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Performative vulnerability: climate change adaptation policies and financing in Kiribati

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Abstract. This paper explores some of the perverse effects of climate change adaptation policies and financing in the Republic of Kiribati, a low-lying island nation in the Central Pacific. I examine how encounters between financiers and government officials might produce vulnerability to climate change. I draw throughout from field research conducted in Kiribati, an archetypical 'vulnerable-to-climate-change' place, and a preeminent site for experimentation in climate change adaptation. By discussing several instances where Government of Kiribati elites are required to enact vulnerability in order to secure climate change adaptation financing, I demonstrate that such encounters are performative. This research contributes to theories of performativity in showing that the matrix conditioning and compelling such performative enactments of vulnerability is socionatural, consisting of a collective of climate change impacts, adaptation-finance technocrats, and many others. Thus, I demonstrate that vulnerability is not a latent condition, but, rather, an emergent effect of an assemblage of facts, expert actors, and objects.

Keywords: vulnerability, performativity, climate change adaptation, Kiribati

Introduction: Our Road to Copenhagen

In December 2009 a collection of experts went to Copenhagen to broadcast the key messages of the Government of Kiribati's climate change agenda. This group of bureaucrats and delegates had organized a side event at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP), entitled Our Road to Copenhagen. The side event aimed to present the extreme vulnerability to climate change of these low-lying islands; one government spokesperson described the agenda as follows:

> "We are here. We have been here for a while. [But] might not be here in the future because of what we are experiencing with climate change; we are the victims, the ones who get trampled by that race [for global development] … . We need help, there is nothing we can do about this, we didn't cause this problem, but we are paying the price. So we would appreciate any help to allow our people to deal with the changes that are happening." [(1)]

The event showcased the vulnerability of Kiribati using scientific reports from technical consultancies to the World Bank's Kiribati Adaptation Project (KAP).[(2)] Scientists gave testimony as to the likely effects of climate change in Kiribati through presentations showing sea-level rise risks and inundation effects. In a different register, yet with a similar message, a video recording of the *Song of the Frigate*—a traditional song about a bird unable to find its atoll-island home in the wide Pacific Ocean—presented an emotional portrayal of a culture threatened by rising sea levels. Women danced in traditional coconut-husk skirts, while all attending wore flowers in their hair or flower garlands. According to many

[(1)] Interview with Ministry of Foreign Affairs and Immigration official, Ministry of Foreign Affairs and Immigration Tarawa, 1 June 2010.

[(2)] A video recording of the event can be seen at United Nations Framework Convention on Climate Change (2009).

Kiribati government officials and World Bank consultants, the event was a fabulous success, recognized by international media as 'a heartbreaking presentation' (Government of Kiribati, 2009). One KAP manager boasted:

> "there was quite a big turnout, and the hits on the website, it's quite high, which reflects the success of the KAP." (3)

What does the Our Road to Copenhagen side event tell us about vulnerability to climate change in Kiribati? Does vulnerability simply exist as a demonstrable 'fact' predicted by exposure, sensitivity, and adaptive capacity (Adger, 2006), effectively demanding an already-known response? I will argue that vulnerability is not simply an objective fact in the world, revealed by an equation incorporating social, economic, and biophysical characteristics; such explanations cannot capture the force, significance, and consequences of the Our Road to Copenhagen event. Instead, I argue that vulnerability is performative: that is, vulnerability to climate change in Kiribati is reproduced in uneven encounters between various actors. In this paper I focus on interactions between adaptation financiers and government elites. Of course, analysis could be, and should be, conducted which examines how vulnerable identities are produced among the i-Kiribati (the Kiribati word for themselves) population more generally. Importantly, the elites examined here enact a vulnerability on behalf of, and in the name of, the i-Kiribati people and the country of Kiribati.

Descriptions of Kiribati often refer to the country's dispersed, small, and thus challenging island environment (for instance, Troost, 2004). Kiribati has a combined land area of 811 km^2 in an ocean territory of 3.5 million km^2. The highest points of the atolls are between 2 m and 4 m above sea level (Barnett and Adger, 2003), and only 34% of the land in the Gilbert Islands (the western string of islands in Kiribati; see figure 1) and the neighbouring atoll country Tuvalu are more than 2 m above mean sea level (Woodroffe, 2008). The islets that comprise each atoll have also relatively small land areas, averaging less than 500 m in width (Lal et al, 2002). Atolls have fragile and limited reserves of freshwater. Beneath the surface of the islets of an atoll are Ghyben–Herzberg, or freshwater, lenses which are created as rainfall seeps through the thin atoll soil (sand and gravel) and floats above the saltwater below (Bridges and McClatchey, 2009).

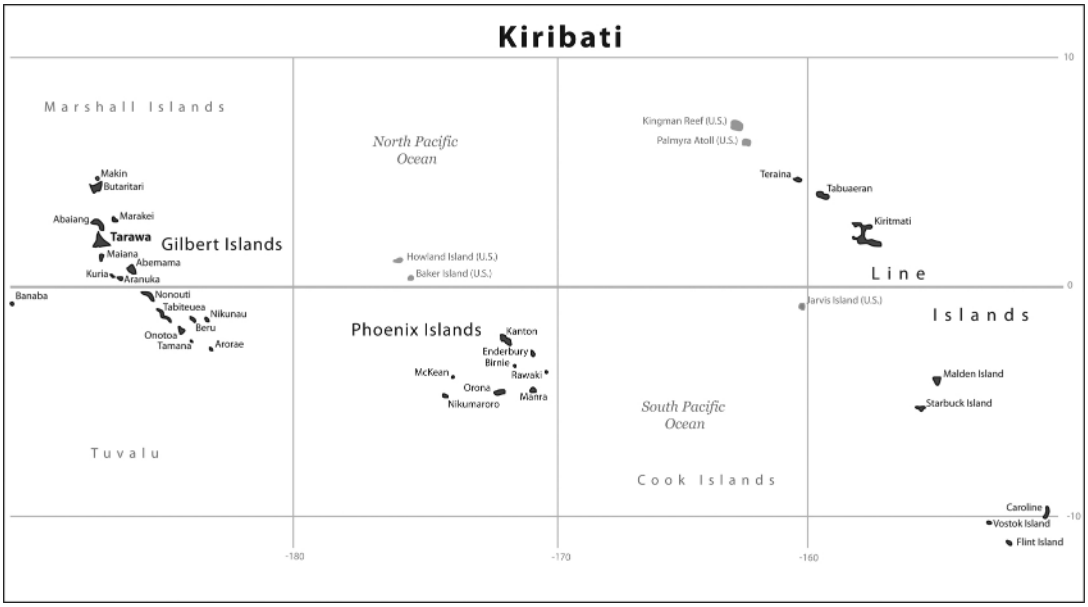

Figure 1. Map of Kiribati.

(3) Interview with KAP official, KAP Office, Tarawa, 5 May 2010.

Climate changes in Kiribati are predicted to reduce access to various natural resources which play a key role in the livelihoods of i-Kiribati people. In addition to the threats posed by rises in sea level to a low-lying country, more irregular precipitation (Lal et al, 2002; Storey and Hunter, 2010; Thompson et al, 2008), extreme events such as droughts and storms (Beca Infrastructure, 2010; Ramsay et al, 2008; World Bank, 2000), and sea-level rise (Ramsay et al, 2008) conspire to reduce both the quantity and the quality of the already fragile freshwater lenses. The physical characteristics of atolls—their low-lying nature, their isolation, their high coastline : land ratio, and their infertile, shallow, sandy, and alkaline soils—amplify the effects of climate change (Barnett and Campbell, 2010; Mimura et al, 2007).

As a response to the multiple threats that climate change poses to Kiribati, the World Bank and the Government of Kiribati instigated the KAP. Planning and research for the project began in the late 1990s, and in 2002 the KAP was officially started, aiming to:

> "develop and demonstrate the systematic diagnosis of climate-related problems and the design of cost-effective adaptation measures, while continuing the integration of climate risk awareness and responsiveness into economic and operational planning … [and] to assist the GoK [Government of Kiribati] in enhancing its capacity to plan and implement adaptation measures to the climate-related issues facing the country" (GEF, 2005, pages 3–4).

The KAP has completed two phases. Between 2002 and 2005 Phase I of KAP completed national consultations, tried to mainstream risk assessment and climate change adaptation into government planning, and produced technical reports and plans for a pilot adaptation project. Phase II of KAP (which I investigated when in Kiribati in 2010) spent almost US $7 million between 2005 and 2010 (GEF, 2005). The World Bank implemented the project—one of its first adaptation projects—and the KAP serves as a demonstration project for other World Bank-implemented climate change adaptation projects. Initially there were five components of KAP-II: (i) policy planning and information, including awareness raising; (ii) land use, physical structures, and ecosystems; (iii) freshwater resources; (iv) capacity building at the island and community levels; and (v) programme management. In 2009, however, the scope and geographical location of the project was vastly reduced due to insufficient progress and the project instead focused on freshwater resources, planning, and protection in the capital, Tarawa (GEF, 2009). KAP-II was recently completed, and planning for KAP-III was being undertaken when I was visiting Kiribati.

I draw throughout from fieldwork conducted in Kiribati in May and June 2010. Kiribati is an archetypical 'vulnerable-to-climate-change' place. It is also one of the world's preeminent sites for experimentation in climate change adaptation. While in Kiribati I sought to understand some of the unintentional effects of the growing climate change adaptation industry. To do this, I conducted more than sixty interviews while in Kiribati and followed up with several Skype interviews; I observed World Bank managers and technical consultants in their work environments by attending workshops, conferences, and World Bank field trips to KAP sites; I attempted to position myself within the expatriate community by attending their weekly social functions and visiting the restaurant they frequented; and I visited outer islands. I met with experts from the KAP management staff (including the local project managers and directors) and the financiers (including AusAID, NZAID, and the World Bank). I met with representatives from several of the Government of Kiribati ministries to discuss their climate change adaptation related work and their involvement with the KAP. In addition, I met with representatives of international donors with permanent setups in Kiribati. Alongside these observations and interviews, I amassed annual ministry work plans and business plans for the state-owned enterprises, budgets for several years, development plans, the consultancy reports to the KAP, and numerous management and assessment reports from the World Bank.

This is a very particular 'slice' of information about climate change adaptation in Kiribati: I primarily 'studied-up' (like Goldman, 2005; Roy, 2010), to management, financiers, and bureaucrats. To be sure, my observations in Kiribati and subsequent desk-based research do not reach the scope of ethnographers of aid, such as Mosse (2005) who spent many years in the field working for and observing donors and development institutions. However, conducting this research in Kiribati over a limited timeframe was generally very informative due to the concentration of such elites in one or two hotels and restaurants and the openness of KAP affiliates and Government of Kiribati employees.

Using these observations from Kiribati, I show that encounters such as the Our Road to Copenhagen event reproduce vulnerability in Kiribati through performative enactments. In the next section I introduce my approach to performativity and vulnerability that draws from Butler (1993; 1997; 1999). Although this work could be situated in conversations about patterns and effects of international development assistance (for instance, Li, 2007; Mosse, 2005), I find the performativity lens useful for understanding what compels and conditions the actions of these transnational elites and their effects. I show that the matrix conditioning and compelling such performative enactments of vulnerability is socionatural (Robbins, 2007): an assemblage of climate change impacts, adaptation-finance technocrats, and more. Thus, I try to understand the limits and opportunities posed to vulnerability by nonhuman actors. Finally, I outline examples of the encounters in which vulnerability is performed in Kiribati and I demonstrate how vulnerability is performative, redirecting international development and adaptation financing and reorganizing state powers and, in the process, foreclosing alternative and empowering political identities.

Theorizing performative vulnerability

Whilst in Kiribati I attended a conference with international delegations, including policy makers and business people. This small conference in Tarawa—the Association of Pacific Island Legislatures, or APIL—was organized to bring together Pacific Island bureaucracies to draft a legal statement about their commitments and vulnerabilities to climate change. By chance, on the previous day two atoll scientists familiar with Kiribati's climate change predicament had released a scientific journal paper which showed several islets in Tarawa growing, not shrinking, under conditions of rising seas (Webb and Kench, 2010). Although atolls are growing because of shoreline manipulation as well as natural processes, and the growth will not alleviate Kiribati's plight, numerous news stories were run which questioned the vulnerability of atoll countries in the face of sea-level rise (McDonald, 2010).

During the conference a government climate change advisor assembled a lengthy presentation, enacting vulnerability by quoting numerous scientific estimates of sea-level rise and the 'multiplying' factors in Kiribati, including poverty and overcrowding, which conspire to make Kiribati the 'vulnerable of the vulnerable' (Government of Kiribati, 2010a). An Australian businessman attending the conference had clearly seen the recent Australian headlines; citing growing islands, he questioned the government climate advisor, suggesting that perhaps Kiribati was not quite as vulnerable as the lengthy statistics implied. It was one technocratic science against another. Rather than acknowledge the recently published data, that some islets in Tarawa were in fact accreting coral sands, the government scientist rejected the suggestion that Kiribati was growing and drew on alarming statistics of sea-level rise and its financial toll, his argument bolstered by observations of overcrowding, poor sanitation, and poor health in the Kiribati housing sector (citing an established vulnerability script). The government scientist also claimed that the Webb and Kench (2010) report was in fact produced from 'questionable' science. In fact, the same person wrote some of the scientific reports for the KAP and the paper which attracted such media attention. The two perspectives do not contradict each other; instead they reflect different data about complex

atoll geographies—one collected using water gauges and models, the other from aerial and satellite photographs.

As this story indicates, vulnerability is not an underlying condition awaiting proper explication or categorization. Instead, vulnerability is an effect of an assemblage—where "assemblages have no pregiven form, but emerge as the result of what people and things do" (Braun, 2008, page 670). I take 'assemblages' to be diverse collections—forces, things, social orders—that in coming together have the capacity to act and give meaning to action (Braun, 2008; Hardie and MacKenzie, 2006). This assemblage approach stresses symmetricality—recognizing the importance of nonhuman actors—and relationality (Robbins and Marks, 2010). What I question in this paper is: what does this assemblage do; that is, does it make or remake Kiribati's vulnerability to climate change? There are several ways of gauging this: are people convinced by the performances of vulnerability; are the i-Kiribati people *more* vulnerable as a result of the encounters; and are the i-Kiribati people vulnerable in ways they were not previously? But vulnerability is not simply an intrinsic condition that exists and thus could be measured in such a way: rather, as I demonstrate here, it is constantly produced, through these assemblages of actors, enactments, and materialities that enable such performances.

Mainstream and critical vulnerability studies mostly follow definitions such as Adger's (2006, page 269): that the vulnerability of a place or social group is the "degree to which a system is susceptible to and is unable to cope with adverse effects (of climate change)." While Adger's definition is here an illustrative example among many other conceptualizations of vulnerability, it is an important one, used by the Intergovernmental Panel on Climate Change (Parry et al, 2007). And although others understand and classify vulnerability slightly differently (Fussel, 2007; Mustafa, 2005; O'Brien et al, 2007), such definitions are united by their attempts to succinctly incorporate the various socioeconomic and ecological components of existing under stressful conditions. Adger (2006, page 269) notes:

> "in all formulations, the key parameters of vulnerability are the stress to which a system is exposed, its sensitivity, and its adaptive capacity."

Definitions of vulnerability to climate change draw from previous explorations of vulnerability to environmental hazards and other shocks in geography from the 1970s and onwards (Hewitt, 1983; Watts, 1983; Wisner et al, 2004). For instance, Adger's (2006) definition of vulnerability to climate change clearly echoes Watts and Bohle's (1993) framework for understanding vulnerability to hunger and famine, which they argued could be summarized as the risks of exposure, inadequate capacities to cope, and the consequences of exposure. Like studies of vulnerability to climate change, this hazards tradition was concerned with 'denaturalizing' natural disasters, and emphasized the underlying social, political, and economic vectors of vulnerability. Accordingly, vulnerability is understood as socially constructed; although political ecologists, such as Wisner et al (2004), rejected a strong constructivist understanding of vulnerability, such as Bankoff's (2001) assertion that vulnerability is an othering and colonial discourse like tropicality and developmentalism. Nonetheless, even mainstream vulnerability researchers (Cutter et al, 2000) acknowledge the importance of positionality in determining vulnerability (summaries in Cannon and Muller-Mahn, 2010; Mustafa, 2005).

Connecting critical and mainstream studies of vulnerability to climate change and vulnerability to hazards is a common ontological position: that vulnerability inheres to people, places, and systems.[4] Accordingly, vulnerability is to be understood by more precise investigations of political economic or political ecological conditions. This is evident amongst the current iteration of vulnerability studies, which is preoccupied with how to

[4] Thank you to an extremely generous and insightful anonymous reviewer for clarifying this point.

measure (ie, with which indicators) and categorise vulnerability (for example, Fussel, 2007; O'Brien et al, 2007). Vulnerability assessments [5] incorporate these insights to find 'hotspots' of vulnerability so as to identify who is vulnerable, in what ways, and how this condition should be ameliorated (Buys et al, 2009; Fussel and Klein, 2006; Heltberg et al, 2009). Even critical political ecologists search for more precise estimates of vulnerability (for example, Mustafa et al, 2011). But this pursuit of scientific precision cannot account for the conflicting assemblages of vulnerability noted at the APIL conference.

I add to the above formulations by suggesting that vulnerability is an emergent effect produced in historical and contemporary encounters that are uneven and power laden, with meaning given by an assemblage of facts, expert actors, and objects (Sundberg, 2004). As the above examples suggest, certain people and places must constantly articulate themselves as vulnerable. In this sense, vulnerability is neither static nor comprehensible through more precise scientific understandings: rather, vulnerability is constantly made and remade within these encounters. In making this argument, I build on previous embodied, posthumanist, and social–theoretical contributions to understanding vulnerability (Braun and McCarthy, 2005; Clark, 2007; Findlay, 2005; Harrison, 2008; Mustafa, 2005; Yamane, 2009). Like Yamane's (2009) and Mustafa's (2005) research on hazardscapes, I want to link the material and discursive work of vulnerability and examine its effects. In contrast to their position that this translative work makes places and people *appear* vulnerable, I draw on theories of performativity to understand how vulnerability is discursively and materially *produced*.

According to Butler's notion of performativity, subjects are compelled, or hailed, through citational practices that both enable and discipline subjects and that are saturated with power. Like gender or other axes of inequality, the enactments of vulnerability are in some senses conscious or intentional (Nelson, 1999), but they are also compelled and constrained by powerful financiers and project management techniques, as well as by historical conditioning. Embodied enactments of vulnerability are productive in that they reshape and reproduce vulnerable identities, and they reveal the distinct mappings of power within these encounters (Collard, 2011). Understanding vulnerability in this way signals some of the perverse and profound effects of such encounters: they become sites for the citation of claims for financial assistance and thus have the potential to reproduce rather than ameliorate vulnerability in marginalized countries, such as Kiribati.

I draw three key theoretical insights from Butler's (1993; 1997; 1999) performativity and its subsequent literature in geography (Gregson and Rose, 2000; Nash, 2000; Nelson, 1999; Rose-Redwood, 2008; Sundberg, 2004). The first insight is that identities are constantly made and remade through repeated acts and practices. Identities are thus processual, slowly accreting with each performance that cites previous ones (Nelson, 1999)—like the i-Kiribati bureaucrat who cited the overcrowding and poverty script. In contrast to Butler, and following Nelson (1999), however, the enactments of vulnerability are not subconscious performances by unthinking agents—it is clear from my empirical results that the i-Kiribati bureaucrats are very aware of their circumstances. Yet, given the financial limits of the Government of Kiribati and the socionatural conditions in Kiribati, such performances are neither 'free' or 'volitional'; rather, they are compelled.

Second, such encounters between i-Kiribati bureaucrats and financiers wherein vulnerability is enacted are uneven and power laden. The asymmetries of such encounters

[5] Vulnerability is not a concept unique to studies of human susceptibility to climate change. The framing of a vulnerability assessment, as a mode of assessing capacities to cope with phenomena such as climate change, is also common in other sciences, such as the ecological sciences (see Head, 2010) for an analysis of concepts moving between the two). Vulnerability assessments, then, are a widespread tool for understanding the responses of any complex system (ecological or human) to external forces of change.

compel and *condition* these performances. In this account, "the concept of performativity recognizes that 'the subject' is constituted through matrices of power/discourse, matrices that are continually reproduced through processes of resignification, or repetition of hegemonic … discourses" (Nelson, 1999, page 337). As Sundberg (2004, page 54) notes in her descriptions of encounters between conservation NGOs and women's groups:

> "The discourses, practices, and performances enacted in this meeting are rooted in interlocking systems of power running along multiple axes, including North/South, modern/traditional, ladino/indigenous, and male/female."

This, and the examples that follow, are not to imply that power is pregiven—indeed, power is a "terrain of struggle" (Li, 1999, page 316)—but, rather, to show how historical unevenness lives on, and to demonstrate the socioecological context into which climate change adaptation enters. Vulnerability in Kiribati is produced (along with other material and ecological conditions) by decades of asymmetrical power relations, including colonialism, nuclearism, and 'aid dependence', and these continue today (Kuletz, 2002). Kiribati was a British colony until 1979, after being a British Protectorate and source of phosphate since 1892 (MacDonald, 1982). The familiarity and recency of this colonial history live on (Burnett, 2005): for instance, embodied in those who worked under the British regime and continue to work in government or on related projects (eg, as project managers of the KAP). Other neocolonial regimes, such as nuclearism and international development assistance, map onto the British colonial history in Kiribati. Although Kiribati may now be officially independent from Britain, they are by no means economically independent: donor assistance was some 41% of total government revenue in 2010 (National Economic Planning Office, 2009).[(6)]

The third insight from a theory of performativity that I draw on here is that performativity leads to the appearance of a natural condition underlying identities (Butler, 1999). As Loxley rephrases (2007, page 118):

> "Our identities are not given by nature … . Our activities and practices, in other words, are not expressions of some prior identity."

Translated to vulnerability, this suggests that notions of natural vulnerability, or natural *causes* of vulnerability, are effects of performative interactions and interplays. Of course, there are 'natural' phenomena that come to matter in vulnerability to climate change: many of Kiribati's ecological characteristics make the country particularly susceptible to some climate impacts. And this is not to say that enactments of vulnerability in some climate change conference are actively and purposefully urging sea-level rise, for example. Instead, I am suggesting that such performances by i-Kiribati bureaucrats in encounters with financiers also enter into assemblages of vulnerability, in ways we might not expect.

This approach is in conversation with Barad's (2003) 'posthumanist performativity'. Barad's performativity is materialist, naturalist, posthumanist, and "allows matter its due as an active participant in the world's becoming" (page 803). The APIL conference and the Our Road to Copenhagen event are subject to and enabled by sociomaterial conditions. Actions are embedded within sociomaterial collections, assemblages of heterogeneous parts that affect vulnerability when brought together. Performativities (and actors) are both limited and enabled by their hybrid collectives of humans, technical devices and others (Braun, 2006; 2008; Hardie and MacKenzie, 2006; Whatmore, 2002), like Robbins's (2007) lawn collective which compels its owners to act, hailing them to maintain it with chemicals and constant attention. This approach to performativity alters the matrix that compels enactments,

[(6)] The Revenue Equalization Reserve Fund, the sovereign wealth fund created from phosphate revenues to promote future development, is drawn down to cover national deficits incurred by the public sector and is only intended for fiscal shocks. Although meant to, it hardly acts as a source of economic independence for the Government of Kiribati.

allowing a consideration of the opportunities and constraints produced by nonhuman natures (see also Harris, 2006).

In Kiribati, one actant in the assemblage that enables (but also constrains) vulnerable identities includes the production and availability of statistics—matters of fact—about Kiribati. The enactments of vulnerability draw on and act within an arrangement of facts about the nature of climate change in Kiribati and tropes about the underlying conditions of life and living. At the Copenhagen side event, the KAP consultant was able to describe i-Kiribati vulnerability when armed with statistics, quoting at length the current and future parameters of sea-level rise, wave strength, and salt-water inundation (and not, for instance, discussing how i-Kiribati people perceived their vulnerability, or what they want to do about these changes). Another participant encouraged the government to "keep banging the drum" about the vulnerability of Kiribati.[7] This participant used the comparisons of Tuvalu—which has only 10 000 residents and is linked to New Zealand—and the Maldives—which "has 300 000, but they can buy their way out". In contrast, in "Kiribati there are 100 000 ill-educated people." This Copenhagen side-event participant was able to present Kiribati as 'the vulnerable of the vulnerable' by drawing forth the sociomaterial conditions of life in Kiribati: there are many people (more than in Tuvalu), they are poor(er, than the Maldives), and they are ill educated. By using these data to bolster their claims, the 'performers' and their matters of fact together make a sociotechnical assemblage that makes a specific case about vulnerability in Kiribati (some of the consequences of which are explored in the following section).

These statistics do not come to life only when announced by the climate scientists or the Copenhagen participants. Indeed, they have a life of their own. Statistics about sea-level rise mingle with images (photographs, graphs, videos, and scenes seen in person) of waves crashing against fragile, home-made sea walls protecting delicate family houses. This partnership is mobile, travelling amongst a recent flourish of media personnel, arriving on the front page of newspapers in Australia (Morton, 2009), or on blog posts in the United States [*The Two-Way* (Reed, 2010a; 2010b; 2010c)]. These matters of fact are also the context, or the background, through or against which vulnerable subjectivities make sense; such statistics create a constellation of citations, through which performances of vulnerability come to matter (Butler, 1993). The sociomaterial/natural conditions of Kiribati—its low-lying nature; its fragile source of freshwater; its small size; and its lack of education infrastructure—and the material conditions of climate change—sea-level rise, storm surges, and wave strength—are required actors in the assemblage that makes vulnerability matter (Barad, 2003; Callon and Law, 1995). These materialities limit, but also enable, the bounds of what is possible to enact, so that Kiribati becomes the 'vulnerable of the vulnerable'.

Performative vulnerability

The official assistance regime in Kiribati is changing in conjunction with 'performances' of vulnerability and collections of observations and statistics about climate change. The vulnerability assemblage allows the conditions of possibility for a climate change agenda to emerge, alongside the traditional focus of longer term official development assistance. There is one hotel in Kiribati where the visiting consultants, technical assistants, and other visitors stay when they visit. One evening when I dined there, I conversed with various visitors. Across from me sat a labour relations bureaucrat from New Zealand (consulting for NZAid) who was assessing potential changes in temporary migration regulations, facilitating i-Kiribati labourers to travel to New Zealand and Australia to fill shortages in areas such as agricultural labour (and which may in the future alleviate the stresses on atolls due to climate change). This bureaucrat was wedged between a World Bank manager and an Asian Development

[7] Interview with NTNK Video, NTNK Office Tarawa, 27 May 2010.

Bank manager who were in town to meet with the Ministry of Public Works and Utilities to discuss building a new 'climate-proofed' road through Tarawa. On either end of the table were a World Bank manager and a technical assistant who were working on a renewable energy project (to reduce i-Kiribati contributions to climate change and thus demonstrate to other states and donors that Kiribati is serious about reducing emissions). Whilst they exchanged comments about the changing roles of the World Bank and other unilateral aid institutions, it became obvious that climate change adaptation is becoming the main game in town. Those at the table recognized this too: both of the road consultants complained about their directives to 'climate-proof' the road—the first because he was now unable to get funding for other projects, for example health projects;[8] and the second because the climate change agenda is just the latest iteration of 'development' concerns—"like the environmentalists, economists, and feminists beforehand".[9] This consultant makes an astute observation, even if he is disparaging about serious 'development' concerns. In Kiribati there are now projects to reduce vulnerability by limiting reef mining, by installing better rainwater tanks, by slum clearance; although some long-term donors continue to invest in education and economic governance (AusAID, 2009; NZAID, 2009). Are changing policies, or framings, providing the conditions for changing practices (contra Mosse, 2004; 2005)?

Donors are keen to communicate that climate change is a fundamental concern, even an organizing principle for their changing and future funding regimes in Kiribati. This is articulated, in many cases, by new and emerging climate change adaptation projects. One government official in Kiribati mentions how this framing has changed:

A: "Because we have been told there are climate change facilities are available, so we are trying to tap those, not missing those … . Climate change [is] one of the top issues. You may have heard our President is very vocal, wherever he goes he will be talking about climate change. Because he is doing that, we make sure to support him and show it is an important national issue for the government, we are serious about it and working on it, and try and get as much support as possible for donors. We try not to wait, but to go forward."

Q: "So most projects have [a] climate change slant?"

A: "Yes, because you know what, the donors are telling us that we can only get this funding facility if there is a climate change measure, so that's what we've been doing, trying to make the design take into account climate change, addressing climate change issues, and that way we will get the funding, and that's what we are doing now. And the donors are advising us, if you want to get this funding you have to do this and this and this."[10]

As this quote suggests, some donors require i-Kiribati bureaucrats to marshal their vulnerability to climate change in order to be successful in their applications for financing. Performances, funding regimes, and materialities are reframing Kiribati and its development assistance regime in terms of vulnerability to climate change. This framing creates climate vulnerability as the overriding concern, minimizing other development and local interests, in such a way as to make Kiribati once more the subject of international and transnational forces, institutions, and interests. Climate change adaptation is a paradigm, a discursive frame, and a metatrope of development assistance, which is shaping the way international assistance is distributed and making possible the conditions for new performance and practices of vulnerability.

Observation of those consultants, assistants, and managers who came through Tarawa suggests that, when they spend their energy and money trying to reduce vulnerability to

[8] Interview with World Bank official, Mary's Hotel Tarawa, 7 May 2010.

[9] Interview with Asian Development Bank official, Mary's Hotel, Tarawa, 7 May 2010.

[10] Interview with Ministry of Finance and Economic Development official, Ministry of Finance and Economic Development, Tarawa, 18 May 2010.

climate change, they also require that the Government of Kiribati spends its time facilitating the reduction of vulnerability to climate change. Senior public servants court consultants, administer projects, and attempt to attract new sources of funding. When each new group of managers or technical assistants arrives in town they meet with the same select i-Kiribati public servants: those with the best English and the highest education—in the Ministries of Environment, Lands and Agricultural Development; Public Works and Utilities; Interior and Social Affairs; the Office of the President (in charge of the 'cross-cutting' issues of climate change and disaster management)—and recommended that I do the same. When these senior i-Kiribati public servants are not meeting with consultants within Kiribati they are often attending training and meetings all over the globe.

It may appear that this is nothing new; after all, before climate change was a central concern in Kiribati, 'development' was the organizing principle of donor assistance. However, Kiribati can articulate a new and profound claim for adaptation aid, owing to its particularly fragile socionatural conditions. These new climate change policy objectives touch down in profound ways. Before climate change, Kiribati was relatively off the developmentalism map. For instance, prior to the KAP the World Bank had no investment or grants in Kiribati (the International Monetary Fund still does not), and in fact the World Bank targeted Kiribati for its first experiment in climate change adaptation as the country was relatively unheard of, and thus the trial project would be relatively anonymous.[(11)] This reordering of state power and capacities in order to facilitate climate change financing is relatively novel and profound in Kiribati. As one *i-Matang* (Kiribati word for foreigner) employee of the KAP noted, in stark contrast to the Ministry of Planning and Economic Development official quoted previously:

> "I would personally remove the word climate change from the KAP and wipe it out of the vocabulary of the country for five years. And no one would be able to use it … . But I think at the moment, I have also been to meetings where there are discussions about how we are going to get money … . The danger here is that we are creating a culture of, 'it's their [the donor's] problem they should come and fix it'. What do they call it, not a charity, aid dependence? … Because there is so much climate change money going around. Yes, Kiribati is in huge danger, we are. Climate change will have catastrophic effects, but in the meantime, we have huge problems."[(12)]

Another consultant added that the headline issue of climate change was effectively drowning out other, no less pressing, issues:

> "Climate change is different from other things in that they do have a claim here, they can genuinely say it's not our fault and we need to be compensated. But, on top of that, and not climate change related, the health statistics in Betio [the western tip of the capital, Tarawa] should just not be happening, especially the maternal and child health stuff. We saw the hospital today. Sure, climate change exacerbates this, but Betio is a basic development problem, there needs to be much improved sanitation and water supply."[(13)]

These quotes are not to suggest that the Government of Kiribati has foolishly chosen to chase climate change moneys at the expense of other, more important, livelihood concerns at home. Indeed, quite the contrary. Rather, these quotes suggest that pleasing financiers and procuring projects compels performative enactments of vulnerability that are beginning to have perverse effects, by reorganizing and redirecting state capacities and possibly reducing the adaptive capacity of government planners. When the government is trying to

[(11)] Interview with previous World Bank manager, Skype conversation, 12 April 2010.

[(12)] Interview with consultant to the World Bank, Ministry of Public Works and Utilities, Tarawa, 10 May 2010.

[(13)] Interview with consultant to the World Bank, Tabon Te Keeke Resort, Tarawa, 15 May 2010.

prise adaptation financing from donors' hands, attempting to convince them to build concrete seawalls, they cannot simultaneously be focusing on implementing locally achievable, well-practised, 'traditional' techniques for reducing vulnerability (a sentiment echoed by many interviewees), such as relying on varied food sources (from the land, the reef, or the ocean) and water sources (from the sky, the ground, and coconuts), or employing traditional coastal defences such as mangrove plantations.

Politics of performativity

Consider again Our Road to Copenhagen at the Copenhagen COP in December 2009. The event was organized by the Government of Kiribati and the KAP to demonstrate the vulnerability of Kiribati and the i-Kiribati. During this encounter, scientists and consultants to the KAP gave testimony to the expected and experienced climate impacts in Kiribati. Through the language of risk assessment, one technical assistant to the KAP demonstrated the various levels of danger of sea-level rise in different parts of Tarawa. Using a variety of projections that this consultant had investigated for the KAP, the presentation 'visualized' exposure to sea-level rise through maps of Kiribati. Different regions were coloured in red, yellow, or green depicting their expected inundation, overlaid with housing and infrastructure expected to be affected. These images demonstrated the regions' vulnerability to sea-level rise under various scenarios (see figure 2 and figure 3, for example).

In addition to this technical rendition of vulnerability, audiovisual interpretations were presented. The *Song of the Frigate* played alongside videos of i-Kiribati women performing traditional dances, interspersed with images of waves crashing against the sea walls and causeways that protect and link the islets (see United Nations Framework Convention on Climate Change, 2009). There were accompanying images of flooded houses and coconut trees that had lost their fronds due to saltwater inundation.

Prior to this encounter, the direction of proceedings was hotly contested. There was a tense negotiation within the Kiribati delegation about the balance of technical testimony and

Figure 2. [In colour online.] 'Base layer with infrastructure' slides from Copenhagen 2009 presentation (Kay, 2009); reprinted with permission of the author.

Figure 3. [In colour online.] 'Risk levels at 2070' slides from Copenhagen 2009 presentation (Kay, 2009); reprinted with permission of the author.

dramatized video. In one case, this negotiation occurred between the i-Matang managers of the KAP, and an i-Kiribati media contingent.(14) When making the video for the Copenhagen event, the KAP management personnel wanted to edit one of the video presentations as it made false claims about the effects of climate change. A water engineer with the KAP complained that the video presentation made claims about storms that were unseasonal and unprecedented in intensity and frequency, but that these storms were within the normal range of weather conditions for Kiribati.(15) On the other hand, the i-Kiribati media contingent told the story in the Kiribati way, drawing from oral histories and their personal connections to Kiribati. They believed that the i-Matang scientists and management did not know about storytelling, how to communicate a 'heartbreaking presentation', or about Kiribati.(16) Enacting vulnerability on the international stage was fraught with politics of storytelling, truth-claims, and values (Wright, 2009), and struggles about what constitutes scientific data sufficiently rigorous for assembling Kiribati as the vulnerable nation. At the heart of these struggles are contested ideas about how and which parts of vulnerability should be practised (although there is also a dispute about substance and exaggeration) in such encounters: scientifically, using animations of inundation, or affectively, using heartfelt pleas to protect disappearing islands and their way of life.

As this example demonstrates, the 'performances' of vulnerability in Copenhagen were intentional and conscious ones (Nelson, 1999; Sundberg, 2004). The event was 'scripted' and 'rehearsed', with the intent and core message altered after rehearsal. There were also costumes: the scientists and government officials wore suits and ties, and the i-Kiribati dancer wore a traditional coconut skirt and flower headdress. However, although these enactments

(14) Interview with consultant to the World Bank, Ministry of Public Works and Utilities, Tarawa, 30 May 2010.

(15) Interview with consultant to the World Bank, Ministry of Public Works and Utilities, Tarawa, 30 May 2010.

(16) Interview with NTNK Video, NTNK Office, Tarawa, 27 May 2010.

are conscious, they are also compelled both by the powerful financiers of the KAP as well as by the historically conditioned and produced script of vulnerability. An i-Matang management consultant directed the proceedings in Copenhagen. In a discussion with this manager, he confirmed that the main goal of the Government of Kiribati in sending a large delegation to the COP was to 'demonstrate their vulnerability and lobby for funds': however, the management consultant rejected this approach, reframing the side event as "go[ing] to explain the challenges and the actions and the importance … [not going] with a begging bowl because people will respond to that by turning away and backing off."[17] Here, the management consultant provided the overall goals of the 'performance' of vulnerability, so as to concentrate on the challenges of vulnerability, and the KAP, rather than directly demanding funding. The management consultant was conditioning, or shaping, the performance, creating a clear script to be cited by those involved in order to 'sell' vulnerability more strategically and successfully to funders.

This framing of social identities in Kiribati as exclusively vulnerable to (and solely because of) climate change "operate[s] to silence alternative identities that emphasize more empowering qualities of resilience and resourcefulness" as Farbotko (2005, page 289) has found in the case of Tuvalu and its discursive representation. Recognizing this, the President of Kiribati, Anote Tong, has resisted representations of Kiribati as helpless victims of climate change, opposing a 'climate refugee' identity for i-Kiribati people who may be forced to leave. Instead the President emphasizes 'migration with dignity' (Government of Kiribati, 2010b) and thus focuses on skilling younger i-Kiribati—in nursing, for instance. The government has also recently purchased land in Fiji that may be used for farming, or for resettling skilled migrants from Kiribati in support of the 'migration with dignity' strategy. These resistances are in tension with the performances of vulnerability, and the ways in which a one-dimensional framing of i-Kiribati forecloses recognition of how these vulnerabilities have been historically and geographically produced—instead, producing a naturalized vulnerability.

As I have suggested, these enactments produce both discursive and material changes in vulnerability. Kiribati comes to be seen solely within the bounds of climate change. The framing of Kiribati in this way (vulnerable, lacking), in turn, influences the terms of debate for climate change adaptation. The acting-out of vulnerability facilitates the flow of finances to and from Kiribati: they must be vulnerable in order to eke adaptation aid from donors. The performances also determine, or discipline, the limits of government action—what is acted upon, and what money is spent on. And there are qualitative changes in vulnerability, such as dignity and autonomy in decision making due to these enactments; the government has significantly less freedom to choose its own programme of action for governing when the finances for these actions are provided by official development assistance, with its apparatus of review, evaluation, and strategic priorities.

Conclusions

This paper draws on theorizations of performativity from Butler (1993; 1997; 1999) and instances of how this has been taken up in geography, to understand what produces Kiribati as vulnerable and how. I situate this discussion amongst a history of vulnerability studies in geography, that have primarily conceptualized vulnerability as an ontological condition that inheres in people, places, and systems. In contrast, I show that vulnerability accretes in encounters between i-Kiribati delegates and multiple international audiences, with some perverse effects (here, I explore the performances of elites acting in the name of Kiribati). These encounters are performative; they are both disciplining and productive of vulnerability. A socionatural assemblage that includes material conditions such as sea-level rise, statistics,

[17] Interview with consultant to the World Bank, Tabon Te Keeke Resort, Tarawa, 15 May 2010.

and government actors, amongst many others, compels enactments of vulnerability. Of course, there are limits—in the disciplining sense, but also limits to the productive outcomes of these encounters—and not everyone can enact vulnerability equally: it is when bolstered by tropes of underdevelopment and statistics about climate change that vulnerability can come to life, creating new vulnerable identities and influencing the nature of vulnerability. By enacting vulnerability, compelled by financiers as well as socionatural conditions, resources are beginning to shift and new frames of social life in Kiribati are created. Vulnerability is not simply a 'condition', but is constantly reproduced, reinscribed on, and relived by people and places. Enactments of vulnerability in these encounters are not volitional but, rather, compelled and conditioned by historical practices of vulnerability and uneven relations.

These enactments of vulnerability, and the performative nature of these encounters and assemblages, are just some of the overflows from climate change adaptation projects. The KAP, and other projects, do not only transform that which they touch, as specified by their terms of reference or project goals, but also have material, generative effects. In this instance, the requirement that vulnerability be acted-out affects the very nature of vulnerability in Kiribati, potentially redirecting finances from traditional 'development' projects and monopolizing limited government capacities. This paper has outlined one of the perverse effects of climate change adaptation financing, which is especially important given the way in which climate change aid has eclipsed traditional 'development' aid—certainly in terms of budgets and arguably also in terms of political priorities.

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