

Article

The New State of Nature: Rising Sea-levels, Climate Justice, and Community-based Adaptation in Papua New Guinea (2003–2011)

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Abstract

If a legal ‘vacuum’ exists at the international level, and no domestic or national remedy can be found, and (non-government organisations) NGOs have not taken up their cause, then where may climate vulnerable people look to find adaptation strategies and remedies for the equity and justice issues contained within them? With the goal of investigating one kind of answer to this question, this case study examines local-level discourse about the prospect of internal resettlement in Papua New Guinea, where slow-onset, coastal erosion has been going on since 2003. Among the several points illustrated, an institutional absence is revealed—the postcolonial state. In response to its ineffective initiative, villagers express ambivalences about, and attachments to, place, as well as fears about resettlement. They have also begun to devise and debate community-based adaptations. The latter offer a temporary solution and an illusion of local agency, but no justice.

Keywords: climate justice, rising sea-levels, community-based adaptation, resettlement discourse, Papua New Guinea

It is unlikely that developed countries will easily accept full legal liability for the injuries caused by climate change impacts. Usually the arguments rejecting liability have been based on the difficulty of attributing climate change impacts to the antecedent actions of developed countries. There are also a number of legal doctrines regarding injuries, some of which would not entail liability for the injuries created by climate change impacts. For example, common law usually requires proof of negligence or unreasonableness for award of damages, and both of them would be difficult to establish in the case of carbon dioxide emissions to the atmosphere in the distant past (Paavola and Adger 2002: 13).

To this warre of every man against every man, this also is consequent; that nothing can be Unjust. The notions

of Right and Wrong, Justice and Injustice, have there no place. Where there is no common Power, there is no law: where no law, no injustice. Force, and Fraud, are in warre the two Cardinall vertues. Justice, and Injustice are none of the Faculties neither of the Body, nor Mind (Hobbes 1651: Chapter XIII).

Consistent with its qualitative methodology based on participant-observation, the cultural anthropology of climate change has concerned itself with what might be termed the Weberian problem, the relationship between values and belief to action (Weber 1958). Cultural anthropology has questioned the extent to which subjectivity—e.g., local ideas about phenomena related to climate change—may contribute to the understanding of impacts and as well as to the development of strategies of adaptation or mitigation (Strauss and Orlove 2003; Crate and Nuttall 2009). Ethnography has thus espoused the empowerment, rather than passive victimisation, of peoples and cultures living at its frontlines (Cruikshank 2005; Lazarus 2009; Jacka 2009; Rudiak-Gold 2011). Agency is one possibility, but, as I shall suggest, climate justice is quite another. This ethnographic case-study focuses on the debate about the prospect of resettlement in a coastal, deltaic society in Papua New Guinea (PNG) where rising sea-

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levels threaten its intertidal, mangrove environment. While I am no less challenged and preoccupied by the Weberian problem, and while I hold to the empirical purpose of the cultural anthropology of climate change, with reference to the relationship of economically and politically marginal peoples to climate justice (see Adger et al. 2006), I take a more equivocal, or skeptical, view of empowerment in the time of rising sea-levels (see also Green 2009). Before turning to my case study, I must briefly introduce the peculiar landscape of concepts and institutions in which societies in the developing world dependent on natural resources, and in the Pacific region in specific, find themselves.

INTRODUCTION: FORMIDABLE DILEMMAS OF JUSTICE

Rising sea-levels lay waste to more than coastlines. From the viewpoint of the state, they erode its claim to territorial sovereignty and call its concept of legal equity into question (see Beck 1999; Posner and Sunstein 2008; Mercer 2010; Giddens 2011). From the viewpoints of low-lying, natural resource-dependent communities, the tides threaten autonomy, well-being, and, not least, property. That is to say, rising sea-levels create far reaching, well-nigh irresolvable political and moral challenges that cross-cut scale (Brown 2011).

What remedy is available to low-lying communities to compensate them for their property loss and to help them adapt? Does any institutional mechanism exist such that they may claim redress for damages, protection, and the costs of resettlement? Or, have they encountered the edge of a great, global, no-man's land that recalls the Hobbesian image (Hobbes 1651) of pre-state nature where the *bellum omnium contra omnes* (war of all against all), motivated by material self-interest, makes life unjust, insecure, and brief? If so, its cause is not a primordial disposition that political authority must restrain (Sahlins 2008). The tides are eroding and exposing the immorality of the state; the immoral state that refuses to accept liability for the environmental consequences of its destructive economy, thus to force climate vulnerable societies to take the burden of adaptation essentially all by themselves.

Indigenous activists have made a few initial efforts to link human rights to climate change (Knox 2009). In order to try to begin to address these questions, attempts at legal action have been made (Lin 2012). In 2005, a petition was filed with the Inter-American Commission on Human Rights on behalf of Inuit in the USA and Canada (Osofsky 2007). The petition focused on emissions of greenhouse gases from the USA. It charged the Commission to declare the USA in violation of the 1948 American Declaration of the Rights and Duties of Man, and that it be obliged to work with the Inuit to adapt to climate change impacts. For unexplained reasons, the Commission declined to accept the petition the following year. In 2009, under the leadership of the Maldives Islands, the United Nations High Commissioner for Human Rights issued a report that listed ways in which climate change threatens human rights, including right to life, health, privacy, and property, as

well as an adequate standard of living. Nevertheless, the report concluded that "it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense" (United Nations Commission on Human Rights 2009: vol. 23 #70). That same year, the Federated States of Micronesia (FSM) filed a groundbreaking challenge, under the Czech Republic's Environmental Assessment Law, against plans to extend the life of a power plant, but again, to no avail. Also in 2009, the Inupiat village of Kivalina in Alaska sued Exxon Mobil. The case was dismissed in a US District Court (Shearer 2011). In 2011, the Center for Climate Change Law at Columbia University hosted a 'Threatened Island Nations Conference' that was co-sponsored by the Republic of the Marshall Islands. In the summary of his presentation, Jacob Werksman, an international lawyer specialising in environmental law, concluded that "What is essentially still missing is a process that has both compulsory jurisdiction and the ability to articulate a binding and enforceable outcome on a respondent state. Justice is still elusive" (Werksman 2011).

So where are the remedies?¹ An unfunded 'International Climate Fund' proposed in 1991 by the Alliance of Small Island States (AOSIS)? Domestic North American tort law (Reed 2002; see also Osofsky 1996–1997, 2005)? The International Court of Justice (Verheyen and Roderick 2008)? Trying to find solutions where none work or exist, the lawyers at the Columbia conference were reduced to grasping at straws. They nominated, in turn, the United Nations Human Rights Committee, the tribunal of the United Nations Convention on the Law of the Sea (UNCLOS), and the United Nations Compensation Fund, and the Chemical Weapons Convention. Burkett seems to have acknowledged the futility of the current situation when, citing du Plessis (2003), she argued on behalf of some new sort of scheme, modeled on reparations for slavery, that would create a new "moral global economy premised in the idea of righting past injustices" (Burkett 2009: 13, 16). In late 2011, an agreement was reached at the annual 17th Conference of the Parties (COP 17) of the United Nations Framework Convention on Climate Change (UNFCCC) in Durban to establish a 'Green Climate Fund' no later than 2015.² This money is meant to become the financial mechanism of the UNFCCC to support 'mitigation and adaptation' in developing countries. Several European countries pledged seed money to establish the Fund, with the expectation that it would eventually equal USD 100 billion per year by 2020. But does 'mitigation and adaptation' include compensation for loss? The 'Draft decision-/CP.17' does not assert, or imply, or suggest, that it would.

It is notable, however, that in many, if not the preponderance, of cases, climate-change displacement will take place within national borders, rather than across them.³ Here, domestic remedies may be found. In the Pacific region, Aborigines and Torres Strait Islanders, under the jurisdiction of Australia, might seek internal remedies deriving from loss of culture and/or land rights, as granted by the (1993) Native Title Act (see also Green 2009). Cook Islanders might file for reparations from New Zealand, with whom they have a relationship of

“free association” that grants them New Zealand citizenship, under the latter state’s Cultural Heritage Law. In connection to internal displacement, one should note that “The Guiding Principles of Internal Displacement” (United Nations Commission on Human Rights 1998) which are based on international humanitarian and human rights law, have set out guarantees for safe return, resettlement, and reintegration. They have been broadly circulated and widely translated. As yet, however, they merely serve as standards to governments and international organisations, and do not “constitute a binding instrument” (Brookings 2009), or address justice-related issues.

In the absence of international and state-based remedies, reference must also be made to civil society, and the efforts made by international NGOs, if not to provide compensation, at least to offer support for adaptation projects.⁴ Of these in Papua New Guinea, perhaps, in the front rank is AusAID, Australia’s AUD 480 million, multi-purposed, overseas program for International Development—which does not list climate change issues among its priority outcomes, but did support small REDD+ related projects by The Natural Conservancy, Conservation International, and the Wildlife Conservation Society in 2010. With funds provided by the Dutch government, ‘Friends of the Earth-PNG’ established a “Center for Environmental Law and Community Rights” in 2000 in order to offer education, training, and workshops on environmental issues.⁵ But it is notable that the last update to its website reports on accomplishments no more recently than 2008. Oxfam Australia did a survey in late 2008 of the impacts of tidal surges throughout the Sepik region of PNG and provided household emergency kits and access to clean water for communities on four of the islands off the Sepik coastline. Oxfam declares interest in issues relating to climate change, but nevertheless does not seem to have a presence in PNG dedicated to it.⁶ Seacology, a Berkeley-based, biodiversity conservationist NGO currently has a dozen ongoing projects in PNG in which targeted funds for community projects are traded for the establishment of marine or forest reserves.⁷ The Institute for Global Environmental Strategies (IGES) co-hosted a partner event in 2011 as part of the Asia Pacific Forestry Week in Beijing entitled ‘REDD+ for the Pacific Community’ at which representatives from PNG delivered two separate presentations—one that studied five proposed pilot projects and the other that discussed one that was underway.⁸

While many indigenous NGOs in PNG are doing extensive work on conservation-related issues that attend to particular regional settings, only a few have either supplemental climate change related concerns or focus specifically on climate change. There is an organisation in West New Britain Province called *Mahonia Na Dari* (“Guardian of the Sea”). Funded today by Seacology, it was founded in 1997, originally with support from The Nature Conservancy to provide marine environment education programs to the local population. There is also an NGO called *Tulele Peisa* (“Sailing the Waves on Our Own”) which was founded by Carteret Islanders in 2007 in support of their resettlement on nearby Bougainville.⁹ Then, there is

The PNG EcoForestry Forum. Founded in 1999 to support small-scale forestry projects at local-levels, it is funded by Dutch, German, and Norwegian NGOs, but entirely staffed by Papua New Guineans. Recently, it has established a “Climate Change/REDD Desk” which has networked with the governmental committees and staged several regional “road shows” in 2010 to educate resource owners in REDD+ projects, should they ever start up in their areas.¹⁰

If a legal “vacuum” (Thomas and Twyman 2005: 115) exists at the international level, and no domestic or national remedy of the sort potentially available to Torres Strait Islanders can be found, and NGOs have not taken up their cause, either because they do not focus on climate change issues at all, or only do so on a regional basis, then where may climate vulnerable people look to find adaptation strategies and remedies for the equity and justice issues contained within them?

With the purpose of analysing a widespread kind of answer to this question, the unpublicised kind, I now go on to adduce local-level debate about the prospect of small-scale, internal resettlement among the Murik Lakes people who have been observing slow-onset, coastal erosion since the first years of the current century.¹¹ This discourse illustrates several points. Yet another institutional absence is revealed: the postcolonial state.¹² In response to its ineffective initiative, villagers expressed ambivalences about, and attachments to, place, as well as fears about resettlement. They also began to devise and debate community-based adaptations. The latter offer a temporary solution and an illusion of empowerment, but no justice.

MELANESIA, THE SEPIK ESTUARY, AND THE MURIK LAKES

Melanesia, the southwest corner of the insular Pacific, is known as the homeland of modern cultural anthropology. It can fairly be tipped as the birthplace of the discipline’s methodological signature, namely, long term, participant-observation based study of small-scale communities, not to mention the problem of collective subjectivity, its main analytic object (Malinowski 1922). Melanesia has no less been the birthplace of the study of exchange relations, reciprocity in particular, that became pivotal in economic and political-legal studies (Sahlins 1972). It has offered perplexing constructions of gender identities that were only explicable in cultural rather than biological terms and gave rise to modern femininisms (Strathern 1988). Not least, the region has been a privileged site for the study of social change, the first reports of which focused on cargo cults, which were syncretic, millenarian movements that sought to possess Western wealth and technology through local concepts of power in the afterlife (Williams 1976). Today, Melanesia is a site in which the developing world is being studied in all of its characteristically plural creeds and contradictory voices (Bainton 2008). Here, rural, village-based societies, linguistically diverse, subsist by means of a dual household- and market-based economy, the integration of which remains partial at best. Here, Christianity coexists

within these communities together with secret Male Cults and animisms. Moreover, the new, postcolonial states in the region struggle to sustain concepts of national identity and citizenship over and above primordial, kinship-based relationships, in the long intervals between elections.

My research in the Sepik River region of Papua New Guinea (PNG) began in 1981. It has largely focused on the changing concepts of, and practices related to, masculinity among the Murik Lakes people, who live in the estuary of the great river (Lipset 1997). However, in the wake of rising sea-levels the Murik have experienced more or less since the first years of the new century, I have turned attention toward issues relating to local-level views of the environment amid climate-change (Lipset 2011). I shall briefly outline the coastal, intertidal environment in which the Murik live.

The delta of the Sepik River drains into the Bismarck Sea from the New Guinea Highlands and northern ranges (Swadling 1997). Following its passage through a lowland, tectonic basin, which today includes flood plains, hills, as well as alluvial soils inland of the delta that are suitable for horticulture, the river enters the sea abruptly at a coast that lacks a continental shelf (Chappel 1993). Here, sago-palm swamps, beach ridges, sand barriers, and a large body of mangrove-fringed, coastal lakes—the Murik Lakes—lie seaward of the Sepik plains. Like mangroves elsewhere in the world, this is a tidal zone along a tropical coastline, which is inundated by daily high tides. It is a saline, brackish wetland environment, a rich fisheries and wildlife habitat, a source of wood and other forest products for the local population, as well as other significant ecosystem services.¹³ The coast west of the Sepik Delta is steep on the flanks of mountain ranges; vegetated bluffs that are occasionally scarred by landslides and minor basal cuffing. Offshore, the Schouten Islands are a chain of small volcanoes, some of which are active. Climate variation more or less corresponds to shifts in the direction of the trade winds. Annual rainfall ranges 200–300 mm and is seasonal. The dry season, when the winds blow from the west to the east along the coast, lasts from May to November. It is hardly dry, but coastal tides do recede. By contrast, the lake tides, fed by the river and the ocean, do not seem to ebb, and indeed their width has expanded considerably during the past 10 years.

The Murik (population: c. 3500) live in five communities on the barrier beaches that divide the Bismarck Sea from the lakes. While the definition of environmentally-based migration is contested, its causes being seen as difficult to isolate, the relationship between context and migration is not at all ambiguous on the Murik coast. Quite the contrary, the role of environmental deterioration in relation to Murik resettlement is definitive. While coconut groves do grow on the beaches, the Murik rely almost completely on resources deriving from a large system of brackish, mangrove swamps for their adaptive strategy that consists of aquatic foraging, intensive and regionally extensive intertribal trade, and barter markets with horticultural peoples. Apart from their small-scale fishery, there is no alternative livelihood in the impacted area.

There is no arable land for gardening, or cash cropping. There are no forests to sell to timber concessions. As I say, during the first decade of the 21st century, this intertidal environment has begun to suffer degradation due to unprecedented sea-level rise aggravated by periodic storms.¹⁴ Thus far, however, while their fishery has suffered—due to biodiversity loss in the lakes, and the destruction of beaches and coconut stands—the Murik lagoons have not been totally inundated by the tides, and migration has not yet begun. Thus, except for one major criterion, the 2007 working definition proposed by the International Organization for Migration (IOM) would apply perfectly to the Murik predicament:

Environmental migrants are persons or groups... who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad (Organization for Migration 2009: 5).

The one, missing element, of course, is that the Murik have yet to exit their coast. But the imminent prospect of resettlement, rather than its aftermath, provides a rich setting for my analytical purpose, which is to evaluate local meanings of environmental justice under worsening, but not yet critical, conditions.

THE POSTCOLONIAL STATE AND THE MURIK RESETTLEMENT PROJECT

With the national elections of 2002, Sir Michael Somare, the Murik native son, formed a coalition government, and returned as the Prime Minister of PNG for his third term in office, after a hiatus of 15 years. Following the 2007 elections, he succeeded again, and began a fourth term as the Prime Minister. During this period (2002–2010), Somare began to play a conspicuous role in climate negotiations on the international stage. At the Global Roundtable on Climate Change held at Columbia University in 2005, he called for the establishment of a Coalition for Rainforest Nations in order to lobby for compensation for reducing greenhouse emissions. He delivered speeches during the 61st and 65th general assemblies of the United Nations (Somare 2006, 2010a; Lipset 2011) in which he urged developed countries to take ownership of reducing greenhouse gases and assist small island states to adapt to climate change. He signed on to the Forest Now Declaration (Somare 2007). At the Oslo Climate and Forest Conference (Somare 2010b), while criticising the United Nations and the World Bank for entangling developing nations like PNG “in endless process and conditionalities” (Somare 2010b: 2) and for failing to deliver the funds, he signed its Reducing Emissions from Deforestation and Degradation (REDD+) partnership and committed PNG to co-chair (with Japan) its efforts to start global cooperation to safeguard tropical forests. However during this same period, together with his sons Arthur

and Sana, he expedited Malaysian timber interests to log extensive virgin forests that bordered the eastern side of the Murik Lakes, as well as elsewhere in the country. And then, the very next day after Sir Michael Somare's Oslo speech, PNG's parliament amended its environmental law, in effect banning legal challenges by landowners against environmentally destructive projects should they be ruled to be of "national interest." Meanwhile, petroleum exploration licenses were issued to several companies to survey the Lower Sepik. His son, Arthur Somare, himself a Member of Parliament, served on the board of directors of one of the companies.

The Murik Lakes Resettlement Project (MLRP) was started in 2003 at Somare's instigation. It targeted the central three Murik villages, Big Murik, Darapap, and Karau, communities that were most exposed to rising sea-levels (Figure 1). Housed in the East Sepik Provincial Government, it was led by Philip Kanora, a long-time provincial official who was also Murik, and employed land surveyors and genealogists. By 2005, a sparsely populated venue had been identified just inland from the lakes in the vicinity of Marienburg, the site of a big Catholic Mission (Figure 2). The area was owned by Murik trading partners and negotiations began with landholders there. Meanwhile, a small number of literate young men were hired to document household and lineage memberships as well as to collect ethnohistorical accounts of the migration of Murik ancestors to the Sepik estuary (see below).

The wet season tides of 2007 then eroded the beaches on the central Murik coast severely, cutting a wide swath of beach in half, destroying coconut groves as they did. The tides broke through at several points. The extent of the damage, and the prospect of extensive ecological damage that it signified, seemed to justify renewed action by the Somare government. The 2007 budget gazetted supplementary funds (USD 743,415) to purchase land for the three most exposed Murik communities. Two big, village-based groups of young men were hired to clear out two clogged, overgrown canoe channels that pre-state Murik ancestors had cut through tidal

areas to facilitate access to trade with their inland, horticultural exchange partners, but had fallen into disuse. Although they had been citizens of three successive colonial states, beginning in the late nineteenth century, as well as citizens of postcolonial PNG since 1975, and although the MLRP had been in the works for several years by now, the Murik relationship to the state was one of political pluralism rather than encompassment. The level of activity that ensued in the aftermath of the tides of 2007 rolled in the promise of a new and expanded form of modernity in its most classic sense—territorially-based governmentality, i.e., the imminent prospect of state-sponsored relocation would substantially alter their political relationship to the environment as never before. Not surprisingly, my fieldwork in 2008 and 2010 found the prospect of resettlement much on the minds of various Murik stakeholders.

In February 2008, I made an appointment to see the Prime Minister in his office in Wewak, the provincial capital. He had only just returned from the villages the day before, where he had introduced a plan to build a new Men's House in order to initiate a cohort of youth in the Male Cult, the secret warrior society, a rite that would include his son, Arthur Somare, who was evidently being groomed to be his father's heir. On the one hand, when speaking at such venues as the Global Roundtable on Climate Change at Columbia University, Sir Michael adopted an internationalist voice, arguing for universalism, interdependency, and so forth:

We must forge a pathway forward. Honestly, at different levels, we all share the blame – my nation included. Now, however, it is time to focus our collective leadership upon effecting CHANGE... Therefore, I have called for the formation of a 'Coalition for Rainforest Nations' (Somare 2005: 3).

Now, he was speaking in a parochial voice that sought to fulfill the conventional duties of a Murik headman (see Lipset 1990). As if to acknowledge the incongruity, Sir Michael put

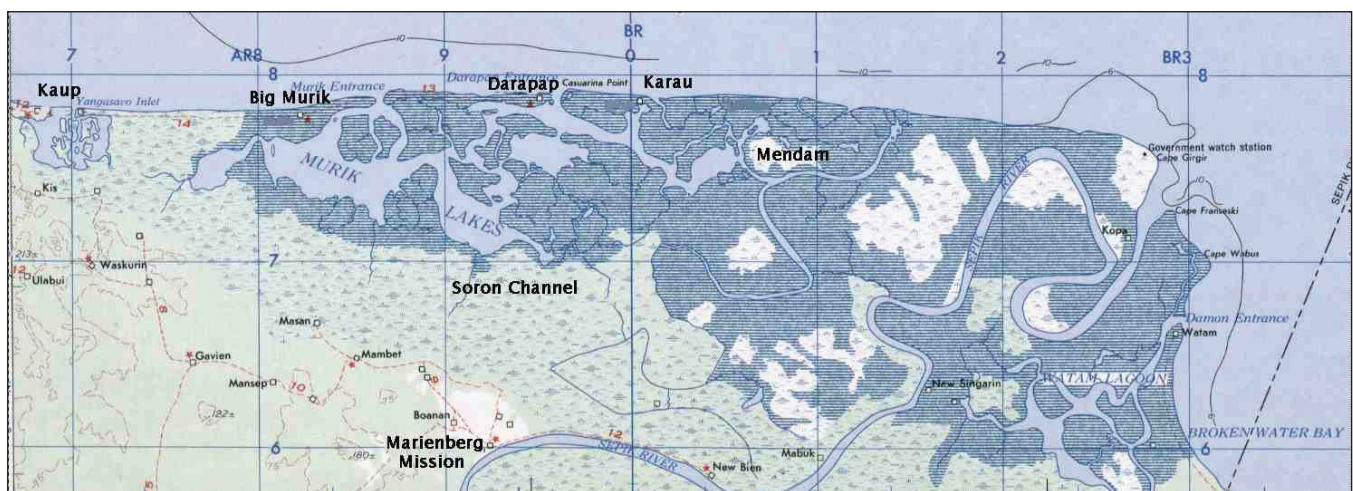


Figure 1
The Murik Lakes and the mouth of the Sepik River, 1962



Figure 2
North coast of Papua New Guinea and the Murik Lakes

a kind of millennial spin on the new building. Because of his resettlement initiative, the project was to be ‘the last Men’s House’ to be erected in the three eastern villages. It would be a museum as well as a sanctum. All of the *sacra*—masks, flutes, and ceremonial spears—that had not been sold off to collectors could be stored here. Tourists might come and look inside, paying a fee, of course. Afterwards, future Men’s Houses would likely be built in an alternate locale, inland.

Somare knew the Murik villagers were reticent and unhappy about the prospect of resettlement, but he was implacable. Our conversation, which began in his office, spilled over to the Boutique Inn where I was staying in town. There, his voice was no less contradictory. He spoke as a postcolonial elite. He emphasised capital and modern personhood, possessive individualism, and autonomous agency. The Murik, he declared, could hardly expect to continue to subsist on, much less make a living from, a mere sandbank! But at the same time, his concept of the state was informed by primordial ties. “This is a once in a lifetime opportunity! Their tribesman is Prime Minister: I have allocated money for... [resettlement]. This may never happen again.” Somare was doing his best to promote resettlement in terms that might have widespread appeal at the local-level.¹⁵ Resettlement would be a boon to development. The state, he seemed to imply, might not have been, and might not be, equitable in its commitment to safeguarding the security of its citizenry, but as a kinsman, and now, as a headman erecting a Men’s House (and thus demonstrating his own magical power), he alone would commit it to this just purpose.

AMBIGUANCES, ATTACHMENTS, FEARS, AND COMMUNITY-BASED ADAPTATIONS

I now discuss and assess differing viewpoints about the Murik Lakes Resettlement Project expressed by the villagers, the fisherfolk living squeezed between their lakes and the ocean, living in a world made up of contradictory combinations of modern and local ideas and practices, of use- and exchange-value, household and marketplace, Male Cult and missionary Christianity, dugout canoes and fiberglass boats, paddles and outboard motors. Their world, in short, is one in which no single field of vision encompasses and stands above them. I canvassed opinion in the villages of Darapap, Karau, Big Murik, and Mendam. I elicited the views of individuals in their houses and convened groups in Men’s Houses during three brief field seasons in 2008, 2010, and 2011.

Ambivalences

In Darapap village, support for the Prime Minister’s Murik Lakes Resettlement Project appeared evident in the considerable effort 125 young men put into manually clearing about 7–8 miles of the Soron Channel, a narrow, overgrown canal, in 2007. The MLRP provisioned the work and paid them to open up a channel from the lakes to the land that the state was negotiating to purchase. But the project ended with a strike, a work-stoppage, rather than the beginning of dry land. Food had not arrived and money had not been transferred, my companions explained with residual bitterness in their voices. In anger, the workers had accused officials of the Resettlement

Project of misappropriation of funds. As the villagers put it: “They ate the money.” Their strike marked a shift in attitude towards the state’s resettlement plan from trust and compliance to skepticism, suspicion, and antagonism.

During the last year of WWII, villagers fled Allied bombing of Japanese encampments in their communities, and sought refuge along the Soron channel.¹⁶ The upkeep of the canal had not been sustained, as trade relations ebbed in the 1950s and 1960s with the rise of petty capitalism, a small-scale fishery, and dietary changes, the introduction of rice in particular. Now it was functional, or nearly so, for the first time since then. While the men worked, they discovered three well preserved artifacts—a Japanese army cap, some kind of big surveyor’s flag, and a very old anchor pole—whose significance also registered their ambivalent commitment to the state’s resettlement initiative.

These curiosities were not exactly perceived as collective mementoes of an authentic pre-colonial era in Murik culture, now lost. The stories they provoked, as well as the objects themselves, evidenced a past that had been no less subject to state interventions than the present. But the anchor pole, which signified the autonomous agency of the ancestors, did seem to preoccupy people a bit more than the flag or the Japanese cap, although it was subject to less narrative. Of course, it could not be identified as someone’s property, or heirloom. It lacked markings, so there was no way of knowing who had left it behind or when. Neither was it a fragment of a more generalised context of use-value, now gone. There is nothing at all unusual about anchor poles in contemporary Murik material culture. Its retrieval from the channel, together with the two other things, were traces of the Murik Lakes in the 20th century, to be sure. They were remnants of past resettlements along this canal, of ancestors working there in a recognisable modality, as well as the former presences of states—not to mention, ongoing capitalist pressures (see below). In a brilliant study of the meaning of souvenirs in Western modernity, Stewart (1993: 140) argued that souvenirs affirm a narrative of continuity amid a morally questionable present. By contrast, the three objects, particularly in the aftermath of the coastal erosion in 2007, and the state’s resettlement project, seemed ‘to speak’ of a Murik history that was, and now continued to be, materially insecure and morally uncertain. Sea-levels might be rising now. But were they creating a categorically different time and space?

Attachments

Men viewed inland resettlement with disfavor. At one point during a discussion of the tides in a Male Cult House in Darapap, a senior man challenged the assembly with an historical question. “How many times”, he asked, “has the sea taken the village? What did your ancestors do? Run away?” Here, in their sanctum, still the seat of their magico-religious power, men of all generations shouted out in unison: “No!” Their interlocutor, a man called Wanuk, was implying that resettlement was cowardly and a defeat unprecedented in their history, a defeat that implied

masculine weakness. He was reminding the assembled men that the recent tidal events were nothing new in their history. The villages of Darapap, Karau, and Mendam had all been driven off the coast during previous tidal events in the 20th century, as well as by WWII bombing raids, to camp or to bivouac in the mangroves, along the Soron and other channels, eventually to rebuild their communities on the beaches.

Men expressed several kinds of attachment to their environment. Elijah Ginau, a middle-aged man, put it bluntly: “The people don’t like to garden”. Another senior man extolled the pleasures of home when he vowed to “stay on the beach where the wind is good and the fish are plentiful. A lot of people share my view. They say, ‘Buy the land, we can garden on it! But we will stay on the beach.’” Inevitably, men rooted themselves in the Murik Lakes in primordial ties. “We live here,” a third senior man declared. “We live here where our fathers and ancestors lived. We know how to live here. So we have a question: why should we move?” This kin- and practice-based rhetoric of attachment to place, together with a sense that past tidal events were temporary set-backs, combined with a trope of emasculation, to motivate a strong, defiant posture toward (cf. Basso 1996), rather than one of compliance with, resettlement (Figure 3).

Fears

Resettlement was also seen as risky. People expressed anxiety about their horticultural neighbours, the landowners of the area where the Murik were to move. In a Men’s House in a village on the eastern edge of the Murik Lakes (Figure 1), I convened a meeting about river tides, loss of marine life, and resettlement. This discussion eventually gave way to a problem that needed to be sorted out in connection with fulfilling ritual obligations associated with building Somare’s Men’s House (Figure 4). Afterwards, a young man approached me and sat close. Unprompted, he told me that he wanted me to grasp how much the prospect of resettling inland alarmed youth in particular.

We worry... about moving [to live] near our... trading-partners. It could be dangerous... If a boy accidentally trespassed on one of their gardens or killed one of their pigs, we worry about what they might do. They would kill you without a second thought. We beach people do not do this. We have rituals [of conflict resolution] (see Lipset 1997).

Prior to ‘pacification’ before WWI, when the colonial state banned warfare, Murik relations with the horticultural communities that ring the lakes were complicated. The beach-dwellers and their gardening neighbours were integrated by hereditary partnerships, according to which the landed peoples likened themselves to “trade mothers” of their beach-dwelling “children”, the Murik, by provisioning them foods the latter did not grow themselves. From the Murik perspective, this maternal trope also had rhetorical purposes, although they

were somewhat jaundiced (see Meeker et al. 1987: 49–50). At the same time as they depended on them for “garden foods”, the beach people raided the inland communities. The Murik dismissed their “trade mothers” as nothing more than yokels who lacked *sumon*—the lineage ornaments that signified the moral center of their identity. These pre-state stereotypes were audible in the young man’s apprehension about the inland people’s amoral propensity for violence, and were perhaps expressed in his hope that some other adaptations might still turn up that would make moving unnecessary. “We asked” the Prime Minister, he went on, “to bring in a dredge to pile up sand by the beaches to rebuild them.” A son of the village catechist joined our conversation just then. Bringing in such a machine might save the day, he agreed. Besides, resettlement would expose the Murik to yet other perils.

We are having a problem at this moment with the landowners of our settlement... in town. They are denying our rights to live there (see Lipset 1985: 84). Young people are [claiming that] the land transfer undertaken by their elders should not be respected. It would be bad if we had the same kind of problem here. In the future, landowners will challenge our rights, knowing nothing about the transfer that took place.

In a way, this apprehension—about the perpetuity of land tenure—is related to the first youth’s fears about security issues that living in proximity to the landowners might create. Both youth express doubts that called the postcolonial legal system into question. Was PNG up to the task of guaranteeing the safety of their community in future time and space? It also called the duty of collective masculinity, the Male Cult, into question. The latter’s sovereignty and capacity having been long since negated by a succession of colonial states. What further humiliation could the postcolonial state now set in train?

Together with these two misgivings, men saw the resettlement plan as little more than as a scheme to defraud the Murik people of oil royalties.¹⁷ Johnny Sakara, a retired soldier, recalled a meeting convened by the head of an NGO¹⁸ about transferring land rights to oil prospectors. Everyone was cautioned to agree to nothing unless it was in writing and then signed by all the relevant parties. Johnny Sakara went on to speculate about the underlying motives behind the state’s resettlement plan.

That is why they want us to move inland; so they can drill for oil. Iraqi oil is not available because of the war. The villages of Karau and Darapap have oil. In upcoming months, ships will come to Port Moresby and bring equipment to Darapap. The drilling they will do will destroy the fish in the lakes.

In the event, this oil exploration never took place. But what remains notable about Johnny Sakara’s suspicion is that it imagines a kind of cargo cult in reverse. Instead of ships



Photo credit: David Lipset

Figure 3
Evelyn Sakara exulting over the work of gathering clams in the Murik Lakes, 2010



Photo credit: David Lipset

Figure 4
Somare’s new Male Cult House in Karau village, 2010

manned by ghosts of ancestors loaded with Western wealth and technology to give Melanesians (see Schwartz 1962; Lawrence 1964), the ships would be manned by human servants of global capitalism and would come with technology to take wealth away from the Murik.

Despite being led and personified by their kinsman, the ethical position of the state was viewed as compromised. People went on to impugn its ability to provide ordinary services to the citizenry. Joe Kabong, a retired prison-warder, offered a wry, ironic comment. “The tides keep at us”, he quipped, “unlike the government, which ignores us” (Figure 5).

For Beck (1999), world risk exposes the limits of the autonomous sovereignty of Western states. In Murik, rising sea-levels, climate change, and the politics of resettlement were also raising issues about the postcolonial state. Villagers complained that PNG had failed them. What had happened to the promise of independence? What had changed in the

village since 1975? What services had been provided? What development projects had been instigated? Talking about Somare, the Prime Minister, a young man observed that the new tuna cannery (South Seas Tuna Co.) erected on the new wharf in Wewak town in 2004 was protected by a new sea wall. “Why”, he asked, “can’t Somare do that for us?” Now the state sought to resettle three Murik communities by way of providing environmental security. Men answered with doubts, fears, and passivity. To their chagrin, neither the state nor the Male Cult were masters of their domain. Neither institution could be trusted to provide security—legal, environmental or military. And neither were they sources of justice.

Community-based adaptations

In 2010, I returned to the Murik Lakes to find the situation somewhat changed. It was the dry season, which meant that the water’s edge of the coastline had expanded, perhaps by as much as a half mile. People had planted tiny, little gardens in the coconut groves. The prospect of resettlement remained indeterminate, still present, but less urgent. The immediate threat had subsided.¹⁹ Concerns were expressed about the next tidal cycle during the upcoming wet season, when the extent and depth of lake tides, which came up twice a day, did not allow the tideflats on which the village houses stand to dry out, as they had in decades past. People in the village of Darapap either poled canoes at high tide, walked along the beaches, or had to trudge through squishy, muddy paths, which they detested. These circumstances had given rise to new kinds of footwear, rubber boots and crocs had become the look of the moment.

The Murik Lakes Resettlement Project had collapsed. Work on clearing the canal had neither been resumed nor completed. Genealogists, hired to facilitate the resettlement of lineage groups, had quit in disgust, not having been paid. Property around the Marienberg Mission, which had been marked off, was neither purchased nor transferred. Simply put, nothing had worked out. What, villagers were asking, had happened to the money? Philip Kanora, the senior bureaucrat of the MLRP, had been suspended by the Provincial Administrator, amid charges and rumors of corruption, misappropriation of funds, and so forth. The Prime Minister had intervened on Kanora’s behalf, on the grounds that the MLRP was ‘personal’ rather than official. But an investigation was pending. In the government accounting for the 2010 budget, the Department of Treasury listed the money (USD 743,415) for the MLRP in the “spent as allocated” category.²⁰ Both in town and in the villages, people were angry about the missing money. Nick Merosh, a Murik land surveyor employed by the MLRP, put his finger on the problem:

This money belonged to... [all] the... communities, not one man. The money was used in its time frame... Philip Kanora ate the money. The office was in his house. It should have been in government buildings. Instead, the money was spent on beer, food, gas... So the villagers now have no way of getting a good situation. We don’t have a second



Figure 5

Joe Kabong said, “The tides keep at us, unlike the government which ignores us”

chance. It is finished. If an investor comes for oil, we can make demands for resettling. That is our only chance.

Merosh’s vision of the future was bleak. However, at that moment, an unanticipated, if controversial, adaptation, arising from Murik ethnohistory, had also begun to play itself out.

The Murik do not claim ownership of the Murik Lakes and coast autochthonously or mythically. Instead their ethnohistory decrees that they are refugees, a warrior people who intermarried iIndigenes and other migrants to the Sepik estuary. Oral accounts collected from a variety of informants uniformly rehearse not one but two migration stories that took place prior to recorded history. Ancestors of the western villagers immigrated from the west, inland from what is today the provincial capital of Wewak. The eastern Murik fled the middle Sepik River in the aftermath of a dispute over crocodile meat during a feast. Prior to resettling along the coast of the Sepik estuary, their ancestors (*nagam*) rafted along the north coast as far west as Matabau village (Figure 6). Near Matabau, a mountain dwelling ogre began to eat their sons. The people beat a hasty retreat back down the coast to the east. Leaving in such a rush, so the story goes, they left all their crockery and utensils. A pregnant woman, beginning her labor, had to be left there too. She gave birth to twin sons who eventually killed the cannibal, spirit-man. Ambushing him on the beach, they pulled off his testicles.²¹ The testicles turned into boulders still visible just offshore the Matabau village (Figure 7).

Individuals in the communities in which the migrant Murik ancestors temporarily settled then became trading partners in the Murik overseas network whose western boundary was marked by the ogre’s ‘testicles’ (Figure 7). As the influence of the market has increased in recent years, overseas trade diminished in frequency, but had not ceased, by any measure (Lipset 2009).

Early in 2010, two brothers from Matabau village sent an invitation to senior leadership from the three eastern, Murik villages of Darapap, Mendam, and Karau to come for a visit.

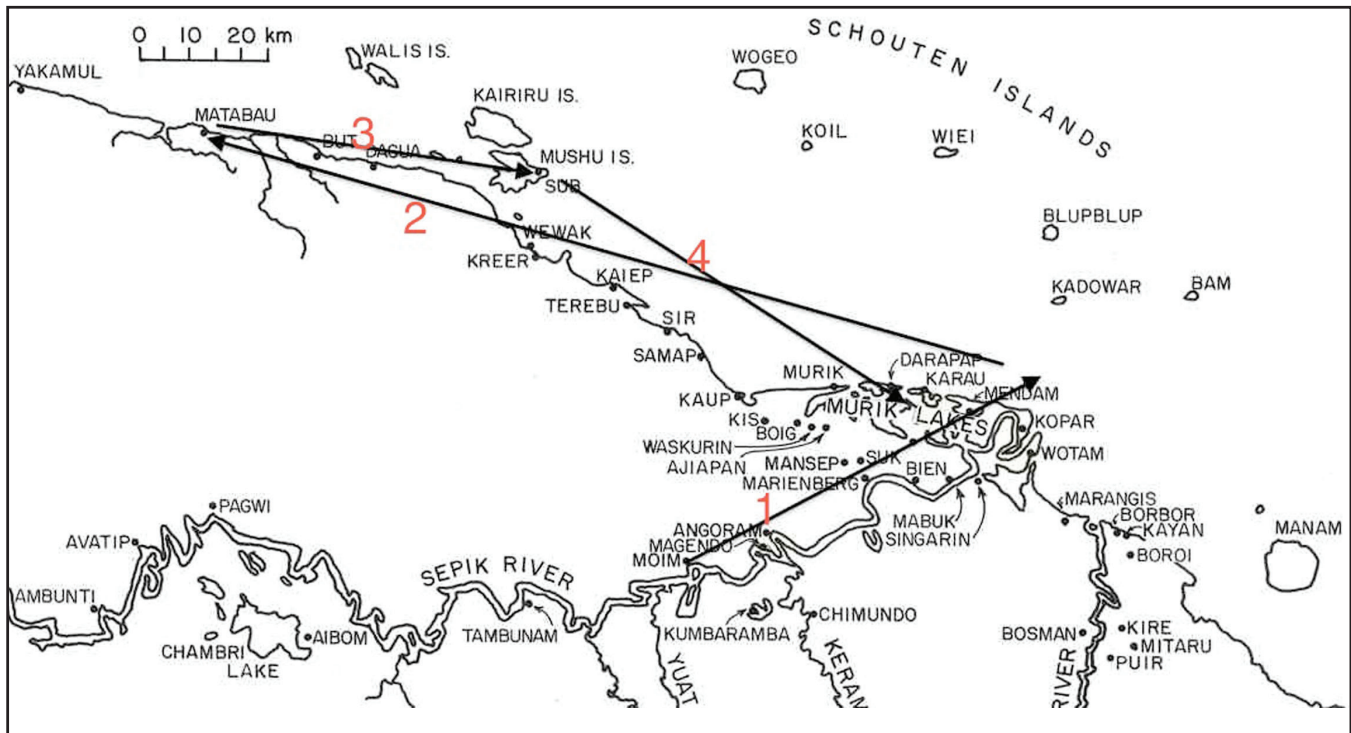


Figure 6

According to Murik ethnohistorical accounts, ancestors left Moim Lakes on the Middle Sepik River, drifted downriver (1), and then made their way along the coast as far west as Matabau village (2). They settled there for a time and then moved on to Sub village on Muschu Island (3), before settling along the coast adjacent to the mouth of the Sepik (4)



Photo credit: David Lipset 1986

Figure 7

The petrified testicles of an ogre offshore Matabau village

Michael Maia, Wanuk, and Nick Merosh recounted the story. An oil exploration team drilling on fallow land found designs that a senior Matabau woman recognised as belonging to the Murik ancestors. At a meeting, the woman explained that the reason the land in question had never been gardened was because it had been ceded to the Murik ancestors whom they called “the people who left and never returned”, or *Ijigab* in their vernacular. “They were afraid of us”, Michael Maia claimed, “so they never worked the land.” Hearing about the

MLRP in the Marienberg Hills, they asked themselves: “Why should their Murik trading partners move to live on foreigners’ land when they owned a big piece of property in Matabau?” Michael Maia and Wanuk went on:

The ancestors of [our hosts], worked with us, we, the descendants of our [migrant] ancestors, and looked after the land. Now they were ready to hand it back to us. They knew the names of the Male Cult Houses that our ancestors had built there and showed us where they had stood. We signed a paper to transfer title. A groundbreaking ceremony there is now pending. They suggested that we carve and decorate a paddle and stick it in the ground, as a symbol of our return at the groundbreaking... The Prime Minister may come... We must divide the land in thirds... We should do that ourselves. The land surveyors will charge us. Never mind the state. We can build houses there and plant things. We don’t have to live there full time. We can go and come, but we should have permanent houses there.

Others, however, were less sanguine at the prospect of relocating up the coast to Matabau. They pointed to a spate of deaths among their trading partners, the Manam Islanders, whom the state had resettled on the mainland opposite their volcano which exploded in 2004. The deaths, they believed, were caused by sorcery cast by the hereditary landowners with

whom the Manam were in conflict. “If we went to Matabau and had a dispute, they might kill us”, a middle-aged man worried. “We are a large, big population. If we moved up near these little villages, they would be overrun. They are afraid of this.” In response to which a woman joked, “When our kids act up and cause trouble, we can send them to Matabau!”

I spoke with Soni Apusi, who had been hired to collect genealogical data to register Incorporated Land Groups (ILGs) in the Murik Lakes should carbon trade payments ever begin.²² He also took a critical view of the Matabau offer. The process of land transfer is administered by the state, he pointed out. “It is slow and time consuming. Michael Maia and Wanuk pushed this idea forward together with the Matabau village counselor. But every titleholder there would have to be interviewed and agree.” An officer in the Lands Office then intervened and put the whole initiative on hold. Urban, middle-class Murik expressed pleasure at this negative outcome. “The senior men think that they can act independently of the state”, one man told me. “That time has long passed. This... involves the transfer of property, which comes under the authority of the government. They don’t seem to understand the law. They think everything can be done [with feasts].”

If the 2010 land offer by their coastal trading partners came to naught, glimpses of a more viable adaptation had perhaps begun to emerge the following year. A tsunami, triggered by the magnitude 8.9 earthquake in northern Japan in March 2011, drove the citizens of Big Murik, one of the beach-front communities, to take to their canoes in the middle of the night to find safety in the mangroves. Houses and coconut palms were destroyed (Figures 8 and 9). Gravesites were swept away. By August, however, many families had returned to rebuild on the beach; it being the dry season when the tides retreat. Still others preferred to stay in a permanent, satellite community that had been established on lineage-owned property along the northern edge of the Murik Lakes (Figure 10).

Several miles down the coast to the east of Big Murik, Darapap village (Figure 2) also suffered extensive damage from that same tsunami. Yet another new channel had broken into a lake from the sea.²³ Beach sand had pored through it,

disrupting that lake’s biodiversity and making it too shallow to navigate at low tide. The leaves of the coconut palms I observed were yellowish in color. They bore no fruit, having evidently been poisoned by the salinity of the big waves. The tides had tossed logs about the village and had dug out huge depressions beneath some of the houses. One building had been swept away. The village was suffering.

There was intense interest in the political theatre surrounding the future of Prime Minister Somare, who had been removed from office in August 2011, while recuperating from an open heart surgery in Singapore; interest that was tinged with sympathy for perceived slights to his honor on the national stage. I did not hear one word about compensation for loss of land, however. Nothing was said about the injustice of rising sea-levels. Moreover, I also noted a complete absence of discussion about moving up the coast to Matabau. Instead, Darapap villagers talked about the possibility of starting a new community on the inland side of the lakes, a plan that was rumored to be supported by funds from the national government.²⁴ There was no question that the location belonged to them, not as tribal ‘Murik’, but rather as descendants of particular, individually named, migrant ancestors, and that, from the point of view of property rights, this adaptation was possible, particularly should the government build a road that might link up with current roads to the provincial capital and regional markets (Figure 10).

The two community-based adaptations, the first from Matabau village up the coast, and now the resettlement plans within the Murik Lakes, were devised, entirely in terms of ethnohistory, hereditary trading partnerships, and lineage, i.e., entirely in sub-state, or local, terms. The authority and role of the postcolonial state, whose resettlement plan had broken down, and whose legitimacy was suspect, had been reduced to the background.

CONCLUSION: THE JUSTICE OF COMMUNITY-BASED ADAPTATION

By and large, the preceding case study of internal resettlement discourse among the Murik is meant to illustrate what is, and



Photo credit: David Lipset (1986)



Photo credit: David Lipset

Figures 8 and 9

The Bungabour Male Cult House being consecrated in 1981. The remains of the same building in the aftermath of the tsunami of March 2011 in Japan



Figure 10

Houses in a new village built on the inland side of the Murik Lakes in the aftermath of the tsunami of March 2011 in Japan

will be, happening between low-lying, coastal communities, and new, postcolonial states, on the frontlines of global climate change (see also Warner et al. 2009). The threat posed by rising sea-levels to property and livelihood, and thus to collective identity, in the Murik case is clear and unmistakable. The Murik, or at least the central Murik villages, will become environmental refugees, when their beaches are not merely breached by new channels (like the one I observed in 2011), but when rising sea-levels submerge the Murik Lakes as a whole. Thus far, PNG has shown that it acknowledges this tragedy-in-the-making, at least as long as the Prime Minister was a Murik native son. Nevertheless, no state-based remedy, either of adaptation or compensation, emerged during his tenure.

The main problem highlighted here is that pragmatically speaking, internal displacement based on climate change is about property rights, in at least two senses (see also Redfearn and Metzger 2010). By relocating environmental refugees, is not the state obliged to provide resources as a remedy either for losses incurred and/or to defray the costs of relocating? And, then should not the state guarantee a contract in perpetuity both to the displaced communities and persons as well as to the land donors/vendors? However, there is a loud silence in the resettlement discourse analyzed in this case study. No one who spoke to me sought redress, which is a strange omission in the litigious atmosphere of contemporary PNG (see also Lipset 2004), where a rudimentary sense of tort law and a calculus of liability quickens rural thinking in the aftermath of many kinds of negligence, victimisation, and injury.

I have analysed the discourse in terms in which the Murik understand rising sea-levels elsewhere (Lipset 2011). Suffice it to say, while both cosmopolitan and rural Murik do connect the risk of rising sea-levels to global warming, they do *not* see it in terms of human rights violations, or violations either by particular economies or corporations. They do not seem to view the threat posed by rising sea-levels as a violation of legal rights to property or personhood. They do not seem to see it in terms of climate-change justice, in brief. Moreover, no representatives of Melanesian or Western civil

society—environmentalists and lawyers who might seek to take legal initiatives on behalf of the Murik as happened in the famous case of Kivalina, Alaska—are to be found on this coast.

Community-based adaptations, e.g., the initiatives taken by the Murik and their hereditary trading partners, and the move to establish permanent settlements along the inland edge of the Murik Lakes, must be seen as janus-faced. They are a symptom of the presently intractable problem that internal displacement poses not only for PNG, but also for all types of state, new and old (cf. Burkett 2011b: 352). And they are a symptom of the complete lack of an international climate regime that would offer people like the Murik a compensatory mechanism. At the same time, small-scale, community-based adaptations, if viable, do seem to offer a glimmer of hope. Such efforts forestall but, of course, do not resolve the vulnerability of coastal peoples to rising sea-levels. However, deriving as they do from local interventions, they support indigenous concepts of property, and closely allied notions of history and cultural autonomy.

To be sure, resettlement on the edges of the Murik Lakes is neither just nor a form of justice. Yet by not transferring the guarantee of their very cultural existence to the legal system of the postcolonial state, such a community-based adaptation does perpetuate a sense of legal pluralism. The meaning of political territory remains incompletely determined by postcolonial law. At the same time, it does submit that life is little better than “solitary, poore, nasty, brutish and short” on the forefront of climate change (Hobbes 1651: Chapter 13). Not because amoral human nature has resurfaced unconstrained by the Leviathan, but rather because of the market-based amorality of the Leviathan.

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Notes

1. The international legal regime, e.g., human rights law, environmental law, and anti-discrimination law, governing environmental harm to societies is said by legal scholars not to be “unified” (Ososky 2005: 75), which seems to mean that the limits of its combined sovereignty are exposed by this transnational or extraterritorial form of global impact where there is no identifiable corporate, or state-based accountability. Burkett (2009: 4) called the situation a “remedy enigma”. The United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol provide basic obligations that all industrialised parties stabilise greenhouse gas emissions and take initiatives to combat climate

- change deterioration. They also assert that states modify long term emissions and assist vulnerable states to meet the costs of adaptation to long term effects. Customary international law in the Stockholm and Rio Declarations commits states to take measures to ensure that their activities limit injury to other states. They must exercise due diligence to limit acts and emissions that harm the international environment in line with generally accepted standards of international law. What, however, is the minimum duty and the due diligence required? What level of emissions is wrongful? That level which exceeds the principle of 'do no harm'? A state (the USA) that issues 20% of global emissions has breached this duty by virtue of the size of its very contribution.
2. See http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_gcf.pdf
 3. Hodgkinson et al. (2008) have proposed to delink the status of climate change refugees from the 1951 Refugee Convention framework, arguing that much climate-related displacement is likely to take place within national borders, and those most acutely vulnerable will often not be in a position to migrate internationally.
 4. The fight for climate justice by NGOs expanded from a series of summits in The Hague (2000), New Delhi (2002), Durban (2004), and Montreal (2005), and has come to involve such organisations as the Carbon Trade Watch, the World Rainforest Movement, and the Greenhouse Development Rights Network (Baer 2011), as well as various indigenous groups, such as the Inuit Circumpolar Council.
 5. See <http://www.foei.org/en/who-we-are/member-directory/groups-by-region/asia-pacific/papuanewguinea.html>
 6. See <http://www.oxfam.org.au/explore/climate-change>
 7. See <http://www.seacology.org/about/index.htm>
 8. Other hosts were the Japan International Co-operation Agency, the Secretariat for the Pacific Community, Deutsche Gesellschaft für Internationale Zusammenarbeit, and UN-REDD. See http://www.iges.or.jp/en/fc/activity_20111110.html
 9. See <http://tulelepeisa.org/about/>. Tulele Peisa has received some support from Friends of the Earth Australia. See <http://foe.org.au/forced-climate-migrants>
 10. See <http://www.ecoforestry.org.pg/customPages/updates-from-climate-change-redd-desk>
 11. The displacement of climate refugees have been classed (by the Inter-Agency Standing Committee 2007) as caused by a) sudden-onset or slow-onset disasters, and b) according to the extent of the damage done to the original site of their displacement, whether revocable or totally destroyed, and thus being either voluntary or involuntary migrants (like refugees in general).
 12. PNG established an Office of Climate Change and a National Climate Change Committee in 2010 (see <http://www.occd.gov.pg/> and see http://climatepng.org/index.php?option=com_content&view=frontpage&Itemid=1). It is entirely focused, however, on adaptation-related projects and REDD+. For example, it has submitted a USD 6.5 million proposal to the United Nations Development Program whose sole purpose is to fund adaptations, such as mangrove planting and early warning systems, as well as educational and advocacy programs in the North Coast region of the country (see <http://adaptation-fund.org/sites/default/files/PNG%20propposal%20afb16.pdf>).
 13. Mangrove forests are also among the major carbon sinks of the tropics (Bouillon et al. 2008).
 14. "In the Murik Lakes area rising sea levels will cause erosion of the shoreline, putting coastal settlements at risk. Especially vulnerable will be villages on sand beach ridges directly fronting the ocean. Examples of such villages are Darapap... and [Karau]... which are located on the low, narrow sand barrier which encloses Murik Lakes. Groundwater on sand barriers and around estuaries will become tainted with brackish water. A sea level rise of more than one metre would make this low-lying coastal area virtually uninhabitable and most of the population would have to be re-located" (Sullivan 1991).
 15. At one point, Somare had also been promising villagers that graves of their kin would be safer as a result of a move to higher ground.
 16. As the war closed in on the Japanese, the Murik Lakes, which had been occupied by the Maritime and Engineering Transport Division of the Akazuki Regiment of the 18th Army, were selected as the site to produce salt for the 18th Army which was based from late 1942 until the end of the war, in the Wewak/North Coast region (Shaw 1991).
 17. A Vancouver based firm, Invicta Oil and Gas Ltd., bought shares of Cheetah B.C. in 2007. The latter company held license for 8.4 million acres of petroleum exploration in PNG. Among these included a license to prospect in the Murik Lakes and the Lower Sepik. See Anon. 2007: 18.
 18. Nancy Sullivan Ltd. is a social impact NGO that Nancy Sullivan operates in PNG. See <http://www.nancysullivan.org/>
 19. Men were focused on their collective future on the coast, rather than elsewhere. The Prime Minister's new Male Cult House in Karau had been built, yet remained empty. A beautiful structure, it stood vacant because of local rivalries, and the Prime Minister's schedule, waiting to be ritually consecrated. Meanwhile, in the neighbouring village of Darapap, men had cut posts to build their own new Male Cult House, having been stung by their neighbours taunts that the death of their most senior generation left them without anyone living to direct the proper ritual for such a project.
 20. http://www.treasury.gov.pg/html/national_budget/files/2010/budget_documents/Volume%201/Chapter%203.pdf. Accessed on November 11, 2010. P. 62.).
 21. I was told the same story both in Murik and Matabau: "One woman, called Saputa'ir, was too pregnant and had to be left behind in the care of her younger brother. She gave birth to twin sons, Makor'pus and Makora'un. The boys grew up and set a trap to catch the spirit-man. They strung a rope across the beach and tied two loops in it. The monster chased them, but caught his huge testicles in the loops. The boys, hiding, holding each end of the rope, pulled it taught, and pounced on him, killing him in his agony."
 22. The windfall of carbon payments, having been introduced by the Prime Minister, were also on peoples' minds, and Murik genealogists were again collecting data from lineages to form Incorporated Land Groups to get ready, should the REDD program actually start, to receive compensation for their mangroves.
 23. The new channel was being used by traffic coming from and going to the market in the provincial capital.
 24. There was a bureaucrat, so the story was circulating, whose father had worked for the village as an Aid-Post-Orderly decades earlier. His son, now a public servant, had met with some villagers in Port Moresby and offered to support a resettlement initiative within the Murik Lakes, dredging ground to a spot on the northern, inland edge of the lakes owned by the village, where it could then be rebuilt. The plan was met with mixed reactions. Some people were encouraged by the proposal, while others were skeptical about the *bona fides* and motives of the Public Servant.

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