Indigenous People-Forest Relationships, Cultural Continuity, and Remobilization Using Indigenous Knowledge Systems: A Case Study of Kenya and Canada

Andrea Lyall
University of British Columbia

Kendi Borona
University of British Columbia

This article shares two cases studies in Kenya and Canada that considers people-forest relationships through the lens of Indigenous Knowledge Systems. These two Indigenous Peoples' traditional stories and oral traditions explain that they are intrinsically interlinked with the lands (forests, waters, sky). Their traditional stories express that their cultures, spirituality, and identities are tied to place. The historic physical removal from land as well as the psychological impacts of land dispossession has a bearing on knowledge use and production. If you do not use the land then you do not generate knowledge, which is directly tied to culture and ways of being. While many researchers have addressed how state governments' natural resource sectors and conservationists are now seeking to engage with communities living within protected forested areas in an effort to craft sustainable solutions, this research will address how Indigenous Peoples are working to mobilize and revitalize Indigenous knowledges in order to gain more sovereignty over their forests. Drawing from two community-led research projects, the authors engage with Indigenous methodologies to dialogue with communities and explore their positioning concerning forests, with an overall goal of ensuring direct community benefits. Research findings show that intersection of forest-dwelling Indigenous Peoples and state government continues to be in flux, and that tools are needed to build relationships critical in safeguarding forests, arguably one of the world's most threatened resources.

Introduction

This article began with two graduate students who discovered that their PhD research dissertation questions and Indigenous methodologies were similar but on different continents. Andrea Lyall is from the Kwakwaka'wakw Nation from the mid-coast of present-day British Columbia, Canada. Kendi Borona hails from the Ameru people of Kenya. Africa. We took a course in Indigenous research methodologies at the University of British Columbia and engaged in a discussion about our respective research projects. At the core of our respective projects is the need to consider people-forest relationships through the lens of Indigenous

Knowledge Systems (IKS). According to Odora Hoppers (2002), IKS refers to the "combination of knowledge systems encompassing technology, social, economic and philosophical learning or educational, legal, and governance systems. It is knowledge relating to the technological, social, institutional, scientific, and developmental including those used in the liberation struggles"(p. 8). We are driven by a conviction that there is a need to engage with IKS in a manner that is meaningful to the communities with which we work. Another point of intersection between the two case studies is the history of colonialism, imperialism, and dispossession of lands of the Indigenous Peoples. This, as we shall see, has had a huge impact on land use, maintaining and revitalizing traditional practices, and the general cultural infrastructure of the two communities. Conservation and forest protection discourses are shifting the world over. There is a drive towards community engagement, community conservation, and many other kinds of practices that seek to look at conservation within a landscape context. It is against the background of this paradigm shift to include Indigenous Peoples that this article seeks to explore the dynamics of Indigenous Peoples' relationships with forests and the linkages that these have to livelihoods. We conceptualize livelihood as the sustenance of life that extends beyond basic subsistence, to encompass the spiritual and environmental realms— that is, a holistic placement of people in landscapes that ties them to place and cultures. We see through these case studies a demonstration of community agency in protecting their landscapes and livelihoods through mobilization and revitalization, both of which are Indigenous practices of construction of knowledge.

Drawing from two community-led research projects, the authors engage with Indigenous methodologies to dialogue with communities and explore their positioning within the respective forests, with an overall goal of ensuring direct community benefits. The first section of this article will present the two case studies, highlighting the historical placements of communities within the landscape, and how policy has been used to dismantle communities from their landscapes. This will be followed by an examination of the methods applied in collecting data. The results sections share quotes from research participants and their relationship of the forests and perceived barriers to continued access to forests for traditional uses. The authors find that the intersection of forest-dwelling Indigenous Peoples and state governments continue to be in flux, and that tools are needed to build relationships that are critical in safeguarding Indigenous knowledge and, in turn, forests.

Case Study Kenya: The Nyandarwa Forest

Kenya boasts some of the most diverse forest ecosystems in East Africa, comprising coastal, rain, riverine, and montane forests that are biologically diverse and contain numerous local endemic species (Peltorinne, 2004). This study was conducted around one of Kenya's large forested landscapes: the Nyandarwa[1] [Aberdare] Forest Reserve.

The Nyandarwa forest covers an area of 149,822 hectares and has a significant influence on the climate and land-use activities of the Agĩkũyũ[2] people who live around it. The Agĩkũyũ are the largest of the over 40 communities in Kenya. They depend on the forest for firewood, building materials, grass harvesting for animal fodder, livestock grazing, beekeeping, and water collection for domestic purposes (Kenya Forest Service [KFS], 2012). This landscape is also spiritually significant and embedded in the Agĩkũyũ cosmology and history. It is believed to be one of the homes of *Ngai*/God (KFS, 2012). Agĩkũyũ ancestors are believed to have arrived in Kenya during the Bantu[3] migrations of 1200 to 1600 AD. The formation of the Agĩkũyũ nation as we know it today was a result of complex migrations and remigration involving different groups of people. By 1800, however, the Agĩkũyũ people had coalesced into a distinct community (Muriuki, 1974).

While Agĩkũyũ people are primarily agriculturalists, theirs is also a mixed economy that includes livestock keeping. Goats, sheep, and cattle are important as they signified wealth and were used in many aspects of Agĩkũyũ life, such as ceremonies, sacrifices, and prayers. Gĩkũyũland is characterised by ridges and valleys. This topography had a significant influence on original settlement, land acquisition, and the ensuing land tenure. Among the Agĩkũyũ, the land is the most important factor in the social, political, religious, and economic life (Kenyatta, 1965). Kenyatta (1965) further points out that land ownership amongst the Agĩkũyũ was not communal; while the whole community collectively defended their territory, "every inch of land had its owner" (Kenyatta, 1965, p. 27). Individuals, families, or clans owned land. However, this form of private ownership did not give the owner(s) exclusive rights. The land was shared with other members of the community in a system that was anchored in reciprocity and pursuit of collective. The British mistook this collective usage as communal ownership of land and instituted new land ownership and management regimes, with devastating consequences that continue to reverberate to this day. The land was tied to rites of passage or transition from childhood to adulthood. A man without land was simply a boy [It did not help that the British were referring to grown men, including those older

than they as "boy"]. A woman became a woman through the cultivation of crops and providing for her family. Without this, she was a girl. In essence, a Mūgīkūyū could not become a Mūgīkūyū without land (Elkins, 2005). Ngūgī wa Thiong'[4] (2010, p. 65) writes that Agīkūyū people believed that *Ngai* had blessed them with a land of abundance. This was incorporated into Gīkūyū teachings and lyricized by the Agīkūyū as follows:

> God has given the Kikuyu a beautiful country
> Abundant with water, food and luscious bush
> The Kikuyu should praise the Lord all the time
> For he has ever been generous to them!

Muriuki (1974) further explains that, besides adequate rainfall, Gīkūyū land is endowed with moderate temperatures and fertile soils. The productivity of the soil was derived from the volcanic tuffs and was rich in humus from the cleared primaeval forest. This was the land of plenty, abundant with all the good things. It is this goodness that drew non-Gīkūyū [the British] people to the Agīkūyū territory. The colonial period ushered in an era in which the Agīkūyū were dismantled from their landscapes, both in a physical and a psychological sense. This was entrenched through forest conservation policy, which sought to create areas that were emptied of human presence, grand theft of land, and enslavement of the Agīkūyū on their own land, through, amongst others, the application of the morally bankrupt *terra nullius* ideology.

Policy Shifts and Forest Management in Kenya

Ongugo (2007) argues that forest management challenges in Kenya have, to a large extent, been linked to policy formulation. From the late 1970s to the early 1980s, for example, there was an unprecedented acceleration in the destruction of forests in Kenya, which was largely blamed on a lack of appropriate and all-inclusive forest policy and legislation. According to KFS (2007), the policies and legislation used to manage forest resources were developed in 1957 by the colonial government, changing only slightly after independence in 1968. This approach to forest governance was considered to be repressive and inconsiderate to members of the various communities living in and around forest ecosystems, and who rely on these landscapes for a diverse array of livelihood functions. Thus, local communities yearned for policies and laws that would recognize and include them in the governance of the country's forests (Ongugo, 2007).

As a response to this yearning, the new *Constitution of Kenya* promulgated in August 2010 embodies a new paradigm shift in resource management that significantly alters Kenya's socio-cultural, political, legal, and economic spheres (Adam, 2012). The *Constitution* now explicitly requires

the state government to involve communities in conserving and managing lands and ecosystems, thus opening more space for dialogue and deeper recognition of communities and their respective cultures (Wily, 2010).

In 2007, Kenya underwent a major change in the operationalization of the *Forests Act, 2005*, which created an opportunity for communities to be involved in forest management through Community Forest Associations, by embracing the participatory forest management approach. This act was revised in 2016 to align it with the 2010 constitution and is now named *Forest Conservation and Management Act, 2016*. These changes in forest governance are considered a welcome paradigm shift from command-and-control towards greater participation and stakeholder engagement in forest management and conflict resolution over forest resources.

There is growing recognition that the use and promotion of conventional scientific methods of forest conservation alone are not sufficient. Perhaps the answers to the environmental challenges we face reside with communities and within knowledge embedded in IKS and other local knowledge systems working alongside and/or with scientific management regimes. This calls for honest engagement with local communities in a constructive manner to establish a common ground and long-term solutions, more so in the African context, where environmental resources still remain a sophisticated pedestal around which culture, religion, livelihoods, and governance are constructed (Borona, 2014).

Case Study: Coastal British Columbia, Canada

The second case study focuses on the coast of the present-day province of British Columbia (BC), Canada and the Kwakwaka'wakw Nation (Kwak̓wala speaking peoples) who have lived surrounded by forests on the northern tip of Vancouver Island and adjacent to the mainland for thousands of years. The forests in BC are rich in biodiversity and cover two-thirds of the province. The province's coastal region is located between the Coastal Mountain Range and the Pacific Ocean. The predominant tree cover is a coniferous, temperate rainforest of Western hemlock (*ḵwax̱'as*), Western red-cedar (*wilkw*), Sitka spruce (*ạli'was*), white pine (*ḵaḵasal'ạms*), red alder (*ƛes'mạs*), and balsam fir (*mumxwạd*) (Pojar & MacKinnon, 1994). Because of the wealth from the ocean and relatively mild winters on the coast of present-day BC, there are several unique Indigenous Peoples, each with complex governing systems, histories, and cultures (Trosper, 2009).

The Kwakwaka'wakw are made up of 15 First Nations (Indian Bands per the Federal government); however, the *'nạ'mima* or extended family unit is regarded as the fundamental social unit of the Kwakwaka'wakw.

Each 'na'mima has creation stories, village sites, dances, songs, and crests that describes where the Kwakwaka'wakw 'na'mima came from out of the sky, land, or water and describes what forests and waters 'na'mima are responsible to uphold (Galois, 1994). Traditionally, 'na'mima held access to hunting, gathering, and fishing sites, such as clam beaches, herring spawning grounds, berry patches, halibut banks, clover-root fields, and rivers (Boas, 1966; Galois, 1994). Transfer of rights was primarily through marriages during potlatches (Boas, 1897; Robertson (with the Kwagu'ł Gixsam Clan), 2012). Due to smallpox, influenza, and tuberculosis from the 1880s to 1920s, the population of the Kwakwaka'wakw fell from over 8,500 pre-contact to 1,029 in 1924 (Galois, 1994). Repressive colonial tactics began in 1867 with the *Indian Act*, which alienated the surviving Kwakwaka'wakw from their lands, such as outlawing the potlatch system, a central part of the Kwakwaka'wakw culture and Indigenous laws, from 1884 to 1951 (Tennant, 1990). From the late 19th century to 1975, Kwakwaka'wakw children were removed from their homes and forced to attend residential school, funded by the federal government and run by the churches (First Nations Education Steering Committee, 2014). In the 1860s, the Chief Commissioner of Land and Works of the Crown Colony, Joseph Trutch, designated pre-confederate British Columbia as *terra nullis* (or empty lands) and began designating Indian reservations that amount to about 0.4 per cent of the BC land-base (Tennant, 1990).

As a result of ongoing colonialism, the Kwakwaka'wakw's current relationship with the forests has changed drastically for complex and cumulative reasons, including joining the wage economy causing loss of time for traditional practices, unresolved historic grief of residential school and federal government assimilation policies, and the loss of control to access traditional resources (Tennant, 1990; Thomas, 2015). It is against this background that the Kwakwaka'wakw's desire of reoccupying the lands and seas are anchored.

Policy Shifts in British Columbia, Canada

In the last four decades, forest policymakers began to consider how to involve Indigenous Peoples in BC in land use planning processes and to allot forest tenures to First Nations. This change in attitude from exclusion to inclusion was a result of a series of direct actions, including Supreme Court of Canada rulings over conflicts in forestry beginning in the 1970s, and with growing public concern about forestry activities leading to the "war in the woods" (a series of forestry protests in British Columbia in the 1980s and 1990s within Haida Gwaii, Stein Valley, and Clayoquot Sound) (Howlett, Rayner, & Tollefson, 2009).

Since this research began, the province of BC adopted the Great Bear Rainforest (GBR) forest legislation, and the Duke and Duchess of Cambridge endorsed the GBR as part of the Queen's Commonwealth Canopy (Province of British Columbia, 2018). Some of the Kwakwaka'wakw Nations are located within the GBR, which is 6.4 million hectares on the coast of present-day British Columbia (Howlett et al., 2009). The GBR legislation was written by large forest companies (BC Timber Sales, Catalyst Paper Corporation, Howe Sound Pulp and Paper Corporation, Interfor, Western Forest Products) with ENGOs (ForestEthics Solutions, Greenpeace, Sierra Club BC) and 11 First Nations represented by the Coastal First Nations and the Nanwakolas First Nations; 15 other First Nations have been "consulted", but have had little involvement (Province of British Columbia, 2018). Andrea Lyall spoke with one of the Kwakwaka'wakw First Nations about their relationship with the forests that was *not* involved in discussions about developing the GBR. Similar to the now-defunct *Canadian Boreal Forest Agreement*, many Indigenous Peoples do not see the GBR agreement as a means of collaboration, but one of alienation from decision making in their traditional territories (Smith, 2015). Further, the provincial government's policy regime is not consistent with IKS. Therefore, some Indigenous Peoples are not enthusiastic about participating in forestry activities that impact their traditional lifestyle or practices that do not reflect their traditional values regarding the land and resources (Barnhardt & Kawagley, 2005).

Methodology

The authors are drawing upon Indigenous decolonizing methodologies that build upon their three decades of combined experience while living in and working with over 40 Indigenous Peoples/communities in Kenya and Canada before beginning their doctoral studies. The rationale for employing Indigenous methodologies is that there is a history of research where there has been little or no chance for Indigenous Peoples to contribute, edit, or even have informed consent to participate (Smith, 1999; Wilson, 2008). Smith's (1999) *Decolonizing Methodologies: Research and Indigenous Peoples* challenges Indigenous scholars to engage in decolonizing research, and shares three decolonizing strategies: (1) to critically understand and challenge the underlying assumptions, tenets, and methods of Western science and history; (2) to centre Indigenous knowledge systems (IKS): ontology (cultural identity, spirituality, creation stories, traditional practices), epistemology (validity of local knowledge, Indigenous language, knowledge keepers and elders recognized as experts), histories (colonization and survival), and interconnectedness of world view; and (3)

to become allies in rebuilding and revitalizing IKS, with the goal of moving Indigenous Peoples to self-determination (Ahenakew, 2014). Such research would empower communities by reclaiming our Indigenous knowledge and allow us to tell our own stories in our own way, and to redistribute the knowledge back to the communities.

In the Kenyan case study, a combination of methods was used to engage participants in discussions. The primary methods of data collection included: talking circles with community groups, one-on-one interviews with elders, experiential learning, and archival data. Talking circle participants were chosen purposely from community groups who were engaged in conservation efforts on both sides of the forest (east and west). Ten talking circles were conducted and comprised of between 14 and 16 participants. To guide discussions, a cultural object was used and passed around from one speaker to the next. Elders were instrumental in explaining the thinking behind the production of these objects, the reasons why some of them were falling into disuse, and their importance as carriers of traditions and memories. A total of 12 objects were used in this study and the objects themselves became a source of data. Interviews with elders helped unpack the environmental histories of this landscape, the location of forests and land as central figures of the community's life, and use of cultural forms, such as stories, proverbs, and sayings as repositories of knowledge. Twenty-one elders interviewed in this study were chosen through a referral system, where elders led the researcher to other elders who were knowledgeable about the topics under discussion. Experiential learning entailed collecting data during joint community workshops (of the two talking circle groups: 36 people) that were punctuated by song, dance, cooking of Indigenous foods, observation of farming practices, and discussions on people-forest relationships.

In the Canadian context, fieldwork began in 2016 when Andrea moved to the main settlement of Gwa'yasdụm's (the village on Gilford Island) during July and early August 2016, continued in the fall of 2017 at Yạlis, Alert Bay, BC, and is ongoing. There were 29 one-on-one interviews with community members, elders, hereditary and elected leaders, and forestry fieldworkers. Three field trips took place during data collection and living in the traditional territory of the Kwakwạkạ'wakw. Five workshops (a preferred term over talking circles) utilized a participatory approach to encourage multidisciplinary dialogue to answer semi-structured research questions. The workshops also engaged community participatory action research to co-develop a draft of a research proposal, reviewing results and co-participating in an analysis, and reviewing research chapter themes. Reciprocity of sharing knowledge was important as the community asked

Andrea to lead a forest walk and salve-making workshop in efforts to further exchange knowledge and ideas.

Each case study looks at Indigenous Peoples' relationship with the forests, continuity and maintenance of traditional land practices, revitalization efforts, and IKS. This research can be explained as a mixed discipline of Indigenous knowledge, history, conservation, and natural resource policy.

Results Kenya

The Agĩkũyũ people were a sovereign and self-sufficient community before their encounter with colonialism. Agĩkũyũ pre-colonial relationships with the forest were encapsulated in an all-encompassing landscape approach that was supported by their socio-religious and political organization. One of the first elders Kendi Borona interviewed pointed out that there is no Gikũyũ name for forest. The Agĩkũyũ understood the forest to be part of the land, which departs from the colonial and now pervasive conceptualization of forests as an area that is set aside for conservation and one that is emptied of human presence. The Agĩkũyũ story of origin locates their history in the land and cements the centrality of trees in their history. In their story of origin, God / Ngai instructs the man to go and establish his homestead under the Mukuyu tree (*Ficus Sycomorus*), a sacred tree. The land sustained the Agĩkũyũ and gave them life in diverse ways, the most important of these being through rainfall. According to an elder interviewed in this study:

The elders used to say, "Let us look to Nyandarwa."
When performing a sacrifice, the elders would not say "rain"; they would say
    "tears."
"When it cries, we drink its tears." That is how they used to sing.
So, if they were praying for rain they would say,
"When it cries, I drink its tears." Because they spoke using proverbs. (personal communication, November 11, 2015)

Rain is considered a blessing in many African societies. In addition, among the Agĩkũyũ, there was[5] a strong belief that Indigenous trees are a source of rainfall. Rain-making rituals were a very important aspect of their culture. If there was drought or delayed rainfall, the community would need to perform a sacrifice to appease *Ngai* and beg for mercy. While these practices have been weakened by the infiltration of Christian beliefs, they are still practiced at a small scale because the community has continued to breathe life into them.

What is known as Kenya today was colonised by Britain from 1895 to 1963. This reign of terror started with the alienation of land for White set-

tlers in Gĩkũyũland. The Agĩkũyũ believed that *Ngai*/God had blessed them with a land of abundance and good weather. It was these very things that drew settlers to Gĩkũyũ land. Having lost huge tracts of land to White settlers to create what was known as "White Highlands[6]", the Agĩkũyũ found themselves enslaved on their own land. It was during the colonial period that this forest under discussion was set aside as a protected area from which communities who had depended on it for their livelihoods were locked out. As an interviewee pointed out:

Everything belonged to the colonialists. We had to go and ask for permission to fetch fire-wood. If you were caught there fetching firewood without permission, the Beberu[7] would take you to his home and beat you so much. Your parents had to come and pick you up from there. (personal communication, November 12, 2015)

Land is the central pillar of Agĩkũyũ identity and life. The loss of land through colonization was a catastrophic disruption of their way of life. An elder's interview historicizes this disruption:

The colonialists came and took land that belonged people. They then constructed huge houses and created ranches. Then, the local people were employed by the colonialists as labourers to herd cows, cultivate wheat, to pick pyrethrum, and to herd sheep—for wool. This is why the White man was constructing the railway line. So that it could transport wool and wheat from the interior to Mombasa (Kenyan coast). They had to construct a way of transporting these materials. And then they contradicted people because they came through Christianity. There were missionaries and administrators. The White man came with a bible in one hand and a gun on the other. Then, they started teaching the local people a song which went like this:

Goats, cows, and money are not important
What is important is the blood of Jesus
When I look this way and that way I see angels

Ehh?

So, the colonialist is teaching this, but all the wool producing sheep are his. All the cows are his. The wheat is his. The pyrethrum is his. But those who are harvesting all these things are told that goats, cows, and money are not important. But, he has come all the way from Britain to enjoy all these things. So there were contradictions. And this is what birthed the Mau Mau. (personal communication, February 10, 2016)

The Agĩkũyũ people have historically mobilized to defend their land. They did not acquiesce to their fate. The first of these large-scale mobilization efforts was the Kenya Land and Freedom Army [Mau Mau] revolt. The Mau Mau launched one of the most protracted wars in Britain's colonial empire to restore their land and African dignity. At the core of the Mau Mau was the use of IKS. This was employed in ensuring survival in the forests (including the Nyandarwa forest) where they retreated to wage war against imperialism. This knowledge was instrumental in ensuring the following: effective communication, food storage, manufacture of weaponry, production of medicine and treatment, spiritual revitalization, and consol-

idating solidarity (e.g., through oathing[8]). Hence, the Agĩkũyũ people say: *Wiyathi twarutire githaka*! Our independence was derived from the forest/Land. *Githaka* directly translates to land. Post-independence policies remained oppressive to local communities and forest lands remained contested spaces. This study further reveals that the Agĩkũyũ people have consistently mobilized to protect the forested landscape and its critical watersheds (with or without the support of enabling policy formulations). Therefore, when elders in eastern Nyandarwa mobilized to protect the forest in the 1990s, they returned to this Agĩkũyũ practice. They forged solidarity and physically removed all those who encroached on the forest, including members of their own families. This event is recalled with much pride in the community because this was instrumental in safeguarding the forest and, in extension, livelihoods. As the mobilizing elder explains:

I saw what was happening and gathered other men of my age in this area and we said *enough is enough* [emphasis added]. I mobilized men of my age because I realized that our children will be hearing it as a form of history that there were once camphor[9] trees but they will not know what that looked like. We agreed that we will not allow anyone to cut down any more trees. Trees were being cut down by the Bukusu, Kisii, Aganda, and even Agĩkũyũ, some of whom are here. People would just go into the forest and allocate land to themselves, and start cultivating. So we took our weapons and torches and went into the forest. We could go in, find charcoal burners, and bring the charcoal into the open and burn it to ashes. We could find logs of wood for timber and we bring them down and cut them into pieces ... we did not want it! We could find their houses and demolish them. It is at this point that the government saw we are doing a good job and they decided to join us and gave us security.... We have planted over 95,000 trees in this forest. (personal communication, February 10, 2016)

Changing legislation aimed at effectively engaging communities in forest governance. The crafting of this legislation was a result of decades of pressure from local communities as well as civil society in order to reap the benefits of the now friendly legislative environment. While there are some positive synergies between the government authorities and the community, years of a top-down approach have created a legacy of mistrust. Communities are involved in many conservation efforts, and some of these are more community-driven with the support of NGOs as opposed to more community-government partnerships. In this particular landscape, restoration efforts have been spearheaded by communities in partnership with the Green Belt Movement, an organization that was founded by Nobel Laureate Wangari Maathai to work towards landscape restoration and to pursue a quest for good governance.

Results Canada

The Kwakwaka'wakw strive to maintain IKS wisdom about the land, their language, and traditional practices despite deliberate attempts by colonial-

ism to have it forgotten. The Kwakwa̱ka'wakws' oral traditions include lessons that the forests and waters are central to their being. One Kwakwa̱ka'wakw elder demonstrates this when she says:

> The forest is our cupboard, and the ocean is our refrigerator. You can go down there and get what you want. So, we're very lucky. (personal communication, July 18, 2016)

This quote explains how the forests were depended upon every day as a source of clothes, structures, spirituality, and food; however, at the same time, the elders are concerned about the impacts of industrial developments contaminating the ocean and impacts on traditional seafood that remain an important part of current day food sovereignty. Further, this quote explains that the Kwakwa̱ka'wakw teachings do not describe humans as separate from nature and are responsible to the forests and ocean in order to survive. Further, we do not see ourselves as land managers, stewards, or as having a hierarchy over the environment, but we are compelled to protect our surroundings otherwise it would negatively impact our heritage, wealth, livelihoods, and survival.

A hereditary titleholder shares that the Kwakwa̱ka'wakw stories explain a strong sense of place with this statement:

> The stories, it shows where we are from, where we came out. We were here a long time ago. We are talking thousands of years ago, those legends are telling us this is where we are out of. Our creation story tells us that we are living as one as the land and sea, therefore we must— maya'x̱ala x̱an's a̱wi'nagwis (to take care of our environment)—I like those couple of phrases. (personal communication, June 18, 2016)

'Na̱'mimas have ordained rights to place through inheritance and are given responsibilities to uphold lands and waters because Kwakwa̱ka'wakw are "one" with their surroundings. Trosper (2009) makes a case that the First Nations in the northwest coast (current day Washington state, British Columbia, and Alaska) lived primarily on salmon, a common pool resource amongst First Nations, and managed to not over-exploit salmon stocks. This is besides the fact that they had the population and technology for at least two centuries to cause environmental damage (Trosper, 2009). Therefore, there are lessons to be learned about not degrading the environment from Indigenous teachings about respect and reciprocity.

Many elders were concerned that the younger generation is not collecting traditional foods as often: for instance, clam digging. There were lived experiences of being stopped from carrying out clam digging, due to state permitting systems. This is even though elders noted that there are traditional practices that allowed for safely gathering clams for a longer season than state permitting allows. An elder who worked as a fisherman most of his life argued:

The old people didn't need a permit. Yeah. Any animal on land and sea all meant something. The killer whales, you know. Salmon, the species in the water, but when everything changed, when the government people came from the Bureau [of Indian Affairs], and when they started to change the rules from the federal, high-level government—they said 'rules and regulations'. That's why they put the Indian Act in ... so we couldn't challenge the government and try to do our own resources when we need it. We have to get a permit. But who gave them permission to do that? What the old people said is that we didn't need it. (personal communication, November 8, 2017)

Another elder who has lived in the traditional territory her whole life also stated concern for regulations that limit access to resources from the forests:

Well nowadays we have to go get a permit to go get a tree hey, but I mean it is ours, but you still have to get a permit, which is full of shit. When did we have to start getting a permit? (personal communication, July 18, 2016)

Regardless of barriers, a solution from community, especially the generation with young children, was to reoccupy the lands, continue traditional practices, and to remobilize some practices that were in hibernation for a while, in order to uphold the relationship with the forests (Coburn, 2015; Holm, Pearson, & Chavis, 2003). A parent with young children sees great value in reoccupying the lands and seas by building more infrastructures throughout the remote areas of the traditional territory:

So anyways, that's kind of my goal and my dream is to [re-]build in our territories and to empower our youth and to utilize our territories for the purpose of healing our nations once again through just being on the land and traditional teachings that we still have. I think it's a good combination—really, really, really powerful. (personal communication, December 14, 2017)

Parents discussed at length the things that need to be taught to the Kwakwaka'wakw children, including the importance of traditional foods, where to collect them throughout the territory, and a learning-by-doing pedagogy on how to prepare traditional foods within the traditional territory. Also included were: the importance of teaching the culture (dances, songs, place names); that the Indigenous language Kwakwa'la was significant; visiting the territory more often; and bringing schools back in the traditional territory so that youth can live closer to their lands. Therefore, the Kwakwaka'wakw knowledge comes from a strong sense of place, and those living in the territory were very proud to have held onto this knowledge and expressed a keen interest in continue transmitting knowledge to the next generation.

Many community members felt it was vital to tell Andrea that the "forests" are considered as a whole and are to be inclusive of the trees, wildlife, medicinal plants, clam beds, oceans, and rivers for salmon and other fish. However, in Canada these forests are managed by the Province of British Columbia, and the oceans are managed by the Federal govern-

ment. Therefore, the combined superstructures of state policies, including forest and ocean policies, work in silos and Kwakwaka'wakw see the cumulative effects of siloed industrial developments on their traditional territories. Further, the Kwakwaka'wakw's livelihood bares the brunt of the impacts of developments; of particular concern were fish farms and logging. Therefore, some Kwakwaka'wakw Nation's are unwilling to join state-led collaboration models that were offered to them in a seemingly "take it or leave it" negotiation format by the province, forest sector, and environmentalists as a form of resistance. Further, the resistance to join the state-led regimes stems from the stipulations that the GBR legislation and other state policy is informed by scientific principles, academic disciplines such as applied ecology (Howlett et al., 2009), and could be improved if there was more attention paid to indirect and cumulative impacts of policy decisions on traditional practices (Turner, Gregory, Brooks, Failing, & Satterfield, 2008).

Discussion

Indigenous Peoples need to find an equitable place in the modern world where they can stay connected with the lands, partake in sustainable economic development activities, and continue with land-based practices on their traditional lands. The main difference between these two case studies is that while the Canadian case is more natural resource industry oriented, the Kenyan case is more conservation industry based; both of these extractive industries have historically excluded communities from their landscapes. Forest policy remains a critical barrier for both case studies because both of these forested landscapes are under state control. While in the Canadian context recent policy changes are being viewed as empowering for Indigenous Peoples (Daigle, 2016), more work needs to be done so that policy does not criminalize their traditional practices and access to resources, and power imbalance must be addressed in the forest and conservation governance structures.

However, there are many similarities in the two case studies. We have demonstrated that both communities have been severely dislocated by colonialism. The initial dislocation from culture and ways of being continues to fester and is manifested in many ways. It can be argued that both communities have been destitute by colonialism. The physical removal from land as well as the psychological impact has a bearing on knowledge use and production. If you do not use the land then you do not generate knowledge. Knowledge production is directly tied to livelihoods. In the Kenyan context, this dislocation is evidenced by the loss of Gīkūyūland during the colonial period. While all the most productive land was set

aside for settlers, the Agĩkũyũ people found themselves crammed into small reserves in which soils were quickly depleted. It was only through concerted efforts that some of this land was restored after independence in 1963. Land remains the most problematic issue in Kenya today and is interestingly encapsulated as "The Land Question". In the Canadian context, the "Indian Land Question" has yet to be addressed for much of the unceded lands in British Columbia and other parts of Canada without signed treaties with state governments (Tennant, 1990). Some individual Indigenous Peoples in Canada have gained increased access rights to land title through court cases and land claims, while others are resisting state-led land recognition initiatives (Coulthard, 2014).

There is an ongoing struggle to gain more decision-making power over public lands in a way that protects traditional uses and practices. Tied to dislocation from land is the criminalization of community livelihoods. Communities are transformed into "poachers" and "trespassers" who need a permit in order to fetch firewood or harvest clams. This transforms conservation areas into areas of conflict, violence, indignity, contestations, and resentment. This is well articulated by Simpson (2017) who writes that:

The old men ... lived a life where they had to live by sneaking around and feeling like they were "poachers". They resorted to catching other animals and harvesting those things that the government did not feel were part of the things they needed to "protect" from us. These things included small animals, such as the groundhog and porcupine; the muskrat for meat and other things were also eaten because we were forbidden from hunting deer (which was our staple). (p. 168)

These sentiments capture the struggle that punctuates access to land and its gifts in both case studies. Colonial conservation and extractive resource developments have continued to linger in the psyche of governments and other players, and at the receiving end are communities who are waged in a never-ending struggle for self-determination. As has been demonstrated by the two case studies discussed in this article, Indigenous Peoples do not view land as comprising of fragmented sections that are thought to exist independent of other parts. There is increasing recognition of the value that IKS can add to land management decisions (Trosper & Parrotta, 2012). There is an opportunity to reconsider how effectively and how frequently IKS could be used to inform land management policy and practices (Polfus, Manseau, Simmons, Neyelle, Bayha, Andrew, Andrew, Klütsch, Rice, & Wilson, 2016: Turner et al., 2008). Another similarity in the cases studies is that policy changes in Kenya and Canada are a step in the right direction. However, the monitoring of the implementation of these policies should ensure that they are achieving goals set out for community benefits and, in some cases, policies may not be new, but include traditional practices and

approaches (Artelle, Stephenson, Bragg, Housty, Housty, Kawharu, & Turner, 2018). If Indigenous Peoples were involved in co-planning the structure based on their IKS and drawing upon the wisdom of the community, it would be more inspiring for them to work with each other rather than the current conservation and protection models developed by state governments in a Western science paradigm (Barnhardt & Kawagley, 2005).

We see through these case studies a demonstration of community agency in protecting their landscapes and livelihoods. Mobilization and revitalization is an Indigenous practice. Amongst the Agĩkũyũ people, the community has historically mobilized to protect the landscape from different incursions. IKS are manifested through practices that are anchored in the land, especially provision of sustenance and landscape restoration. In the case of the Kwakwaka'wakw, complex state policies taken together limit some of their traditional practices; however, they remain determined to continue to teach these practices to the next generation. The fact that these knowledge systems continue to survive, despite all the pressures, is a testament to their resilience (Scheba & Mustalahti, 2015; Simpson, 2017). It is also a testament that the communities have continued to breathe life into them. It also reinforces the belief that IKS are ultimately about rebuilding, self-determination, and survival in ways relevant to Agĩkũyũ and Kwakwaka'wakw Peoples.

Conclusion

Takeaway findings are that the intersection of forest-dwelling Indigenous Peoples and state government continues to be in flux and continues to impact Indigenous Peoples' access to land. While it is important to safeguard forests, arguably one of the world's most threatened resources, it needs to be done in a way that considers Indigenous Peoples' livelihoods, heritage, and identities within forest governance and policy.

While there have been attempts to include IKS into the current models for conservation and resource development, a question remains of how successful this is or if the "incorporation" model is the right way to go (Bohensky & Maru, 2011; Daigle, 2016; Smith, 2015). This research considered how IKS could inform conservation models and forestry by looking at IKS at non-hierarchal levels. There is no shortage of good ideas or policy formulations about land management/forest governance (Smith, 2015). What is lacking is a will to cede power and engage with communities in meaningful partnerships. If policy creates room for community engagement then communities come on board with all of their IKS. It is from that position that we must negotiate and forge strategies for sustainable forest governance anchored on social justice (Coburn, 2015; Holm et al., 2003).

For without proper consideration of the lands, it is impossible to maintain and remobilize Indigenous Peoples' heritage, livelihoods, and identities.

Notes

[1] The Gĩkũyũ name for this landscape is *Nyandrwa*. It is named after a drying hide because of its distinctive fold in its silhouette. *Aberdares*, the current name in use, is derived from the "era of discovery." Explorer Thompson named the mountain Aberdares after the then chairman of the Royal Geographic Society. In an effort to decolonize conservation and knowledge production, we shall make use of the Indigenous name of the landscape (Nyandarwa) throughout this article.

[2] The Anglicized name for the Agĩkũyũ is *Kikuyu*, which is the current name in use, but the elders I spoke to during the course of this project recommended that I use proper terminology. I will use the *Agĩkũyũ* (plural), *Mũgĩkũyũ* (singular), or *Gĩkũyũ* (in reference to the land) as appropriate throughout the text.

[3] A cluster of African peoples that speak closely related languages. Bantu speaking people are found in Central Africa, the Great Lakes region, and southern Africa.

[4] I will use the full names of Gĩkũyũ scholars who have chosen to be named the Gĩkũyũ way whenever I refer to their work(s) in the text. The use of just a surname is inappropriate for these individuals because there is no surname as such. *Ngũgĩ wa Thiong'o* means *Ngũgĩ, the son of Thiong'o*. The two names are joined together and cannot be separated. If I use *wa Thiong'o* that would mean any of the other children of Thiong'o or, indeed, Thiong'o's wife.

[5] This section will use the past tense for clarity. It should, however, be noted that some of these practices and or beliefs are held today.

[6] Areas for exclusive White settlement.

[7] There are various terms that Agĩkũyũ people used to make reference to White settlers: Nyakeru; Athungu; Comba; and Beberu. While they all mean the same thing (i.e., White man or White people), the Swahili term *Beberu* is a better metaphorical encapsulation of colonial oppression and domination. Male goats are also known as Beberu and are known for their legendary sexual greed. They are to be found mounting one female goat after the other or the same goat over and over again. They are dictatorial; they are uncompromising. The British Beberu could not have enough of looting, raping, murdering, and torturing. They were the epitome of gluttonousness. The term *Beberu* is also a more apt description of the true nature of colonialism—that colonialism was a "one armed bandit" (Rodney, 1972, p. 327) that extracted without ever giving anything back. Rodney (1972) came up with this expression to challenge the unfortunate and surprisingly still pervasive notion that Africans were better off during colonialism and that they benefited from colonialism.

[8] Oathing is an Indigenous Gĩkũyũ practice. In pre-colonial times, the Gĩkũyũ would take an oath to forge solidarity during times of war or other events. The oath involved reciting several phrases and ingesting various products of the land. The Mau Mau radicalized this practice in order to forge solidarity to resist colonial oppression.

[9] This was and is one of the highly sought after hardwood species. It is now classified as endangered.

References

Adam, A. H. (2012.) *Recognising sacred natural sites and territories in Kenya: An analysis of how the Kenyan Constitution, national and international laws can support the recognition of sacred natural sites and their community governance systems*. Thika, KE: Institute for Culture and Ecology (Kenya), African Biodiversity Network & the Gaia Foundation. Retrieved from http://cmsdata.iucn.org/downloads/gaiasns_1.pdf

Ahenakew, C. (2014). *EDST 508A Indigenous Inquiry and Methodology*, week 1 [PowerPoint slides]. Department of Education Studies, The University of British Columbia, Vancouver, British Columbia.

Artelle, K. A., Stephenson, J., Bragg, C., Housty, J. A., Housty, W. G., Kawharu, M., & Turner, N. J. (2018). Values-led management: The guidance of place-based values in environmental relationships of the past, present, and future. *Ecology and Society, 23*(3), 1-15. https://doi.org/10.5751/ES-10357-230335

Barnhardt, R., & Kawagley, A. O. (2005). Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropology and Education Quarterly, 36*(1), 8-23.

Bohensky, E. L., & Maru, Y. (2011). Indigenous knowledge, science, and resilience: What have we learned from a decade of international literature on "integration"? *Ecology and Society, 16*(4), 1-19. http://dx.doi.org/10.5751/ES-04342-160406

Boas, F. (1897). *The social organization and the secret societies of the Kwakiutl Indians*. In *Report of the U.S. National Museum for 1895* (pp. 311-738). Washington, DC: Smithsonian Institution.

Boas, F., & Codere, H. F. (Ed.). (1966). *Kwakiutl ethnography*. Chicago, IL: University of Chicago Press.

Borona, G. K. (2014). Exploring the link between forests, traditional custodianship and community livelihoods: The case of Nyambene forest in Kenya. *The Forestry Chronicle, 90*(5), 586-591.

Coburn, E. (Ed.). (2015). *More will sing their way to freedom: Indigenous resistance and resurgence*. Winnipeg, MB: Fernwood Publishing.

Coulthard, G. S. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. Minneapolis, MN: University of Minnesota Press.

Daigle, M. (2016). Awawanenitakik: The spatial politics of recognition and relational geographies of Indigenous self□determination. *The Canadian Geographer/Le Géographe Canadien, 60*(2), 259-269.

Elkins, C. (2005). *Britain's gulag: The brutal end of empire in Kenya*. London, UK: Jonathan Cape.

Galois, R. M. (1994). *Kwakwaka'wakw settlements, 1775-1920: A geographical analysis and gazetteer*. Vancouver, BC: UBC Press.

Holm, T., Pearson, J. D., & Chavis, B. (2003). Peoplehood: A model for the extension of sovereignty in American Indian studies. *Wicazo Sa Review, 18*(1), 7-24.

Howlett, M., Rayner, J., & Tollefson, C. (2009). From government to governance in forest planning? Lessons from the case of the British Columbia Great Bear Rainforest initiative. *Forest Policy and Economics, 11*(2009), 383-391.

First Nations Education Steering Committee. (2014). Indian residential schools and reconciliation resources. West Vancouver, BC: Author. Retrieved from http://www.fnesc.ca/irsr/

Kenya Forest Service. (2007). *Participatory forest management guidelines*. Nairobi, KE: Kenya Forest Service, Ministry of Environment anda Natural Resources.

Kenya Forest Service. (2012). Aberdare Forest Reserve management plan: 2010-2019. Nairobi, KE: Author. Retrieved from http://www.kenyaforestservice.org/documents/Aberdare.pdf

Kenyatta, J. (1965). *Facing Mount Kenya: The tribal life of the Gikuyu*. New York, NY: Vintage Books.

Muriuki, G. (1974). *A history of the Kikuyu, 1500-1900*. Nairobi, KE: Oxford University Press.

Odora Hoppers, C. A. (Ed.). (2002). Indigenous knowledge and the integration of knowledge systems. In C. A. Odora Hoppers (Ed.), *Indigenous knowledge and the integration of knowledge systems: Towards apPhilosophy of articulation* (pp. 2-22). Claremont, SA: New Africa Books.

Ongugo, P. O. (2007, September). Participatory forest management in Kenya: Is there anything for the poor? In *Proceedings: International Conference on Poverty Reduction and Forests* (pp. 1-10). Bangkok, TH: Author. Retrieved from http://lib.icimod.org/record/13228/files/4937.pdf

Peltorinne, P. (2004). The forest types of Kenya. In P. Pellikka, J. Ylhäisi, & B. Clark (Eds.), *Taita Hills and Kenya, 2004: Seminar, reports and journal of a field excursion to Kenya: Expedition reports of the Department of Geography, University of Helsinki* (pp. 8-13). Helsinki, FI: Department of Geography, University of Helsinki.

Pojar, J., & MacKinnon, A. (1994). *Plants of the Pacific Northwest coast: Washington, Oregon, British Columbia and Alaska.* Vancouver, BC: Lone Pine Publishing.

Polfus, J. L., Manseau, M., Simmons, D., Neyelle, M., Bayha, W., Andrew, F., Andrew, L., Klütsch, C. F. C., Rice, K., & Wilson, P. (2016). Łeghágots'enetę (learning together): The importance of Indigenous perspectives in the identification of biological variation. *Ecology and Society, 21*(2), 1-35. doi 10.5751/ES-08284-210218

Province of British Columbia. (2018). *GBR communities.* Victoria, BC: Author. Retrieved from https://greatbearrainforest.gov.bc.ca/tile/communities-of-the-great-bear-rainforest/

Robertson, L. A. (with the Kwagu'ł Gixsam Clan). (2012). *Standing up with Ga'axsta'las: Jane Constance Cook and the politics of memory, church, and custom.* Vancouver, BC: UBC Press.

Rodney, W. (1972). How Europe underdeveloped Africa. London, UK: Bogle-L'Ouverture Publications.

Scheba, A., & Mustalahti, I. (2015). Rethinking 'expert' knowledge in community forest management in Tanzania. *Forest Policy and Economics, 60*(2015), 7-18.

Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance.* Minneapolis, MN: University of Minnesota Press.

Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples.* London, UK: Zed books.

Smith, M. A. (2015). A reflection on First Nations in their boreal homelands in Ontario: Between a rock and a caribou. *Conservation and Society, 13*(1), 23-38.

Tennant, P. (1990). *Aboriginal peoples and politics: The Indian land question in British Columbia, 1849-1989.* Vancouver, BC: UBC Press.

Thomas, R. A. (2015). Honouring the oral traditions of the Ta't Mustimuxw (ancestors) through storytelling. In S. Strega & L. Brown (Eds.), *Research as resistance: Revisiting critical, Indigenous, and anti-oppressive approaches* (2nd ed., pp. 177-198). Toronto, ON: Canadian Scholars' Press Women's Press.

Trosper, R. L. (2009). *Resilience, reciprocity and ecological economics: Northwest Coast sustainability.* New York, NY: Routledge.

Trosper, R. L., & Parrotta, J. A. (2012). Introduction: The growing importance of traditional forest-related knowledge. In J. A. Parrotta & R. L. Trosper (Eds.), *Traditional forest-related knowledge: Sustaining communities, ecosystems and biocultural diversity* (pp. 1-36). Dordrecht, NL: Springer. doi:10.1007/978-94-007-2144-9

Turner, N. J., Gregory, R., Brooks, C., Failing, L., & Satterfield, T. (2008). From invisibility to transparency: Identifying the implications. *Ecology and Society, 13*(2), 1-14.

Wilson, S. (2008). *Research is ceremony: Indigenous research methods.* Winnipeg, MB: Fernwood Publishing.

Wily, L. A. (2010). *Land in the proposed constitution of Kenya: What does it mean?* [Online brief]. Retrieved from http://mokoro.co.uk/wp-content/uploads/land_in_proposed_kenya_constitution.pdf