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Short Communication

Solastalgia and the Gendered Nature of Climate Change: An Example from Erub Island, Torres Strait

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Abstract: This communication focuses on respected older womens' ('Aunties') experiences of climate and other environmental change observed on Australia's Erub Island in the Torres Strait. By documenting these experiences, we explore the gendered nature of climate change, and provide new perspectives on how these environmental impacts are experienced, enacted and responded to. The way these adverse changes affect people and places is bound up with numerous constructions of difference, including gender. The responses of the Aunties interviewed to climate change impacts revealed Solastalgia; feelings of sadness, worry, fear and distress, along with a declining sense of self, belonging and familiarity.

Keywords: climate change, gender, Solastalgia, Torres Strait

Coined in 2003, 'Solastalgia' is an evolving concept, stemming from research conducted in Australia on communities that have experienced distress resulting from environmental change (see Albrecht 2005). Research indicates that whilst nostalgia—a feeling of melancholy or yearning when absent from one's home—is well known, similar negative emotions can be felt by people who experience distress because of environmental changes that harm their home environment, with resultant loss of solace (Albrecht et al. 2007). For rural communities in Australia, for example, recent mounting recognition has shown that drought and longer term climate change can have serious social implications, including psychological and mental health impacts (Tonna et al. 2009). Likewise, studies of communities affected by open-cut coal mines and persistent drought in New South Wales have documented a sense of powerlessness and lack of control (Albrecht et al. 2007). The connection between environmental change, distress and mental health is now recognised as an important research agenda and priority (Bell et al. 2010; Berry et al. 2010), and is increasingly acknowledged in Intergovernmental Panel on Climate Change assessments (McMichael and Githeko 2001).

Distress caused by environmental change can be devastating for communities which have a strong connection to country, and whose cosmologies are imbedded in place and the natural environment (Anderson 1996; Maller et al. 2008). 'Country' denotes not only the physical elements of sea and land but also the spiritual and cosmic relationship that Torres Strait Islanders have with the natural environment (Arabena 2008; Burgess et al. 2005). Transformation of place through human induced or natural change may diminish solace found in country, enabling the emergence of Solastalgia. However, whilst experiences linked to a changing climate can contribute to Solastalgia, communi-

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ties that resist or adapt to such changes can maintain their sense of place and identity.

Many small island and rural communities are more vulnerable to extreme weather events and climate change than urban dwellers (Ebi et al. 2006). Livelihoods and food systems for such populations are particularly contingent on weather patterns, such as the timing of the monsoon. In such cases, the effect of seasonal changes and extreme weather events will inevitably be more pronounced (UNEP 1999). UNESCO (2009) has documented examples of small island and indigenous communities' experiences of unusual or extreme climate and weather phenomenon. These have ranged from severe droughts in indigenous communities in Kenya, destructive storms eroding coastlines and forcing relocation of Inupiat Eskimos, to the inundation of freshwater reserves by extreme tides in the Federation States of Micronesia.

This communication focuses on Erub Island, located in the eastern group of islands in the Torres Strait region of Australia, between the southern coastline of Papua New Guinea and Cape York on mainland Australia. This region includes over 100 islands in an area of 48,000 km^2 (see http://www.tsra.gov.au) and is home to a unique set of histories, traditions, laws and customs. Approximately, 7,105 Torres Strait Islanders reside in 19 communities across 16 inhabited islands (Human Rights and Equal Opportunity Commission 2009). By comparison, over 33,000 Torres Strait Islanders live on mainland Australia (Australian Bureau of Statistics 2006).

Erub is a volcanic island, hence considered a 'high' island. Consequently, it is less vulnerable to inundation events and changes to island shape. However, significant infrastructure, housing settlements and cultural sites lie on the low coastal fringe, as is common across the region. Similar to other Torres Strait Islanders, the people of Erub are considered to be socially and economically disadvantaged and therefore, according to Green et al. (2010), viewed to have limited resilience to climate change. Approximately 400 people live on Erub Island, with only some who retain their traditional language, Meriam Mer; Torres Strait Creole and English are the prominent community languages (Australian Bureau of Statistics 2006). Erub Island is a key site in the social movement to obtain recognition of indigenous Islander land rights.

This communication is part of a larger project, funded by the Australian Government's Marine and Tropical Sciences Research Facility, conducted in 2009–2010 on traditional knowledge, and climate change experiences, seasons and adaptation. This larger project produced a series of outputs, largely as reports. This communication draws extensively from one of these reports, which set out to ascertain the experiences of environmental change of both (male) Elders and Aunties on Erub Island, including their memories of past extreme environmental events (see McNamara et al. 2010a).

In this communication, we draw exclusively on the interview material collected from four Aunties living on Erub Island. Overall, five interviews were conducted with Aunties and eight were conducted with Elders, yet it was only four Aunties who expressed explicit feelings of loss, distress and powerlessness; consistent with Solastalgia. This was distinct from the Elders, who did not express such feelings as a result of a changing climate. The gendered nature of climate change (increasingly being documented) is illustrated through this explicit sharing by Aunties, rather than Elders, of worry, fear and distress. Whether this difference along gender lines is a direct result of only Aunties having these feelings, or Elders tending to be more apprehensive in sharing their stories of loss or worry is unclear. However, our opinion is that overwhelmingly, these Aunties do experience Solastalgia and can openly articulate this to a greater degree than the Elders interviewed.

In-depth, semi-structured interviews were conducted between November 2009 and May 2010. Local community leaders were approached to identify these Aunties, respected as holders of knowledge. These interviews explored not only the biophysical impacts of environmental and climate change but also potential emotional, cultural and psycho-social impacts. Broadly, the health of islanders' land and sea country is directly related to their mental and physical well being, as is the maintenance of their cultural heritage and practices (Anderson 1996). That is, an intrinsic synergistic relationship connects the health of islanders and the well being of their land and sea country. Consequently, biophysical impacts have the potential to affect mental health in ways not often considered in non-indigenous societies. Green et al. (2010) argued that these cultural dimensions add extra complexity to understanding the wider impacts of climate change in the Torres Strait.

Climate Change and Gender

To date, little published work examines the gendered nature of climate change. The insights of these Aunties can provide novel perspectives on how climate and environ-

mental change impacts are interpreted, experienced and reacted to. As highlighted in a recent UNDP report on gender and equality, women 'are not passive, and can become agents of change… and should be active participants and decision makers in mitigating and adapting to climate change' (2009, p. 58, 78). Torres Strait Islanders have adapted to biophysical changes in the environment for millennia. The co-evolution between their island and sea environment and nature and culture is facilitated by islanders' ability to 'read' and adapt to landscape changes. These adaptations include shifting resource bases, using local materials to build structures such as seawalls and windbreaks, and changing times for planting and cropping (McNamara et al. 2010b). However, recent environmental changes being experienced by communities are occurring at an unprecedented rate. Human experience of these changes is accumulating, evident as islanders' knowledge is sought and documented concerning the rates of increasing inundation, tidal surges, and altered trends of land and sea-based flora and fauna, particularly, the migratory patterns of birds. These rates of change appear to be destabilising traditional ways of knowing and reading the landscape, including the predictability of weather, seasons, tides, and plant and animal cycles. These changes are described as a source of distress for Aunties on Erub Island.

Four Aunties Reflect

The first Aunty expressed her experiences through her art. She spoke passionately about her identity being intimately linked with her art; a reflection of her surrounding environment that she noted was changing:

> 'It's like an opening for me to really get into my culture, my identity, where I come from; it's all about my artwork… We live on the island surrounded by sea, and I took my artwork from here and the land… The tide is getting higher now. We used to have the shells. There's not much now. We used to go out and collect octopus but it's really hard now to find octopus and for the shell as well, like clam shell or spider shell; it's really hard' (Aunty, pers. comm., 2009).

This Aunty expressed great sadness as she sensed that her identity was changing. She explained that her inspiration is drawn from her home environment. The comfort and solace she gained from her natural home environment was waning. In relation to Albrecht's work (2005, p. 45), these sentiments indicate an 'attack on one's sense of place', along with 'the erosion of the sense of belonging (identity) to a particular place', resulting in feelings of distress and psychological desolation.

The second Aunty revealed how difficult it was becoming to 'read' her home landscape, such as seasonal indicators in the environment. She described how this was also causing sadness and distress:

> 'We used to read the landscape. But now it changes, you have to guess now. Everything changes, make it so hard… You never know, it just change like that, even the tide… Like before, you can know what's gonna happen. So hard now, guessing all the time, through from 2000 is sort of getting worse. I think it start changing in the 1980s, the changes start… Am sad at home, think about the good old days, we always talk about the good old days. Now everything is changing, even the trees, you can see changes in them, even the fruits, like before, we haven't had mango season' (Aunty, pers. comm., 2010).

For this Aunty, her changing environment was also causing sadness and experiences of Solastalgia (Albrecht 2005), a sense of 'homesickness' evident by a decline in familiarity, even though still in the same location. This is a core component of Solastalgia.

Using a different lens, the third Aunty described her experiences of climate change in relation to direct threats to her property, such as encroaching high tides:

> 'When I was young we used to go further out on the beach, the beach was right out… But now, it change a lot and the water comes right in, right up to the back door, I mean, my laundry and the back step in the house… We used to walk all the way out to where the rocks are. Yeah, we can't do that anymore… If it's going to still come in, up to the house and that, where would I go? I would have to leave all of my life at the house but I don't want to' (Aunty, pers. comm., 2010).

This loss of the present is a major concern for this Aunty, who described distress over the potential future decline in solace to be found in her home environment. For her, even greater distress and loss of solace are likely if environmental changes continue and relocation is the only way forward.

The final Aunty whose comments are described here revealed worrying memories and experiences of high winds and tides:

> 'The first king tide came at night… So I can't go to sleep as I was a bit frightened… The first one come there was big wind, I couldn't sleep; I just sit there at the window and watch it until it dropped… It really frightens me, and I sad, you know' (Aunty, pers. comm., 2009).

Conclusion

Collectively, these experiences on Erub Island in the Torres Strait resonate with Solastalgia. They give insight to new, different and gendered perspectives on the many and varied impacts of climate change and its role in creating community distress. This communication has provided a deeper understanding of feelings of a deteriorating connection to self and country, and the sadness, fear and distress that consequently emerges. The feelings expressed here by these Aunties are likely to be shared by many other people, including those who are indigenous, in a growing number of regions throughout the planet.

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