(Re)Possessing the Commons: Genealogies, Ancestral Tribal Lands and Conservation in Solomon Islands¹

Laura Shillington York University, Toronto, Canada lshillin@yorku.ca

[Draft: do not cite without consulting author]

Biodiversity conservation has become an extensive global initiative. Tropical rainforests, coastal wetlands and other ecosystems have been classified as "hot spots" – threatened areas of high biodiversity – by environmental organisations. To save global hot spots from the ever-increasing devastating influence of human society, international environmental non-governmental organisations (ENGO) advocate for the establishment of protected areas.² These hot spots constitute areas of importance to local livelihood strategies and are considered, in many cases, common property resources. The establishment of protected areas within these commons has led to conflict between local communities, environmental organisations and governments, particularly when ENGOs promote a strict separation of nature within the hot spots and the surrounding local (human) communities.

Efforts to protect hot spots by excluding human communities from 'natural' areas reflect the commonplace understanding in Western society of nature and society as distinct and disconnected. Protected areas management schemes encouraged by ENGOs are based in ecological and biological studies, which maintain the nature/society dichotomy. "Conservation policies", Zimmerer (2000: 357) argues, "are rooted in the belief, held by policymakers, politicians, scientists and administrators of a balance or equilibrium-tending nature...[and] premised on rigid ecological territories". 'Nature', in the equilibrium model, achieves a stage of stability and symmetry and environmentalists claim that this is the nature that needs to be preserved. In contrast, some ecologists have put forward the concept of flux, which views nature not as balanced or stable but instead

¹ This paper is based on an evaluation the author was contracted to do on an integrated conservation and development project implemented by Conservation International in Solomon Islands. Conservation International has given permission to the author to use the information, which includes field interviews with staff, local villagers, and government officials as well as project documents.

² The IUCN has established protected areas management categories, which range from strict nature reserve to multi-use management area. See IUCN (1994).

as dynamic, fluid and in a constant state of change. The former understanding of nature-in-balance is prominent in environmental agendas to protect biodiversity. As such, protected areas management centres on an understanding of nature as a place of competing human and biological/ecological interests. Rocheleau (2001) and Berkes and Folkes (2002) suggest that continuing to see the commons as a place of competing interests between nature and society tends to privilege one side and ultimately fails to address concerns of "overlapping groups of people and other species" (Rocheleau et. al. 2001). Seeing nature as the latter perspective of fluctuating and dynamic renders opportunities to address the diverse interests of multiple species and communities. At present, however, the nature-in-balance and competing nature-society dominates environmental discourses and endeavours, particularly biodiversity conservation. Within these endeavours, biodiversity is unmistakably privileged over human communities that live with, utilise and depend on the nature being 'saved' (c.f. Wilshusen et. a. 2002).

The embeddedness of ENGOs in the nature/society binary is clearly visible in the ways in which they attempt to enrol local communities in conventional environmental discourses. This is evident in a recent (and ongoing) conservation project in Makira, Solomon Islands. Using this project as an example, I want to show how this particular project to create a protected area - an attempt to materially separate nature and human society – was unable to disengage local understandings of socio-natural spaces and was forced to alter its underlying assumptions. In the end, the project on Makira is an example of how conservation (particularly biodiversity conservation) is inevitably a socio-natural project. This paper draws on recent critical work in geography and other disciplines that challenge the understanding of nature and human society as ontologically and abstractly separate.

Calls for a more inclusive social theory (Whatmore 1999; Wolch and Emel 1998) and a new "political theory of nature" (Smith 1996:49) are among the many attempts to disrupt the nature-society binary. These analyses "increasingly recognize that natural or ecological conditions and processes do not operate separately from social processes, and that the actually existing socio-natural conditions are always the result of intricate transformations of pre-existing configurations that are themselves inherently natural and social" (Swyngedouw 1999: 445). The entanglements of such a socio-nature are

increasingly explained through actor network theory, hybrids, and cyborgs (c.f. Braun and Castree 1998; Castree and Braun 2001; Haraway 1991, 1997; Latour 1993, 1997; Law 2004).

To show how the Makira conservation project fails to dislodge the interwoven social and natural processes, I examine how genealogy, used as a method to identify "appropriate" stakeholders (those with customary land right), enabled local villagers to (re)claim not only their rights to the forest commons but to also articulate an understanding of the forest as a socionatural space. To begin, however, I give a brief overview of Makira and the conservation project. Then I discuss the ways in which the project sought to reinforce nature and human society as separate and competing, and how the use of genealogy and the emergent discourses of socio-nature that led to a (re) claiming of the commons and a hybrid, socio-natural project.

HIGHLAND FORESTS AND CONSERVATION ON MAKIRA

Solomon Islands' province of Makira/Ulawa consists of one large and several small islands, located just south-east of the main island of Guadalcanal (see Map 1). In comparison to neighbouring Polynesian islands and Micronesia, Solomon Islands is endowed with relatively rich and diverse flora and fauna and natural resources such as timber, minerals, and fisheries. Bayless-Smith et. al (2003: 346) claim that Solomon Islands are among the few places left in the world "where large tracts of coastal forest remain". These forested areas have attracted many foreign timber companies; in 1996 timber comprised almost 50 percent of the total national exports (Kabutaulaka 1998). The rich biodiversity attracted, in the mid-late1980s and early 1990s, international environmental organisations such as Greenpeace, World Wildlife Fund for Nature (WWF), and Conservation International (CI) who arrived with an agenda to prevent the islands from over-exploitation and environmental degradation.

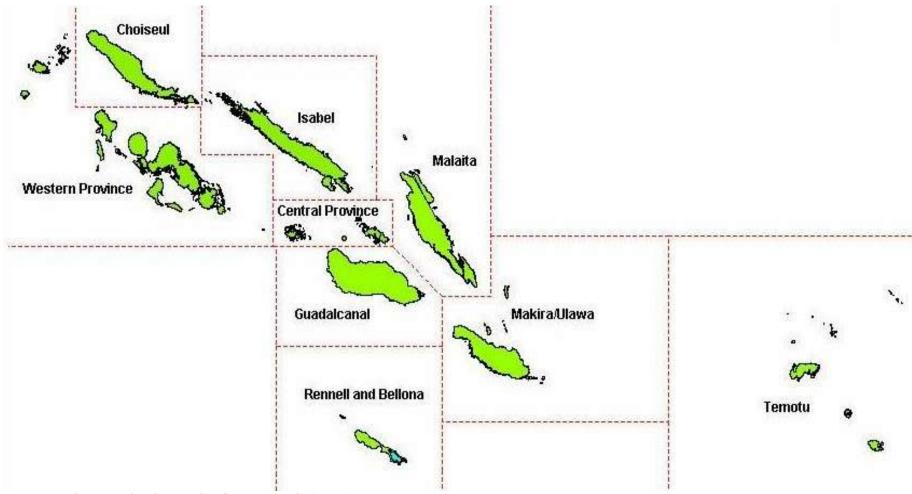
In 1986, Solomon Islands' federal government signed the South Pacific Regional Environment Programme (SPREP) Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, which they later ratified in 1989. Article 14 of the treaty stipulates that signatories take "all appropriate measures to protect rare or fragile ecosystems and threatened or endangered flora and fauna through

the establishment of protected areas and the regulation of activities likely to have an adverse effect on the species, ecosystems and biological processes being protected" (SPREP 1986). To assist the government in realizing the treaty, a national non-governmental organisation, the Solomon Islands Development Trust (SIDT), appealed to a New Zealand environmental group, the Maruia Society, to carry out an ecological survey to determine what areas are in urgent need of protection, as the group had done in Fiji (Lees et al., 1991). The Maruia Society petitioned funding from the Australian Aid agency and US-based environmental organisation Conservation International (CI). Until this point, CI had little experience in the South Pacific and providing funding for the ecological survey afforded the organisation a way to extend their work into the region.

The Maruia Society carried out a nation-wide ecological survey in 1990 with the assistance of several local staff serving as guides and translators. The survey involved a detailed assessment of the population and distribution of flora and fauna in addition to community level interviews. The results of the survey were reported in a publication commonly referred to as "The Green Book" (Lees et. al., 1991). The survey reported that Makira was home to several endemic and endangered species of flora and fauna, including a rare and endemic species of pigeon. This species became one of the rallying points for protecting an area of highland tropical forest, as its populations appeared to be dwindling. Indeed a great deal of Makira's land, the survey revealed, was still covered by large tracts of intact highland tropical rain forests not yet disturbed by the mainland Asian timber companies that had exploited forests on other islands. However, timber companies were beginning to approach local communities in an effort to lease their lands. With the threat of logging imminent on Makira, CI pronounced the highlands of Makira a threatened ecosystem, which became part of the Melanesian hot spot. In an effort to keep the logging companies at bay and to save and preserve the rich biodiversity, CI and SIDT together developed a joint initiative called conservation-in-development (CID) with SIDT managing the project and CI providing funding. The goal of CID on Makira was to establish a protected area - the Makira Conservation Area - under a community-based management scheme. The planned protected area would be established in a 65,000 ha area in the Central Bauro highlands (see Map 2).

(Re)Possessing the Commons

Map 1: Solomon Island Provinces



Source: Solomon Islands People First Network (2004)

Map 2: Proposed Makira Conservation Area in Central Bauro Highlands



Source: Adapted from Solomon Islands People First Network (2004)

As in most of Melanesia, the majority of land in Solomon Islands, approximately 88 per cent, is under customary land tenure. The forested Central Bauro highlands of Makira are no exception. For generations the area has been under tribal customary law, a type of common property resource regime referred to as communal or community (Berkes 1989; Seixas and Berkes 2002). Customary land in Solomon Islands is legally recognised by the government and therefore continues to function as a primary land management system (Baines 1989; Kabutaulaka 1998; Mohamed and Clark 1996). Legislation in Solomon Islands dictates, "that any foreign company [or organisation] must negotiate directly with the local owners of the resources desired" (Hviding 2003: 542), which are those tribes that hold customary rights. Unfortunately, data of customary land rights are not kept; efforts to register customary land have all but failed with only 13 per cent of the total land area in Solomon Islands registered (Kabutaulaka 1998). This, however, is not surprising given that traditionally few absolute boundary lines were drawn around tribal land areas. Customary rights over land are also not straightforward. As Baines (1989) points out, through imposition of colonial land systems customary land tenure practices also changed, resulting in secondary use rights (as opposed to primary rights by birth). Although secondary use rights are generally established on land that was once plantation and officially "no

longer part of the traditional [customary] system", (Baines 1989: 280), the planting of food gardens on customary land enables individuals from outside the tribe to claim rights. Many land disputes in Solomon Islands are over primary versus secondary-use rights.

The intact forests of the Central Bauro highlands are not intensively cultivated and the competition between secondary use and primary rights appears to be minimal. Yet, the migration of highland community members to the coast or other islands has made maintaining distinction between the various tribal customary land rights in the area difficult. The lack of clarity on tribal land rights presents difficulties in establishing protected areas. Usually, to establish a protected area an environmental organisation leases (or in some cases purchases) land from landowners and compensates them for any missed opportunities such as cash income from logging; timber and mining companies also follow this practice but compensate instead for resources extracted (known as concessions) (CI 2003). In most cases national and/or local governments are the first contact for identifying legal landowners and the biggest challenge is convincing those landowners that a protected area more beneficial than large-scale extractive industries. However, because Solomon Islands' federal government has not maintained records of nor registered customary land right holders, identifying appropriate tribes became the main task of the conservation project.

Complicating the identification of customary land-holders is, as I mention briefly above, the migration of tribal members to the coast, other islands, or abroad. Many highland communities migrated at the height of British Colonial rule to work on plantations (mainly palm and coconut) and export-processing industries. Those that remained on Makira tended to settle in towns and villages mainly along the coast and in some cases lessened ties to their tribes. As a result, contemporary villages and towns no longer comprise of only one tribe; villages are multi-tribal and tribes are dispersed throughout Makira and the country. Thus, modern social life in Makira is embedded in what Rocheleau (2001: 80) fittingly describes as "nested and overlapping collectives, including patrilineal [and matrilineal] clans (lineage-based, across places) ... and villages (place-based)".³

³ On Makira (the main island of the province of Makira/Ulawa) lineage is traditionally matrilineal; women hold the primary right to custodianship over the tribal lands but men make decisions on how tribal land is used and developed. However, patrilineal systems emerged after colonialisation (Hviding 2000; Kabutaulaka 1998)

GENEALOGIES, ANCESTRAL TRIBAL LANDS AND SOCIONATURES

The Makira conservation project reflects the paradoxical notions of nature and society of environmental efforts, as Murdoch and Lowe (2003: 319) explain:

...[M]any environmentalists believe that the separation between the 'natural' and the 'social' will ultimately be undermined by ecological relations (at some point nature will 'act' back upon human society, thereby disrupting and amending economic and social relationships...). One main function of the environmental movement, then, is to remind modern society that development inevitably binds humans and nonhumans more closely together within socio-natural assemblages [hybrids]. ...And environmentalism is attuned to the hybrid character of the modern world, it is also caught up in the dualistic presuppositions... many environmentalists cling to the belief that nature can ultimately be separated from society. Thus, the objective of much environmental action is not to more deeply embed human action and human society in the 'hybrid' relations; it is instead to diminish the impact of this society on natural entities by protecting nature from human interference.

The establishment of a protected areas in the Central Bauro Highlands clearly illustrates this paradoxical standpoint; not only was the goal to protect the forest (biodiversity) from logging but also from the local villagers. Nature-society relations are at the core of the Makira conservation project and Conservation International sought to materially reproduce this separation of nature and society in two ways: boundary-making and promotion of western environmental discourses.

Zimmerer calls attention to the importance of boundary making in conservation: "boundaries", he argues, "are central to today's conservation boom" and function as a means of "exclosure and containment" (2000: 362). The creation of boundaries enables a privileging of nature; boundaries establish a clear separation of a nature that is worth saving (first nature) from a nature that is not so 'natural', such as that in places of higher human concentration. As Zimmerer (2000: 362) suggests, boundary making "runs the risk of simply walling-off ... degraded landscapes from the prized places whose ecological value is deemed worthy of conservation-style treatment". Conservation initiatives on Makira illustrate both the walling-off of a first 'nature' and discourses of nature as special and prized. The process of boundary making and 'edification' of western environmental discourses framed the three main project objectives - clarifying land 'ownership', increasing awareness of environmental issues, and "creating and enforcing communal regulation in an attempt to reverse the tragedy of the commons phenomenon" (CI project document 2000).

9

Clarifying land ownership entailed delineation of the area to be protected and of various tribal customary lands within the proposed protected area – in this order. In the ecological survey, the Maruia Society had recommended a large area of the Central Bauro highlands be protected. CI used this recommended area, reducing it only slightly to make the initial stages of the project more feasible. Boundaries for the conservation area were, therefore, straightforward as it involved CI simply using the boundaries suggested by the survey, which had been drawn around several watersheds, and literally drawing those on a map. Based on these boundaries, CI then had to identify which tribes had customary land within the protected area so they could negotiate conservation concessions with those tribes and from this develop a community-based management plan. Thus, boundary making consisted of drawing the physical boundaries of the protected area as well as the boundaries of lineages and tribes – of separating out those who were deemed important to the conservation effort.

Genealogy, or the tracing of one's ancestry, was employed as a way to identify the key tribes. Workshops were held in villages surrounding the proposed protected area and villagers were asked to identify what tribes they, their parents, grandparents, etc. belonged and to trace the villages where their ancestors had lived and moved. Discussions of "land inheritance, customs, the differences between land users and birth-right, how marriages work, and the cultural changes that have been happening between arranged marriages and free-choice marriages, how marriage has decreased (or increased) dramatically and how that impacted land divisions" was used to assist villagers in tracing their genealogies (field staff interview, 2001). Maps and a colour-coded system (dots) were used to trace the movements of different generations of families and tribes. From here it was hoped that villagers would identify the original tribes with customary rights to the area and, consequently, the chiefs or Big-Men of those tribes, who would serve as the key contacts with which CI could negotiate conservation concessions.⁴ The tracing of movement and lineage of generations proved to reveal a much more intricate and blurred tribal system. Lack of clear land and lineage boundaries made negotiation difficult. Inability to identify appropriate tribal leaders led to complications in agreeing to a conservation concession and communitybased conservation management plan in the timeframe that CI hoped. Although being unable to clearly identify all tribes with customary land rights, the process of genealogy prompted villagers

⁴ Tribal chiefs in Solomon Islands do not always hold positions of political power, although they have influence over public opinions in their community. Political power is normally held by various Big-Men, who are not chiefs but rather community leaders. Kabutaulaka (1998: 27) explains that "there are many Big-Men and chiefs who rule over limited geographical enclaves with relatively small populations".

to suggest that, since tribal members were dispersed and leadership uncertain, that it would be easier to have a system where general areas each had representatives (ensuring that each tribe was represented), as opposed to strict tribal boundaries.

While genealogies failed to create boundaries around customary land areas, villagers viewed the process as revealing more than just generations and spatial movement. The genealogies became a way to retell histories of ways of life and traditions; *kastom* easily materialised in, interacted with, and influenced the project outcome. *Kastom* is a concept in Solomon Islands that represents "an attempt to preserve cultural traditions by reviving and re-enacting what are regarded as past ways of life...it implies the existence of a uniquely Solomon Islands 'way'" (Kabutaulaka 1998: 17). Contemporary life in Solomon Islands is generally dichotomised as either *kastom* or the "whiteman way', represented by European ideas, material goods, and institutions" (Kabutaulaka 1998: 17). Hviding (2003) points out that *kastom* and modernity are not totally incompatible; in many instances *kastom* is transformed by outside influences just as it constitutes many external initiatives, such as conservation.

Kastom manifested in both genealogy workshops as well as environmental awareness presentations. 'Increasing awareness of environmental issues' revolved around educating villagers on global environmental narratives. The narratives purported by CI in the workshops emphasised what Hviding (2000: 322) lists as "fragility of the biosphere, the threat of global warming, an ongoing wage of extinctions that justifies urgent actions to conserve wildlife, and in general a plundering of paradise". Makira conservation project managers, all foreigners, used tragedy of the commons as a their focal narrative, largely due to the common property regime of customary land tenure. Workshop discussions began with explanations of Western-style conservation (purpose and objectives), how conservation worked in other regions of the world where government and individuals owned land, how it would operate in Makira, and the benefits.

Three main issues were stressed: endangered species, preservation of old forests, and population growth. Project staff emphasised to villagers that their forests were important not only to them but also internationally (field staff interview, 2002); the message was clearly that the forests on Makira were special and worthy of protection. Discussions revolved around a discourse of preserving the highland forest to protect threatened bird species, which would help attract foreign visitors – ecotourists, which in turn would bring income into villages. For

example, one local staff member cites examples of species protection in Latin America which he used in the workshops:

"What I mean here, that people you ask do not know the value of conservation here. For example we have found that places in South America, Central America where they've got parrot - a very red one somewhere in Central America or one of the Caribbean islands. But so many people say oh, its very nice. And, that's conservation, to try to keep that one [parrot] there. So people come to spend money just to see this bird. I forgot the place now. But there was earning thousands of thousands of US dollars for keeping that species in there and maybe something in here that we need to be able to look after for other people to see" (local field staff interview, 2002).

The Central Bauro forests emerged from these discussions as places of importance both locally and globally. Villagers increasingly understood that outsiders viewed their forest as part of a global conservation network, and that this 'global' forest should not include activities viewed as destructive, such as gardening. However, villagers distinguished between their understanding of conservation and nature and that presented in the workshops. There was hesitancy to accept "English word" conservation, as many villagers referred to the western understanding of the term. Viewed as part of the "whiteman way", many villagers challenged the design of the conservation area. Desires for a particular type of conservation surfaced. Many villagers began articulating conservation through both traditional (kastom) and western understandings.

At the start, the conservation area was viewed in the project to be an area restricting human activity. Ideally, the protected area would have around its borders buffer zones, following typical ecological models. This archetype sought to separate materially and legally human communities from ecological communities. However, land in Solomon Islands is a complex and integral part of society; "land is central to people's identity, traditions, and spiritual values" and is a "vital part of traditional, beliefs and values" (Mohamed and Clark 1996). The land and coastal waters are not owned by a tribe and are therefore not commodities to be sold or traded; rather, tribes and individuals are viewed as custodians and guardians (Baines 1989). To break apart communities from ancestral land was viewed with scepticism; disentangling tribes and villages from the forest through prohibiting their use, yet allowing foreigners to use it for ecotourism was accepted with hesitation. The forest in the proposed protected area represented a link to traditional cultural activities, as one villager shared:

"The old people before liked to go through the primary forest to garden because we were so much feasting before and people needed to plant big gardens to be able to provide for a big feast that was going to get people from far and wide to come. Feasting is something where you make enough food to invite people who are related to you out of other villages further away to build the relationship with the extended family. And a lot of people came so for feasts they had to plant big gardens for feasting and when you cut forest, ah cut the primary forest the food that you plant in it would grow bigger, you'd get a bigger harvest from them for the feast. People would plan to have a feast of possums so then people go hunting for possums in that area; maybe one or two years they'd stop the area from hunting and then just one year they're planning to make a feast so and at the end of it they'd harvest the possums in that area to make sure they got a good harvest" (male villager interview, 2002).

Gardening and hunting are at the core of cultural traditions and are intricately interwoven with the natural landscape. In the workshops, there was distinction made between secondary forests where villagers currently (and in recent past) garden intensely, and primary forests, which were perceived as undisturbed by the ecological survey and the project. Local gardening practices, such as whether households and villages established gardens in primary (big trees) or secondary (small trees) forests, were of particular interest in the project. To protect the forest, it was suggested to villagers that "good conservation" gardening, as one female villager recounted, was "...working in secondary forest rather than primary forest" (female villager interview, 2002). However, she continued in her interview to explain that her ancestors always gardened in primary forest and left old garden plots to revert back to forest.

The endorsement of gardening in secondary forests was based around the assumption that the forest was relatively undisturbed and that current land-use patterns present a threat to the forest well-being. The ecological survey argued that any increased or continued use of the forest would result in degradation. These assumptions, in the context of the project objectives, conclude that human society is incompatible with such an undisturbed nature. These are not uncommon assertions in the project of biodiversity conservation. Contrary to this inference of the Central Bauro forests as undisturbed, a recent study by Bayliss-Smith et. al (2003: 346) reported that tropical rainforests in Solomon Islands are commonly perceived by outsiders as undisturbed and pristine, yet are actually sites of "former settlements, extensive forest clearance, and irrigated/swidden agriculture". This shows, they suggest, that "natural forests are in fact cultural artifacts exhibiting remarkable resilience in the face of both natural disturbance and human use over very long periods" (2003: 352). The small geographic size and spatial limits of Solomon

Island provinces together with the long existence of human populations in the region would corroborate this argument.

Histories emerging from the Makira conservation project reveal that the Central Bauro forests played and still play an important role in the cultural landscape of Makiran tribes and villages. An understanding of nature as part of this cultural landscape, as socionatural, resulted in a partial rejection of the "English" concept of conservation. The concept was not entirely discarded and incorporating some aspects enabled villagers to (re)claim their commons as spaces of both local and global socionatures. Genealogies generated a strong articulation of *kastom* and made possible for villagers to (re)claim their commons from be converted into a stereotypical 'global commons' of conservation with local ways of living excluded. Consequently, a new 'local commons' was created based on tribal customary land tenure, traditional land-use patterns, place-based communities and global environmental narratives.

Conclusion

My above discussion seeks to reveal how genealogies used by an international environmental organisation to identify key stakeholders and create boundaries to protect highland tropical rainforests led to an articulation of local narratives of forests as socionatural landscapes, which shifted the conservation project from a focus on nature and society as separate to one of entanglements of nature-society. Genealogies exposed not only family histories, but also cultural traditions and understandings of nature. The telling of these histories resulted in villagers questioning the way in which 'English' conservation was being imposed on their forest and livelihoods. Understandings of nature and society relations saturated discussions between project managers, staff and villagers. These discussions were wrought with global environmental narratives and indeed reflected the normalization of environmental problems and solutions (c.f. Escobar 1999; Fairhead and Leach 1996; Neumann 1995). Forest degradation and species extinction were linked to the solution of extracting human activity; a solution that villagers not only challenged but changed. Through appropriating and melding the 'English' conservation with their own understanding of socionatures, the project was modified to one defined by villagers. The community-based protected area failed to disengage the villagers from the forest and plans now allow villagers to use the area with regulations decided upon and enforced by area and tribal representatives based on traditional use patterns and customary laws.

Bibliography

- Baines, G.B.K. (1989) Traditional Resource Management in the Melanesian South Pacific: A Development Dilemma. In Berkes, F. (Ed) *Common Property Resources: Ecology and Community-Based Sustainable Development*: 273-295. Belhaven Press, London.
- Bayliss-Smith, T., Hviding, E., and Whitmore, T. (2003) Rainforest composition and histories of human disturbance in Solomon Islands. *AMBIO: A Journal of the Human Environment*, 32 (5): 346-352.
- Berkes, Fikret (1989) Common Property Resources: Ecology and Community-Based Sustainable Development. Belhaven Press, London.
- Berkes, F. and C. Folke (2002) Back to the future: Ecosystem dynamics and local knowledge. In L.H. Gunderson and C.S. Holling (Eds) *Panarchy: Understanding Transformations in Human and Natural Systems:* 121-146. Island Press, Washington, DC.
- Braun, B. and N. Castree (eds) (1998) *Remaking Reality: Nature at the Millennium*. Routledge, New York.
- Castree, N. and B. Braun (eds) (2001) *Social Nature: theory practice and politics*. Blackwell, Cambridge, Mass.
- Conservation International (CI) (2003) Melanesia Newsletter. December 2003 Edition.
- Escobar, A (1999) After Nature: Steps to an Antiessentialist Political Ecology. *Current Anthropology*. 40: 1-29.
- Fairhead, J. and Leach, M. (1996) *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic*. Cambridge University Press, UK.
- Haraway, Donna (1991) The Promise of Monsters: A Regenerative Politics for Inappropriate/d Others. In L. Grossberg, C. Nelson, and P. Treicher (eds) *Cultural Studies*: 275-332. Routledge, New York.
- Hviding, Edward (2003) Contested Rainforests, NGOs and Projects of Desire in Solomon Islands. International Social Science Journal 55(4): 539-554.
- Hviding, Edward and Tim Bayliss-Smith (2000) *Islands of Rainforest: Agroforestry, loggins, and eco-tourism in Solomon Islands*. Ashgate, Burlington, VT.

- IUCN (1994). *Guidelines for Protected Area Management Categories*. CNPPA with the assistance of WCMC. IUCN, Gland, Switzerland and Cambridge, UK.
- Kabutaulaka, Tarcisius Tara (1998) *Pacific Islands Stakeholder Participation in Development: Solomon Islands*. Pacific Island Discussion Paper Series, World Bank, Washington DC.
- Latour, Bruno (1993) *We have never been Modern*. Harvard University Press, Cambridge, Massachusetts.
- Latour, Bruno (1997) Science in Action: How to Follow Scientists and Engineers through Society. Milton Keyes, Open University Press.
- Lees, Annette, M. Garnett, and S. Wright (1991) *A Representative Protected Areas Forest System for the Solomon Islands*. Maruia Society, for Australian Parks and Wildlife Service, Nelson, New Zealand.
- Ministry of Provincial Government and Rural Development (2001) *Makira/Ulawa Province Development Profile*. Rural Development Division, Honiara, Solomon Islands. Available Online: www.peoplefirst.net.sb
- Mohamed, N. and K. Clark (1996) Forestry on Customary-owned Land: Some Experiences from the South Pacific. *Network Paper 19a: Rural Development Forestry Network*. Wellington, New Zealand.
- Murdoch, J. and P. Lowe (2003) The preservationist paradox: modernism, environmentalism and the politics of spatial division. *Transactions of the Institute of British Geographers*. 28: 318-332.
- Neumann, R (1995) Ways of Seeing Africa: Colonial Recasting of African Society and Landscape in Serengeti National Park. *Ecumene* 2(2): 149-169.
- Rocheleau, D. (2001) Complex Communities and Relational Webs: Uncertainty, surprise and Transformation in Machakos. *IDS Bulletin* 32(4): 78-87.
- Seixas, C.S. and F. Berkes (2002) Dynamics of social-ecological changes in a lagoon fishery in southern Brazil. In F. Berkes, J. Colding, and C. Folke (Eds) *Navigating Social-Ecological Systems*: 271-298. Cambridge University Press, Cambridge, UK.
- Smith, N. (1996) The Production of Nature. In G. Robertson, M. Mash, L. Tickner, J. Bird, B. Curtis, and T. Putnam (Eds) *Future-Natural: nature, science culture*: 35-54. Routledge, New York.

- Solomon Islands People First Network, Digital Atlas. Online: www.peoplefirst.net.sb Maps downloaded 29 April 2004.
- South Pacific Regional Environmental Programme (SPREP) (1986) Convention for the Protection of the Natural Resources and Environment of the South Pacific. Noumea, New Caledonia. Online: www.spc.org.nc/coastfish/Asides/conventions/sprep-convention.html
- Swyngedouw, E. (1999) Modernity and Hybridity: Nature, Regeneracionism, and the Production of Spanish Waterscape, 1890-1930. *Annals of the Association of American Geographers*, 89 (3): 443-465
- Whatmore, S. (1999) Hybrid Geographies: Rethinking the 'Human' in Human Geography. In D. Massey, J. Allen, and Philip Sarre (eds.), *Human Geography Today:* 22-39. Polity Press, Cambridge.
- Wilshusen, P., S. Brechin, C. Fortwangler, and P. West (2002) Reinventing a Square Wheel: Critique of Resurgent "Protection Paradigm" in International Biodiversity Conservation. *Society and Natural Resources*, 15: 17-40.
- Wolch, J. and J. Emel (Eds) (1998) Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands. Verso, London.
- Zimmerer, K. (2000) The Reworking of Conservation Geographies: Nonequilibrium Landscapes and Nature Society Hybrids. *Annals of the Association of American Geographers*, 90 (2): 356-369.