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THINKING SPACE

Climate change and national security: an agenda for geography

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ABSTRACT

On 4 December 2017 the Australian Foreign Affairs, Defence and Trade References Committee is due to report on its inquiry into the implications of climate change for Australia's national security. Public submissions to the inquiry closed on 4 August 2017 and, at the time of writing, some 59 submissions had been made by researchers, public-interest organisations and members of the public, including a number of geographers. A topic of profound significance, climate change and national security warrants deep and sustained public engagement such as that offered by the Senate Inquiry submission process. In this Thinking Space essay, I urge geographers, working in Australia and internationally, to make ongoing contributions to such engagements. The emerging debate about climate change and national security will likely amplify following the release of the Committee's report. Geographic data and analysis pertaining to various aspects of climate change and security are needed in order to shape policy directions and support evidence-based policy making. My contention here is that contributions ought to extend not just from those working at the coalface of climate change risk, for example in political geography, but from all quarters of the discipline.

KEYWORDS

Climate change; national security; geography

On 4 December 2017 the Australian Foreign Affairs, Defence and Trade References Committee is due to report on its inquiry into the implications of climate change for Australia's national security. Public submissions to the inquiry closed on 4 August 2017 and, at the time of writing, some 59 submissions had been made by researchers, public-interest organisations and members of the public, including a number of geographers.[1] A topic of profound significance, climate change and national security warrants deep and sustained public engagement such as that offered by the Senate Inquiry submission process. In this Thinking Space essay, I urge geographers, working in Australia and internationally, to make ongoing contributions to such engagements. The emerging debate about climate change and national security will likely amplify following the release of the Committee's report. Geographic data and analysis pertaining to various aspects of climate change and security are needed in order to shape policy directions and support evidence-based policy making. My contention here is that contributions ought to extend

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not just from those working at the coalface of climate change risk, for example in political geography, but from all quarters of the discipline.

A question of geopolitics?

National security, for geographers, can be more broadly, and arguably more accurately, conceptualised as geopolitical security; as a set of processes and narratives that justify and enact the securitisation of particular geographies. In geopolitical discourse, climate change is often described as a 'threat multiplier' (e.g. CNA 2007), but it is perhaps instructive to think of this as shorthand for a complex suite of interrelated risks that can be disaggregated to food security, water security, energy security, human security and political instability (Brown, Hammill, and McLeman 2007; Nordås and Gleditsch 2007). Such risks can arise in the context of both insidious long-term changes and short-term disaster conditions, within Australia and in Australia's neighbouring states, and can cross borders (Press, Bergin, and Garnsey 2013). Disaggregation is important because only in limited circumstances are such risks likely to compound into conflict, particularly in Australia's relatively peaceful Pacific region where cooperation is often visible in times of hardship (Press, Bergin, and Garnsey 2013; Wyeth 2016). Further, conflict, if it does occur, is likely to be highly localised, small scale and/or within national borders and thus unlikely to warrant a geopolitical security intervention (Hartmann 2010). On the other hand, increasing frequency, intensity and duration of extreme weather and climate events impact on the Australian Department of Defence's existing operations and infrastructure, raising the challenge of multiple extreme events occurring internationally and domestically, simultaneously (Press, Bergin, and Garnsey 2013). Such challenges are certainly an issue for Defence's civil mandate, but do not necessarily map onto security risks, nor, more importantly, is it clear that they are best tackled under geopolitical security policy. Security might be better enhanced through investment in climate change mitigation and adaptation, as precaution against exacerbated climate change risks.

An important question in climate change and geopolitical security research has been establishing that climate in fact does influence human conflict (Hsiang, Burke, and Miguel 2013; Scheffran et al. 2012). Quantifying links between climate and conflict through meta-analysis of aggregated and decontextualised data has established some links between climate and conflict in general, but has not established climate as the sole or even primary driver of conflict (Hsiang, Burke, and Miguel 2013). The question of whether, in a particular case, climate change will lead to or exacerbate conflict will depend on knowledge of the other drivers, and, importantly, how climate change may interact with these. Indeed, a question such as 'do rainfall shortages lead to riots?' is for many geographers beyond countenance, since it retains shadows of environmental determinism and can reduce focus on the politics of vulnerability. Vulnerability, for geographers, is always an outcome of particular social conditions, albeit situated in sometimes hazardous ecologies (Ribot 2010). In any case, crucially important questions of context that highlight potential effects of climate change in socio-ecological systems need to be confronted, region by region. Policy makers in geopolitical security arguably need knowledge of pre-conflict geographies, such as drivers of resilience and vulnerability (Miller et al. 2010). Otherwise, there may be little choice but to solve crises *as crises*, likely addressing only superficial, immediate or acute climate change vulnerabilities, and being less alert to

'slow violence' (O'Lear 2016). Such responses, evidence suggests, will prove ineffective over time, and be unlikely to avert negative social effects such as exacerbating inequity or impacts on mental health (Berry, Bowen, and Kjellstrom 2010). Advances in geography and related disciplines, however, are readily available that enable analysis of complex, simultaneous and deeply rooted socio-ecological stressors in anticipatory ways (Wise et al. 2014). Indeed, I would argue, professional geography is well placed to assist, and indeed take the lead, in providing the socio-ecological expertise for Australia and its region. Advancing human security and building resilience are, unexpectedly perhaps in some quarters, also the best ways to ensure 'geopolitical security' in a changing climate.

Diversifying concepts for climate change and national security

A diverse range of geographic skill sets and knowledges will be valuable, as the debate on climate change and security unfolds, to provide evidence to support, or critique, emerging policy. Indeed, much relevant work is already being undertaken, framed not as pre-conflict geography but as development geography, climate change adaptation, or studies of socio-ecological systems (e.g. Cote and Nightingale 2012; O'Brien 2011; Webber 2016). Knowledge in all aspects of human, water, energy, and food security, livelihoods, and socio-ecological systems risk is necessary (Tanner et al. 2015). So too is historical and cultural geography because, for example, social and cultural loss of homelands must be factored into integrated policy and decision making (Adger et al. 2011). Physical geography is crucial, for example, in highlighting how maps of areas of high vulnerability to climate change impacts require site-specific, consultative assessments to supplement quantitative data (e.g. Nguyen and Woodroffe 2016). Economic geographies can make significant contributions, for example, into understanding the links between insurance and security (Sturm and Oh 2010). Indigenous geographies are crucial, because environmental knowledges have contributed to adaptive capacity for long periods and will remain significant in a changing climate (e.g. McNamara and Westoby 2011). Political geographers have long been analysing climate change and national security (Barnett 2003; Barnett and Adger 2007). For example, political geographers question whether mobilising alarm by framing climate change as a security issue is effective in moving climate policy forward (Dalby 2016). There is, however, ample space, and indeed urgency, for a broader representation of geography expertise and skills (Hulme 2008).

Indeed, a wider range of integrative insights from geographers into climate change and geopolitical security is needed, for debate and policy to be truly innovative. Here, I mention just a few areas of possible expansion and geographic exploration. First, it is important to interrogate how a broad framing of climate change as an issue of geopolitical security does not necessarily lend itself well to addressing climate change as a complex transboundary issue (Kythreotis 2012). In other words, climate change risks are not necessarily most effectively addressed using boundary-reinforcing problem-framings, such as 'national security'.

Human geographers attend to climate change and geopolitical security as a relational affair. Climate-vulnerable places are not only outside Australia's borders (Green et al. 2010). Nor have they become vulnerable in isolation from global processes such as industrialisation and imperialism (Chakrabarty 2012). Nor are representatives of vulnerable people lacking the agency to participate in formulating solutions to climate risk

(Dumaru 2010). More politically, leaders of states in 'climate-insecure' regions are demanding a reversal of the discourse that the industrialised world be held accountable for emissions as a security threat to those who contribute relatively few emissions (Brown, Hammill, and McLeman 2007). The Senate Inquiry received submissions from international organisations, including the Pacific Islands Forum Secretariat. Research with a range of international partners, exploring climate change security issues, is urgently needed.

Further, the temporalities of security are significant. Anticipatory rather than reactionary action is most effective in preventing climate-vulnerable places from becoming sites of conflict or disaster through public and democratic rather than military processes (Hartmann 2010). Supporting Indigenous knowledges, for instance, can help in building resilience (McNamara and Westoby 2011). Pre-emptive approaches to security indeed require institutional adaptive learning, such as deeper collaboration across defence, aid, development and research organisations. Domestic and cross-border policy processes are likely to need to become more adaptive in a changing climate (Chaffin, Gosnell, and Cosens 2014). While knowledge partnerships for climate resilience between Australian and overseas organisations exist, more resources devoted to such partnerships (at a fraction of the cost of typical defence operations) could help tackle climate-related stressors in culturally appropriate and capacity-building ways, contributing to regional resilience (e.g. the current Department of Foreign Affairs and Trade Pacific Risk Resilience Program).

Unsettling mobilities

If all this sounds a touch hypothetical, it is worth closing with a case study, illustrating one reason why the evidence base for policy addressing climate change and geopolitical security needs to be scrutinised closely by geographers. My specific research interests are in climate-related mobility. It is notable—and concerning—that the climate migration 'risk' to geopolitical security is now frequently asserted in policy globally without any scientific evidence at all, because the negative effects on geopolitical security caused by increased migration associated with climate change have in fact been overstated (Betts and Pilath 2017; Gemenne et al. 2014). While there may be some evidence to support the position that migration associated with environmental decline could contribute to exacerbating tensions over resources and thus lead to conflict (Reuveny 2007), risks to geopolitical security in such contexts are unsubstantiated by rigorous data and analysis (Gemenne 2011; Gemenne et al. 2014). Further, studies that announce extremely large numbers of climate migrants have been discredited, largely for failing to take into account adaptation (Betts and Pilath 2017; Gemenne 2011; Press, Bergin, and Garnsey 2013). Any security risk associated with border movement is reduced when migrants have access to appropriate support, en route and in receiving areas. Migration associated with climate change per se is therefore not a significant phenomenon across national borders and thus the threat to geopolitical security is at best overstated.

However, as noted in the submission I made with colleagues to the Senate Inquiry, there are dubious statistics (Farbotko et al. 2017). The Office of the United Nations High Commissioner for Refugees published an estimate range of 25 million to 1 billion climate migrants by 2050 in *The State of the World's Refugees 2012*, with no indication of sources or methodologies supporting the figures. Similarly, the *United States Department*

of Defense National Security Implications of Climate-related Risks and a Changing Climate Report 2015 cites an earlier US defense strategy document (National Security Strategy 2015) to support its claim of increased numbers of refugees associated with climate change, which itself is not supported by any reference to scientific studies. Used in this way, the climate migration risk to geopolitical security seems to derive its legitimacy from common sense or perhaps from the 'politics of fear' often ascribed to the tightening of border controls (Bettini 2013). Either way, the climate migration risk to geopolitical security has become a self-referencing, self-evident claim divorced from science (Betts and Pilath 2017). On the other hand, there is arguably scientific consensus that human security is at significant risk from increased migration-associated climate change (Barnett and Adger 2007; Morton, Boncour, and Laczko 2008; Tacoli 2009). Those who are already facing poverty and lack of opportunity, sometimes bound up in political unrest and disaster risk, are most likely to be temporarily displaced and need humanitarian relief and protection from trafficking. The very vulnerable, moreover, are likely to be trapped in place rather than mobile (Black et al. 2013). Human security associated with climate change migration can be addressed through well-designed and integrated development, migration and climate change adaptation policies, with cooperation between states. As such, migration needs to be recognised as significant in building adaptive capacity, for example when migration is already a part of everyday life and used to diversify income (Connell and Brown 2015; Farbotko and Lazrus 2012; Gemenne 2010). Such an example, I hope, can act as a call to action for more geographers to consider how their own research, and diverse critical perspectives, can inform debates about geopolitical security and climate change.

Note

1. http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Foreign_Affairs_Defence_and_Trade/Nationalsecurity/Submissions.

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