abstract:** Widely used land administration models promote the formalisation of land under multiple ownership to a more individualised, Western style of tenure. However, the dangers for Māori land under multiple ownership are that Māori values might become diluted or even lost in this transition, despite those values continuing to function within other community practices. For instance, values of whanaungatanga (kinship) can be seen in the Whānau Ora initiative which provides health and social services for Māori based on a whānau-centred (family-centred) approach.

This research proposes to use a range of case studies to understand how Māori values and land tenure principles are (and can be) successfully incorporated in housing initiatives, how this could inform the wider New Zealand planning debate, and how the current cadastral system could better cater for Māori land-right preferences.

# Structural provinces and limits on rift propagation in the Ross Ice Shelf

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**Abstract:** Ice shelves, marine extensions of terrestrial ice sheets, connect the interiors of ice sheets to the ocean, where small changes in water temperature can lead to large changes in the floating ice. Fractures, observed as crevasses and through-cutting rifts, are ubiquitous features of flowing ice. A small number of these become the rifts along which large icebergs calve from the fronts of ice shelves. Because iceberg calving is responsible for about half the mass loss from Antarctica, understanding why, when, and where fractures propagate is fundamentally important to understanding ice shelf change.

This PhD research aims at answering the following question: what are the real-world limits on large rifts in the Ross Ice Shelf (RIS)? Driven by hazy links in present-day literature, this research will focus on the nature and spatial distribution of crevasses and material properties in the RIS and their effect on the production of large rifts. To begin, spatial variations in material properties must be considered. Interaction among groups of fractures will also be considered. This work requires information about spatial variation in the material properties of the RIS, observations of crevasse and rift geometries and change over time, and mathematical models of ice flow and fracture physics.

**12:00 noon, Thursday, 2 March 2017**

**L1 Lecture Theatre  
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