INSIDE THE CLIMATE FRONTIER: INTERSECTING INDIGENOUS RIGHTS AND HYDROPOWER DEVELOPMENT IN COSTA RICA

by

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ABSTRACT

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Thesis directed by Associate Professor Dr. Jerry K. Jacka

Historically, hydropower has served as a symbol of modernization and economic progress, as well as a form of energy security. More recently, it has been adopted as a sustainable climate mitigation strategy. While the rhetorical justification for constructing dams has transitioned through time, the social and ecological consequences that they spawn has remained unchanged, sparking resistance from those impacted. Such is the case in southwestern Costa Rica where I conducted ethnographic fieldwork with the Brörán peoples living on Térraba territory. Community members have spent 50 years fighting against a series of three state-proposed hydropower projects that threatened to transform the Térraba river, and subsequently, their cultures, livelihoods, and imaginaries. They successfully stopped each dam, primarily by demanding that the state recognize and enforce their legal rights as Indigenous peoples. Examples of stopping hydropower are rare, especially now that it has been repositioned as a mitigation solution to the climate crisis by policy and decision-makers. As such, this dissertation seeks to understand the contested nature of hydropower development and Indigenous rights as they intersect within the context of climate governance. Through the framework of a climate frontier—spaces of engagement between (dis)interconnected ideologies and epistemologies regarding climate adaptation and mitigation strategies—I examine the assemblage of relationships, frictions, and interactions that occur across local-global scales. Within the climate frontier, I focus on hydrosocial territories, intersecting social-ecological-political-economic factors coproduced through human-water relations. My dissertation builds on more than 14 months of multi-sited, interdisciplinary research in Costa Rica (where policy is enacted) and at climate and hydropower conferences (where policy is produced). Herein, hydropower serves as a catalyst for understanding the realities of conflicting future imaginaries, real and imagined transformations of spaces/places, and the violence that materializes when disparate ideologies converge. The ultimate goal of this research is to inform more equitable and sustainable policies.

DEDICATION

To the Rivera family.

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INTRODUCTION

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Political Ecology of a Hydrosocial Territory

One humid morning in the summer of 2017, Jerhy asked me if I would like to go see the river. I continued to sip my coffee, thinking over his request. I was definitely interested in going and it was my general policy to say yes to any invitations during field work. Yet I inquired which part of the river, knowing that sometimes his suggestions "to see" something turn into exhausting, full day excursions in far off corners of the territory. Jerhy chuckled at my concern and assured me that we would be back by lunch. He said it wouldn't be far, adding that his five cousins would also come with us. I got some things together and luckily, we all fit snugly into my rented 4x4 compact SUV. Over an hour later, I sat with my feet in the water, satisfied with the day's events. I admired the swift rapids as Jerhy and his cousins submerged themselves into a refreshing pool (Figure 2). Later that afternoon I shared my photographs with Doña Digna Rivera, Jerhy's mother, and she laughed, recalling that she did the same as a child. However, the opportunity to play in the water usually only occurred when fishing or crossing the river to trade coffee for Christmas presents in town.

Figure 2. Jerhy and one of his cousin's children sitting on rocks at the edge of the river.

When she was young, Doña Digna explained that it was only feasible to get to Buenos Aires by wading across the Térraba river either during the dry season or if her parents arranged for a boater to ferry them to the other side. The sole bridge spanning the main branch of the river wasn't built until the 1960s

as part of the Inter-American Highway project, connecting the northern capital region to the more remote southern areas. These infrastructure projects traversed Térraba territory without consultation with the impacted Brörán Indigenous peoples, thereby sparking increased conflict between Indigenous and non-Indigenous peoples over resource use, rights, and development. Road workers were primarily foreigners (non-Indigenous and/or non-Costa Rican citizens), who the Brörán peoples blamed for the influx of drugs, violence, and prostitution in their communities. Doña Digna sighed as she explained these long-standing issues of inequity with me, themes that frequently emerged in our daily discussions. At the conclusion of our breakfast chats, she would often lean back in her chair and fondly reminisce on her experiences growing up with the river, nostalgically dreaming of the days before it was damaged by roads and threatened with hydropower development.

I lived with Doña Digna, her partner Don Enrique, and their son Jerhy in Térraba Indigenous territory for the duration of my preliminary and dissertation research, more than 14 months between 2016 and 2019.[1] Living with a host family was the only viable and culturally appropriate option for conducting long-term fieldwork in the community as non-Indigenous peoples are not legally permitted to occupy homes or land within the territory.[2] Térraba territory is a 9,355 hectare region (Figure 3) located in southwestern Puntarenas Province, Costa Rica (Figure 4).[3] I lived in Térraba *centro* or simply, Térraba, which is a rural, picturesque small town with no distinct downtown. The primary road passes by the unofficial community center, the soccer field, then continues by a small clinic (only open a few days a week), an elementary school, and a water pumping and filter station. There are a few *pulperías* (corner stores) that sell basic goods, toys, and food supplies, as well as a new middle-high school that stands near

[1] See Appendix I for complete list of research dates and activities.
[2] According to *Ley Indígena* No. 6172 (Indigenous Law Number 6172, also known as the Indigenous Act), non-Indigenous peoples are not permitted to live within Indigenous territories. In some cases, the government is responsible for paying to relocate non-Indigenous peoples, in others, they are to be removed without compensation. The law was established in 1977. See Chapter One for more detail.
[3] The territory encompasses about 40% of the original lands of the Brörán peoples. It is bounded on the eastern side by the Río General, on the south by Río Térraba, and to the west by Boruca Indigenous territories. Its northern border is forest and agricultural lands that are owned and occupied primarily by non-Indigenous Costa Ricans.

the cemetery. Various churches (Catholic, Evangelical, Seventh Day Adventist, and others) and two cultural tourism *albergues* (hostels) are also dispersed through town connected by a series of interwoven roads and paths. Primarily dirt with some paved areas, these roads are scattered with potholes and unfinished drainage ditches that, unimpeded, overrun during the rainy season. While Térraba has electricity and access to clean drinking water, not all communities in the territory do.

Figure 3. Map illustrating the location of Indigenous territories throughout Costa Rica. Térraba is in blue, next to Boruca territory in dark green. Source: https://ministeriopublico.poder-judicial.go.cr/index.php/component/icagenda/38-visita-a-territorio-indigena

Figure 4. Political map of Costa Rica. Puntarenas Province runs the along the Pacific Ocean on the west coast of the country, seen in light yellow. Térraba territory is located in the municipal district of Buenos Aires, 11 miles southwest of the county's capital of the same name.

The Rivera home, like most others in Térraba, is a modest cement, square structure. A *jicaro* tree (*Crescentia cujete*), also known as calabash, hung above my single-bed room, and with shocking frequency, the heavy softball-sized fruits would crash onto the roof in the dead of night. I would jolt awake as the calabash cracked the thin tin roof that failed to protect me from the seasonal rains. Once in a while, Don Enrique or Jerhy would climb up and attempt to patch the holes with paint or duct tape, which lasted only until the next fruit fell. Unique to the Rivera property is a large outdoor kitchen and seating area, located under the shade of a 10-15 foot-high A-frame tin roof that is structurally supported with steel beams and bamboo. The space allows the Rivera family to host gatherings of friends, families, and dignitaries, including Dr. James Anaya, former United Nations Special Rapporteur on the Rights of Indigenous Peoples. At the side of the house is a traditional *rancho*, an open-aired, wooden, palm-roof structure where Doña Digna cooks traditional meals on her hand-made, clay wood stove.

Community members estimated that there are about 600 Brörán peoples living within Térraba territory.[4] While there are multiple names in the literature to refer to the Indigenous people living there, among them Teribe, Térraba, Terbi or Brörán, I refer to the peoples as Brörán throughout the dissertation because it is the name the elders used to refer to themselves.[5] The language of the Bröran peoples is *naso* (*na* = here and *so* = inhabitant), which is in the Chibchan language group.[6] Very few elders in Térraba territory fluently speak the native language, which they refer to simply as "*la idioma*" or the language. Don Enrique enjoyed greeting me in *naso* or interjecting *la idioma* into our Spanish conversations to see my reaction; he took pleasure in explaining the terms to me. Don Enrique and other elders are in the process of revitalizing the language, pushing for its inclusion in school curricula and enhancing exchanges with Térraba relatives living in Panama who speak it fluently.

I came to live in Térraba after having been introduced to Jerhy through my Spanish teacher in San José, with whom I was studying in preparation for my dissertation work. Adriana informed me that Jerhy and his family operate the *Asociación Cultural Indígena Teribe* (*Teribe Indigenous Cultural Association)*, an officially registered small-scale non-governmental organization where they host researchers and students interested in studying local cultures and ecologies. Jerhy and I first met on June 23, 2016 at the bus station in Buenos Aires, the regional capital of the *canton* (county) of the same name, located about 11 miles north of Térraba. We immediately recognized each other from our social media photos, although I am sure I stood out to him as one of the few white foreigners who visit the region via bus. He greeted me with his blazing white smile and positive energy. We immediately piled into a vehicle with his colleagues, who work for a Canadian development organization, and attended a meeting with an elder's council in Ujarrás, one of the nearby Indigenous territories of the Cabécar peoples. I chatted with the

[4] The last national census, in 2011, reported there were 1267 Indigenous people living in Térraba territory. The discrepancy may be related to who claims Indigeneity, which according to the elders is highly contested.

[5] The use of the term Brörán also distinguishes the peoples from the town, territory, and the river, also with the names of Térraba.

[6] For a thorough review of the historical settlement of Indigenous peoples in the region, see Jones (1985), Lange and Stone (1984), Lothrop (1963), Snarskis (1985), and Quilter (2004).

group, laughing at their jokes as we bounced around the rough roads through seemingly endless pineapple fields. A few hours later, when the meeting over potential project funding had finally ended, Jerhy and I took the bus to Térraba, where he introduced me to his extended family. I immediately felt welcomed by all. In the following days, Jerhy showed me around the territory and detailed many of the current social, ecological, economic, and political issues that the community faces. It was in the process of this predissertation research with the Riveras that I came to understand that Térraba is at the heart of the country's climate debate, which revolves around hydropower development.

In the past 50 years, the Riveras, together with their Bröran relatives and other Indigenous communities in the region, have fought against a succession of three hydropower projects slated to be built on the Térraba River. When my dissertation research began, my intent was to study the coupled social-ecological transformations that occurred before, during, and after construction of the Diquís hydropower project, the most recent proposal from the National Electricity Institute (*Instituto Costarricense de Electricidad* or ICE, pronounced *E-say*). The Diquís was supposed to be up and running by 2021 to fulfill the country's goal of becoming the first Latin American country to be carbon neutral.[7] Its completion appeared inevitable, considering hydropower's dominant position as a climate crisis solution among policy-makers, as well as ICE's specialty in building dams (see following sections). However, the Brörán peoples maintained a long-term resistance movement against construction and increasingly pressured the Costa Rican government to recognize and enforce Indigenous peoples' legal rights, successfully delaying its completion. After an almost 15-year standoff, the Diquís project was officially cancelled in November 2018, approximately nine months into my dissertation fieldwork.

As a result of these shifting dynamics on the ground, I began to refocus my examination on the assemblage of relationships, frictions, and interactions that occur across local-global scales relative to the Indigenous-hydropower nexus. I consider herein that hydropower development promoted under the guise

[7] ICE's original goal in 2006 was to have the Diquís online by the end of 2016. Delays reset its operation date to 2018, 2020, and then to 2026. At the beginning of my research, in the summer of 2016, it was supposed to be online by 2021 for the country's bicentennial. See ICE's Generation Expansion Plan 2000-2016 and Todd 2013.

of climate mitigation is a form of exploitative resource extraction that disenfranchises and further marginalizes Indigenous communities. Thus, my dissertation **seeks to understand the contested nature of hydropower development and Indigenous rights as they intersect within the context of climate governance**. I study the spectrum of assemblages from within what I refer to as a climate frontier—spaces of engagement between (dis)interconnected ideologies and epistemologies regarding climate governance. The climate frontier encompasses development and implementation of a variety of adaptation and mitigation strategies, including carbon trading schemes, energy efficient technologies, electric transportation, and reducing vulnerabilities to climate change, among others. Within this framework, I focus on a specific subset of interactions, what have been described as a hydrosocial territory—the hybridity of social-cultural-economic-political institutions involved in human-water relations (Boelens et al. 2016; Linton and Budds 2014; Swyngedouw 2004). The hydrosocial territory provides a nuanced examination of hydropolitics, which integrates politics and water management (cf. Folch 2019). The hydrosocial territory, as conceptualized by Swyngedouw explores "the circulation of water as a hybridized socio-natural flow that [transcends] nature-society boundaries" (*in* Rogers and Crow-Miller 2017:2). The hydrosocial territory concept recognizes that society and water are coproduced and inherently interrelated in complex ways; it therefore encompasses a broad spectrum of interactions between peoples and aquatic resources beyond the political.

In this context, hydropower serves as a political-economic tool through which powerful decision-makers implement climate mitigation policies, which they claim additionally fulfills the goals of sustainable development; a paradigm through which social, ecological, and economic growth are intricately linked. Meanwhile, Indigenous communities employ legal mechanisms to stop those same hydropower projects and protect themselves from the social-ecological and economic destruction that they cause. Relations between the local and global scales through which dams and Indigenous peoples intersect are by no means linear, hierarchical or given. The ability of Indigenous peoples to defeat powerful decision-makers and the hydropower industry through their resistance efforts (as they have in Costa Rica) specifically draws into question power dynamics between multi-scalar governance. As such, I

employ political ecology as the theoretical and methodological basis for my mixed-methods, ethnographic fieldwork.

Methodological Approach and Field Sites

Political ecology serves as the central research framework in this dissertation, as it incorporates the intersection of ecology and political economy, as well as the power dynamics that underlie their relations (Blaikie and Brookfield 1987). Political ecology can expose the ways in which humans and nature reciprocally influence each other (see Bryant 1998; Greenberg and Park 1994; Peet, Robbins, and Watts 2010) and how they are related to a broadly defined political economy (Blaikie and Brookfield 1987:17). Not only does this dialogical paradigm understand social and natural worlds, i.e., the hydrosocial territory, as mutually constitutive (Jacka 2015), it can be used to uncover intricate relationships within the climate frontier (cf. Perry et al. 2018). Furthermore, it is applicable herein since political ecology considers relations across local-global scales. Robbins (2013:13) expresses that "any tug on the strands of the global web of human-environment linkages reverberates throughout the system as a whole." It is therefore an appropriate framework through which to study the interconnections throughout the climate frontier.

Within anthropology, political ecology has been utilized to highlight inequities from within the conservation arena (Brockington, Duffy, and Igoe 2008; Dowie 2009; Hoffman 2011; West, Igoe, and Brockington 2006), exploitation within extractive resource frontiers (Ballard and Banks 2003; Jacka 2015; Kirsch 2014; Willow and Wylie 2014), de-valuing certain knowledges and environmentalities (Agrawal 2005; Fletcher 2010b; Forsyth and Walker 2008; Vogel 2015), uneven power and governmentalities (Li 2007; Scott 1998), and violence/violent environments (Auyero et al. 2015; Peluso and Watts 2001; Watts 2013). Anthropologist Christine Folch (2019) advocates for the use of political ecology in understanding dams after she applied it towards investigating the reciprocal impact of human-environmental relationships involved in the *becoming* of the Itaipu dam in Brazil.

I apply the framework of political ecology liberally in my research to lend equal weight to studying political economy, ecology, equity, and their integrated dynamics, cautious not to fall into the trap of some political ecologists who focus solely on the political (see Vayda and Walter 1999; Zimmerer and Bassett 2003). I contribute to a political ecology of scale (both spatial and temporal) by working in Térraba territory, Costa Rica more broadly (where policy is enacted), and at climate and hydropower conferences (where policy is produced). Hence, this is very much a "place-based" political ecology, wherein multi-sited research (Marcus 1995) is used to assess the ways in which social-environmental relations are intricately linked, assuming no *a priori* configurations (see Biersack 2006; Jacka 2003, 2016). Furthermore, a political ecology approach allows for the opportunity to find "better, less coercive, less exploitative, and more sustainable ways of doing things" (Robbins 2012:12), which is the ultimate goal of this applied anthropological research.

Costa Rica was selected as a primary field site to study the hydrosocial territory because of my previous experiences working within the country and my knowledge of its social-environmental and political settings.[8] Additionally, Costa Rica presents an interesting case in which to study the interactions between climate mitigation policies, hydropower development, and Indigenous rights because the country is internationally recognized as a stable and just democratic oasis, as well as an environmentally progressive nation (see Chapter One). In addition to the participant observation conducted on a daily basis with the Rivera family (as discussed throughout the dissertation), I also conducted informal and semi-structured interviews with community members, Brörán elders, academics at the University of San José, government officials, and electricity company representatives in Costa Rica.[9] I addressed the *ecology* in

[8] I worked with the Leatherback Trust and Earthwatch Institute in Playa Grande at the *Parque Nacional Marino las Baulas* (Leatherback Marine National Park) in Guanacaste Province in northwestern Costa Rica during the 2004-2005 leatherback nesting season (September – March). I also taught science at a private school at a nearby town in Guanacaste during the 2013-2014 academic year.

[9] After I identified myself as an anthropology doctoral student conducting research for my dissertation, I would ask general questions that pertained to each person and situation regarding Indigenous rights, dams, connections to place, significance of water and the river, land recuperation, cultural beliefs and practices, climate policy and change, governance, local conflicts, as well as Indigeneity and identity. I categorize most of my daily conversation with community members as informal interviews. The more formal interviews were those that were scheduled with community leaders and industry representatives

political ecology by studying bird diversity around the Rivera home and conducting vegetation transects in the family's conserved forested areas to explore human-nature connections (see Chapter Two).

To further study the power dynamics undergirding decisions to build dams, I conducted ethnographic research at two transnational climate conferences and one international hydropower meeting. My research simulated collaborative event ethnography, known as CEE. Typically, CEE is conducted by multiple ethnographers who work together to study the intricacies of organizational and social dynamics, technologies, counter-movements, networks, and discourses as they are formulated within governance arenas (see Brosius and Campbell 2010; Campbell et al. 2014). In this case, I conducted participant observation at panels, talks, presentations, and public spaces, as well as interviews with attendees at each meeting to 'study up' with those in power (Nader 1972). I discussed the conferences with a few researchers whom I knew and who were also in attendance, gaining invaluable insights and feedback about our experiences. This research set a foundation through which I aim to build a larger CEE network for future climate-related conference research.

The first conference I attended was the Global Climate Action Summit in San Francisco, California in September 2018. The Summit was aimed at promoting climate action by subnational actors, including state governors and mayors, corporations, non-profit organizations, academia, and civil society. Second, I attended the United Nations Framework Convention on Climate Change (UNFCCC) 24th Conference of Parties (COP24) in Katowice, Poland in December 2018. The goal of COP24 was to set the rulebook for the Paris Agreement, which was previously developed at COP21 in 2015 in France.[10] Third, I attended the World Hydropower Congress, the biennial meeting of the International Hydropower Association (IHA) in Paris, France in May 2019. The Congress' goal was to expand the use of

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and those focused on more specific questions pertaining to their expertise. Some interviews with community members were ride-along interviews, which allowed for greater exploration and understanding of place (see Kusenbach 2003; Wegerif 2019). All photographs were taken by the author unless otherwise cited.

[10] The Paris Agreement is the global accord focused on reducing greenhouse gas emissions and stabilizing global temperatures through intended nationally determined contributions INDCs. The Agreement is discussed in more detail in the following sections. Read the Paris Agreement at https://assets.documentcloud.org/documents/2646274/Updated-l09r01.pdf.

hydropower to reach each country's pledged emissions reductions in the Paris Agreement, as well as the United Nations Sustainable Development Goals.[11] These conferences were selected because they are interconnected through complex feedback loops that ultimately fuse into contemporary climate governance (see Chapter Four).

Applying political ecology framework to study across scales within the climate frontier allowed me to address three objectives: (1) *To examine the diversity of knowledges and imaginaries regarding hydropower and climate policy;* (2) *To assess the processes through which these diverse knowledges and imaginaries inform the development and implementation of climate policy, specifically hydropower*; and (3) *To investigate the human-environmental connections and transformations among the Brörán peoples in Térraba*.

Herein, hydropower serves as a catalyst for understanding (1) the complex realities of conflicting future imaginaries and their relation to divergent knowledges and development ideologies; (2) the physical and affective impacts of both real and imagined transformations of spaces/places, with a focus on the production of space/place as a form of autonomy and control; and (3) the violence that materializes when disparate ideologies converge, which becomes visible when examining Costa Rica's national political mythology, as well as the climate frontier. As such, after reviewing the roles of hydropower and Indigenous rights within the climate frontier, I explore the anthropological literature on imaginaries, space/place, and violence. These themes emerged after I pieced the dissertation together and are threaded through each chapter.

Throughout this dissertation, I write at length about the Rivera family. Doña Digna, Don Enrique, and Jerhy are well known throughout the territory and the country for their anti-dam stance and for protecting Brörán Indigeneity, culture, and lands. The Riveras have been on the national news discussing their beliefs, participated in Youtube video documentaries where they express their positionality,

[11] Sustainable Development Goals are organized by the United Nations Department of Economic and Social Affairs. They aim to reach a broad sustainability platform for all countries by 2030. Relatable here is SDG 7, the goal to ensure access to affordable, reliable, sustainable and modern energy for all. Information available at https://sdgs.un.org/goals/goal7.

documented their own ideologies on their website, signed documents with national and international government and non-government organizations denouncing development, and proudly voiced their position at meetings and events. I therefore reiterate their positionality herein, with their permission, and do not attempt to conceal their identities.

Governance and Frictions in the Climate Frontier

Academic discourse on the frontier has grown out of Fredrick Jackson Turner's thesis entitled "The Significance of the Frontier in American History." Published in 1893, the so-called *Turner thesis* theorized the frontier as a Western-expanding line of social and economic interactions through which the pioneers could "tame the wild."[12] These spaces of contact were violent and chaotic, where diverse peoples and ideologies intersected. Victor Turner (1970) theorized that these synergistic spaces of interaction between the "civilized" and the "wilderness" are liminal, wherein peoples are betwixt and between, ambiguous as they transition from one phase of life to another. While Victor Turner mainly discussed spaces of interaction as they relate to ritual symbols and rites of passage, Anna Tsing (2005) focuses on sites of resource extraction or resource frontiers.

Tsing (2003:5100-5105) describes such resource frontiers as places where "the small and the great collaborate and collide in a climate of chaos and violence" where it is "never quite clear what is being preserved, what is degraded, and what is restored." Resource frontiers are spaces where global capital, multinational corporations, and national elites exploit natural resources (Tsing 2005), spaces where unstable regimes of accumulation fund unfettered neoliberal capitalist growth (Harvey 2005). Harvey (2005:2) defines neoliberalism as "a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free

[12] Fredrick Jackson Turner's thesis argues that the mode through which settlers expanded westward, as well as their encounters with Indigenous peoples and unfamiliar landscapes, gave birth to a new American identity.

trade." Büscher and colleagues (2012:5) further attribute neoliberal logic as being "a political ideology that aims to subject political, social, and ecological affairs to capitalist market dynamics." Accepting these frameworks, herein, neoliberalism is understood as simultaneously a worldview, a policy discourse, and a set of policy measures that promote socioeconomic growth through a self-regulating market (Castree 2010; Harvey 2005; Polanyi 1944).

Neoliberal activities further the metabolic rift, the continued separation of peoples from natures that has not ceased since the original primitive accumulation that sparked capitalism (Foster 2000). Implementation of hydroelectric energy projects is arguably a form of accumulation by dispossession manifested through the development of fixed capital and infrastructure in a similar manner by which West and colleagues (2006) critique population displacement via the creation of protected areas. Thus continues the historical trajectory of governments that seek to build infrastructures in "unused" or under developed areas to expand their presence into (and control of) frontier zones (i.e., Indigenous territories). For example, in Chile, the government used forestry conservation initiatives as "tools for extending state governance into a frontier territory" (Klubbock 2014:4), and similarly in Brazil, hydropower development has been described as a "form of production linked to economic expansion" (Ribeiro 1994:163). In both cases, the social-ecological landscapes were remade and reordered in a way that allowed for powerful elites to gain regional hegemony over both peoples and natures. Similarly, the Costa Rican government promotes development in the southern region near Térraba territory to expand its access to the area and control over the region's water resources and high biodiversity.

Within these frontier zones, "friction, the awkward, unequal, unstable, and creative qualities of interconnection across difference" drives various changes (Tsing 2005:4). According to Tsing (2005:5-6), "friction gets in the way of the smooth operation of global power. Difference can disrupt, causing everyday malfunctions as well as unexpected cataclysms…heterogeneous and unequal encounters can lead to new arrangements of culture and power." Neves-Graça (2004) highlights how frictions across divergent conceptualizations of common-pool resource management have the potential to lead to "ecological learning and improved ecological wisdoms." I focus on understanding the frictions occurring

within the specific subset of the resource frontier related to mitigating and adapting to the climate crisis, in what I refer to as a "climate frontier." This is important because as While, Jonas, and Gibbs (2010) have argued, "climate" is the centripetal force of contemporary global environmental politics.

Climate governance includes a variety of mitigation and adaptation strategies, multi-scalar treaties, decision-making processes, stakeholders, and policies, all of which are predominantly based on neoliberal market logics (Bulkeley 2016; see following sections). The climate frontier then is formed by all the interactions occurring within the governance arena across local-global scales of space and time. Political responses to climate change have been shaped historically by the universal recognition of anthropogenic impacts on the atmospheric commons, therefore addressing universal and location specific impacts. Additionally, a multitude of peoples are involved within this frontier, among them Indigenous groups, academics, civil society, industry leaders, and government representatives. Each group brings their diverse perspectives, imaginaries, and epistemologies into the frontier zones, which interact and mold together in unpredictable ways, influencing a diverse plethora of social-ecological, political, and economic transformations. The climate frontier therefore encompasses tangible and intangible factors, as media, presentations, social movements, publications, conferences, networks, policies, and projects intersect and interact to shape and co-produce policies.

The contemporary climate frontier is driven by decisions made at annual Conference of Parties (COP21) held by the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC came into power in 1994 after being developed at the 1992 Rio Earth Summit in Brazil with the objective to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (UNFCCC 1992).[13] It is a supranational climate agreement whereby member states focus on addressing climate change locally, globally, and collectively across scales. At the international level, governance focuses on developing adaptation and

[13] The first meeting of UNFCCC, known as the Conference of Parties (COP), began in 1995 in Berlin, Germany just a year after the UNFCCC had been ratified. There are now 197 ratifying members.

mitigation strategies that fulfill the goals of the Paris Agreement, the latest attempt by the international community to decrease greenhouse gas (GHG) emissions and stabilize the Earth's temperature. In the agreement, countries agreed to "achieve a balance between anthropogenic emissions by sources and removals by sinks of GHG in the second half of this century" (Article 4; see Clémenćon 2016). Goals of the Paris Agreement are reached by individual countries as they address climate change through nationally determined contributions (NDCs), actions they deem to be feasible given their finances and resources. Decisions regarding actualization of the Paris Agreement trickle down into the state and city levels, where governance and private sector stakeholders work to advance NDC projects. At the local level, people become more intimately involved in implementation of or resistance to those NDCs. States' actions and international policies are reciprocally impacted when local resistance movements are successful in halting unwanted development (via mitigation or adaptation projects) that are needed to fulfill climate goals, as is the case in Costa Rica, discussed herein.

The Paris Agreement follows in the footsteps of its famous predecessors, the Montreal and the Kyoto Protocols. The Montreal Protocol, signed by all 198 members of the United Nations (UN) in 1987, was heralded as "a model of cooperation" by President Ronald Reagan for its success in phasing out chemicals that were burning a hole in the ozone layer.[14] The Montreal Protocol served as an exemplary for collaborative international treaties that followed. Indeed, the Kyoto Protocol signed in 1997 at COP3 in Japan, emulated the Montreal Protocol with its global, collective response to a common-pool resource problem where countries shared the responsibility of saving the environment.

The Kyoto Protocol became the first legally binding agreement whereby countries pledged to reduce GHG and solve the climate crisis. To ameliorate this emerging global problem, countries agreed on instituting "flexible mechanisms," which are market-based mitigation and adaptation strategies that

[14] The United States was a major player in the passing of the Montreal Protocol as they promoted innovative alternatives to dangerous chemicals, and consumers dramatically shifted behavior by cutting aerosols out of their lives. Read more on the Montreal Protocol at https://www.state.gov/key-topics-office-of-environmental-quality-and-transboundary-issues/the-montreal-protocol-on-substances-that-deplete-the-ozone-layer/.

they can utilize to fulfill their reduction goals. This decision set the foundational principle that the climate crisis can be solved through economic structures, intimately relegating the environment to market dynamics. The Kyoto framework was built on the premise that developed or industrialized countries (defined as Annex I) held more responsibility in decreasing GHG emissions because they historically have contributed more to climate change than less developed/industrialized countries or non-Annex I. Annex I countries are able to meet their emission reduction targets by cutting emissions or buying emission credits through one of three programs: Joint Implementation, Emissions Trading, or the Clean Development Mechanism (CDM).[15]

In order for those flexible mechanisms to work, the UNFCCC developed a carbon market, packaging carbon into units (per ton) that could be traded or sold between countries or industries (Fearnside 2013; Soanes, Skinner, and Haas 2016; UNFCCC 1992). Through these carbon trading schemes, countries can offset their own emissions by investing in low carbon projects through one of the Kyoto's flexible mechanisms (e.g., hydropower).[16] My research focuses on CDM projects, as they most directly relate to hydropower production (see following sections). Within the rationale of the CDM, the production of clean energy in one location counter-balances the use of dirty fossil fuels in another. Through the process of becoming a CDM, hydropolitics (via dams) gained a stronghold in the global realm of climate governance.

Many carbon offset experts argue, however, that the carbon market is unable to adequately reduce emissions (Bond 2012; Bumpus and Liverman 2008), specifying that they do "little to physically address atmospheric carbon concentrations" (Gifford 2020). Liverman (2009:294) calls such neoliberal trading mechanisms "a new form of colonialism whereby the north is able to maintain its consumption by paying

[15] Costa Rica has a historical role in climate actions at the international level. Along with Brazil, Costa Rica was responsible for helping establish CDMs as a component of the Kyoto Protocol (Subak 2000). Costa Rica also partnered with Papua New Guinea to propose development of the REDD program (UNFCC 2005), and they also initiated the first nation-wide PES program in the world (Pagiola 2008).
[16] The Kyoto Protocol is a legally binding treaty that aims to stabilize greenhouse gas emissions to "a level that would prevent dangerous anthropogenic interference with the climate system" (Article 2; https://unfccc.int/kyoto_protocol).

southern communities a pittance." For example, the Kyoto Protocol has been critiqued by Barnhart (2014) "as a neoliberal governance strategy that seeks to effectively privatize the atmosphere." Fletcher (2012:108) further argues that carbon trading as a form of climate solution is a form of disaster capitalism, employed as "a marketing opportunity and justification to expand" economic markets (see also Klein 2007). Carbon commodification schemes have largely failed because, as has been illustrated through numerous political ecological projects across the globe, "living ecosocial systems do not fit the requirements of market contracts" (McAfee 2016). Moreover, in an extensive and collective review of climate policy since about 1990, Rayner and Caine (2015) argue that climate policy has thus far failed and has resulted in a delayed ability of government institutions to confront the current crisis.

While the UNFCCC boasts that the Paris Agreement "charts a new course in the global climate effort," Clémençon (2016:11) argues that the Paris Agreement is, at best, "better than no agreement at all" for its fault in not "address[ing] fundamental problems with the global capitalist economic system." Considering that the levels of GHG have continued to increase, specifically carbon dioxide, which is now at 418 ppm compared to approximately 350ppm in the 1990s, and the fact that global temperatures continue to increase, it is fair to say that the current system of addressing the climate crisis has failed—neither the Paris Agreement nor the Kyoto Protocol achieved the same success as their model predecessor (Sunstein 2008). The United Nations Environment Programme (UNEP) reports that even if all the current pledges of the Paris Agreement are implemented, temperatures will still rise by 3.2ºC. They state that countries must increase their efforts fivefold if the 1.5ºC goal is to be reached (UNEP 2019).

The failure of the UNFCCC to "solve" the climate crisis after more than 20 years of market-based mechanisms warrants investigation into the climate frontier. One must consider how, and by whom, policy decisions are being made, as well as why alternatives to the status quo (i.e., technoscientific market mechanisms such as dams) are not being sought. This consideration is especially important since reports of inequitable social-ecological-economic impacts from climate change occurring across the globe are growing, signaling the need for innovative solutions (see Crate and Nuttall 2016; Dove 2014; Jasanoff 2018; Ciplet, Roberts, and Khan 2015). The climate justice movement likewise highlights inequity within

decision making processes, arguing that the restriction of voices and representation within the climate frontier limits our ability to effectively address the crisis.

Despite the plethora of diverse actors, positionalities, and epistemologies within this frontier, my research illustrates that control of the spaces of decision-making by powerful elites limits their entanglements and intersections, thereby minimizing the frictions that can ultimately lead to change (cf. Tsing 2005). The decision-makers within climate governance present a unified harmony in terms of collectively addressing the climate crisis; however, their work fails to account for the multitude of complex local situations that cannot be solved by 'one size fits all' umbrella policies. Most notably, Indigenous peoples have largely been excluded from participating in hydropolitics, particularly within the climate frontier, despite their diversity of knowledges and their high rate of being impacted by both climate change and hydropower development.

Becoming Green: Hydropower and its Legacy of Destruction

Humans have been diverting water for irrigation, flood control, water security, and sovereignty since around 6000 BC, which some academics have argued was key to development of societies and civilizations (White 1943; Wittfogel 1955). Beginning in the twentieth century, manipulation of aquatic resources grew exponentially, as countries increasingly built dams and other grey infrastructure for sovereign energy production and to illustrate their economic progress (Evenden 2009; McCully 1996; Scudder 2005; Tilt 2014; Vidal 2017). Geographer Karen Bakker (2010:33) explains that dams are "valued as symbolic infrastructure" because they represent development of a nation-state. In the United States, dams were not only believed to be "an economic necessity, but also a spiritual duty [that furthered] God's work" (McCully 1996:15). As Theodore Steinberg wrote (1991:16), in the 1800s, "a consensus emerged on the need to exploit and manipulate water for economic gain. A stunning cultural transformation was taking place, a shift in people's very perception of nature. By the latter part of the nineteenth century, it was commonly assumed, even expected, that water should be tapped, controlled, and dominated in the name of progress." The transformation of dams into sources of energy production

rapidly expanded across the globe after the United States built the world's first hydropower plant in Wisconsin in 1882 (McCully 1996).

According to McCully (1996), the extensive damming systems developed by the Tennessee Valley Authority (TVA) in the United States illustrated to the world how to shift subsistence agriculture into large-scale agribusiness and industry. Henceforth, the TVA model of hydropower development was adopted around the globe with little attention to local impacts. By the year 2000, more than 45,000 large dams existed worldwide (Moore, Dore, and Gyawali 2010; WCD 2000; Willow 2018).[17] Over twenty years later, there are now an estimated 90,000 large dams globally, 40,000 of which can be defined as mega-dams (over 150m in height), as well as an additional 800,000 small dams (5m-15m in height; Graf 2006; Grill et al. 2019; Zarfl et al. 2015). Lehner and colleagues (2011) estimate there are closer to 2.8 million dams in total throughout the world; however, they recognize unregulated matrix of state, corporate, and private dams make it almost impossible to know the exact total. Consequentially, over 500,000 km of rivers are impacted globally, and are described as "little more than staircases of reservoirs" (Lehner et al. 2011; McCully 1996:6). Considering the state of long rivers (>1000km), where only 37% remain free-flowing and only 23% reach the ocean unimpeded, the balance of ecosystems, biodiversity, and the capacity to provide services to people are seriously threatened around the world (Grill et al. 2019).[18]

Costa Rica was among the earliest countries to transform the power of their rivers into electricity production with their first waterwheel in 1884 (ICE 2020; McCully 1996); San José thus became the third

[17] In 1900, there were only a few hundred large dams globally (>15m in height); fifty years later there were over 5,000, and by the year 2000, there were over 45,000 (Moore, Dore, and Gyawali 2010; WCD 2000; Willow 2018). There are an additional 3700 large dams in the planning stages. Technological advances in turbine design allowed for increases in the size of the dams being built in addition to the number being constructed (McCully 1996).

[18] Grill and colleagues define free-flowing rivers (FFR) by their connectivity pathways that "enable the movement and exchange of water and of the organisms, sediments, organic matter, nutrients and energy" (2019:215). Their analysis considers four modes of connectivity: longitudinal (up and downstream of the river channel); laterally (the floodplain, channel, and riparian areas); vertically (groundwater, river, atmosphere); and temporally (seasonal flow regime).

city in the world to have electric street lights after NYC and Paris. Hydropower development in Costa Rica was influenced by engineers and financiers from the United States, exemplifying hydropower as "a nineteenth-century foreign investment strategy" as argued by Christine Folch (2019:14). Folch illustrates that dams were often tools wielded by global elite and foreign banks to control resources in less developed countries where rich natural resources are located, often leaving little benefit to the people most impacted. This appears to have been the case in Haiti, where the United States coordinated, funded, and constructed the Péligre Dam—a project that proved disastrous for local peoples and the environment (Farmer 2004).

Costa Rica's lush tropical climate and landscape provide ideal characteristics for hydropower development, which immediately drew attention by the United States and other investors. Costa Rica's steep terrain and 11 feet of annual rainfall (primarily in the southwest region where this research is concerned) drew American Foreign Power and Light Company to the region, and the corporation soon became a monopoly (Fay and Morrison 2005; Perry and Berry 2016).[19] Growing social unrest over foreign investments in (and their control of) natural resources led to the restructuring of public utilities in Costa Rica. The Costa Rican government reclaimed sovereign control of their bountiful water resources by forming a state-run electricity company (ICE) in 1949. ICE's goal is to "promote enhanced understanding and exploitation of the country's resources of wealth" and "utilize the country's hydroelectric energy" in its social and economic endeavors (*in* Perry and Berry 2016:104). ICE focused on the country's natural "hydropower capital," exploiting the perceived limitless supply of water for their growth and dominance (see also Miranda, Dieperink, and Glasbergen 2007). ICE's first hydropower

[19] American Foreign Power and Light Company, or American and Foreign Power Company, subsidiary of the Electric Bond and Share Company (General Electric) from the United States, owned and operated multiple electric companies worldwide, primarily throughout the Americas, as well as Japan, Italy, and India. It began acquiring companies in 1923, primarily focused in Panama and Guatemala to maintain control, or wrest it away from German companies. For more detail, see Hausman (2011) and Wilkins and Schröter (1998).

project, Arenal, completed in 1979, was fundamental in supporting the growth of the cosmopolitan region of San José.[20]

By 2015, ICE was operating 29 large hydropower projects throughout the country (Figure 5), which does not include the hundreds of other dams that they manage by private companies.[21] According to Lindo (2006), Costa Rica had at least another 100 dams of various sizes planned, and Carls and Harraf (2010) reported 120 hydropower projects under construction. Costa Rican laws regulate production capacity per dam, but do not regulate how many dams can be built on a single watershed (Lindo 2006). Hydroelectricity from dams reportedly cut Costa Rica's carbon dioxide emissions by 6.4 billion tons and reduced oil imports by five million barrels in 2004 (CEPAL 2005). Costa Rica's electricity grid is recognized as a model of efficiency and economic profit to other Central American countries, which rely on Costa Rica's expertise for their own development (Fay and Morrison 2005; Perry and Berry 2016).

[20] Construction of the Arenal dam required relocation of 2500 people in the early 1980s and was considered to be a successful example of relocation because local people participated in planning efforts and were relocated years in advance of the reservoir's arrival, thereby avoiding the difficulties that other relocations have faced. See also Scudder (2005).

[21] Although the neoliberal shift in the 1980s eventually led the Costa Rican government to allow for privatized development of water resources, those companies are limited to how much power they can generate and they sell the energy to ICE, who then distribute it to customers (see review in Perry and Berry 2016).

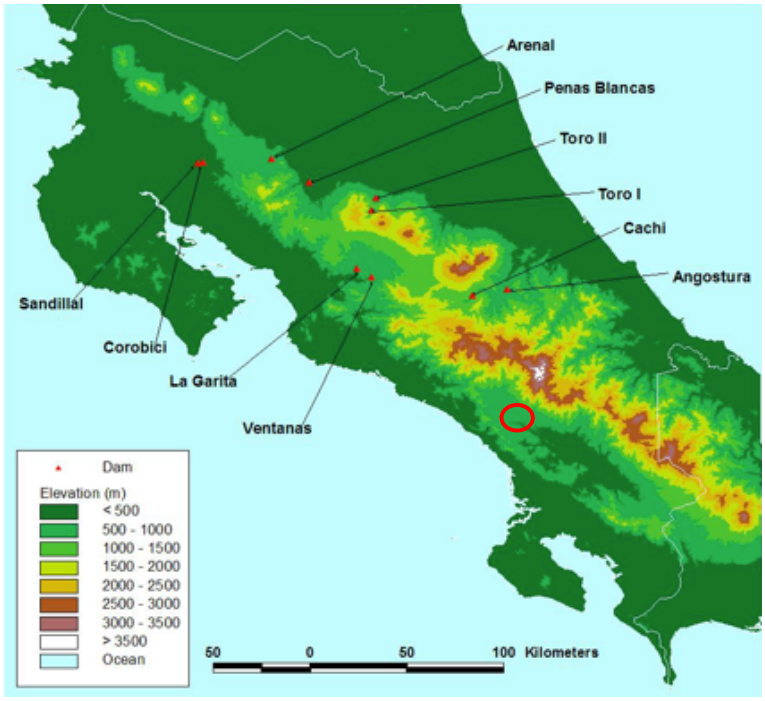

Figure 5. Map illustrating the location of ten of ICE's large dams. The bright red circle southwest of the mountain range shows the approximate location of the proposed Diquís hydropower project near Térraba territory for reference. Source: Laura Richards Laurencio (2005).

While hydropower has been heralded as a cost effective renewable resource by those within the industry and its supporters, numerous unwanted social, ecological, and economic impacts have also been ushered in by its implementation. The effects of hydrological alterations from dams have been known for decades, including habitat fragmentation (Dynesius and Nilsson 1994; Graf 1999), impaired water quality (Gillilan and Brown 1997), decreased nutrient cycling and productivity (Pringle 1997), a decline in aquatic biodiversity (Master et al. 1998; Richter et al. 1997), and cumulative consequences for fish and ecosystem sustainability (Bergkamp et al. 2000; Bussi et al. 2021; Lessard and Hayes 2003; Oliveira et al. 2018). Dams with large reservoirs are known to cause earthquakes (Chander 1999; Chung-Kang et al. 1974), change the rotation and axis of the Earth (Carabajal et al. 2006; Chao 1995), and reduce sea levels (Chao 1991; Chao, Wu, and Li 2008).

Specific short- and long-term social-ecological consequences of hydropower, and their accompanying social impacts, are illustrated by the "12 dams that changed the world" (Bosshard 2015). Among those 12 dams, the Hoover dam destroyed the fisheries of the Colorado River after its

inauguration in 1936. The Kariba Dam built in the 1950s to power Zambia, displaced 57,000 people who continue to suffer famine and impoverishment. The Bhakra Dam was thought of as a "Temple of Modern India" when it was built in the 1960s, yet effectively destroyed soils, and ruined agricultural harvests in the surrounding region. In 1975, the Banqiao Dam in China broke, killing 171,000 people. The Yacyretá Dam built in Argentina in the 1990s is now known as "a monument to corruption" after its projected cost of $2.5bn skyrocketed to $15bn. China's Three Gorges Dam, the largest complex in the world, completed in 2008, "ravaged the ecosystem of the Yangtze River" and displaced more than 1.2 million people.

The negative impacts of dams in the United States were recognized by environmental groups like the Sierra Club. David Brower, successor of the organization's founder, John Muir, led the Sierra Club's successful anti-dam campaign to stop dams from clogging the Colorado River basin through the 1960-70s. Brower gained support from Congress against what was recognized as the Bureau of Reclamation's 'unchecked damming frenzy' in the West. According to activist and author Tim Palmer (1986:78), "the battle of the Grand Canyon dams was a central, symbolic event which played a major role in awakening environmental awareness in America." A clear sign of hydropolitics playing out in the US, McCully (1996) describes the shift in attitude against dams as a democratic issue, as eastern states were sick of spending their tax dollars to build overpriced dams in the West; frontier expansion via dams was no longer economically profitable.[22]

Similar to the way that dam growth mirrored their expansion in the United States, anti-dam sentiments from within the US gained strength throughout the world. A long-term anti-dam movement in

[22] Tensions between dam proponents and opponents were already aroused in 1913 with the damming of the Tuolumne River in the Hetch Hetchy Valley in Northern California, which John Muir, co-founder of the Sierra Club, famously opposed. Furthermore, resistance to dams in the US was bolstered by a series of environmental legislations enacted throughout the 1970s that created legal precedent for stopping them. The Endangered Species Act was first applied to halt construction of the Tellico Dam in Tennessee in 1978. This case, the Tennessee Valley Authority (TVA) versus Hill, further marked a turning point in the American consciousness regarding dam construction, highlighting not only the ecological pitfalls of the industry, but also the immense social and economic costs of dams. The continued pressures from environmental groups, and the fact that most of the locations best suited for dams were already developed or protected by the 1950s, led to the decline in development within the United States by the 1990s (McCully 1996; Perry and Praskievicz 2017).

Brazil were among the earliest, beginning in the 1970s, although their power to effect change was limited by the military dictatorship (Hess 2018). Attitudes regarding dams were broadly influenced by Goldsmith and Hildyard's (1984) book *The Social and Environmental Effects of Large Dams*. In the book, the first collective assessment of dams' irreversible, negative impacts was made widely available to public audiences. By 2000, the rate of dam building globally was less than half of what it was at its height in the 1970s (Fletcher 2010a; WCD 2000). Moreover, as international pressures from the environmental movements grew, the World Bank was forced to rescind its financial support for dams. The intimate connection between the United States and World Bank in part explains their parallel growth and decline of support for dams.[23]

The World Bank has financed more than 550 large dams, primarily in African and Latin American countries.[24] Their indifference to the destruction they caused was evidenced in their continued support of dams despite direct physical violence resulting from their construction. In 1958, they funded the Kariba project on the border of Zambia and Zimbabwe, where eight dam opponents were murdered by the colonial government. Again, in the early 1980s, the Bank funded the Chixoy Dam; pressure to complete the project spurred the Guatemalan military to massacre 400 of the Maya Achi peoples who stood in the way of its construction (Colajacoma 1999; Del Bene, Scheidel, and Temper 2018; Johnston 2010). It was not until 1994 that the Bank withdrew its support from hydropower projects after an independent review found that it was guilty of wide-spread systemic social and environmental violations. This information came to light during the development of the Sardar Sarovar dam project in India.

The Sardar Sarovar project displaced at least 200,000 Indigenous Adivasi peoples and destroyed almost 2 million hectares of agricultural lands. The opposition movement effectively mobilized media

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[23] The World Bank Group is the world's largest development institution. It provides financial support to low- and middle-income countries. The Bank was created in 1944 at the Bretton Woods Conference, primarily under guidance and regulation of the United States and the United Kingdom. For more detail, visit the World Bank website at https://www.worldbank.org/en/about/history.

[24] The World Bank was one of the most prominent financial supporters of dams globally, spending an estimated US $90 billion (2007 rate) to finance more than 550 large dams. See more information from International Rivers at https://www.internationalrivers.org/wp-content/uploads/sites/86/2020/05/the_world_banks_big_dam_legacy.pdf).

campaigns, legal battles, demonstrations, and hunger strikes that eventually pressured the Indian government into ending their contract with the World Bank.[25] This project is heralded as the 'straw that broke the camel's back; after a history of displacing more than 10 million people, the World Bank temporarily ended its support of dams. A pinnacle report by the World Commission on Dams (WCD 2000) supported an end to the large dam era for its immeasurable social and ecological consequences.

The WCD report was cited in support of the dam removal campaign in the United States as people aimed to restore rivers' natural flow regimes, fish movements, and sediment exchange by removing hundreds of small dams.[26] Arguments supporting dam removal highlight that aging dams no longer serve their purpose, are too costly to upkeep, and fragmented rivers impede a multitude of complex natural, biological, geomorphic, and ecological processes (see review in Magilligan et al. 2016). In New England alone, where there are more than 14,000 dams, 127 dams ranging between 2-6 meters in height were removed between 1990-2013 (Magilligan et al. 2016). In total, it is estimated that more than 1300 dams have been removed in the United States, mostly between 1976 and 2015 (Foley et al. 2017). France removed dams after seeing the success of river restoration in the United States, Canada has removed two dozen in British Columbia, and Japan has removed one dam (Wang, Lee, and Melching 2014). The global hiatus in dam development was short-lived; construction of new dams far outpaces their removal.

With the start of the twenty-first century, hydropower was repositioned by its supporters as a clean, renewable, and sustainable energy source and a preferable alternative to fossil fuels, prompting its global resurgence in the face of climate change (Chaturvedi, Nautiyal, and Yaqoot 2020). Hydropower became a key component of contemporary climate policy with the UNFCCC combined development of a carbon market and the Kyoto Protocol's flexible mechanisms. What followed was a "public relations

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[25] Read more information from International Rivers website about the Sardar Sarovar project in India at https://www.internationalrivers.org/wp-content/uploads/sites/86/2020/07/world_bank_and_dams_fact_sheet_web.pdf.

[26] The dam removal campaign began in the early 1900s, occurring in parallel to the dam building movement. These two dueling narratives have been in competition with each other for over a century, both receiving support from their respective sides. Environmental writings of Edward Abbey (*The Monkey Wrench Gang,* 1975), Rachel Carson (*Silent Spring,* 1962), and Aldo Leopold (*Sand County Almanac,* 1949) were invaluable in shifting popular opinion of dams in the latter half of the 20th century.

offensive" that effectively greenwashed the industry to convince everyone that hydropower could solve the climate crisis, successfully prompting a surge in dam construction (Imhof and Lanza 2010). There are over 2000 hydropower projects included as a CDM worldwide, with another 840 in the process of becoming certified (Baird and Green 2020; Soanes, Skinner, and Haas 2016). Sutter and Parreño (2007) assessed hydropower CDM projects, concluding that they will not fulfill their stated sustainable development goals because of their inherent contradictions (impossibility of simultaneous economic and social-ecological wellbeing), leakages (conservation in one area failing to capture pollution in another), and lack of additionality (providing benefits not already occurring).

Despite critiques of the Kyoto Protocol and its carbon trading schemes, hydropower is widely accepted and promoted as a technoscientific mitigation solution to the climate crisis (Fearnside 2013; Frey and Linke 2002).[27] The Intergovernmental Panel on Climate Change (IPCC; scientific advisory board for climate policy-makers) advocates for greater expansion of hydropower, with the aim of doubling global installed capacity by 2050, noting, however, a potential four-fold increase given the remaining hydrological resources available (Kumar et al. 2011). The focus of most new hydropower projects is in Africa, Asia, and South America, where sources have not yet been exhaustively developed (Berga 2016). Yet, hydropower projects, specifically those in tropical regions where they are increasingly concentrated, release considerable amounts of methane, a GHG twenty times more potent than carbon dioxide (Fearnside 2002, 2004, 2005, 2013; Fearnside and Pueyo 2012). Reservoirs from tropical dams emit 22% of worldwide methane emissions (Paucar et al. 2018). Furthermore, cement, a key component of dam construction, contributes 0.5 tons of carbon dioxide per ton of cement into the atmosphere (Boden et al. 1995), making it the world's third-largest source of anthropogenic emissions of carbon dioxide (Andrew 2018). The amount of greenhouse gas emissions produced from the construction and operation of hydropower thereby counters its stated promise of mitigating climate change.

[27] The detailed workings of how the hydropower industry successfully infiltrated climate governance deserves more detailed ethnographic investigation. Research as discussed herein points to the bond between the World Bank and its relationship with the industry after a long history of supporting dam building, combined with the neoliberal turn in environmental governance broadly.

Increasingly, hydropower's ability to produce a dependable supply of energy is challenged by the fact that changing precipitation patterns due to climate change may not provide enough water to fill reservoirs, to propel turbines or fill pumping stations (Perry and Praskievicz 2017). In a thorough review of global hydropower projects, Ansar and colleagues (2014) debunked the myth that hydropower is a "cheap" and "affordable" form of energy because developers regularly underestimate costs from planning, construction, and operation (see also WCD 2000). Considering these impacts, hydropower is arguably a maladaptive solution to the climate crisis and sustainable development that only serves to exacerbate social and ecological problems (Asher and Bhandari 2021; Shiva 2002). Notwithstanding these data, the World Bank re-entered the arena and began funding hydropower projects again in the early 2000s; they provided loans and carbon financing for nine hydropower projects in the amount of $814 million (Switkes 2007). In 2010, they financed $350 million to upgrade 220 dams in India (World Bank 2019). The World Bank's Vice President for sustainable development, Rachel Kyte, explained their regret at pulling out of hydropower funding in the past, stating that "was the wrong message" to send and that "That was then. This is now. We are back" (Schneider 2013). China has become a major financier in hydropower infrastructure as well, marked by their involvement in building 330 dams in 74 countries (Bosshard 2015).

Hydropower, particularly large- and mega-dams, are a form of infrastructural violence (Rodgers and O'Neill 2012), wherein technological structures serve as media of violence that negatively impact numerous social and ecological systems (see also Scott 1998). Yet the World Bank and other global lenders slipped seamlessly back into the hydropower business under the shadow of climate mitigation rhetoric. While the hydropower sector was successfully rebranded as clean and environmentally friendly, efforts to actually upgrade hydropower into a clean, green technology are lagging well behind the narrative. A spokesman for the Sierra Club stated that "Turning back to hydro is being anything but a progressive climate [strategy]" (Schneider 2013). Similar to McCully's assessment of hydropower companies in the early 1990s, I conclude that the industry's "culture of denial" leads its proponents to

focus more on their public image than addressing the substantive changes needed to make the industry actually sustainable.

Recent efforts by the International Hydropower Association (IHA) appear to address the legacy of negative impacts from dams. In 2010, the IHA created the *Hydropower Sustainability Assessment Protocol*, which was prompted after pressures from the World Commission on Dams report in 2000. The IHA promotes the Protocol as a new tool for companies to utilize as they assess projects at each stage of their life-cycle and aim to achieve either good or best practices in dam building. As a universal metric, the Protocol is to set a global standard for dam development; however, there are no legal obligations to adhere to its suggestions. It was not until 2018 that climate change resilience and mitigation factors were incorporated into it, despite the wave of data on climate change available since at least 2007.[28] Social and environmental NGOs, governments, financial institutions, banks, and the hydropower industry were all involved in creating the assessment tool. While very clearly excluding representative voices of the peoples who are directly impacted by dams, the Hydropower Sustainability website assures that they will be incorporated, stating "Please note that the Indigenous Peoples guideline is currently being updated to include the *newly established* free, prior and informed consent requirements and guidance for good international industry practice" (emphasis mine). The time lag in recognizing the rights of Indigenous and other impacted peoples is disturbing considering the length of time that legislation specifically protecting them from externally-proposed development projects has been in place.

Indigenous Peoples in the Global Human Rights Regime

The rights of Indigenous peoples emerged from the broad framework of "the global human rights regime" that formed with the United Nations after World War II (see Donnelly 1986; Edelman and James 2011). The regime positions human rights as universal, interdependent, and indivisible. Indigenous peoples built upon the human rights framework to "[identify] themselves as a global part of the human condition,

[28] To read the fourth IPCC assessment report, see Pachauri and Reisinger (2007).

asserting an equal claim to universal rights, and specifying rights that are particular to their unique situation" (Edelman and James 2011:84), primarily through conventions and declarations.

One of the most important legal guarantees for the rights of Indigenous peoples is the Indigenous and Tribal Peoples' Convention, which was established by the International Labour Organization (ILO) in 1991. Known as ILO 169, this legal guarantee reinforced and enhanced the standards previously established in ILO 107 in 1957.[29] ILO 107 set some guidelines for Indigenous peoples, but it had many problematic features and was most notably critiqued for allowing nation states to oppress and discriminate against Indigenous and tribal peoples. The primary goal of ILO 107 was arguably to assimilate Indigenous and tribal peoples into the country's patrimony, suggesting that a loss of cultural identity and practices would be inevitable. It furthermore aimed to provide Indigenous and tribal peoples with training and education 'sufficient' for them to enter into market economies. And in regards to relocation for externally proposed development projects, Indigenous and tribal peoples were "not to be removed without their free consent from their habitual territories" except in cases where the government needed such territories for "national security, or in the interest of national economic development." ILO 169 provided many needed updates to the rights of Indigenous peoples, removing the assimilationist, hierarchical character of its predecessor.

Within its 44 articles, ILO 169 sets minimum standards of the rights of Indigenous peoples, recognizing "the aspirations of Indigenous peoples to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions." Additionally, ILO 169 recognizes that Indigenous peoples have the right to prioritize their own development needs (Article 7), have access to equal and fair employment opportunities (Articles 20-23), rights to health care (Article 25), and the right to education in one's own language (Articles 27-28). ILO 169 set the stage for free prior and informed consent (FPIC), wherein the community must be provided

[29] ILO C107, the Indigenous and Tribal Populations Convention, 1957 is available at the following link: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C107.

with information explaining all the risks and benefits before any actions can be taken on projects that may impact their lives, lands, or rights, and furthermore, the Indigenous peoples must consent to the project.

The Declaration of the Rights of Indigenous Peoples, established in 2007, is another significant document that reinforces and delineates individual and collective rights of Indigenous peoples (see Anaya and Wiessner 2007).[30] It focuses on normalizing the rights, justice, and equity for Indigenous peoples by addressing their rights to self-determination, culture, identity, education, health, employment, and language. Furthermore, it encourages state governments to work with Indigenous peoples on development projects and more broadly, to solve global issues. The origins of the Declaration can be traced back to 1925 when Haudenosaunee Chief Deskaheh fought for recognition of tribal rights and autonomy under the League of Nations (Woo 2003). More than 80 years later, 144 countries finally agreed on language and statutes to institute for Indigenous peoples. Now, it is being used by the Inter-American Court of Human Rights to set jurisprudence.

Yet because of the Declaration's precarity as a non-legally binding resolution, many conflicts and complications that discriminate against Indigenous peoples remain. The text says that states should "consider" all the aspects of Indigenous peoples and their rights before making development decisions (Article 40), but they are not obliged to strictly adhere to their wishes. Many groups found the language to be lacking, and critique the resolution for the compromises that had to be made for it to be accepted so broadly (Hohmann and Weller 2018). Such critiques are clearly evidenced by the International Hydropower Association's recent statement on building dams, in which they were largely unaware that these rights existed, only recently creating their Protocol and incorporating guidelines from ILO 169 in 2019 and promoting them as best practices in 2020.

It is evident in the legacy of dams that the IHA did not adhere to international law, as the majority of the world's dams have been built on or near Indigenous territories (Fearnside 2020). For example, most

[30] The Declaration of the Rights of Indigenous Peoples can be read at the following site: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.

of Brazil's 158 hydropower projects currently under construction and the 351 projects being planned will directly impact Indigenous groups (Ibid). The Belo Monte dam, the world's fourth largest hydropower complex, was built on the Xingu river in Brazil despite decades of protests from the impacted Indigenous peoples (Bratman 2014; Carvalho 2006; Turner and Fajans-Turner 2006). A similar protest movement failed in India against the Teesta hydro project (Huber and Joshi 2015), as well as in the United States by Seneca, Mohawk, and Iroquois peoples in New York in opposition to development of the St. Lawrence Seaway (Churchill 1993), and the Sioux peoples resisting dam development along the Missouri (Lawson 1982).

Moreover, the Dalles (Oregon) and Elwha (Washington) River hydropower projects had enormous negative impacts on local Indigenous tribes, that included forced relocation, a loss of subsistence fishing and hunting lands, and severed ties to culturally and spiritually significant places (Church et al. 2015; Lawson 1982). Displacement is one of the most common side-effects of dam building. Hydropower projects have displaced at least 80 million people worldwide, primarily Indigenous peoples or ethnic minorities living in impact zones (Hitchcock 2015; Johnston 2010; Oliver–Smith 2009; Scudder 2005). Anthropologist Robert Hitchcock (2015:529) found that in nearly all cases where relocation of Indigenous or local populations was required for a hydropower project, "the degree of impact on populations has been seriously underestimated." Displaced peoples, who suffer physical and emotional disconnection from place/rivers, are rarely, if ever, able to recover economically, psychologically, or culturally (McCully 1996) and face long-term affective and mental health impacts (Perry et al. 2018).

Success in stopping proposed dams is rare. For example, the Kalinga peoples in the Philippines successfully stopped the Chico dam—only after resistance leader Macli-ing Dulag was murdered by national police forces (Drucker 1985). Decision-makers rationalize project construction despite opposition by arguing that hydropower is needed for the 'national good,' which they apparently believe outweighs the voices and rights of Indigenous peoples and their allies. A state's lack of respect for Indigenous peoples signifies a neocolonial act of violence that privileges technoscientific and neoliberal

development aspirations over alternative solutions proposed by Indigenous peoples (cf. Kuokkanen 2006; Shah, Boelens, and Bruins 2019).

Similar exclusions have historically occurred within the broad sphere of global climate governance (i.e., the climate frontier), and more specifically within the hydrosocial territory. Indigenous peoples and their rights have only recently been recognized within the UNFCCC. Although part of the many voices existing within the climate frontier, Indigenous peoples did not have an official platform at the UNFCCC annual COP meetings until 2008 with the establishment of the International Indigenous Peoples Platform on Climate Change (IIPFCC). Then, at the 2015 COP21 meeting in Paris, the IIPFCC established the Local Communities and Indigenous Peoples Platform (LCIPP), also known as the Indigenous Caucus. The Caucus, a working group that acts to strengthen the role of Indigenous peoples in climate negotiations and decisions, had its inaugural panel at COP24 in Poland. There are 14 members in the LCIPP representing the following UN defined categories: five from UN regional groups (Africa; Latin America and the Caribbean; Eastern Europe; Asia-Pacific; and Western Europe and others), seven from Indigenous sociocultural regions (Eastern Europe, Russian Federation, Central Asia and Transcaucasia; Asia; The Pacific; The Arctic; Central and South America and the Caribbean; and North America), one from Small Island Developing States, and one from Least Developed Countries (Sherpa 2019).

The goals of the LCIPP are to (1) strengthen the knowledge, technologies, practices and efforts of local communities and Indigenous peoples in addressing and responding to climate change; (2) facilitate the exchange of experience and sharing of best practices and lessons learned in holistic and integrated mitigating and adapting strategies; and (3) to enhance the engagement of Indigenous peoples and local communities in the UNFCCC process. Through these broad goals, the LCIPP aims to increase the capacity for engagement of Indigenous peoples whereby the UNFCCC policy decisions incorporate diverse knowledges, practices, and innovations in solutions to the climate crisis.[31]

[31] LCIPP goals and operations are available at https://www4.unfccc.int/sites/nwpstaging/News/Pages/Inidigenous-Peoples-and-Local-Communities-Platform-Update.aspx.

Although Indigenous peoples are increasingly participating within the broad climate governance arena, Gay-Antaki (2020) argues that their voices are compressed into homogenous entities and silenced by oppressive structural systems, thereby allowing inequities to persist. This homogenization is evident in the fourteen people chosen to represent millions of Indigenous peoples around the world through one dedicated Indigenous platform at the UNFCCC. The future of how Indigenous peoples, their rights, and knowledges are integrated into climate mitigation and policy decisions remains to be seen. Investigating the climate frontier with a focus on Indigenous rights, then, illuminates the gaps wherein knowledges collide and new solutions can be developed. Without such engagement, the hierarchical structure of climate governance will maintain that antiquated technologies like hydropower are the key to a low carbon future, despite their well-known pitfalls and impacts on Indigenous peoples. Examining the interactions that shape hydrosocial territories within the climate frontier, three themes emerged: imaginaries, space/place, and violence.

Indigenous and Modern Imaginaries

Much of the friction within the climate frontier emerges from the interactions between a diversity of imaginaries, the way that peoples see themselves in the world and the futures that they have envisioned for themselves. Imaginaries stem from a groups' identities, cultural and spiritual beliefs, daily practices, histories and memories, as well as cosmologies and epistemologies, which in turn are inherently place-based within specific environmental contexts (Anderson 1983; Appadurai 1988; Basso 1996; Escobar 2008). Imaginaries are constantly created and transformed through politics, rebalancing of powers, media, and other representations (García Canclini 2014). It is important to understand imaginaries as they inform decision-making processes because as Appadurai (1996:31) argues, the "imagination is now central to all forms of agency" and "is the key component of the new global order." The imaginary is now a core factor of how climate policy is formulated, enacted, and accepted, as I illustrate below.

Our initial understanding of the imaginary stems from Jean-Paul Sartre's *The Imaginary: A Phenomenological Psychology of the Imagination* in 1940. Sartre believed that the imagination related not

only to consciousness and ontology, but also to freedom—a necessary factor in peoples' abilities to change the world. Being free enables us to imagine "the world or any part of it being different from the way it in fact is…We are therefore not compelled to live in the world as we find it. We can and do act to change it, and this involves imagination" (Webber *in* Sartre 2004: xxvi [1940]). The imaginary, as understood herein, thus relates to our ability (i.e., freedom) to develop policies, programs, networks, and other actions now that fulfill the futures that we envision for ourselves. Individual's imaginaries form a larger community collective imaginary, relatable to Benedict Anderson's concept of *imagined communities*.

Anderson (1983:6) considers that fictive, imaginative relationships and associations forged into a nation, which he defined as "an imagined political community." Although heterogeneous in origin, groups of peoples merged their collective identities, values, and beliefs into a mutual communion (i.e., the nation). While understanding that communities once were considered to emerge out of "nets of kinship," Anderson conceives of nationalism as being aligned with rooted cultural systems through which it is born (and with which it contrasts). Similarly, Taylor (2004) characterizes the concept of social imaginaries as the complex, collective set of expectations, experiences, and understandings of a society, which is taken as representative of the whole. Both understand that there are inherently unique perspectives and heterogeneity within the nation, societies, and communities, while at the same time allowing for collective affinities among groups of peoples. It is from within this rationale that I understand and analyze the imaginaries within the climate frontier.

While simultaneously recognizing the multitude of individual knowledges, epistemologies, cultures, values, and ideologies, as well as their inherent, broad, collective unities, I assess the climate frontier through two primary imaginaries—the *Indigenous* and the *modern*. This distinction is based on continued public and academic divisions between Western and Indigenous science/knowledges (as illustrated in Chapter Four), recognized herein as a distinction between foundational value systems and world views (Little Bear 2000). According to Little Bear (2000:77), there are different ways of interpreting the world based on one's culture, which are composed of "society's shared philosophy,

values, and customs." MacCabe (1988) stresses that the Indigenous and Western knowledges possess unique histories and patterns of change making these broad distinctions bound to fail. However, as Agrawal (1995) summarizes, Indigenous and Western knowledges can be distinguished in three manners: (1) *substantive,* between their subject matter and character; (2) *methodological* and *epistemological* (i.e., different ways of investigating reality and understanding worldviews); and (3) *contextual,* Indigenous knowledges are more deeply rooted in specific local contexts. Both Agrawal and Little Bear recognize that the two systems of thought are problematically too heterogeneous to be so easily grouped.

Heeding Agrawal's warning regarding pitting Indigenous knowledges against Western knowledges (each as homogenous entities), I place them as opponents insofar as they are fueled by different logics and epistemologies within the specific groups with which I work. This dissertation serves to elucidate the specific complexities of the two imaginaries on a local level with my engagement with the Brörán peoples and ICE in Costa Rica. Illuminating this dichotomy is furthermore a direct result of the ethnographic research conducted across the local-global scales where Indigenous peoples were pitted against capitalist-driven development industries in conferences, presentations, and resistance movements. The differences in these imaginaries drive the Indigenous-hydropower cycle described in Chapter Three. Similar to Little Bear's (2000) assessment that jagged worldviews, wherein Eurocentric and Aboriginal peoples adopt aspects of the other's ideologies when they collide, I recognize that within the climate frontier these imaginaries intersect through frictions and present the opportunity to merge in a multitude of indeterminate ways.

Broadly speaking, the Indigenous future imaginary includes the autonomy and self-determination to produce and maintain an Indigenous group's own social, cultural, and economic prosperity through the methods of their choosing (Chandler and Reid 2019; Lewis 2013). The Indigenous future imaginary involves not only the active imagining of a future developed by, with, and for Indigenous peoples, but also requires the capacity to fulfill the future they envision for themselves (Lewis 2013). The freedom that they seek to fulfill their imaginaries (cf. Sartre 2004) includes the ability to enact their sovereign and/or

autonomous rights (Ellis and Perry 2020). Indigenous imaginaries broadly seek development projects that place social, cultural, and ecological well-being above economic growth (see Chapter Two).

Indigenous activist and dancer Emily Johnson describes extraction activities like hydropower as inherently colonial projects, specifically separating the modern imaginary from Indigenous imaginaries.[32] The modern imaginary is a future characterized by "accelerated economic growth, intensification of natural resource extraction, [and] development enclaves" (Escobar 2008). This concept places economic growth as a primary component of a desirable future, requiring various development initiatives in otherwise undeveloped, frontier zones. The modern imaginary necessitates spatial transformation as capitalist development projects thrive on resource extraction. The modern imaginary, in this case referring to the fixed infrastructure of climate governance, irrevocably alters place, either tangibly, through physical development, or affectively, through threats of change. Both tangible and affective transformations are forms of accumulation by dispossession (cf. Harvey 2005) as they result in significant losses of ecological and traditional knowledges, have lasting emotional consequences for peoples, sever social-ecological connections, destroy places, and disrupt cultures (Agnew 2011; Gordillo 2014; Jacka 2015).

Ballestero (2019) posits that futures are not calculable from the present when human rights to water are juxtaposed to water commoditization. The case with hydropower in Costa Rica illustrates this point as the rights of the Brörán peoples become secondary to state efforts to manipulate the Térraba river for so-called sustainable development. As anthropologist David Nugent (2012:282) has pointed out, for many peoples caught in power struggles over rights and resources, the future is regarded "not as an open-ended horizon of democratic possibility, but as a source of fear and danger that looms perilously close to the present." While hydropower is perceived and promoted as "sustainable" to policy makers, Indigenous and other peoples impacted by dams disagree; hydropower does not allow for the sustainable future that they imagine for themselves.

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[32] UConn Humanities Institute webinar on April 1, 2021, "Native Scholars and Artists on Climate Justice."

Costa Rica's first female anthropologist, María Bozzoli (2000:276), critiqued sustainable development for leading to increased environmental deterioration and external debt. As she argues, the model was based on a "notion of progress inherited from the liberal ideologies of the 19th century…under the guise of modernization." While the ideology of sustainable development broadly incorporates goals of social justice, conservation, and ethics, those concepts have not effectively been implemented as practice (see also Quesada Mateo 1990). The discrepancy between the idea of sustainable development and its practical application illustrates the problems inherent in neoliberal practices, i.e., uneven development (see Harvey 2006; Foster 2000; Smith 2008).

Disputes over the use and management of natural resources have "everything to do with imagined ideal worlds, with the creative manipulation of political discourse, the assertion of moral priorities and identities, and with how activists on both sides appropriate linguistic and symbolic tools in order to promote a cultural world that reflects their quests for change" (Satterfield 2007:4). As Escobar (2008) argues, it is imperative to recognize diverse knowledges that emerge from engagement with dominant governance sectors and counter-perspectives of protestors, in this case, the modern and Indigenous imaginaries, respectively. When diverse imaginaries intersect within the climate frontier, a form of what Taussig (1986) refers to as "epistemic murk" is produced, signifying the amalgamation of a multitude of fragmented histories, memories, and truth/lies. The intersection of such a combination of knowledges can effectively harness diversity within governance arenas and produce more effective and sustainable outcomes (Landemore 2017). The transformations that we need to achieve those outcomes requires the ability to collectively and meaningfully "debate realistic and desirable futures," as Milkoreit (2017:2) posits, "imagination lies at the heart of social change." However, control of the spaces where climate policies are produced (e.g., conferences, as discussed in Chapter Four) staunchly separates these two imaginaries, ultimately hindering effective and sustainable global responses to the climate crisis.

Productions of Space and Place

Basso (1996:5) has described "place-making" as involving "multiple acts of remembering and imagining," which is essential for constructing history, social traditions, and identities. Anthropology of place has built on studies by Heidegger (1971), Bourdieu (1977), Ingold (1993), and Basso (1996), among others, to situate peoples and environments as active agents in creation of a society's place-worlds. The distinction between space and place, as illustrated by Basso, gained an important foothold in anthropology after spatial studies were critiqued for problematically mapping cultures onto specifically bound spaces empty of further investigation. Gupta and Ferguson (1992:8) respond to that critique with the contention that by studying the "spatial distribution of hierarchical power relations, we can better understand the processes whereby space achieves a distinctive identity as place." As Basso (1996) has showcased in his work with Apache peoples in the American southwest, place is where something happens, becomes meaningful, and is embedded into peoples' lives.

My research incorporates the study on space and place through their production because, as Setha Low (2017:1) states, "the ethnographic study of space and place is critical to understanding the everyday lives of people whose homes and homelands are disrupted by globalization, uneven development, violence and social inequality." Harvey (2001) notes the importance of studying uneven development, the spatial transformations that occur through capital accumulation. As I argue herein, in relation to frontier zones, "space after space is opportunistically demonized or sanctified by some dominant power as a justification for political action" Harvey (2001:301). The neoliberal production of space re-engineers terror and violence (Bessire 2014), silences Indigenous peoples (Gordillo 2014), and creates spaces of death where a mosaic of fantasies, truths, and myths is fragmented through fear and chaos (cf. Taussig 1986).

I posit that the climate frontier encapsulates such forms of uneven development through hydropower projects, which in most cases are built within Indigenous territories, requiring Indigenous peoples to sever ties with their homelands. The threat of displacement by proposed dams disrupts connections to place as well, because as we know, peoples are so "place oriented" that forced relocation,

or the idea of it, causes severe anxieties (Casey 1997; Gupta and Ferguson 1992; Scudder and Carlson 1982). Conflicting perspectives on the ways in which space should be produced lead to the frictions discussed herein regarding the Indigenous-hydropower nexus. Indigenous peoples work to protect their spaces and places from the physical and affective threats of capitalist encroachment, often through reclaiming ancestral lands and creating new spatial configurations on the landscape (see Chapter Two). Such Indigenous resistance methods are met by international proposals to produce capital and dams to control resources in frontier zones, decisions of which are made in controlled spaces of conference meetings (see Chapter Four).

It is therefore not only the real but also imagined spatial transformations that I study, as they intersect and impact human-nature relations across scales. To study the productions of space and place in the climate frontier, I critically employ Lefebvre's theory of social space, where space and place are cultural constructs that are superimposed upon and interpenetrate each other. Lefebvre's main contribution to Marx's historical materialism regarding the production of space is to argue that new modes of production (e.g., capitalism) create new practices and ideas regarding space. Lefebvre (1991) developed a three-part dialectic of spatialization, which is comprised of (1) spatial practice (perceived), consisting of the material elements of space; (2) representations of space (conceived), the institutional spaces produced by dominant groups within society; and (3) representational space (lived), the way in which people experience the combination of perceived and conceived spaces in their daily lives. Each aspect of the spatial triad is constantly and simultaneously producing and being produced by the other. Jacka (2016) illustrates the utility of Lefebvre's theory in environmental anthropology by using political ecology to assess the shifting productions of space in a conflicting resource frontier in Papua New Guinea.

In this project, I use Lefebvre's key understanding about spatiality and economic structures to examine how the neoliberalization of nature via climate mitigation (i.e., hydropower) is contextualized into the grounded realities of people's everyday lives. I focus on studying the interplay between the physical transformations of space and place via hydropower development (perceived), the dominant

decision-making powers of climate mitigation (conceived), and the experiences, imaginaries, and livelihoods of the Brörán Indigenous peoples, as well as decision-makers (lived). What I contribute here is also the affective impacts of imagined spatial transformations within what Lefebvre otherwise solely relegated to material (perceived) transformations.

Furthermore, not only is little known about the social-cultural dynamics informing the imaginaries of policy- and decision-makers (lived experiences), but their correlation with Indigenous imaginaries is even less understood. This research explores the ways in which divergent conceptualizations of spatial production intersect. In Chapter Two, I illustrate the combined perceived and conceived spaces as they inform the lived experiences of the Brörán peoples in Térraba territory. Chapter Three details the perceived spaces that culminate from conflicting development ideologies regarding material and affective transformations of space by hydropower projects. Chapter Four is an ethnography of climate and hydropower conferences, the conceived spaces where climate mitigation policies and practices are orchestrated by governance institutions, as well as the space where I assess the lived experiences of the decision- and policy-makers. Collectively, I argue that the uneven power dynamics informing how these spaces are constructed ultimately contribute to the violent environment lived by the Brörán peoples (Peluso and Watts 2001:5; see also Auyero et al. 2015; Watts 2013).

The Fast and Slow Continuum of Violence

The inclusion of a discussion on violence as an underlying current in Costa Rica, specifically as it impacts the Brörán peoples, was not my original intent. While I engage with the power inequities prevalent in neoliberal governance and control over resources, I did not plan to become involved in what Ortner (2016: 49) terms "dark anthropology" or the increasing trend within the social sciences to focus on "the harsh and brutal dimensions of the human experience." I knew the history of colonization in the country, ongoing struggles for equality (visible in the frequent roadblocks, protests, and strikes I witnessed over the years), and of course resistance that arose from issues of uneven development (i.e., hydropower) that threatened many peoples' lives and livelihoods. Jerhy, his family, and other collaborators assured me,

however, that *I* wasn't in any danger and could complete my research. My privilege as a white, foreign researcher allowed me to avoid direct, personal confrontation with the violence that was occurring all around me. It wasn't until February 2020, after the conclusion of my research and a few months into writing my dissertation, that I finally came to understand the reality of violence in Costa Rica when Jerhy was murdered.

While I didn't believe in the imaginary of Costa Rica as a utopic paradise before Jerhy's murder, I certainly don't believe the rhetoric that it is a social, democratic oasis based on equity and protection of Indigenous rights now. The impact of Jerhy's death affected everything that I thought of and wrote in regards this dissertation. It is my long-time love of Costa Rica, its animals, beaches, and the peoples who live there that I have come to know in the past 15 years that propel me to continue to work in the country and more importantly, to use this space to discuss the violence that my interlocutors face daily. It would be problematic to avoid addressing violence as an anthropologist, as Kroeber and Geertz did in their work in California and Bali, respectively (Scheper-Hughes and Bourgois 2004; see following sections).

Neil Whitehead (2004) warns that without critically interrogating violence, anthropology risks not only being resistant to confronting violence but also guilty of perpetuating it. Nancy Scheper-Hughes and Phillipe Bourgois (2004) point to many examples of anthropologists who ignore violence, even impending genocide, in the name of cultural and/or moral relativism. In one case, University of California, Berkeley's Museum of Anthropology captured Ishi, one of the last Yahi peoples from Deer Creek in northern California, who served as a living exhibit through which anthropologists (including Alfred Kroeber) studied his tool making, songs, and stories (Scheper-Hughes 2001).[33] While attempting to complete "salvage anthropology," researchers ignored the fact that Ishi's family and tribe were victims of genocide by white colonial settlers (see review in Accomazzo 2012). Moreover, people like Geertz apparently purposefully ignored violence and signs of genocide because they did not want to engage in the "politics of advocacy" (Scheper-Hughes and Bourgois 2004).

[33] For information on Ishi, see also the Phoebe A. Hearst Museum of Anthropology site: https://hearstmuseum.berkeley.edu/ishi/.

Increasingly since the 1980s, anthropologists have examined the spectrum of violence occurring in the communities where they were working. Riches (1986) provides a foundational, yet vague, definition of violence from which to develop anthropological theory: violence is an act of physical hurt deemed legitimate by the performer and some witnesses. Social legitimation of violence is culturally constructed as conflicts are evaluated on the basis of historical experiences and knowledges (Schmidt and Schröder 2001:4). A variety of physical, social, and cultural dimensions combine to give violence power and meaning within specific contexts (Scheper-Hughes and Bourgois 2004).

Anthropological studies of violence have focused on symbolic violence (Bourdieu 2003), epistemic violence (Spivak 1988), structural violence (Farmer 1996; Galtung 1969; Lee 2019), infrastructural violence (Rodgers and O'Neill 2012), and affective violence (Luna 2018). Within each of these conceptualizations, violence is understood on some level to be "nonlinear, productive, destructive, and reproductive" (Scheper-Hughes and Bourgois 2004:1). As Scheper-Hughes and Bourgois (2004) have described, violence occurs on a continuum, encompassing a spectrum of overlapping structural, symbolic, and what Scheper-Hughes (1992) called, everyday violence (see also Goldstein 2013). I engage with the understanding that in the climate frontier, there is a continuum of violence, however epistemic and affective violence replace symbolic violence as a factor herein. Within this continuum, different modes of violence coalesce on both fast and slow temporal scales (see Nixon 2011) to create violent environments wherein Indigenous peoples and environmental/land defenders are murdered and threatened with impunity (see Del Bene, Scheidel, and Temper 2018).

The murder of Lancan woman Berta Cáceres gained widespread media attention on March 2, 2016 when she was gunned down in her home after years of being threatened by armed militants. The 2015 Goldman Environmental Prize winner was leading a successful resistance movement against the Agua Zarca Dam in her Honduran homeland along the Río Gualcarque.[34] The project was backed by

[34] The Goldman Environmental Prize "recognizes individuals for sustained and significant efforts to protect and enhance the natural environment, often at great personal risk." https://www.goldmanprize.org/about/. The Agua Zarca project, operated by *Desarrollos Energéticos* (Energy Development) S.A., was being funded by the Netherlands Development Finance Institution and

international banks that employed security forces "to control, neutralize and eliminate any opposition." In 2013, those forces opened fire on protestors who were opposing the Agua Zarca dam, killing one and injuring three of Cáceres' collaborators. Three years later, security forces sent by the executive president of *Desarrollos Energéticos* (DESA) set their aim on Berta as she gained international support for her opposition to the dam.[35] DESA began building the dam without consulting the Lenca peoples as is required by international law (i.e., ILO 169). At the time of her death, Berta was under "precautionary measures" provided by the Inter-American Commission on Human Rights, meant to keep her safe from the continued threats of violence she received.[36] The Honduran Supreme Court indefinitely suspended prosecution of the men accused of murdering Cáceras in September 2018.

This one case highlights the violence faced by Indigenous peoples involved in protecting rights and resources from unwanted external development initiatives, and unfortunately, is not unique to Berta or Honduras. Berta is the second Goldman Environmental Prize winner to be murdered, following Isidro Baldenegro's assassination in 2005 for fighting against illegal logging in Mexico. They are among the growing list of environmental defenders and activists who are murdered on a regular basis because they oppose extraction activities in their native lands. In recent years, international human rights' watch group Global Witness has been documenting this physical violence. The year 2019 was the most dangerous thus far, as 212 people were killed protecting their resources, territories, and communities (GW 2020). Of

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the Finnish Fund for Industrial Cooperation. Both funders ended their support after conflict surrounding Berta erupted.

[35] At least two of the other military assassins involved in Cáceres' murder were trained at the WHINSEC, formerly known as the School of the Americas (Lakhani 2020b)

[36] IACHR is a legally binding commission with a court located in San José, Costa Rica. They are responsible for upholding the American Convention on Human Rights. 23 countries from Central and South America, and the Caribbean (including Costa Rica) have ratified the Convention. The court is an autonomous legal institution that resolves contentious cases, supervises judgments, advises nation states, and orders provisional measures. Provisional measures are protective orders that the court hands down to the nation state to ensure the safety of its citizens when they face serious and urgent threats. The precautionary measures were established by the OAS member states (Organization of American States) to protect people who are in "imminent risk of irreparable harm." See: https://www.corteidh.or.cr/que_es_la_corte.cfm?lang=en and https://www.oas.org/en/iachr/consultation/2_measures.asp.

those murdered, 40% were Indigenous. Previously, between 2015-2019, over one-third of all fatalities of land protectors were Indigenous peoples (GW 2020). Killings of Indigenous peoples acting in their role as environmental or Earth protectors has been described as an "epidemic" by Victoria Tauli-Corpuz, the UN Special Rapporteur on the Rights of Indigenous Peoples (Pashley 2016). Witnesses who can attest to such conflicts and violence, deeming them legitimate, have not convinced others in a manner that would demand widespread social change.

Violence directly related to dams was first widely addressed in Patrick McCully's book *Silenced Rivers* (1996). This public denunciation was followed by the World Commission on Dams' report (2000:218) that recognized historically "coercion and violence have been used against communities affected by dams."[37] Both accounts served to illustrate the inherent connections between violence and dams. This dissertation works towards a recognition of violence against Indigenous peoples (violence made legitimate by witnesses) in the name of climate mitigation in order to emphasize a more just and effective pathway to a sustainable future.

[37] The anti-dam movement had already been working to address social concerns, however, as previously mentioned, since the early 1900s. Decades later, in a collaboration effort to address this violence, anti-dam organizations held the *First International Meeting of People Affected by Dams* in Curitiba, Brazil on March 14, 1997. They called for an end to the one-sided decision-making powers of the technocrats, politicians, and elites whereby humans and nature are no longer "reduced to the logic of the market where the only value is that of commodities." They demanded an end to all dam building that is not approved by affected peoples and until such time that all forms of violence against those in opposition to dams stops.

Chapter Summaries

Chapter One, *Unveiling the façade of Costa Rica's exceptionalism: Violent environments in Térraba territory,* exposes the disparities between the country's mythological utopic image and the lived realities of the Brörán peoples. I explore the multiple forms of fast and slow violence that result from Costa Rica's history of colonization, failure to uphold Indigenous laws, and inequity of their environmental agenda. The Brörán peoples have suffered epistemic violence, destruction of spaces, and corporeal violence, all of which produce epistemic murk regarding the future within the violent environment that they live. Yet through continued resistance movements and cultural revitalization strategies they have maintained their cultures, identities, epistemologies, and connections to place.

Chapter Two, entitled *Place, Identity, and the Imaginary: An ethnography of the Brörán peoples*, focuses on understanding how the Rivera family position themselves in the world and how they view their futures in it. The ethnographic discussions focus on their knowledges, kinships, and acts of place-making, which are strongly founded in their values, beliefs, and spiritual connections with nature and ancestors. Their daily lives and future imaginaries are undergirded by uneven power dynamics as non-Indigenous peoples who are illegally living within Térraba territory, and external development pressures, actively work to disrupt them.

Chapter Three, *The Many-headed Hydra and the Rigidity Trap: How conflicting conceptualizations of development fuel the Indigenous-hydropower cycle,* explores the cyclical temporality of hydropower projects as they intertwine with Indigenous resistance. This chapter chronicles the constant threats of hydropower development that have plagued the Brörán peoples for over 50 years. I incorporate the multi-layered panarchy model to understand why the cycle continues, which I argue is due to a rigidity trap perpetuated locally by the electricity company and globally by neoliberal climate governance. Neither of those institutes allow for innovative learning, adaptations or alternatives to be presented as a solution to the climate crisis, which can be further explained through an ethnographic exploration of climate and hydropower conferences.

Chapter Four, *Harmonious Spectacles in the Climate Frontier: The production of space and the manufacturing of consent for neoliberal climate policy,* investigates climate and hydropower conferences and their role in developing policy, as related to Indigenous peoples and hydropower. At the gatherings of global communities discussed in the chapter, participants reaffirm each other's values and beliefs through produced spectacles through which they orchestrate a dominant and consonant vision of climate governance. Celebrities and other members of the epistemic community of so-called experts offer overly simplistic, technocratic, and clumsy solutions to highly complex social-ecological problems. These events reinforce a master narrative of climate policy by creating specific truths that support the neoliberal framework of climate governance. Interactions at these events clearly illustrate the hegemony of the technoscientific, utopic imaginary as they control the spaces of production and exclude alternative knowledges, peoples, and values.

In the Conclusion, I comment on the current state of affairs in the climate frontier and continuation of the violent environment with a focus on Térraba and Costa Rica one year after Jerhy's murder.

CHAPTER ONE

Unveiling the Façade of Costa Rica's Exceptionalism: Violent Environments in Térraba Territory

Figure 1. Mural illustrating the spiritual connections between peoples, animals, and nature on the wall of a deteriorating community center in Térraba centro. The community center was used as a meeting place to organize for resisting hydropower projects. On the left are visible the words "libertad," or liberty, and "tierra," or land.

Costa Rica's National Political Mythology

In 1992, Costa Rica's President at the time, Rafael Ángel Calderón Fournier, remarked on the history of Spanish colonization in Costa Rica: "In our country there was no bloodshed, no confrontation with Spain. Interestingly, Costa Rica had no aboriginal population. The country is made of immigrants who began to arrive almost 500 years ago. Humble Spanish peasants that came to work and forged a peaceful nation." [1] Costa Rican scholar Carlos Monge Alfaro similarly claimed that Indigenous peoples in Costa Rica did not face atrocities during Spanish colonization, as did Indigenous peoples in the rest of Latin America (Alfaro Monge and Wender 1947). Political Scientist Deborah Yashar (1997) has stated that Costa Rica's peaceful history resulted from its "civil self-government." The perception that Costa Rica is a peaceful democracy reflective of European standards of modernity, as well as its self-identified and perceived "whiteness," earned it the nickname the "Switzerland of Central America" (Phillips 1977:49). Collectively, these statements have built a "national political mythology," whereby Costa Rica is believed to be an *exception* to its more violent, "darker," and politically unstable Central American neighbors (Low 2000:57).

Original in Spanish at II *Cumbre Iberomericana Jueves* 23-7-92 p 41, available online at: https://www.abc.es/archivo/periodicos/abc-madrid-19920723-41.html

Costa Rica's exceptionalism is rooted in and reified by a variety of factors, including its abolition of the army in 1948, its 98% literacy rate, increasingly high Human Development Index (HDI), and a variety of legal protections for Indigenous peoples.[2] The country also has a widespread protected areas network, a reputation for being "clean" via use of renewable energy sources, and has a progressively "green" environmental agenda. Moreover, the country has consistently ranked within the top 20 of the

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[1] Original in Spanish at II *Cumbre Iberomericana Jueves* 23-7-92 p 41, available online at: https://www.abc.es/archivo/periodicos/abc-madrid-19920723-41.html.

[2] Human Development Index (HDI) is a United Nations Development Programme categorizes country's development based on per capita income, access to health and education, and as of 2020, criteria of "planetary pressure," which includes carbon dioxide emissions and economic footprint (per capita). Information available at: http://hdr.undp.org/en/content/human-development-index-hdi.

happiest nations in the world (Helliwell et al. 2020).[3] I focus on examining the exceptionalism regarding Indigenous rights and the government's environmental agenda as they relate to the Brörán peoples with whom I work because they are key components to understanding Costa Rica's climate frontier.

According to Jerhy Rivera, an Indigenous Brörán community leader who was my primary interlocutor, the daily reality for Indigenous people living within Costa Rica greatly contrasts with the state-produced mythology of exceptionalism. He told me during an interview in 2016 that "*Costa Rica no puede seguirse llamando en el país verde, el país neutral, el país más feliz del mundo, si en los territorios indígenas no hay felicidad"* (Costa Rica cannot continue to call itself a green country, a neutral country, the happiest country in the world, if in the Indigenous territories, there is no happiness).[4] Jerhy was referring to the fact that Indigenous peoples in Costa Rica have faced relentless violence and abuse ever since colonization began over 500 years ago (Gudmundson 1976; Lohse 2014). His statement illustrates how the state's manicured narratives exclude "bodies of colour" (Rivers-Moore 2007). The purposeful erasure of Indigenous peoples from the national narrative exemplifies a form of what Fletcher (2012b) refers to as "imperialist amnesia," a way in which the "agents of postcolonialism" ignore or present a deliberately misleading false reality—or sanitized version of history—that ignores the state's historical and contemporary injustices against Indigenous peoples (see also Rosaldo 1989). In so doing, the state's objective of controlling the image of Costa Rica as a utopic paradise continues to create serious implications for poor, Indigenous, and other citizens who are systematically excluded from society (cf. Goldstein 2013).

In this chapter, I illustrate the violent environment Costa Rica's national mythology has created. A violent environment is "rooted in local histories and social relations" while also "connected to larger

[3] Happy Planet Index map is available at http://happyplanetindex.org/.
[4] All interviews within Térraba were in Spanish, the dominant language in the community. The original response in Spanish is provided first, followed by the English translation in parenthesis. I translated the Spanish to English within the context that I understood them, so any errors in translation are solely mine. Some of the original quotes were shortened (by excluding repetitive words, pauses, disfluencies) for brevity and clarity, only where they do not detract from the overall message or character of the text. Interviews that were not recorded are not written in quotes herein, but rather summarized in the text.

processes of material transformations and power relations" (Peluso and Watts 2001:5; see also Auyero et al. 2015; Watts 2013). In other words, violence occurs at both slow and fast rates in numerous forms across a multitude of spatial and temporal scales (Nixon 2011). Nixon (2011:2) refers to slow violence as the "violence that occurs gradually and out of sight, a violence of delayed destruction, an attritional violence that is typically not viewed as violence at all." Slow violence is evident in the attempted erasure and exclusion of Indigenous peoples from the national narrative in Costa Rica, lengthy court cases over resource use and human rights (see also Chapter Three), as well as epistemic (Spivak 1988) and affective violence (cf. Luna 2018). Additionally, the Brörán peoples face "fast" violence, or what would typically be understood as "an event or action that is immediate in time, explosive and spectacular in space, and as erupting into instant sensational visibility" (Nixon 2011:2), as exemplified by colonialism, destruction of places, and corporeal violence. Both slow and fast violence mutually reinforce one another within Costa Rica's violent environment to disproportionately affect Indigenous peoples.

These affects accumulate and interact on a continuum in notable ways. Mora (2018:73) argues that the violence occurring in Costa Rica stems from land tenure and environmental issues, thereby creating a continuous cycle of "*terrorismo*." He reasons that the structural violence endured by ecologists, peasants, and Indigenous peoples ultimately distances them from the "myth of peace and respect for Human Rights in Costa Rica" (Mora 2018:73). Indigenous peoples in Costa Rica have effectively been relegated to "unimagined communities" as their "vigorously unimagined condition becomes indispensable to maintaining a highly selective discourse of national development" (Nixon 2011:150). The violent environment in Térraba territory ultimately led to the murder of Brörán leader Jerhy Helmut Rivera Rivera on February 24, 2020.

Jerhy was born on November 1, 1974 in Térraba territory. He was the second eldest son of Doña Digna Rivera Navas and Don Enrique Rivera, both of whom can trace their lineage directly to the original Térraba peoples (see Chapter Two). Jerhy followed in his parents' footsteps in fighting for justice and equity for the Brörán peoples. In 2013, he survived an assassination attempt by non-Indigenous peoples when he reported them to authorities for illegal logging within Térraba territory. Left with a broken arm

as well as a cut, bruised, and bloodied face and head, he continued to speak out against racism and discrimination of Indigenous peoples on local and national platforms alongside other local leaders (Figure 2).[5] He was elected by community members to attend international conferences and speak on their behalf, even meeting Ban Ki-moon, former Secretary General of the United Nations and numerous national politicians.

Figure 2. Sergio Rojas (left) and Jerhy Rivera (right) speak at a conference on Indigenous rights in Costa Rica in September 2013. Bribri leader Sergio was murdered almost one year before Jerhy for protecting his native lands in Salitre territory. Jerhy's broken right arm is in a cast, barely visible as it rests on his lap in this photograph. A healing scar, evident of his attack on September 1, 2013, is also visible above his left eye. The image text translates as "Goodbye brothers! The fighting continues! Sergio and Jerhy live!" Photo credit: Ricardö Araya Röjas

At a political rally for presidential candidate Fabricio Alvarado in February 2018, Jerhy convinced security that I was international press from Colorado so I could access backstage and record

[5] The assailants were released the following day without charge. The doctor told Jerhy his wounds were lethal. View description of the attack by Jerhy in an interview with Gaia Foundation Costa Rica at https://www.youtube.com/watch?v=4GOJAycOX0k&list=PLRkPpe67mgGkdm0a34NRnSsMrRIzEdL-V&index=1.

him speaking. I smiled and showed security my camera and audio recorder and they let me pass without concern. I knelt in the front row and filmed Jerhy as he sat at a table with Alvarado and read a letter from the Brörán peoples appealing for the politician to acknowledge and enforce the rights of Indigenous peoples. He nervously chewed gum as he spoke proudly in front of dozens of cameras and politicians recounting the inequities that they face and their unfaltering resistance to the Diquís hydropower project. Jerhy was running for president of the town governance system in Térraba territory and had increasingly been involved in local political, economic, and development decisions in the years preceding his death, which also placed him in the center of internal conflict with non-Indigenous peoples in Térraba territory.

Through an examination of the violent environment in Térraba territory, and the factors that maintain it, I disrupt the image of Costa Rica as a utopic paradise. I focus on how the façade of Indigenous rights and environmental harmony unjustly affect the Brörán peoples and threaten to further disconnect them from their sacred, spiritual, and cultural places. Moreover, various forms of fast and slow violence intersect and reinforce each other to threaten their ability to live in peace, prosper as they desire, and fulfill their future imaginaries. Unless this reality is illuminated and publicly acknowledged, violence against Indigenous peoples will continue with impunity in Costa Rica.

The mythology of Costa Rica as an exception stems from an erroneous depiction of Spanish colonization that harmonized the interactions between the Spanish and Indigenous peoples. First, I briefly review the false narrative surrounding the history of Spanish colonization and highlight the narrative of violence and resistance that were seeded with this "first contact." The methods of resistance employed by Indigenous peoples have increasingly incorporated legal mechanisms, as legislation recognizing their rights has grown both on national and international scales. To illustrate resistance through legal enforcement, I provide a detailed discussion of how legislation lacks operationalization, impacting the Brörán peoples. I then discuss the reality of Costa Rica's environmental agenda, as Indigenous peoples are not included in decision-making processes nor do they benefit from the country's "greening." Instead, land tenure conflicts have been exacerbated by the constant pressure to build hydropower, more recently in the name of climate mitigation (see also Chapter Three). In conclusion, I illuminate how these factors

have culminated in the present, violent realities lived by Indigenous peoples, and ultimately leading to Jerhy's murder.

Spanish Colonization: Origins of Violence and Resistance

When the Spanish arrived in Costa Rica in 1502, approximately 400,000 Indigenous peoples from more than 20 different ethnic groups inhabited all regions of the country (Boza Villareal 2014; Palmer and Molino 2004). As a direct consequence of Spanish colonization, only 120,500 Indigenous peoples were left in Costa Rica by 1864 (Boza Villareal 2014). The Indigenous peoples that were not decimated by influenza, plague, smallpox or other diseases were enslaved within Costa Rica or sold to other colonizers throughout Latin America (Sibaja 1983). In 1500, Queen Isabella of Spain declared that Indigenous peoples were "free vassals" of the crown unless they were captured in a "just war," an exception that allowed the Spanish to legitimize their enslavement and abuse of Indigenous populations (Palmer and Molina 2004). Instead of chattel slavery, Indigenous peoples throughout the Americas were subjected to the "communal slavery" of Spain's *encomienda* system, which forced native peoples to work for the crown and pay tribute to Spanish *conquistadors* (conquerors) or the *encomenderos* (masters) who ran plantations (Chaverri 1999; Yeager 1995). In return for tributes, the Spanish provided Indigenous peoples with so-called benefits, including Catholicism (Sibaja 1983).

According to Goebel (2016:139), "Spanish colonialism in the Americas was much more about the exploitation of native labour (and enslaved African peoples) for extractive purposes and plantations than about European settlement." Costa Rican writer Fernández Guardia (1913:384) detailed the role of missionaries in assisting Spanish enslavement of Indigenous peoples and maintenance of the *encomiendas*, stating that "there must be taken into account the enormous difficulties that had beset the missionaries because of the ruggedness of the country in which they labored and the wide dispersion of the Indians, who could not be assembled in communities of any considerable size–an indispensable requisite for the work of bringing them under civilization." Those apparent difficulties did not prevent the Spanish from trying to consolidate the Indigenous peoples—the Spanish burnt their villages and forced

them to live in areas known as *reducciones* or reductions, an act that gave Spanish greater control over Indigenous peoples, their labor, their products, and their spaces. The Indigenous peoples who escaped initial capture were hunted by *correrías*, Spanish expeditions that tracked Indigenous peoples and forced them into *encomiendas* and *reducciones* (Palmer and Molina 2004).

There were reportedly 25 Térraba communities in the Bocas region of what is now Panama (at the southern Atlantic border with Costa Rica) that were divided into nine ruling caciques or chiefdoms.[6] The first European to document the Térraba peoples in writing, in 1563, was Juan Vázquez de Coronado, who was a Spanish colonizer and became the first governor of Costa Rica (1562-1565). He was one of the few Spaniards to penetrate Térraba territory in the 1500s, as the Térraba peoples were known to be fierce warriors. Because of their rebellious attitude and actions, the Spanish wanted to relocate all Térraba peoples to the Boruca region in Costa Rica, which would also fulfill their desire to subdue the similarly bellicose Boruca peoples (Guardia 1913). Because of successful resistance by Indigenous groups, it wasn't until 1697 that a smaller group of Térraba peoples from the Brörán clan were forcibly relocated to present day Térraba territory in Costa Rica and the Spanish goal of placing them onto a *reducciones* was achieved. In assessing the goals of the Spanish, Jerhy's father, a respected Brörán elder named Don Enrique, explained[7]

> *Estos hombres [Españoles] tenían la misión de conquistar pueblos, pueblos originarios. Su misión era llevarse las riquezas de oro, plata y otras cosas de valor que tenían nuestros pueblos originarios y destruir toda la organización social de ellos para garantizar su conquista llamada 'civilización cristiana.'*
>
> These [Spanish] men had the mission of conquering peoples, native peoples. Their mission was to take the wealth of gold, silver and other things of value that our native peoples had and destroy their entire social organization to guarantee their conquest, called 'Christian civilization.'

[6] Chiefdoms are socio-political groupings typically comprised of a few hundred to several thousand people, "organized around a partially hereditary hierarchy…[that] lack rigid social stratification" (Service 1975). The chiefs were elected; their positions were not inherited but instead were achieved by being successful community leaders and warriors (Steward and Faron 1959).

[7] Personal account in *Hasta Que Muera el Sol: Antología de escritoras y escritores indígenas Bröran-Térraba* compiled by Alberto Tapia-Ortiz (2015:62).

Yeager (1995) argues that Spanish support of the *encomienda* system satisfied the crown's ideological position against chattel slavery in the new world, while also allowing the crown to exploit Indigenous labor for resource extraction (see also Cavanagh and Veracini 2016). The Valladolid debate over the Spanish treatment of Indigenous peoples in the New World was argued on moral and theoretical grounds, culminating in the New Laws, which meant to protect Indigenous peoples from enslavement but arguably failed to substantially alter Spanish treatment of the Indigenous peoples (Hernandez 2001).[8] The Spanish began importing enslaved African peoples into Costa Rica when Indigenous populations were depleted, forcing them to work on cacao plantations primarily on the Caribbean coastal region (Palmer and Molina 2004:26). All forms of slavery were officially abolished in 1823 in Costa Rica, at which time Indigenous and African peoples were freed, although systemic racism allowed only for their labor to be transferred onto *haciendas*, large estates or plantations run by Europeans. The *hacienda* system was based on an oligarchical and antidemocratic social order that maintained a territorial aristocracy, as only the Spanish colonizers owned land and had legal rights to resources. As such, Chaverri (1999) argues that Costa Rica was built on the backs of Indigenous and African peoples by enslaved and *hacienda* labor. Spain's attempt to set itself apart from other colonial powers through their rhetorical positionality against chattel slavery does not obscure the fact that they were nonetheless guilty of cultural and biological genocide; similar to its fellow European powers, Spanish colonization in Costa Rica decimated many native populations (Reséndez 2016; Stannard 1993).

Despite the historical reality of Spanish colonization, the myth of peaceful encounters and homogenous egalitarianism continues to be perpetuated through various media. The first meeting between the Spanish *conquistadors* and Indigenous peoples is depicted as peaceful in the mural of the *Salón*

[8] The Valladolid debate was between theologian Chiapas Bartolomé de las Casas and humanist scholar Juan Ginés de Sepúlveda in 1550. Las Casas argued that the Indigenous peoples should be treated as free men, in equity to colonizers. Sepúlveda disagreed because he believed the Indigenous were guilty of crimes against nature (human sacrifice and cannibalism) and should therefore be suppressed. While no side notably won the debate, it did result in the New Laws of 1542, which were "the New Laws of the Indies for the Good treatment and Preservation of the Indians." The debate excluded considerations of the humanity of enslaved Africans, ultimately leading to their mass chattel enslavement.

Dorado or the Golden Room at the *Museo de Arte Costarricense* in San José (Figure 3). The free museum is housed within the country's first airport at the edge of *Parque Sabana* and is a popular tourist attraction that displays temporary exhibits of contemporary Costa Rican art. The peaceful encounter between the Spanish and Indigenous peoples presented to tourists is a common curation choice, as I found while visiting multiple other museums throughout the country (see Appendix I).[9]

Figure 3. *Salón Dorado*, the Golden Room at the *Museo de Arte Costarricense* (Museum of Costa Rican Art). Portion of the wall that depicts a peaceful encounter between the Spanish colonizers and the Indigenous peoples in Costa Rica.

The image is reinforced by what tourists learn on tours and read in local guidebooks also. The self-proclaimed first eco-tour agency in Costa Rica, *Horizontes* Nature Tours, stated on their website:[10]

> the absence of precious metals and Indian labor force prevented the Spaniards from introducing semi-feudal institutions…most of the natives escaped enslavement by fleeing into the Talamanca mountains, where they perished from wars of resistance, epidemics and wars among rival tribes.

[9] As part of my research methodology, I visited museums throughout the country to gain a foundational understanding of Costa Rica in historical and contemporary artistic, cultural, and political contexts. Museums also provided a glimpse into how non-Indigenous and Indigenous Costa Ricans are represented on a national forum and inform the greater narrative and imagery of the country.

[10] Website of Horizontes Nature Tours: https://web.archive.org/web/20070922232020/http://www.horizontes.com/en/history.html.

> Other indigenous people were assimilated into colonial society. Still others maintained their cultural identity because they lived – and still live – in isolated mountain regions. The extermination and assimilation of the Indians yielded a more homogenous society…The pronounced class divisions that still exist in other Latin American countries never developed here."

This passage implies that the Spanish and Indigenous peoples had a harmonious interaction whereby Indigenous peoples simply "assimilated" into Spanish society. It ignores the death of hundreds of thousands of Indigenous peoples resulting from Spanish colonization. The passage attempts to erase the contemporary financial, educational, and health care inequities in the country as well. It also creates the impression that the only Indigenous peoples living today are those who reside deep in the mountains, discounting all those who live in cities and towns, and in/near Indigenous territories. Moreover, painting Costa Rica as a "homogenous" society serves to perpetuate the "white myth" of Costa Rican identity, which equates to a white person of European descent, who is Spanish speaking and Catholic (Mosby 2018).

Costa Rica's national identity equates itself "with an alleged white racial heritage…[that] generates xenophobia and promotes discrimination against the vast majority of visibly nonwhite Costa Ricans" (Palmer and Molina 2004:2). According to Townsend-Bell (2014:436), "Costa Rica lays claim to whiteness beginning in the colonial era, framing itself as an always white and fairly egalitarian society." Costa Rican historian Calvo Mora (1886) also referred to the civilized population as "white, homogeneous, healthy [wholesome], and robust." The white narrative distinguishes Costa Rica from its neighbors by contributing to the notion that they are "better" than they are (Biesanz, Biesanz, and Biesanz 1999; see also Campo-Engelstein and Meagher 2011).

In other settings, whiteness has been equated to Christianity, civilization, and urbanization (Whitten 1981), as well as having benefits of social and economic mobility (Bonnett 2002). As Roland (2013:399) illustrated in Cuba, perception or amount of whiteness "define[s] an individual's cultural designation" and is a determinant of "who belongs in spaces of privilege and power." In Costa Rica, those controlled spaces exclude Indigenous peoples from national political and development decision-making processes, as I explore in the context of hydropower development projects herein (see also Townsend-

Bell 2014). The white myth is maintained through processes of racializing space, wherein the central valley (the metropolitan region around the capitol, San José) has been a white space since colonization and as a result, the "dark periphery" where Indigenous peoples live (primarily in the southern mountain regions) has been decreasing in size throughout the postcolonial era (Townsend-Bell 2014:436).

The whitening of Costa Rica has been recounted in various forms by numerous academics. Pulsipher and colleagues (2017:180) state in their World Geography textbook "the fairly small native population died out soon after the conquest." Similarly, Helmuth (2000: xx) suggests termination of the entire Indigenous population in her chronology on the *Cultures and Customs of Costa Rica* that states in 1710, "the Talamanca region is finally wrested from Indian control;" there is no other mention of Indigenous peoples after that date in the entire book. Carls and Haffar's (2010:80-81) research on Costa Rican hydropower projects further reported that the Brörán peoples specifically "practice a non-Indigenous lifestyle, owing to agricultural colonization and racial inter-mixing;" that they have a "Complete loss of their language;" and that "No features of their ancestral culture have been preserved." They similarly wrote uninformed summaries of the other seven Indigenous groups in Costa Rica (Carls and Haffar 2010). Contrary to these accounts, Indigenous peoples did not all die out soon after conquest and they maintain many aspects of their cultures and identities through multiple acts of resistance and cultural revitalization.

Historian Vázquez de Coronado reported that the Spanish "failed" in their mission to fully dominate the peoples of Costa Rica because "the Indians are so wild and warlike that they have defended themselves and repulsed the Spaniards and conquistadors with greater valor than any other nation of the Indies" (*in* Fernández Guardia 1913:300). I argue that Indigenous peoples are alive not because of Spanish failures, but because of their own active resistance and success in fighting against unwanted cultural, social, and spiritual transformations.

One of the most notable confrontations between the Spanish and the Indigenous populations of Costa Rica occurred in September 1709 in the Talamanca region. A Bribri religious leader and chief named Pabru Presbere (Pabru meaning "*el Rey de las Lapas*" or chief of the macaw and Presbere meaning

place of running waters) led a unified uprising of Indigenous peoples against their Spanish oppressors. Oral history of the Brörán peoples proudly place them at this battle and many others. Pabru Presbere's revolt resulted in the death of several friars and Spanish soldiers, the death of a soldier's wife, and the incineration of 14 Spanish mission temples throughout the Talamanca region. Presbere and 700 of his Indigenous allies were eventually captured by Spanish soldiers and subsequently executed, enslaved, or deceased due to disease. Presbere was executed by garrote on July 1, 1710 after refusing to name any of his collaborators or their locations. He has since become a symbol of Indigenous unity, strength, and resistance for the 120,000 Indigenous peoples living in Costa Rica today.

Don Enrique and Jerhy frequently spoke about Pabru Presbere as an inspiration for their continued fight for autonomy, for their resistance to unwanted development, and their protection and recuperation of ancestral lands.[11] One of my first interviews in San José for this dissertation was with Alancay Morales, a Boruca man working with Forest Peoples Programme at the time. He told me that, first and foremost, the main concern preempting hydropower projects was concern over land tenure, as it was the root of all conflict between Indigenous and non-Indigenous peoples, which stems from colonization (see also Bozzoli 2000). He further explained that there was an ongoing and growing Indigenous peoples' movement across the country that seeks to reclaim their lands through a form of *recuperacion* or recuperation via squatting. The purpose of the movement is to protect and revitalize the land and the peoples' spiritual connection to it, protect water sources, and restore the ecology of the forests.

Don Enrique referred to his ancestors' resistance to the Spanish conquest as "*luchando por su espacio, su dignidad, su espiritualidad y su identitdad histórica*" [fighting for their space, their dignity, their spirituality, and their historical identity]" (Tapia-Ortiz 2015). One morning in March 2019, I sat patiently jotting down notes and swatting away mosquitos while speaking with Don Enrique about his experiences with the Indigenous resistance movement in Costa Rica. He is a surprisingly strong man for

[11] See also the *Costa Rica Indígena* Podcast.

his short stature and age. While he suffers from various ailments, he energetically works around the house and in the agricultural fields most days. He carries a pocket-sized copy of the Declaration of Indigenous Rights with him at all times in case he needs to reference it on his daily journeys.

That morning, Don Enrique summarized that in the beginning (1960s), alongside his family and friends, he protested mineral extraction and hydropower development in the southern region where they live. Increasingly throughout the 1980s and 1990s, Don Enrique hiked through forested pathways to meet with many other Indigenous leaders in the neighboring Indigenous communities within Boruca, Curré, Salitre, and Cabagra territories to discuss Indigenous rights and methods of ensuring their enforcement.[12] In the late 1990s, Don Enrique walked with a group of Indigenous peoples for five days from Térraba to the capital city of San José (132 miles) to deliver an Autonomy bill that they penned to the government.[13] They climbed almost 10,000 feet in altitude from their communities over the notoriously foggy, cold, and rainy *Cerro de la Muerte* (Mountain of Death or Summit of Death) and down the other side into the central valley. The Bill has been ignored by the legislature ever since, although Indigenous groups continue to pressure the government to acknowledge and act on it.

Don Enrique described their resistance movements as being "*una lucha muy fuerte*" (a very hard fight) as they had few resources to support their efforts. At one point in the early 2000s, so exhausted from marching, protesting, and fighting against unwanted hydropower projects, a new dam emerged [the Diquís] and he thought to himself "*Nada que hacer. Nada que podemos hacer*" (Nothing to do. Nothing we can do). However, Don Enrique's successful leadership and resistance strategies were recognized by other humanitarian organizations and he was an invited guest at meetings and workshops throughout Costa Rica, as well as in both Guatemala and Switzerland. Don Enrique's voice trembled and he cleared his throat as he recounted these stories, telling me they were "*gran experiencias*."

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[12] The leaders I refer to are the traditional leaders of the Indigenous communities, *consejo de mayors* (council of elders), and others like the Riveras who have a history of fighting for Indigenous rights and have been integral to implementation of Indigenous rights in Costa Rica. See Chapters Two and Three.
[13] The Indigenous Autonomy Law would give Indigenous peoples full autonomous governance and jurisdiction of their 24 Indigenous territories. Twenty-five years after the bill was introduced, it has yet to be passed or considered in Parliament.

Around the same time that Indigenous resistance movements began to grow in Costa Rica and throughout Latin America, gender equality movements also spread. Don Enrique's partner, Doña Digna, was among the first women in Térraba territory to participate. When I first met Doña Digna in the summer of 2016, she walked with a slight sideways limp that favored her left leg. Despite having just months prior been bitten by a poisonous pit viper (terciopelo or *Bothrops asper*) and suffering the after effects of necropsy, she worked heartily from dawn until dusk harvesting food and cooking for her family, maintaining the home, and helping care for her grandchildren.

In the 1970s, she went to Mexico with some fellow community members to participate in a women's march where she met with Indigenous peoples from all over the world.[14] They built a network of support, sharing ideas of how to maintain "*nuestra cultura propia*" (our own culture) and "*propias formas de vida*" (our own ways of life) in the face of ceaseless externally imposed changes. Once back in Costa Rica, Doña Digna served as president of *Servicio de Paz y Justicia* (SERPAJ) for two years to improve the equity of Indigenous peoples throughout the country.[15] Additionally, she was elected president of the local governance institution in Térraba territory in the 1980s. Her work in Indigenous and women's rights also took her to Bolivia twice in the early 1990s to stand alongside women fighting oppressive regimes, which she described as "*antihumano*" or anti-human.

Doña Digna used her growing knowledge and experiences to improve the livelihoods of women in Térraba and build regional female support against the barrage of dam projects threatening their communities, cultures, and connections to place. She explained that Brörán women learned how to use microphones, studied Indigenous law, and increasingly fought side by side with their partners, accompanying them on protest marches with their children in tow. Women and men in the community participated in road blocks and marches, while also revitalizing their culture through daily acts of

[14] I believe Doña Digna was referring to the World Conference on Women held in Mexico City, Mexico between June and July 1975, but she could not remember the name of it. She said she met Indigenous peoples from all over the world, even from places where she didn't know there were Indigenous peoples.
[15] SERPAJ, Service of Peace and Justice is a Human Rights NGO working throughout Latin America since 1974.

resistance (Kahn 2011; Pile and Keith 1997; Scott 1985). The elders successfully reintroduced culture and language into the school curriculums in their territory, and multiple traditional medicinal and agricultural methods continue to be passed on to younger generations (see also Chapter Two). As part of a multi-day New Year celebration, the Brörán and Boruca communities enact the *Danza de Diablitos* (Dance of the Little Devils), where Indigenous peoples wear hand-carved balsam masks and fight a person dressed as a bull. The bull represents the Spanish, as well as contemporary industry and development, but in this reenactment of their contact, the Indigenous peoples win, signifying their strength and continued survival.

As another form of resistance, water festivals are held in multiple communities throughout the year to share knowledge and provide support in the fight against hydropower projects that impact Indigenous peoples and their territories. I attended my first water festival on Sunday May 6, 2018. I left the Rivera home shortly after 7am and successfully navigated the bus system, arriving at Restaurant Hawaii outside of Perez Zeledon at about 9am. I met with my friend Raquel and her friend Sophí over a cup of coffee and a piece of chocolate cake to discuss hydropower development in the region. Raquel and I first met in 2016 in Térraba at a meeting organized by the Brörán women's group *Mano del Tigre* (Tiger's Hand) in collaboration with regional organizations *Bloque Verde* (Green Block) and *Voces Nuestras Asociación* (Our Voices Association).[16]

As I sat with Raquel and Sophí, I told them I planned to go to the World Hydropower Congress the next year.[17] Raquel asked, "Why do they still want to build dams when we know they are not green or clean energy? Who do we talk to and tell that we don't want dams, to stop building them?" Unfortunately, I had no answers to offer. She told me about the numerous meetings she has attended with government

[16] *Bloque Verde* is a social and ecological direct action group. They work in collaboration, support, and solidarity with diverse social movement groups throughout Costa Rica. *Voces Nuestras* is an alternative news site and radio show in Costa Rica. Over the course of the two-day event, women participated in team building exercises, ate lunch together, and talked about art as a medium for resistance. I also spoke with Raquel about her involvement with *Bloque Verde* and *Movimiento Ríos Vivos* (Living Rivers Movement), a group whose mission is to protect rivers in southern Costa Rica from dams and pollution.
[17] The World Hydropower Congress is a biennial meeting of the International Hydropower Association. In 2019, the meeting was held in Paris, France. I conducted participant observation and interviews at the meeting. See Chapter Four.

and electricity company representatives. Raquel described them as being understanding and empathetic, but when they returned to San José, they "must have forgotten everything" because they forged ahead with hydropower plans anyway, completely disregarding everyone's cultural and social-ecological concerns. We finished our morning snack and Raquel drove us 30 minutes up a dirt road to the small town of San Rafael in the Talamanca foothills. The community is one of many fighting against private hydropower development by the company H. Solís.[18] The company has about a dozen dams planned for the region in collaboration with the state and Costa Rica's national electricity institute (ICE for its Spanish acronym, pronounced E-say). The majority of people in the impacted communities have been in an active resistance movement to stop the proposed projects since 2013.

The festival was a family affair, with children running and playing between seats, cars, and other people. Community members and activists gave speeches, performed songs, and danced on the make-shift stage as *Voces Nuestras* broadcast the event live on the radio. The festival was held in the community town hall where people were also busy painting signs (Figure 4a), trading native seeds, and selling homemade arts, crafts, and jewelry. All these activities were also featured at another river festival I attended with Don Enrique, Doña Digna, and one of their grandsons the following spring in nearby Longo Mai.[19] Don Enrique stood with a group of men to talk about their work to stop dams (Figure 4b). River festivals and other everyday acts of resistance have had a significant impact on the community's ability to maintain their cultures, identities, and connections to place, though they have not ended the lingering structural violence that has continued since colonization in the form of development initiatives (cf.

[18] H. Solís (*Constructora Hernán Solís S.R. Ltda*.) is based in San José; they were founded in 1963 and continue to work on heavy infrastructure including ports, airports, highways, hydropower plants, and skyscrapers throughout the country. They are one of the largest private organizations working in collaboration with ICE to expand hydropower production in the southern region.

[19] Longo Mai (meaning Long Life) is an international organization, founded in Switzerland in 1973. It established a community in Costa Rica in 1979 with the help of the United Nations to assist Central American refugees. It has since evolved into a social-ecological haven in southwestern Puntarenas Province. Founder Roland Spendlingwimmer sponsored Don Enrique's trip to Switzerland and has been a life-long friend to the Rivera family.

Chatterji and Mehta 2020). Daily acts of resistance have been supplemented in recent years with an effort to implement and enforce Indigenous rights at the national and international levels.

Figure 4. Left (a): One of the signs people were designing. "*El agua es vida,*" or "water is life." Right (b): Don Enrique standing second from the left with the microphone in his hand, speaking with a group of other land defenders and anti-dam activists at a river festival during the 40th anniversary celebration of Longo Mai at the community center in Longo Mai.

Indigenous Rights and Legislation

National Laws and Lend Tenure

Costa Rica has some of the most extensive legal protections for Indigenous peoples in the Americas at both the national and international levels, a factor that enhances their image as an egalitarian society. However, many of the laws are not operationalized or enforced. In 1970, the state mandated that Indigenous communities be governed like all other communities throughout Costa Rica, with an *Asociación Desarrollo Integral* (ADI; Association for Integral Development; Cover 2020). ADI was integrated into Indigenous communities "to serve as an instrument of coordination of government, municipal, and communal efforts in the realization of projects of common interest that contribute to the country's social and economic development" (Jenkins and Hunter 2011:23). Within Indigenous communities, ADI were to "exist alongside traditional community organizations and function as the legal representative of the Indigenous peoples to the state" (Jenkins and Hunter 2011:24). However in reality, ADI replaced and erased traditional forms of governing, which was primarily through a *Consejo de Mayores* or council of Indigenous elders.

While it is generally understood in Térraba territory that ADI will listen to all voices and organizations within the territory and consider the opinions of those groups when making decisions, it is ultimately up to ADI what decisions are made. Furthermore, the national government will only negotiate or deal with ADI representatives regarding development, finances, land recuperation, and other legal matters. This arrangement has led to inadequate representation of the Brörán peoples at the national level, as ADI only selectively represents certain interests and is known to be corrupted (see also Chapter Two). The state-imposed structural systems meant to assist or protect Indigenous peoples have had the opposite effect, and actually hindered their abilities to participate equitably in decision-making processes (see also Campregher 2010). Specifically, ADI has been described as "ill-suited to the task of providing an effective and accurate mechanism of representation for Indigenous communities" (Jenkins and Hunter 2011: 29).

At the national level, the most comprehensive Indigenous legal protection, the *Ley Indígena* No. 6172 (Indigenous Law Number 6172, also known as the Indigenous Act) was established in 1977. Within the Indigenous Act, the state defined Indigenous peoples as "people that constitute ethnic groups descending directly from pre-Columbian civilizations and conserve their own identity" (Article 1; see also Vaage 2011).[20] The Indigenous Act also solidified Indigenous *reservas,* or reserves, that had been created previously, and established new ones. As Doña Digna explained, Indigenous peoples resent and do not use the word *reserva* to refer to their homelands because that is a name for a place where animals are kept; they prefer to call their homes *territories*, language I adopt herein.

As a Brörán child, Doña Digna grew up with her four sisters in what was then the Boruca-Térraba territory, which the government recognized as an Indigenous homeland first in 1935, then through legislation in 1956. The territory collectively marked and bounded parts of the traditional ancestral lands of the Boruca and Brörán peoples, respectively. Térraba territory currently encompasses 9355 hectares

[20] The Ley Indígena, original in Spanish, is accessible at https://www.wipo.int/edocs/lexdocs/laws/es/cr/cr057es.pdf.

(36 mi^2); representing only about 40% of their original territory.[21] An additional two territories were created in 1956, neighboring Ujarrás-Salitre-Cabagra and China Kichá. In the Indigenous Act of 1977, the Boruca-Térraba and Ujarrás-Salitre-Cabagra collective territories were distinguished as individual territories, for each of the respective peoples who traditionally occupied the lands, and established 19 other territories for a total of 24 (Figure 5).

Figure 5. Map illustrating the twenty-four territories of the eight Indigenous ethnic groups living in Costa Rica. Térraba territory, where the Brörán peoples live, is in the southern Pacific region of the country, shown in royal blue, adjacent to the two Boruca territories in yellow. Source: Defensa Pública.[22]

Approximately 42.6% of Indigenous peoples in Costa Rica live within one of the twenty-four Indigenous territories, which comprise 6.7% of the national territory (Solano Salazar 2002:348; Camacho -Nassar 2020). The majority of these territories are located in the southern half of the country, where

[21] View a historical outline of Térraba territory and the Brörán peoples from a website made by a local Brörán group: http://www.terraba.org/en/history.html ; see also Ricardo Fernandez Guardia (1913). Original territory boundaries are explained in *Reseña del patrimonio cultural del pueblo Brörán/Terbi del Territorio Indígena Térraba*, compiled by José Luis Navas Rojas in collaboration with University of Costa Rica and Térraba community members (2018).

[22] Image source: https://defensapublica.poder-judicial.go.cr/index.php/asesoria-legal/indigenas.

Indigenous peoples increasingly settled after Spanish colonization, as the region is mountainous, rich in biodiversity and resources, and far from the settler communities in the central valley (which houses 33% of the country's population). Law 6172 declared that Indigenous territories are

> inalienable and imprescriptible, nontransferable and exclusive for the indigenous communities that inhabit them. Non-Indigenous people will not be able to rent, lease, buy or in any other way acquire land or farms included within these reserves. The indigenous will only be able to negotiate their lands with other indigenous people. All handover or negotiation of lands or improvements between indigenous and non-indigenous peoples, is absolutely null (Article 3).

For those non-Indigenous peoples who began occupying Indigenous lands within the demarcated territories before the Indigenous Act (or before the 1956 establishment of the first three territories), the state declares that they acted in *buena fe* (good faith) and shall be relocated in accordance with the Expropriation Law (No. 7495) of 1995 (Article 5). They will be compensated with four annual installments of 25 *milliones de colones* (USD $40,896 or $235,849 total), money which was allocated in the national budget at the time. The non-Indigenous peoples who began to occupy the territories after the Indigenous Act was ratified acted in *mala fe*, or bad faith, and the "competent authorities must proceed with their eviction, without payment of any compensation" (Article 5). The gradual encroachment onto Indigenous lands is a form of slow violence as now, an estimated 60% of all Indigenous territories are occupied by non-Indigenous peoples.

In Térraba territory, the Brörán peoples only control 10% of their lands. The process through which Indigenous peoples have been gradually pushed off their ancestral lands has been supported by the state as they encouraged improvements via cattle grazing, farming, and other forms of development. It wasn't until the 1980s brought neoliberal based environmental reforms and recognition of Indigenous rights that encroachment slowed. However, the state has made no effort to relocate or remove non-Indigenous peoples from any of the territories despite their illegal presence. Because of inadequate titles and deeds, it is difficult for the state to differentiate who moved in before (*buena fe*) and after (*mala fe*) the law was passed. The Riveras indicated that the elders' council is composing a list of *mala fe* and *buena fe* actors for future reference as that knowledge is readily available to most of the people within the territory. ADI, however, has been unwilling to intervene and participate in these decisions. Many of the

buena fe land owners are willing to relocate if the government follows suit on its promises of financial assistance. However, if the state were to pay *buena fe* land owners four installments of *25 milliones de colones*, adjusting for inflation since 1977, they would be paying each family four installments of 5.2 billion *colones* (USD $8.6 million). Even if they maintained the original price and ignored inflation, the government could go bankrupt upholding their legal obligations of compensation.

Doña Digna explained the situation to me, stating that "*el estado nos abandonó*" (the state abandoned us), leaving the Brörán and other Indigenous peoples in the area to fend for themselves. Loss of the land, its resources, and the complexities of reclaiming it has resulted in high levels of poverty and malnutrition within Indigenous territories. The United Nations Development Programme reports that 70.1% of Indigenous households do not meet the minimal level of basic needs, while the national average is 24.6% (Ixchíu 2020). There is little recourse for gaining access to resources, as institutional racism and discrimination by governance systems have reduced the community's capacity for self-determination, sovereignty, and autonomy (also evident in the decision-making processes regarding hydropower, see Chapter Three).

The Indigenous Act additionally specifies that territories should be governed "through their own traditional communal structure or by the law of the governing state, under the coordination and advice of CONAI" (Article 4). CONAI is the National Indigenous Affairs Commission, which was established in 1959 to represent Indigenous peoples in the state's general assembly. Instead of providing a space for Indigenous representation, Stocker (2005:41) argues that Indigenous territories and CONAI were created "with the express goal of assimilating the indigenous populations" by integrating Indigenous peoples into "the development process."

To rectify many of the issues that Indigenous peoples have faced as a result of the state's inability to enforce its own laws, Indigenous peoples drafted their own Autonomy bill, *Proyecto de Ley de Desarrollo Autónomo de los Pueblos Indígenas* (Bill for Autonomous Development of Indigenous Peoples, or Bill hereafter). The Bill would afford Indigenous communities full control of their territories and resources (above and below ground), asserting and reinforcing their rights to sovereignty, self-

determination, and autonomy. The Bill also proposes to eliminate CONAI and replace ADI with traditional Indigenous councils. It has been stalled and ignored in the legislative branch ever since its introduction by Don Enrique and his collaborators. The International Working Group on Indigenous Affairs (Camacho-Nassar 2020:390) says the state's refusal to pass it is due to "the continuing racist attitude that persists in the country, as well as the opposition of the private sector, which see the right to self-determination as a risk to extractive industries."

Additionally, the IWGIA report critiques the fact that the country has yet to implement its National Policy for a Society Free from Racism, Racial Discrimination and Xenophobia, which should have been activated in 2015 for the 2014-2025 period. They state that the precautionary measures passed by the Inter-American Commission on Human Rights from April 2015 to protect the Indigenous peoples of Salitre and Térraba territories from non-Indigenous land usurpers have also not been implemented yet (see following sections). Many of the programs developed by the government claiming to be for Indigenous justice are critiqued for being "Western development concepts" that did not incorporate appropriate cultural concerns into their policies (Camacho-Nassar 2020:392). A similar lack of just and equitable treatment of Indigenous peoples and their traditional legal systems is perpetuated by lack of enforcement of international legislation and treaties.

International Legal Protections

Costa Rica's constitution declares that "international treaties and conventions ratified by Costa Rica are of a higher authority than national law" (Article 7, in Schulting 1997). As detailed in the Introduction, legal rights are guaranteed to Indigenous peoples under international laws, namely the Indigenous and Tribal Peoples Convention (ILO 169) (Swepston 1990) and the Declaration of the Rights of Indigenous Peoples (UN 2007). ILO 169 guarantees Indigenous peoples the right to consultation and equal decision-making regarding development projects (Article 6) and the right to determine the types of development in their communities (Article 7). The Declaration of the Rights of Indigenous Peoples, ratified by 144 nations in 2007, reemphasized these rights of autonomy, self-determination, and self-governance, and established a

baseline set of standards for protecting the survival and cultural integrity of Indigenous peoples. Such international treaties provide a legal foundation for Indigenous peoples to assert their rights and successfully stop unwanted development projects. Many countries do not understand the laws, do not respect them, do not know how to implement them, and frequently do not have a protocol in place to operationalize them, rendering them ineffective.

The Indigenous and Tribal Peoples' Convention (ILO 169) was ratified in Costa Rica on April 2, 1993 and they signed the Declaration of the Rights of Indigenous Peoples in 2007. Yet it wasn't until 2018 that there was a structural mechanism through which those standard rights could be operationalized. After decades of legal battles between Indigenous peoples and the state-national electricity institute over hydropower development (see Chapter Three), the Costa Rica Supreme Court ordered a consultation process to determine the best methodology for obtaining consent, known as "the consultation to consult" or *la consulta.* The *consulta* was a two-year process that began March 9, 2016. State representatives met with Indigenous communities in all 24 territories multiple times throughout the process to develop a framework through which free prior informed consent (FPIC) could be reached. According to representatives from the office of the president with whom I met in San José in the spring of 2017, consultation is important for achieving a greater respect for Indigenous peoples' human rights in state development initiatives. The day before our meeting, the representatives had been in Térraba territory, where they successfully held their first meeting with over 70 Brörán elders. I was told that ongoing conflicts and tensions resulting from issues of representation and governance within Térraba prevented meetings in the first year of the program.

At the meetings, Indigenous community members described culturally appropriate ways in which they could be consulted on future projects, which should not only incorporate their concerns, knowledges, desires, and epistemologies, but also provide space for their equitable participation in the planning and decision-making processes. Meetings also focused on building trust and providing avenues for information transparency between the state, electricity company, and Indigenous communities (McPhaul

2017). On March 6, 2018, the consultation was completed, and President Solís ratified it as the General Mechanism for Consultation of Indigenous Peoples.

The final consultation mechanism has its caveats. First, only Indigenous peoples living within Indigenous territories are consulted about development projects. Indigenous peoples not living within territories when the government established them are excluded from all forms of legal Indigenous governance and rights within those territories, despite living on ancestral lands. Second, the Mechanism combines "culturally appropriate" methods from eight different ethnic groups into one commonly applied process. There are therefore a wide array of compromises that had to be made by all parties to find common ground. Third, "consultation" does not equate to "consent." There are three potential outcomes of a completed consultation process: (1) the Indigenous community will approve of the proposed project with minimal revisions required, (2) the Indigenous community will provisionally approve the project if significant revisions are completed, or (3) the Indigenous community will deny the project. Each of these outcomes are then considered by the state and/or industry. If the state determines that the project is of national importance, they are able to declare the project essential and it will proceed despite the wishes or demands of the Indigenous peoples. It is yet to be seen how equitable the process will be.

Environmental Agenda and the Misnomer 'Green Republic'

Costa Rica's reputation for having an environmentally-focused governance agenda earned it the label of "Green Republic" (Evans 1999). The country's environment initiatives focused on sustainable development projects (Bozzoli 2000; Fletcher, Dowd-Uribe, and Aistara 2020), with ecotourism emerging as the favored methodology of meeting simultaneous goals of social, economic, and environmental growth and wellbeing. Ecotourism now represents over 3% of Costa Rica's GDP (Honey 2008; Hunt, Durham, and Menke 2020), and it has helped fund expansion and monitoring of the country's protected area network. Currently, approximately 28% of the country's territory and 1% of its marine region are bounded within protected areas (Barquet and Andersson 2020; UNEP-WCMC 2019).

Costa Rica has earned international recognition as a leader in environmental and climate policies by instituting one of the first nationwide programs for payments for environmental services (PES) in 1996 and co-founding the Reducing Emissions from Deforestation and Forest Degradation (REDD+) program in 2005 (Wallbott and Florian-Rivero 2018; see also Fletcher and Breitling 2012). Both PES and REDD+ have been critiqued as new forms of enclosure whereby elites economically benefit from 'land grabs' while Indigenous and other forest-dependent peoples are further marginalized (Johns 2012; Porras et al. 2013). Doña Digna is critical of these programs as she is familiar with the ways in which other Indigenous peoples in Costa Rica have been denied access to forest resources when they participate (see also Wallbott and Florian-Rivero 2018). While approximately 60 million Indigenous peoples around the world depend upon forest resources for their livelihoods, they have very limited decision-making powers regarding how those forests are utilized, just as the Costa Rica Indigenous population does (Abidin 2015).

Costa Rica announced its plan to become 100% carbon neutral by 2021 at the Bali United National Climate Change Conference in December of 2007 (Sánchez 2012). This goal was reinforced in their commitment to the Paris Climate Agreement in 2015, which entails offsetting, reducing, and avoiding domestic carbon emissions by utilizing hydroelectric power, implementing reforestation projects, funding emission reduction activities (such as buying carbon credits), and exploring other alternative energy sources (Ibid). The reality of obtaining carbon neutrality by 2021 is no longer feasible under the current trajectory of greenhouse gas emissions, policy implementation, and pledges. The primary obstacle has been the pollution from the transportation sector. Instead, carbon neutrality may be achieved by 2085 if Costa Rica successfully fulfills their updated pledges to the 2015 Paris Climate Agreement.

Araya (2020) notes that Costa Rica's announcement to become carbon neutral was made with no plan for operationalization. However, in preparation for COP21 in Paris, Costa Rica was forced to make specific targets to reduce its greenhouse gas emissions. I asked Roberto de la Ossa of *Alianza Nacional Ríos y Cuencas de Costa Rica* (the National Alliance of Rivers and Basins of Costa Rica) his opinion of the country's climate neutrality goals during an interview in 2018. He stated:

> this is another illusion of Costa Rica, to be carbon free. We have been talking about those issues, they promised 2018, then 2020, then 2025, and I can assure [you], it will be 2050 and we still won't reach that goal…Costa Rica is very smart at selling to the world, but nothing is being done radically to achieve that goal. It is true that Costa Rica has a fantastic attitude towards the environment, but we have very clear examples that what we talk is not necessarily what we do. That [carbon neutrality] is not going to be happening in my lifetime, I don't think so…that is one of the parts of how Costa Rica behaves, we are a green nation, we have the fantastic life with nature, but we are really, very dirty as a country.

Finally, in 2018, President Carlos Alvarado offered Costa Rica as a global lab for decarbonization, to illustrate to other countries how to transform into a low carbon economy (Flagg 2018; see also Fletcher, Dowd-Uribe, and Aistara 2020). ICE claims to successfully provide electricity to 98% of the population; the remaining 2% of the country that do not receive consistent and affordable electricity are those in the Indigenous communities. With regularity throughout my dissertation field research, the electricity would flicker on and off or turn off for hours. After five hours of power outage one day, the news informed us that a glitch was responsible for the country's complete loss of power—but it was the fault of Panama's infrastructure, not Costa Rica. Many of the communities within Térraba territory do not have access to electricity or clean drinking water. On many occasions, I saw children guiding their horses to springs and trickling streams to collect buckets of water for drinking, cooking, and bathing.

According to the Climate Tracker, Costa Rica is categorized as "2ºC Compatible," meaning it will meet its pledges to keep global temperature increases below the two-degree target. The country's on-target trajectory appears to have been made possible only recently by the significant decrease in travel due to Covid-19 restrictions.[23] Meanwhile, energy demand has continued to steadily increase at 5% per year, placing continuous pressure on the government to meet demands for uninterrupted, cheap energy (Anderson et al. 2006). The most recent national electricity institute report states that the country's electricity grid is comprised primarily of hydropower (67.5%), wind (17%), and geothermal energy (13.5%) (ICE 2020). For five consecutive years, Costa Rica has produced over 98% of its electricity from renewable sources (Arias 2016). These numbers do not accurately depict the country's overall energy

[23] See Climate Tracker data at: https://climateactiontracker.org/countries/costa-rica/

budget, however, and numerous social media and news outlets erroneously reported that Costa Rica was running on almost 100% renewable energy (cf. Zuñiga 2019).

In 2015, renewable energy usage accounted for only 38.7 percent of total actual energy consumption in Costa Rica.[24] In 2019, that number appeared to have decreased in proportion, as oil, gas, and coal made up the majority of energy sources for Costa Rica (84%), primarily utilized in the transportation sector (Figure 6). In terms of impact on Indigenous peoples, the government is pushing to decarbonize by cutting their use of fossil fuels via increasing hydropower and renewable energy sources. The locations where hydropower, geothermal, wind, and solar production would be most cost effective are in or around Indigenous territories, placing increased strain on already tense conflicts over land tenure.

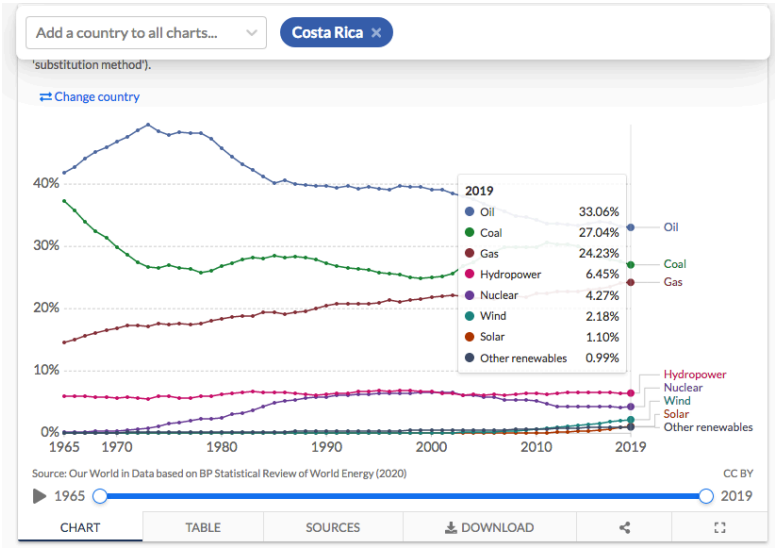

Figure 6. Chart illustrating the sources of energy utilized in Costa Rica between 1965 and 2019. Oil, coal, and gas account for almost 85%, while hydropower is almost 6.5%, and nuclear is 4.2%. The remaining balance is from wind (2.18%), solar (1.10%), and other renewables, such as geothermal and biomass (.99%). Source: https://ourworldindata.org/energy/country/costa-rica?country=~CRI

As explored in the Introduction, government, transnational agencies, and industry leaders involved in climate governance promote hydropower as a mitigation solution to the climate crisis. Costa Rica's electricity company has capitalized on this momentum by reframing the issue to argue for their

[24] World Data information available at the following website: https://www.worlddata.info/america/costa-rica/energy-consumption.php

continued exploitation of freshwater resources. However, mounting scientific evidence counters claims of hydropower as a "clean" resource and challenges its ability to fulfill its stated objectives of climate mitigation and sustainable development. Hydropower projects, specifically those in tropical regions (where they are increasingly concentrated), release considerable amounts of methane, a significantly more potent greenhouse gas (GHG) than carbon dioxide (Fearnside 2002, 2004, 2005, 2013; Fearnside and Pueyo 2012).[25]

Hydropower projects in Costa Rica have been known to destroy biodiversity and ecosystems (Anderson, Pringle, and Rojas 2006; Anderson, Pringle, and Freeman 2008; Hermoso 2017; Rosenberg , McCully, and Pringle 2000). Similar to large dams around the world, those in Costa Rica have significant negative impacts on downstream hydrologic cycles and challenge the health of their overall river basins (Laurencio 2006) in part due to changing sediment regimes that alter biomass (Antoine et al. 2020). Opperman and colleagues (2019) have argued that Costa Rica has not yet managed to find "energy solutions that are simultaneously low cost, low carbon, and low in conflict" in their critique of the country's hydropower.

Regarding conservation programs and ecotourism, Indigenous peoples have historically been excluded from participating or financially benefitting. Ecotourism for example, "dramatically restructure[s] land tenure, flows of labour and capital, forms of subsistence, and local and regional demographics…[and] displacement" (Büscher and Davidov 2016). Rivers-Moore (2007) critiques the Costa Rican tourism sector for its appropriation of space in the national narrative, selling it as a safe, "white" space for mainly Northern, US or European, white tourists. The ecotourism enterprise simultaneously makes "bodies of colour" invisible within the national imaginary and hypervisible as exotic attractions (Rivers-Moore 2007). Within Térraba territory, very few people work within the

[25] Cement, a key component of dam construction, contributes 0.5 tons of carbon dioxide per ton of cement into the atmosphere (Boden et al. 1995), making it the world's third-largest source of anthropogenic emissions of carbon dioxide (Andrew 2018).

tourism sector, yet tourists pass through Indigenous territories searching for the cultural tourism experience that the government promotes.

One day in Térraba as I lounged in the shade waiting for the heat to pass, an obvious carload of tourists slowly passed the house in a shiny rented car. The tall, pale white occupants gazed out the windows at the homes they passed and came to a stop when they spotted another white person within the space—me. They reversed and pulled into the Rivera's driveway. This group of Germans did not speak Spanish, so they were quite relieved that we could communicate in English. They inquired as to where they could partake in authentic activities with Indigenous peoples. I briefly described the variety of activities around town, asked if they were looking for a tour or wanted to meet Jerhy to learn more about the culture, but they were largely uninterested. I pointed out numerous small home shops around town where some Brörán peoples sell artisan pieces like jewelry, carved bowls, and furniture. But they were looking for more of a textbook-style "authentic Indigenous" experience that included peoples in traditionally historical clothing performing some type of ritual ceremony speaking in an unknown language. They inquired as to where the masks were made, a reference to the more well-known balsam masks that are made on a larger scale in Boruca, the next territory over. They jumped in their car and continued up the steep hill to Boruca in hopes of getting the authentic experience they desired.

Doña Digna chuckled to herself when I described the encounter, shaking her head and mumbling something under her breath in disdain. Government programs encourage Indigenous peoples to offer cultural tours, but many are not interested in performing for tourists or becoming commodities that can be sold within the tourism market (cf. Comaroff and Comaroff 2009). One Brörán craftsman told me that although dams would bring tourists—to whom he could sell his goods—they were not the *kind* of tourists he wanted in Térraba, insinuating that they would not respect nature or culture there. Furthermore, many believe that eco-tours are a form of selling nature, something that goes against many Indigenous peoples' spiritual beliefs and connections with the environment (see also Chapter Two). When ICE was promoting the economic benefits of hydropower to the Brörán peoples, they pointed to the large reservoir that would be available for recreation and tourism activities. Indigenous peoples are not in the position to benefit or

enter into the tourism industry as most of the lands overlooking or near the reservoir are controlled by non-Indigenous peoples. Furthermore, Indigenous peoples either had no desire to participate, were not in a financial position to be able to participate, or were against that form of development.

Dr. Gerardo Budowski, a conservation scientist who worked in Costa Rica for decades, suggested that the ecotourism-conservation relationship could be one of conflict, coexistence or symbiosis (see Boza 1993).[26] My other experiences participating in eco-tours throughout the country where guides feed wild animals, mimic howler monkey calls to spur a response, and entice sea turtles to lay in unfavorable locations by adding sea water to nests (Hite 2020), highlight the inconsistencies and misappropriations of the "eco" in tourism. I am less inclined to believe it is a relation of symbiosis given the failures of the ecotourism-as-conservation paradigm (Ibid). Tourism appears to be another method of controlling spaces to maintain the image of a homogenous, white society. This racialized space is evident in economically developing countries like Cuba, where the government limited interactions between tourists and citizens, particularly those who had darker complexions, to re-solidify "traditional racial hierarchies" (Roland 2006:160).

Costa Rica's sustainability platform has been critiqued for its inability to sustain growth and equity simultaneously (Herrera-Rodríguez 2013; Vandermeer 1991). Isla (2015) argues the state appropriates environmental rhetoric to manufacture consent for resource exploitation, consequentially producing Costa Rica's social image, and concludes that the "greening" of the country is a secondary result of political and economic processes, not its intended purpose.[27] Most studies of Costa Rica's successful sustainable development, biodiversity conservation, and environmental policies avoid "the contested landscapes and social practices that are destructive of nature... Furthermore, the voices and actions of rural Latin Americans are critically absent from these studies [including] those socially situated

[26] Dr. Budowski was also the first Director General of the International Union for the Conservation of Nature.

[27] According to Isla (2015:4), "greening" refers to the neoliberalization or "so-called sustainable development" program through which Costa Rica exchanged debt for nature, and their economy became intricately linked to the environment.

actors whose everyday lives and interactions are key factors in how environmentalism actually works" (Vivanco 2006:7). Various aspects of the country's environmental agenda add to the slow, epistemic, and affective violence that frequently leads to more immediate forms of violence, including the capitalist production of space and corporeal violence.

Violence in Indigenous Territories

Transformations of Space

In the case where the landscape is "incorporated into origin myths, historical accounts, and religious symbolism" (Scudder and Colson 1982:270), as is the case for the Brörán peoples, threats of large-scale development projects can have the same physical and affective impacts as if they were built (Gupta and Ferguson 1992). The production of space re-engineers terror and violence as it consumes Indigeneity (Bessire 2014), attempting to silence the past, present, and future of Indigenous peoples and their voices (Gordillo 2014:200). The Brörán peoples have spiritual and cultural connections to places within their territory and traditional lands (see also Chapter Two), and the potential future without those places would create irrevocable damage to the Brörán peoples, their identities, and epistemologies. Even though the dam itself has not been built, supportive infrastructure has materially altered space and transformed connections to place. ICE plowed through forests, paved over streams, polluted water ways with their heavy equipment, and drilled two 200-meter long tunnels into the mountainside.[28]

Jerhy wanted to show me the tunnels so I could better understand how the threats they face are actualized on the landscape. On Sunday May 27, 2018, after a hearty breakfast of fried corn cakes, scrambled eggs, and black coffee, we set off to inspect the destruction. We drove down as far as the road would safely take us, passing through town towards the Inter-American Highway, taking the left just before the two-story, open-aired wooden house. We drove past countless cow pastures before I paused to put the rental in 4-wheel drive. I cautiously proceeded over the concrete bridge that ICE built, which was

[28] This infrastructure was part of what IADB describes as "geotechnical studies" that were needed before the dam could be built.

over-run by the stream it spanned. Eventually, the road became too rough to drive on, so we parked and hiked along the road ICE carved out through the meadow, spooking a pair of Southern Lapwings (*Vanellus chilensis*) that jolted up out of the tall grass ahead of us.

We began the descent down slick, moss-covered, diamond-shaped concrete slabs that hadn't been driven on in a long time; they were covered by overgrowth, brush, sticks, and leaves (Figure 7a). Despite being completely obscured by thick vegetation, the pathway Jerhy took us on lead directly to the first tunnel, located about halfway down the mountainside. Inside the structure, water was dripping from the steel and wooden arched ceiling into large puddles below. There were weeds growing along the ground and up the walls (Figure 7b). Jerhy and I squeezed through the rusty bars one appendage at a time to get a better look inside. We took some photos and stayed within five meters of the entrance, conscious that being inside the abandoned space presented a very tangible hazard.

Figure 7. Left (a): Overgrown, mossy, cement road to the proposed Diquís dam site. Right (b): A look inside the first tunnel, with its rusty arched ceiling. The front was blocked by metal rebar gates visible in the foreground.

We continued downhill to the second tunnel, admiring the view of the curving river below. Jerhy pointed out the high-water line where Hurricane Nate had flooded the river the year before and washed away an extra layer of trees along the river bank.[29] Once we reached the river bed, we could see the

[29] In October 2017, Hurricane Nate ravaged Costa Rica. Former President Solís declared a state of emergency as 800 people were rescued, the Inter-American highway was damaged by landslides, homes were washed into the Térraba River, 42 bridges collapsed, and drinking water was cut off to 500,000 people. 14 people died. It cost the country $562 million dollars in damages and is known as the "costliest

second tunnel ahead, only half of its barrier remaining (Figure 8a), as Hurricane Nate had ripped off part of the gate. Inside the tunnel, vegetation grew on a substantial sand deposit surrounded by a healthy-sized body of stagnant water that maintained the smell of mold and bat droppings (Figure 8b). I feared one of the river's caiman residents could have been relaxing inside and didn't venture too far in.

Figure 8. Left (a): Tunnel at the base of the mountainside, overgrown with vegetation and missing half of its gated barrier. Right (b): Inside the tunnel, vegetation is growing on a sand bank in the foreground. Jerhy standing at the edge of the sand looking into the murky water.[30]

We walked on top of the 50-meter long cement berm that the electric company built to protect the tunnel from being undercut by the swift current and rapids running past. The riparian zone that they flattened could perhaps be repurposed for community benefit, as it makes a great location for rafting inputs or outhauls. Jerhy has imagined that possibility and said they would need some 4-wheel vehicles and carts to take people back up the hill we just trotted down, something I wish were readily available as I struggled to make it back up myself. While Jerhy zig-zagged uphill at a leisurely pace, I gasped for air and felt a lack of oxygen going to my brain. I had to force one foot in front of the other. He allowed me to sit for a few moments in a futile attempt to catch my breath. It felt like an apt metaphor for what the

natural disaster in Costa Rican history." In Rey Curré, an indigenous community of the Boruca peoples located along the river near Térraba, the entire community was underwater; luckily everyone evacuated on time.

[30] For more visuals on the tunnels and ICE workers assessing the area, see also *Detrás Del Diquís – La Verdad Sobre El Proyecto Hidroeléctrico* at https://www.youtube.com/watch?v=x1uuIYNaOls and *Teletica 7 días Proyecto Diquis* at https://www.youtube.com/watch?v=tFQLdrLaAnk.

community was currently enduring: attempting to catch its breath from the effort of constant resistance against hydropower projects.

Violence on the landscape is an abuse of peoples' connections to place, which are directly related to their cultures, identity, and epistemologies (Basso 1996; Cruikshank 2005). The community members I spoke with were horrified at the construction of the tunnels because there are a multitude of burial sites in the region that could have been disturbed—places that they are inherently connected to and responsible for protecting. Yet this was a new place, one that was forged by the contradictions embedded within it (Gordillo 2014). Bessire (2014:xi) refers to such spatial transformations as evidence of "world-ending violence relentlessly stalking" Indigenous peoples. Furthermore, the tunnels exemplify the blatant abuse of Indigenous rights, symbolizing the institutional inequities between the state/electricity company and Indigenous peoples. Landscape violence has also transcended into corporeal violence, particularly because these conflicts over the use of resources frequently become physical.

Physical Violence

Indigenous peoples are among the most impacted by physical violence because they are often at the forefront of environmental and resource protection. Costa Rica is not immune to this violence. In the three decades since the first documented murder of peasant Gil Tablada over land tenure conflicts, there have been 75 documented attacks against land defenders, prosecution of 36 environmental activists, multiple death threats, and at least 10 murders, which had been carried out by the state, paramilitary groups, and/or "white" land owners (Mora 2018).[31] There have now been 27 reported Indigenous and environmental activists murdered in Costa Rica (Figure 9).[32] Costa Rica's homicide rate peaked in 2017 at 12.18 (per 100,000); the majority was attributed to narco-trafficking and most of the culpable were jailed or

[31] Gil died while protecting the rights of local squatters on usurped lands in Guanacaste Province on November 18, 1970

[32] Infographic created by Geog. A. Jiménez based on Mora 2018.

otherwise penalized.[33] In contrast, there have been no prosecutions of any of the assassins responsible for killing the 27 activists (Mora 2018).

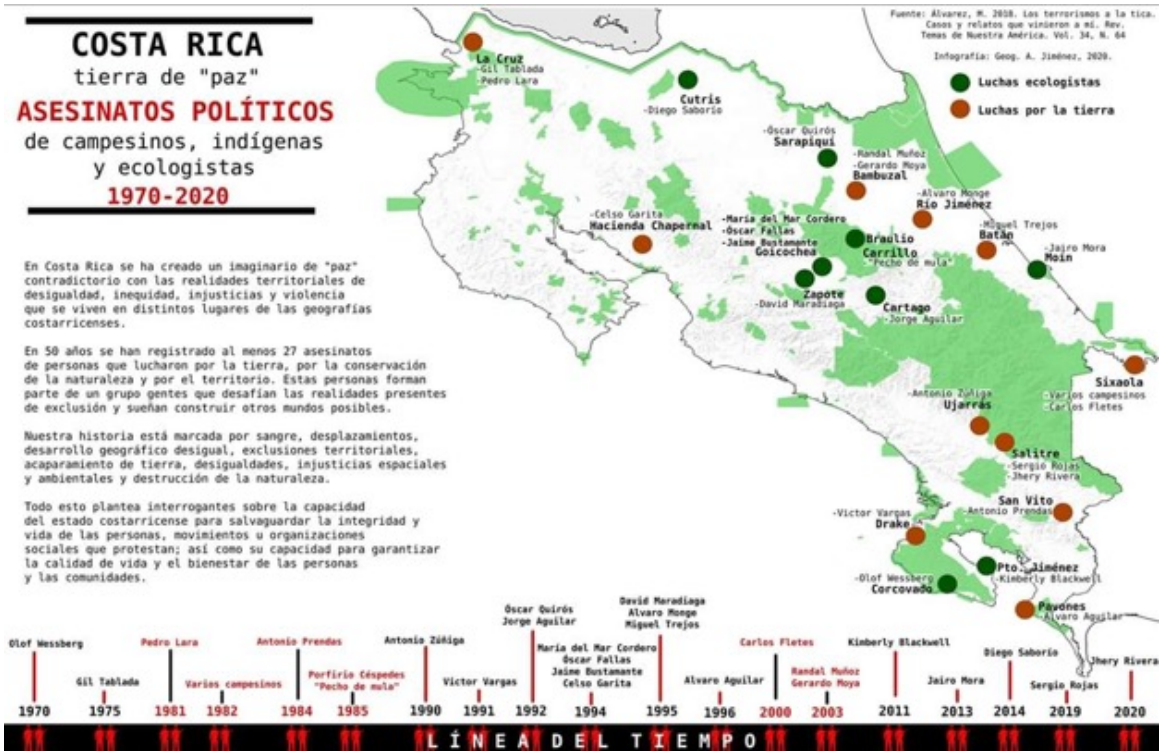

Figure 9. Image entitled: *Costa Rica: tierra de "paz" Asesinatos politicos de campesinos, indígenas y ecologistas 1970-2020* (Costa Rica: land of "peace" Political assassinations of farmers, Indigenous, and ecologists 1970-2020). Paragraph translation: "In Costa Rica an imaginary of "peace" has been created that is contradictory to the territorial realities of inequality, injustice, and violence that are experienced in different parts of the Costa Rican geographies. In 50 years, there have been at least 27 murders of people who fought for the land, for the conservation of nature, and for the territory. These people are part of a group of people who challenge the present realities of exclusion and dream of building other possible worlds. All this raises questions about the capacity of the Costa Rican state to safeguard the integrity and life of the people, movements or social organizations that protest; as well as its ability to guarantee the quality of life and the well-being of people and communities." Jerhy is incorrectly listed under "Salitre" with Sergio, and should be reported as being from Térraba.

Two of the places with the highest rates of violence in Costa Rica are in Salitre and Térraba territories, against the Bribri and Brörán peoples, respectively. There is an ebb and flow of violence,

[33] Despite Costa Rica's reputation for being a safe country, particularly in regards to tourism (see, for example, Lakhani 2020a), its homicide rate has increased substantially in the past decade due to narco-trafficking. In 2018, the rate dropped to 11.26 per 100,000, although any number above 10 is considered to be an epidemic by the United Nations Office on Drugs and Crime. For comparison, the United States' homicide rate in 2018 was less than 5 per 100,000. In 2019, Costa Rican drug boss, known as M1 who has ties to Sinaloa cartel, was arrested in San José. He was on the DEA and FBI most wanted lists.

typically prompted by external development projects that reignite tensions over land tenure. Starting in early 2012, the new wave of violence began in Salitre when non-Indigenous peoples actively terrorized the Bribri people, burning down their homes and chasing them off Indigenous lands with clubs and machetes. One Bribri man related the uptick in violence directly to the payments for environmental services program that the government initiated in their attempt to become carbon neutral. Since only those in control of the land would have access to the money, the non-Indigenous peoples took actions to remove the Indigenous peoples to ensure their own financial gain (McPhaul 2015). Multiple people were injured in the confrontations and local police did nothing to assist the Indigenous peoples.

On September 17, 2012, Bribri leader Sergio Rojas, who had been promoting Indigenous recuperation activities, survived an assassination attempt; he was shot at six times while riding in a taxi. The regional government municipality had recently declared Sergio *persona non grata*, adding to the precarity of the situation. There have also been repetitive assassinations attempts made on Brörán leader Pablo Sibar for his leadership in recuperation of Térraba lands.[34] In the course of the year, at least 20 Indigenous people had been physically injured by non-Indigenous peoples (FPP 2013). The attacks continued into 2013. According to the Forest Peoples Program, in January 2013:

> Wilbert Ortiz was shot in the leg, Marcos Obando Delgado was stabbed with a machete leaving him with deep lacerations and two severed fingers and Mainor [Minor] Ortiz Delgado was also stabbed with a machete and tortured with a hot iron rod, permanently scarring his chest. Undoubtedly, these attacks have caused severe physical and psychological trauma.

On September 1, 2013, Jerhy Rivera survived the assassination attempt described earlier. Finally, on April 30, 2015, the Inter-American Commission on Human Rights (IACHR) granted provisional measures (MC 321-12) for both Salitre and Térraba territories, which specifically orders the state to protect Sergio, Jerhy, and their other community members from physical harm.[35] This was the only measure of its kind in Costa Rica, granted because of the serious danger that the Indigenous communities were in as a result of

[34] Pablo Sibar is a well-known Brörán elder leading land recuperation activities throughout Térraba territory (see also Chapter Three). He has been physically attacked and received death threats for his activism over the past few decades.
[35] IACHR offered the same protections to Berta Cáceres (see Introduction).

non-Indigenous peoples illegally occupying their lands, and the total lack of protection by the state authorities (FPP 2020b). According to the Forest Peoples Programme, the Costa Rican state has never adhered to the IACHR guidelines to protect any of the Indigenous peoples being threatened. This is clearly evident in the violence in both Salitre and Térraba that continues today.

Sergio Rojas was killed on March 18, 2019 in his home, after being shot multiple times. The morning Sergio died, he had reported his assassin and others to the police because he felt his life was in danger. In October 2020, the prosecutor's office closed and archived Sergio's case, claiming they could not identify the shooters, despite witness testimony and evidence pointing directly to the culprits. When two Bribri female leaders were threatened recently, they reported it to the *Fuerza Pùblica*.[36] They were told by the police that the threats "were not their responsibility [and] it was not possible to file a criminal complaint" (FPP 2020a). Violence against Indigenous peoples increased throughout 2019 in the communities of Salitre, Térraba, Cabagra, China Kichá, and Maleku, primarily over land tenure, as the non-Indigenous peoples became infuriated over Indigenous peoples' attempts to recuperate their ancestral lands. On February 17, 2020, Bribri leader Minor Ortíz was shot, making it the sixth assassination attempt he has survived in the past decade. One week later, on February 24, 2020, Jerhy Rivera was murdered.

The following is a description of the events leading to Jerhy's death as told by his mother's sister, Elides Rivera Navas, in an open petition to the Inter-American Commission on Human Rights (interview filmed by the Forest Peoples Programme):[37]

> On February 23 of this year [2020], we took the decision to recover some land in our territory that we had thought we had access to. These are lands that belong to us. Because the State's recovery plan is slow and complex, it has been on the table for six years and to this day, not a single hectare has been recovered. On the 23rd, several families came to recover their land. We entered the land at approximately 2:30pm. We notified the regional head of the police that we were going to do this and that they should be on the alert for any situation that might arise in terms of violence, because

[36] The Fuerza Pùblica is the name of the police force of Costa Rica. They replaced the army when it was abolished in 1948. It is managed by the Ministry of Public Security. They are charged with performing security, law enforcement, counter-narcotics, border patrol, and tourism security. An elite commando unit within the police force work directly for the Ministry of the President. The forces are largely supplied with weaponry and training from the United States, including the School of the Americas (https://soaw.org/costa-rica-soa-graduate-arrested-for-drug-trafficking/).

[37] The full video can be seen here; original in Spanish with subtitles: https://www.forestpeoples.org/en/i-fear-for-my-life-costa-rica-government-fails-protect-indigenous-peoples.

> we knew that this could have serious consequences. At 6pm we again dialed 911 and called the director of the police because the non-Indigenous peoples were indeed organizing themselves and had already issued warnings that they were going to attack those of us who were carrying out these actions. Jerhy was at the Mano de Tigre farm and there, at around 7pm~7:45pm, they attacked him and his family, beat them up, stoned them, and threatened to kill them. As it was just Jerhy, his father, a brother, and a nephew, they had to leave. They managed to get out, they were able to get into the car and get out.
>
> At 8:45, about an hour later, they came to where we were, threatening us, shouting that they were going to kill us, that they were going to slaughter us, and the police were there, giving this crowd the freedom to do this. We estimate that there were 300 people or a little more. The truth is that there were a lot of non-Indigenous people, extremely aggressive and violent people. They were shouting that they were going to kill us, that they were going to slaughter us, that they were going to kill Pablo [Sibar], that they were going to kill Vinicius, that they were going to cut off his feet. The chief of the police of the canton [Buenos Aires county] came in and asked us to leave. We decided to leave because we saw that Pablo's life and ours were really in danger. And when we went outside, the police, although they had promised to provide us with security, this did not happen. They left us there so that the people would come at us. They threw stones at our car and they shouted that they were going to kill us, that they were going to burn the car. It was a miracle that we were saved because these people were absolutely furious. And the police were there. They never stopped anyone, never said a word to them.
>
> The next day it happened again. At 1:30 they warned that they were going to attack us again in Térraba, in the center, where we were in our homes. I immediately called the head of the police force. Again, I advised him that they should get ready to take the necessary steps. He told me that they were in Térraba. And so, sometime around 6 pm or 7 pm, they raised the alarm that a farm belonging to a non-Indigenous person was being burned. All the police arrived, all the white people gathered. The strange thing is that on this farm, there never was a fire, nothing was happening. But at 8:45 there was another alert that near the Mano de Tigre, in the Finca del Agua, they were attacking. It was about 8:45 at night. This is when Jerhy was killed, and the police force was here, here in Térraba. In the video you can see it, in the video that was recorded by the attackers themselves when Jerhy is dying, they stone him, kick him, and shout insults at him. And the police are there. The police did not stop anyone at any time. They let everyone see and attack the body of Jerhy when he was already dying. These are the security measures that we have. As you can see, we are still at risk. We are at risk. Nothing has changed.

Despite witnesses, video, and testimony, the murderer was questioned and released without charge. My understanding is that the assassin lives in a house on the Rivera's ancestral lands, in close proximity to the current Rivera home. As they were not prosecuted and remain free in the territory, non-Indigenous peoples gained courage and escalated violence, attacking multiple Indigenous peoples, threatening many others, and burning down encampments on recuperated lands in Térraba, as well as numerous territories throughout the country. Schools within the territory were closed for over a week for safety concerns of the Indigenous students.

News outlets and social media sites published letters from the United Nations, Indigenous communities, non-government organizations, universities, human rights organizations, and community members, all of whom condemned the violence against Indigenous peoples. Many of them additionally demanded that the government fulfill its legal obligations to protect Indigenous peoples. The response by the Costa Rican Federation for Environmental Conservation (FECON)[38] reflects the sentiment of most of those groups:

> this crime against the indigenous rights defender Jehry Rivera splashes with blood the hypocrisy of the Costa Rican state, which claims to protect human rights, but its policies leave all indigenous peoples abandoned and forgotten. Although Costa Rican legislation recognises these lands as part of the indigenous territories, governments do not apply the law. They protect the interests of racist groups.

Jerhy is buried on ancestral lands near the Rivera home (Figure 10). During Jerhy's service, Don Enrique and Doña Digna both spoke about how proud they were of him for fighting to his last breath to protect his native territory and Brörán peoples. In one interview after Jerhy's funeral, Doña Digna told reporters that years ago "[Jerhy] took the burden that I had been carrying. He told me I had done it long enough and now I can rest. He will continue the fight because it is his turn." Now the struggle returns to his parents, who are actively involved in new legal cases to find justice for Jerhy and stop the cycle of abuse. They recognize sadly that the violence will not likely end any time soon.

[38] The full statement by FECON can be read here: https://theviolenceofdevelopment.com/category/chapter-8/land-disputes-and-encroachments-into-indigenous-territories-in-central-america/.

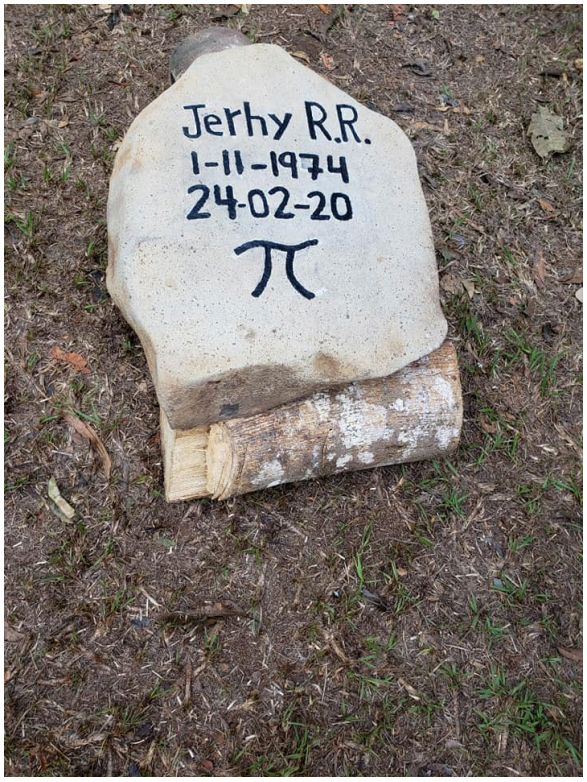

Figure 10. Cemetery marker for Jerhy Rivera Rivera located on the Rivera family property within Térraba territory. Jerhy was born on November 1, 1974 and died on February 24, 2020. The "pi" symbol is a representation of the Térraba peoples.

Discussion—Violent Environments

Overall, this chapter is about violence—the slow (affective, epistemological violence), the fast (destruction of place and corporeal violence)—and how the Brörán peoples continue to resist oppression from within a violent environment. In this chapter, I attempt to peel back the layers that have created an image of Costa Rica as an exception and expose the violent realities faced by Indigenous peoples. In so doing, I also share some of their resistance methods and purposeful acts of cultural revitalization that they have enacted to maintain their cultures, identities, and epistemologies.

Violence began with colonization and is perpetuated by exclusion from state's national mythology, lack of enforcement of Indigenous rights, and inequity of the country's environmental agenda. Within these systems, both slow and fast violence operate in ways that are intertwined with and reinforce the other; they are not mutually exclusive. Various forms of affective and epistemological violence are

created and reified by the actualization of slow and fast violence—visible and affective destruction of spaces that sever peoples' ties to places and corporeal violence against Indigenous bodies.

As discussed, the government's attempts to "green" the country exacerbate ongoing land tenure conflicts between Indigenous and non-Indigenous peoples. The government then ignores Indigenous treaties and legislation meant to protect them from non-Indigenous peoples. Similarly problematic is the institutional exclusion from or purposeful refusal to participate in tourism enterprises, even while Indigenous peoples are made hypervisible as an exotic attraction as described by Rivers-Moore (2007). Whether it is PES, tourism or climate pledges, Indigenous communities are not included in the national planning or decision-making processes, despite the fact that the majority of natural resources needed to fulfill national goals are located within the biologically diverse and highly forested Indigenous territories.

It is beyond the scope of this chapter or dissertation to fully analyze *how* Costa Rica maintains its national political mythology. But it is certain that the state's capacity to reify their utopic image greatly depends on the spectacle of social, ecological, and political harmony (Debord 1967) that they have curated throughout their history and the acceptance of that false reality by everyone who upholds it (cf. Kahn 2011; West 2016). Taussig (1986) describes such produced (false) imaginaries as mechanisms of state control that are representative of dominant decision-making powers. Likewise, the image that the Costa Rican government created is essential because it supports its economy; tourism comprises over 8% of the country's GDP, with 9% of its workforce involved in the tourism industry (Zúñiga 2019). Once the violence becomes visible, the economy is at risk, as was seen recently when the United States downgraded travel recommendations to the country, citing increased crime, an action that set the Costa Rican government on a frantic image-restoring campaign (Webber 2020).

The continued violence is met with persistent resistance by the Brörán peoples, as Don Enrique explained to me one humid afternoon in early July 2016. Don Enrique joined me in the *rancho* as I rested on an old, fraying hammock by the family's hand-crafted wood stove. Knowing about the recent flare-up of violence in the region, I asked if Don Enrique was afraid for his life. He said yes. He is afraid. Others are afraid. "*Hay muchas amenazas"* (There are many threats). But he asked me, "*Qué se supone que*

debemos hacer? (What are we supposed to do)? Furthermore, he said that he could die at any time. He is old and has many ailments. Only God knows what will happen. He has been chased through the forest, before there were roads in town, many times. He has been threatened by people with knives. He yelled at the attackers, "*si me vas a matar, mátame ya*" (If you are going to kill me, then kill me already). But he escaped through the woods because as an Indigenous man with deep connections to nature, he was more skilled and knowledgeable at navigating them than the non-Indigenous men were. They want to fight him over the dams, because he is Indigenous, because he resists. He explained that there are (non-Indigenous) murderers in many of the Indigenous communities. Regardless, "*No hay más opciones que luchar*" (There are no other options but to fight); they need to defend are the rights of the Indigenous peoples and the environment even if their lives are at risk.

He continued speaking about social movements and methods of resistance, stating that marches and protests are wonderful options for young people to pursue, which he said as he pressed a hand on his stomach indicating his constant pains. Instead, Don Enrique said he and some of the other elders will fight the dams and other development through legal pathways. I inquired as to how he feels after continuing this resistance for 40 years. He corrected me; it had been over 50. He placed his elbow on the table alongside him and rested his head in his hand. "*Estoy tan cansado* (I am so tired)" he told me. "*Es una pesadilla* (It is a nightmare)." He rubbed his forehead and said "*la lucha ha sido muy dura y larga*" (the fight has been so long and difficult). He paused for a few moments, and I asked how his life might be different if he didn't have to constantly worry about "*las amenazas*" or the threats that he and his family face. He smirked, shaking his head, then told me, "*Sería tranquilo. Podría trabajar en mi finca y producir alimentos*" (It would be quiet. I could work on my farm and produce food).

CHAPTER TWO

Place, Identity, and the Imaginary:
An Ethnography of the Brörán Peoples

Figure 1. Map of the main routes throughout Térraba territory, marking culturally significant places. Painted by community members and positioned at the main bus stop in Térraba centro, in front of the elementary school.

Connections to Place

One early evening in March 2019, I stood next to Don Benjamín Nájera, a respected Brörán elder, at the end of his steep, dirt driveway. His rustic house sits atop a hill overlooking the Térraba river and an expanse of forest and farm lands of Macho Monte, a historical community that is no longer included in the Indigenous territory of the Brörán peoples. As the wind howled through the valley before us, Don Benjamín and I looked across the Térraba river and admired the vast expanse of forested lands that it cut through. Don Benjamín read the landscape like a book to me, from left to right describing in detail who once owned each parcel of land; he recounted anecdotes about his friends and relatives who had lived there. A sadness filled his powerful voice as he lamented about the fact that due to state-sponsored development projects, most of the traditional lands of the Brörán peoples were not part of Térraba territory.

I have heard similar sentiments from Doña Digna Rivera, my host mother and a close friend of Don Benjamín, multiple times over the years. She mourns the loss of so many sacred places and can't imagine a future without the many other significant places throughout Térraba territory that she is connected to. They are places filled with histories and memories of the Brörán ancestors who have passed before her and where her descendants will pass in the future. They are places where she played as a child with her siblings and where she has raised her own children and grandchildren; places where she nurtures medicinal plants and harvests vegetables to care for and feed her family. They are places where she celebrates birthdays and holidays, and mourns lost loved ones at funerals.

Within these continued acts of *place-making*, Doña Digna has constructed a complex *place-world* that reflects the intimate and interconnected relationships that she has fostered between her and the landscape (Basso 1996). She shares these acts of place-making and the resulting place-world with her Brörán relatives. The Brörán place-world includes the river, forests, rocks, goblins (see following sections), and the heavens—all of which represent forms of kinship that the Brörán peoples have with non-humans. These inseparable connections between humans and nature are founded in Brörán spiritual beliefs and in the teachings of their God Sibö. This Indigenous epistemological understanding of their

place-world ultimately drives the Brörán people's sincere respect for and protection of the environment, and reciprocally, in protecting nature, they understand that nature cares for, feeds, nurtures, and protects them (Quesada 2001).

Speaking through tears during one interview, Doña Digna explained the importance of protecting her place-world from unwanted transformations, specifically those wrought by hydropower projects, stating, "*El río es parte de nuestra vida. El día que se pierda el río, estaremos muertos. El día que perdamos esta naturaleza, ¿por qué vivir?* (The river is a part of our life. The day that the river is lost, we are dead. The day that we lose this nature, why live)?"[1] This sentiment, "*Why live*?" reflects the profound connections that Brörán peoples have with their environment and the places within it, which are inseparable from their identities, knowledges, epistemologies, cosmologies, ways of living, and belief systems. Those connections also inform the future that the Brörán peoples imagine for themselves and their communities. To Kiowa writer Scott Momaday (2001:351), "the imagination is a kind of divine blindness in which we see not with our eyes but with our minds and souls, in which we dream the world and our being in it."

In this chapter, I focus on understanding how the Brörán peoples position themselves in the world and how they view their futures in it through a discussion of their place-based culture, identities, and imaginaries. The violence discussed in Chapter One is evident here in the conflicts that the Brörán peoples confront on a daily basis. Non-Indigenous peoples illegally occupying Térraba territory threaten to force Brörán peoples from their ancestral lands and deliberately act to destroy the Brörán place-world.[2]

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[1] The Rivera family founded an organization called *Asociación Cultural Indígena Teribe* (Teribe Indigenous Cultural Association). The video interview is posted on their website terraba.org

[2] Non-Indigenous peoples are those who self-identify as white or mestizo (83.4%), 7% black (Afro-Costa Rican), Asians (.2%), and other (7%). The Brörán peoples I work with refer to "*blancos*" or white Costa Ricans as those they perceive to be white or mestizo, who are primarily of European descent, "*negros*" or black Costa Ricans for those peoples with African heritage, and "*chinos*" or Chinese peoples for those having Asian heritage. The Brörán peoples and other Indigenous peoples refer to non-Indigenous peoples (white, mestizo, African, and Asian peoples) broadly as "*no-Indígena*" or non-Indigenous because they are believed to not belong to any of the eight ethnically Indigenous groups living within Costa Rica (despite what those people may claim on the census). The primary group of people that the Brörán peoples refer to as a threat are the white or mestizo Costa Ricans of European descent who own most of the land in Térraba territory. Information on demographics is from the 2011 census.

Violence has infiltrated numerous aspects of the Brörán peoples' daily lives and threatens their ability to fulfill their future imaginaries, however, their strong cultural identities, relationships, and connections are sources of power and resilience that allow them to continue to pursue those futures.

First, I explore their connections to place by presenting some aspects of Don Enrique and Doña Digna's relationships with and knowledges of nature. Then, I discuss Brörán Indigenous identity and the factors that make their Indigeneity authentic. I review how Indigenous identity politics inform town governance and ultimately, the Brörán peoples' ability to fulfill their future imaginaries. In the final section, I elucidate the imaginaries of the Rivera family, who hosted me during dissertation research; I do this primarily by highlighting the futures they envision for themselves, their families, and their community.

Place-making and Place-worlds

Mano de Tigre: Protector of the Brörán Peoples

The tiger figures prominently in Brörán cultural beliefs and place-worlds as a protector of the people and lands. Originally, the Brörán peoples were *monos colorados* (spider monkeys) and therefore could not defend themselves well against hunters (Rojas 2018). According to the elders (in Rojas 2018:31), the *monos* were transformed into humans and "*el Protector había enviado un tigre a vigilarlos*" (the Protector had sent a tiger to watch over them). Knowing that there are no tigers in Costa Rica, I questioned Jerhy of its significance in their culture. He shrugged and chuckled a bit under his breath, as he frequently did with a slanted smile, explaining that those were their beliefs—the tiger once lived there but is now only present as a fighting spirit inside them. The tiger gives them strength against their enemies; it has enabled them to successfully defeat many enemies in the past. Today, they are frequently reminded of the tiger's presence in their lives by one of the most visible and accessible sacred locations within Térraba territory: *Mano de Tigre* (Hand of the Tiger or Tiger's Hand) (Figure 2). According to the elders' teachings, as the tiger roamed throughout Térraba, it left its paw print on the rocks, which were believed to be "*suave*" or soft at the time (Rojas 2018: 31). The rock is oblong in shape and almost six

feet tall. It rests on a gravel and concrete base along the side of the road near the town of the same name within Térraba territory, only a few kilometers uphill from the Rivera home.

Figure 2. Jerhy Rivera standing next to Mano de Tigre in Térraba territory. Jerhy's hand is placed on top of the tiger's paw print, partially visible at the top of the rock. A structure above the rock had recently been burned, and only its charred structural beams are present.

Mano de Tigre reminds the people of Térraba "*para que tengan fuerza y sigan luchando por su derecho a la tierra y sus creencias*" (to have strength and to keep fighting for their rights and beliefs). The following is a description of Mano de Tigre from one of the elders:[3]

> Oral tradition told by our grandparents says that this land of the Brörán was given to our people since the beginning of time. Brought on the wings of an Eagle, the Great Creator also brought the sacred tiger so that it would always be in the company and protection of the bribris, cabecares, bröransö and brúnkaso.
>
> The tiger guarded our sacred lands–but it was also true–the tiger retreated from our forests. The tiger had not made a mistake in leaving, there was no place [for it] ... The dense virgin forests disappeared and were occupied by cattle. The silence and the natural bustle were hindered to give way to the construction of roads, the excessive hunting, including the tiger's skin as a trophy, the imposition of a religion, the education far from the knowledge of the Elders, the lands occupied by

[3] As told by Jose Luis Navas Rivera in 2015. Recorded with the *Universidad Estatal a Distancia* in Costa Rica. Original in Spanish available at: https://www.uned.ac.cr/extension/extension-en-accion/noticias/717-dobon-orcuo-ac-la-leyenda-terraba-broeran-de-mano-de-tigre

> outsiders, the privately owned savannas, the Río Grande del Térraba (Dinmo or Diquës) polluted, the womb of "almost" all the women of our people conquered, the forgotten tiger and monkey dance, our language almost disappeared and our knowledge diminished. The people had forgotten that natural way of life that our grandparents had lived, but still the Stone of the Tiger Hand remembered.
>
> But the tiger sought refuge in another place and never died, his spirit continued to live in the heart of the bröransö (terrabas) who are heirs of that past. Not long ago, the women and men descended from the hand of the tiger have reminded the State and the other peoples that the fighting spirit still exists to defend their forests, their land and their river, because it is known that it is the inheritance of girls and boys that have not yet been born and this fight will continue as long as the savannas continue to grow, the river continues to flow, and the sun has illuminated the tiger's hand for the last time.

Jerhy took me to see Mano de Tigre on July 2, 2016, during the first summer I visited Térraba. We hiked straight up the steep road that traverses the territory for over three km (2 miles) and arrived at *la piedra* (the rock), as it is locally called, around 5 pm. Jerhy told me a similar version of the story recounted above. The tiger helped guide Jerhy's ancestors in the fight against Spanish colonizers, assists them now in their resistance against dams, and leads them in their efforts to survive non-Indigenous aggressors. A sign near the rock reads "*Patrimonio cultural de los Brörán,*" meaning the cultural heritage of the Brörán peoples, signifying to passersby that it is a culturally significant place to the Brörán peoples. Jerhy explained that the Indigenous peoples protect the rock by building a roof over it and structurally support it with a cement foundation that extends under the gravel to the road in an effort to prevent erosion. Non-Indigenous peoples burned down the protective roof only months before I visited the rock, reportedly as part of their ongoing attempts to drive the Indigenous peoples out of town. Now, only the crisp, black framework remains (visible in Figure 2). It is not the first time that non-Indigenous peoples have attempted to destroy the rock, and the Brörán community rebuilds the roof each time. As a spiritual and cultural symbol that signifies their historical connections to and kinship relations with the land, it is their duty to save the rock not only from non-Indigenous peoples, but also from the rain, weather, and other elements that are eroding it.

Fear and Respect for Río Térraba

Brörán peoples also relate the river to a tiger. Doña Digna told me that tigers hunt at night along a path and it is dangerous for people to walk along it (even during the day), as they may be mistaken for food. Similarly, she said, the river has a path and it is hazardous to live within its boundaries. The river is known to flood every 25-30 years, raising 15m over its average height. No one should live within that littoral zone because, like the tiger, the river has the potential to destroy anything in its way. Doña Digna told me at least twice of the time when she, Don Enrique, and their young children lived on the other side of the river on ancestral Térraba lands. Jerhy and his three siblings played among the gardens, agricultural lands, and forested areas, and fished along the river banks. Don Enrique used to travel by small, wooden boat to nearby towns to buy and sell items, as many of their ancestors always have to trade salt, shells, and a variety of other goods with neighboring Indigenous communities.

During one severe flood in the 1980s, the Riveras were cut off from the rest of Térraba territory for days. Doña Digna expressed her fear as she stood with her youngest son Edgar clutched to her side, watching the water rise high above its banks, encroaching on their home. Days later, when the water finally receded, Doña Digna relocated her family to Térraba *centro*, further uphill from the river, where they would be safe from potential future storms and out of the tiger's path. This fear and respect of the river that Doña Digna described to me is entangled with the belief that she and her Brörán relatives have the sacred duty of protecting it. Elders relate the Río Térraba as "*uno de los sitios de mayor sentido para el pueblo*" (one of the most meaningful places for the people). Jerhy captured the importance of the river and water to the Brörán peoples, and the reciprocal need for the Brörán peoples to protect the river in an interview, stating,[4]

> *El agua para nuestra comunidad es vida, es la esencia pura de la vida. Sin ella, no tendriamos razón de vivir. El agua como tal, tenemos que cuidarla. Es una gota de agua para nosotros es fundamental y no cualquier agua, tiene que estar limpia, tiene que ser una agua que en que la bebes ahi no mas no te va a dañar. Es por eso que nuestra cosmovisión está ligada directamente a la tierra y al agua, que son dos aspectos fundamentales para nosotros y desde nuestra*

[4] The video link is available at https://www.youtube.com/watch?v=HahYoAXSigs&list=PLRkPpe67mgGkdm0a34NRnSsMrRIzEdL-V&index=5.

> *espiritualidad. El agua corre por nuestras venas día a día. Es el día a día que contamos con el agua y por lo tanto tenemos que cuidar el bosque cuidar la tierra, porque sin esos no tenemos agua.*
>
> Water for our community is life, it is the pure essence of life. Without it (water) we would have no reason to live. Water as such, we have to take care of it. A drop of water for us is fundamental, and not just any water, it has to be clean, it has to be a water that you drink and it will not harm you. That is why our worldview is directly linked to land and water, which are two fundamental aspects for us and our spirituality. Water runs through our veins day by day. It is the day to day that we count on water and therefore we have to take care of the forest, take care of the land, because without it we have no water.

As water protectors, the Riveras always wanted to monitor the river. Each time we drove by it, they would inspect it and comment on its health—too muddy or clear, too high or too shallow. They would point out areas along the bank where the river had flooded recently, comment on the velocity of the waterfalls jetting over cliffs during the rainy season, and lamented about its health, specifically how the *pindecos* (pineapple plantations) upstream were killing all the fish and shrimp. During the course of my field work, we navigated the entire river—from its cool and clear-turquoise headwaters in the Talamanca mountains near Chirripó (Figure 3a); to places down river where it picked up sediments and transitioned into the muddy Térraba river that borders the territory (Figure 3b); and to its mouth within the Térraba-Sierpe Wetlands where it disperses into the Pacific Ocean (Figure 3c). There were frequently horses and cows drinking from the river's edge, where swallows and hawks soared and swooped in search for their next meals.

Figure 3. Left (a): Near the town of Rivas, this tributary stemming from the mountains of Talamanca empties into the Río General before it becomes the Río Térraba. Middle (b): Facing west, the view of the Río Térraba from the bridge connecting Palmar Norte, visible on the left of the photograph, and Palmar Sur. Right (c): Near the small village of Chacara at the mouth of the Térraba River where it empties into the Pacific Ocean.

One day in fall 2018, I accompanied Doña Digna, Don Enrique, and one of their teenage granddaughters to a cultural festival in Palmar Norte. We spent the morning watching cowboys and cowgirls of all ages ride their horses, compete in rodeos, and perform tricks throughout the main thoroughfare of town. Local food vendors lined the road selling tamales, rice dishes, and candies to those strolling by. Games, rides, and beer tents filled the open field by the river. We meandered through the crowds and made our way to the edge of the river so Doña Digna and Don Enrique could examine it better (Figure 4). This is the closest I had been to the river with them, as they typically conducted their informal inspections from afar—Doña Digna had a healthy fear of the caimans living within it. As we walked out further on the dried riverbed, we noticed a hose and self-made pump suctioning water from the river into one of the festival tents. Don Enrique scoffed at the pump in disapproval, commenting on the disrespectful way that *los blancos* (the whites)[5] take from nature without asking.

Figure 4. Doña Digna and Don Enrique stand along the Térraba river near Palmar Norte. The mucky river bed was exposed by the harsh, prolonged dry season.

[5] *Los blancos* is a term used by many Indigenous peoples with whom I worked to describe all non-Indigenous peoples, Costa Rican or foreign.

Garden-scapes

One afternoon in early February 2018, the rain pounded down on the Rivera's tin roof, and we could no longer hear each other without yelling. We turned off the TV and covered it with a towel so that the rain splatter wouldn't damage it. As we watched the rain quickly fill the ditches from the safety of the portico, Doña Digna told me that the elders predicted an early start to the wet season this year. They typically predict the year's weather in the first half of January. Regional meteorologists did not believe the elders' forecast because the rains usually start around April to May. However, as I stood at the end of the driveway with Doña Digna watching the deluge of rain flow down the road in front of us, it was clear that the elders were correct—it was only the second month of the year and we were already seeing heavy downpours with regularity. The shifting rains meant that crops need to be planted and harvested at different times than the Riveras had been accustomed to. Doña Digna expressed her concern that she and Don Enrique were struggling to keep up with the new agricultural demands resulting from rapid climate changes.

Like most families in the territory, the Riveras support themselves by subsistence farming, primarily growing yucca, other tubers, and bananas. They also maintain a healthy diversity of other fruit and vegetable crops, including sugar cane, coconut, oranges, chocolate, beans, chayote (*Sechium edule*), and papaya. Additionally, they foster a variety of medicinal herbs and greens that grow in the wild, including turmeric and cilantro. Many days I would accompany Doña Digna into one of the numerous small gardens around the Rivera property to collect produce. She never really asked me to come with her, but she would let me know she was headed somewhere with a suggestive tone. As she would struggle to push the wheelbarrow or carry a rake, I'd come along and offer to push it or carry it for her, and she was happy to relinquish the duty to me. I'd follow behind her as she trudged through thick, unkempt grass, carrying her machete in her right hand, which she sometimes leaned on like a walking cane. Doña Digna insisted on wearing flip flops through the forests and gardens, despite her encounter with a deadly pit-viper less than a year prior. She shrugged off the doctor's advice to stay off her feet for six-months, as if that was an option with all the daily work to be done. Many times, her grandchildren would follow along

into the gardens—not only were they there to absorb lessons about cultivating and harvesting plants, but they eagerly anticipated their opportunity to crack open a cacao shell or coconut husk for a sweet reward.

As Doña Digna slowly wandered through the thick undergrowth, she eyed the polycultural gardens that she and Don Enrique cultivated, determining in which area we should begin our collections that day. The multiple gardens they have created each house a multitude of plant species, all of which are dispersed throughout their properties in Térraba. Some are near their homes, within thick shaded plots uphill from their home and in grasslands areas towards the river. If one area is destroyed by a storm or other disaster, they have a variety of plants in other plots to rely on to feed their family. These forms of agroforestry are known to reduce social and ecological vulnerability to climate change for peoples living in tropical areas (Maezumi et al. 2018).

On our walks to the gardens, I'd always check on the progress of the lone *guanábana* tree (*Annonaceae muricata*) in hopes there would be a ripe fruit waiting for us, but the ants always seemed to find it first, claiming the naturally rich soursop for themselves. More than once, I helped wiggle the yucca up out of the ground, careful not to break the stalk off the crop itself as Doña Digna loosened the dirt around the tubers with her machete. Other days, we'd stroll past the yucca towards the sprawling grove of banana trees growing behind the large Guanacaste tree (*Enterolobium cyclocarpum*). With a swing of her machete, Doña Digna chopped off the top of a banana tree, and I would load an enormous and sticky hand of green bananas into the wheelbarrow. Other days we would pick beans, and Doña Digna would scourge, half-laughing at the birds that ate the produce. Occasionally, her grandson Carlos would help us harvest fresh coconut from the slender tree by her youngest son Edgar's house. We would then sip fresh coconut water while standing under the shade of the Guanacaste tree, pausing from the day's activities. These daily acts of walking through the gardens, monitoring plants, and testing the ripeness of fruits and vegetables are forms of place-making wherein Doña Digna and her relatives build their knowledges and adapt their practices to meet the needs of changing environmental conditions.

To the Brörán and other Indigenous peoples, their knowledges are specific "ways of knowing, relating, and being in the world" and are intimately connected to places and spirituality, thereby

permeating into "every aspect of daily life and existence" (Kuokkanen 2006:265). For example, they have shared and adapted the knowledges with family and friends in Térraba at *asambleas* (community meetings) and with Teribe relatives in Panama. This method of agroforestry has also been successful in neighboring Bribri communities (Posas 2013), in Mexico (Bray 2020), and elsewhere (Jacka 2015; Maezumi et al. 2018). Knowledge of forest conservation techniques, management of agricultural plots via regulated burns and plant rotation, and cultivation of medicinal plants are illustrative of Traditional Ecological Knowledges (TEK), the "cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Berkes, Colding, and Folk 2000:1252). Knowledges expressed to me while I lived in Térraba were as extensive as they were diverse.

In addition to Doña Digna's knowledge of agricultural practices and medicinal plants, she shared her extensive knowledge of birds with me. Birds were a constant fixture in my fieldwork. They were always in the background at meal times, during meetings and interviews, hikes, and daily life. They can be heard in the background of every recorded interview from Térraba and entertained my family on Zoom calls. When I pointed them out to my hosts, they smiled and told me the local name, always amused that I took an interest in them. As an amateur birder, I was particularly interested in pursuing this line of inquiry with Doña Digna, which manifested itself naturally out of our daily, informal observations.

Every morning at breakfast, Doña Digna and I sat at the table sipping coffee, quietly appreciating the birds singing around us. House wrens flittered throughout the salon, hopped along the crossbeams, and sang over our light conversation. They were among the regulars that visited us daily, like the blue-gray tanagers (*Thraupis episcopus*) (Figure 5a). One day, a flash of orange disappeared among the thick green foliage behind the kitchen—so bright and yet completely concealed by the tropical forest. I popped up from my seat and quickly retrieved my camera from my room. I made a stealthy movement around the side of the house towards the outdoor wood stove where I think the passerine might have landed. To my astonishment, it was there, resting on a small branch just long enough for me to focus my lens and capture

a crisp image. The distinct black cap, orange neck, black wings, and olive body allowed for easy identification; it was a male orange-collared manakin (*Manacus aurantiacus*) (Figure 5b). It was the only one of its kind that I saw in Térraba during fieldwork. I proudly showed my photograph to Doña Digna, who smiled and told me it was a common sight.


Figure 5. Left (a): This blue-gray tanager (*Thraupis episcopus*) was a common sight around the house and gardens. Right (b): The one male orange-collared manakin (*Manacus aurantiacus*) that was observed during fieldwork at the Rivera's home.

The clay-colored thrush (*Turdus grayi*), the underwhelming plain brown national bird of Costa Rica, frequently hopped along the ground or spied us from a nearby branch. A rookery of great egrets (*Ardea alba*) filled a tall tree close to the football pitch each evening at sunset, visible from the Rivera kitchen. The diverse species of parrots made a cacophony of noise at sunset each night as they nestled in for the evening in one of the thick trees behind the house. Variable seedeaters (*Sporophila corvina*) flittered among the flowers, competing for resources with the rufous-tailed hummingbirds (*Amazilia tzacatl*) and others. One day as I lay in a hammock staring at what I thought was a beautiful new flower, I realized that what I had spotted was a Blue-crowned motmot (*Momotus coeruliceps*) blending into the foliage. A variety of Euphonia (*Fringillidae sp*), woodcreepers (*Furnariidae sp*), and numerous olive-colored female birds filled the space around the Rivera home, and my frustration at not being able to decipher them all gave Doña Digna some humor.

While I was identifying the most recent bird flying around the house, Doña Digna would assist and leaf through my bird book. She confirmed my classifications, often telling me the local name of the

bird, what time of year you could find it in town, and if it was a migrant. One day she shared with me the animal book that she and other Brörán peoples made in collaboration with researchers at the University of Costa Rica (UCR). It had illustrations of local birds and included their Indigenous *naso* names alongside their common Spanish names and Latin nomenclature. They use it to teach school children local animals in combination with teaching *naso*. I increasingly recorded each species in a more methodical manner as Doña Digna described their eggs, habits, food consumption, and other details to me.[6] My intention for documenting birds was a natural manifestation of my interactions with Doña Digna, providing me with an opportunity to learn more about nature-culture connections that she had to her surroundings. It would also serve to document biodiversity in the area, which could inform decisions regarding development projects, as there are some rare migrants that pass through the region. I positively identified and documented 53 species over the year with the help of Doña Digna—the majority of which were around the Rivera home, while few others, like the yellow-headed caracara (*Milvago chimachima*), I spotted on the road within Térraba territory.

As one of Jerhy's cousins had told me in 2016, Brörán peoples share the forest and the resources with all the animals and encourage birds, squirrels, and other forest dwellers to partake in the fruits and flowers around their homes. Doña Digna's attitude towards the birds that ate the beans or vied for the bananas hanging in their kitchen illustrated this equitable perspective as she mused at their playful behavior, never swatting them away or getting cross if they claimed food she had harvested. Additionally, Don Enrique would split open fruit or find one that had fallen to the ground and place it on a platform above the *rancho* for the birds to enjoy. In this manner, they created new spaces for the birds that further encouraged the cohabitation of peoples and nature.

[6] I used binoculars and photography in combination with Merlin bird app and the second edition of The Birds of Costa Rica field guide by Richard Garrigues and Robert Dean (2014) to identify all the birds I encountered in Térraba territory. My focus was the garden area around the Rivera home and I expanded my efforts around Térraba *centro* as we traveled to meetings and other activities.

Conservation Areas: Gracias a Dios

Don Enrique was always happiest in his agricultural plots or in the forest and was energized by the idea of spending time conducting vegetation transects with me in his *área de conservación* (conservation area). I had suggested to Don Enrique that we could do transects, as I had the equipment and experience of performing these studies in the past (Hite et al. 2017). The purpose of suggesting the transects were three-fold. First, I was interested in learning about the forest and local biodiversity. Secondly, the information could be used as an independent study of regional vegetation in support of the community's stance against hydropower development, especially if there were endangered or rare species present. I originally wanted to conduct transects in the land that would be flooded by the Diquís dam, however those are primarily agricultural lands void of larger vegetation and are illegally occupied by non-Indigenous peoples, making them inaccessible. Third, I wanted to spend time discussing the forest and its relation to Don Enrique personally, as well as the Brörán culture more broadly, to gain a better understanding of their historical and contemporary connections to place. In this process, I was hoping to learn more about their reasons for protecting their lands from being transformed by hydropower projects. Don Enrique eagerly agreed because he wanted to know the methods of studying trees and wanted to share the data with a botanist he is friends with at the UCR. He would also use the information to advertise for an *albergue* (hostel) he wanted to build in the area for small groups of cultural and ecological researchers to utilize.

Don Enrique suggested that we work around his schedule in his *área de conservación*, a 45-hectare plot located uphill from his home, and *finca de* Carlos, a farm located in the opposite direction, downhill on a property that is named after their grandson who will inherit the land. Both areas have been in their family since they can remember. Both plots are covered with secondary forest that the family purposefully manages for biodiversity conservation. Neither have been clear cut or harvested for at least 20 years. We scheduled our first transect for the morning of May 3, 2018. I was ready by 8 am after a cup of strong black coffee and a filling breakfast of *gallo pinto* (rice and beans), sunny side up eggs, and fried banana slices. I met Don Enrique on the road, and we began the long, hot march uphill. A few cars passed us, including one with Jerhy and some of the town government representatives, but no one offered us a

ride. Because of the stifling heat, we decided to veer off the road and take the parallel path through the woods. The temperature seemed to drop about 10 degrees under the cool shade of the thick canopy, and I was instantly relieved. Don Enrique began to tell me the name of trees as we passed them, remarking with a "*gracias a Dios*" (thank God) when we came to a tree used for traditional purposes. Most of them, he told me, have been destroyed and are locally extinct. Clear cutting large tracts of forest for conversion into cattle farming by non-Indigenous peoples was encouraged by the state (and funded in part by the United States beef industry) in the 1960-1970s; by the mid 1970s, Costa Rica had one of the highest rates of annual forest loss in the Americas (Repetto 1990; Sader and Joyce 1988). Don Enrique is working to protect and restore the forest from further degradation and, unlike the rest of the country that planted monocultural teak plantations to combat deforestation, he aims to bring the diversity back through regional seed exchanges and promotion of natural forest regrowth.

Once we arrived at the conservation area, I sorted out our equipment (Figure 6) while Don Enrique prepped our 50 meter transect (Figure 7). He walked a straight line and back, swiping his machete to clear the prickly underbrush and then repeated the line to set up the measuring tape—he didn't want to mingle the machete and the tape in a single pass in case he accidentally chopped the tape in two. We documented every tree over 2.5 cm in diameter at breast height within one meter of each side of the 50-meter measuring tape.[7] As we walked along through the forests, Don Enrique recounted to me the name of the plant, in Spanish and sometimes *naso*. As soon as we paused to document a tree, I was engulfed in mosquitos, while Don Enrique seemed to be immune. Don Enrique squinted and closely examined the calipers each time he read the diameter to me. Occasionally the tree trunk was too large, and we had to use a measuring tape to record the full circumference, which always amused me because Don

[7] We did not include young samplings in the study, although I documented a few in the comments section that Don Enrique noted as being rare or culturally important. I recorded the presence of flowers or berries of the documented trees. Each transect line was parallel to the other, located at least 25 meters apart and oriented perpendicular to the main access trails. We used a pair of calipers to measure the diameter, a clipboard and data sheets to record each species, a large 50-m measuring tape, and smaller measuring tapes to measure the circumference of large, mature trees.

Enrique would hug the tree in the process and tell me how wonderful it was to have such an old and mature tree on his property. A tree of that size meant that it had escaped earlier clear cuts by the state or cattle ranchers.

Figure 6. Red clipboard with data sheets on the forest floor with a pair of calipers laying on top. A bag with additional measuring equipment and a 50m measuring tape lay nearby.

Figure 7. Don Enrique setting the 50m tape into the conservation area. We completed 12 transects.

Don Enrique described what each plant was used for, such as leaves for medicinal purposes, fruits for nourishment, trunks for building materials, and other traditional uses. Tree names and medicinal purposes are not included here because of the suggestions given to me by Bribri elders of a nearby Indigenous territory who have been negatively impacted by biopharmaceutical companies and intellectual property rights violations. When I inquired about this, Don Enrique agreed it would be best if that information was not disclosed. Instead, I focus on the qualitative experience, which was primarily marked by my awe of Don Enrique and his endless supply of stories.

During a short lunch break, we shared some of our food along the side of the trail. Don Enrique was beyond content sitting in the dirt and leaves. He took his heavy rubber boots off and leaned against a tree, breathing in the fresh forest air. Don Enrique took this time to tell me about the importance of protecting the plants and animals throughout Térraba, which was part of his daily routine. His eyes lit up as he relished in his memories of playing in the woods and trekking 14-miles roundtrip to play soccer in neighboring territories as a young man, as well as the fact that he still owned ancestral lands now. In a more morose tone, Don Enrique pointed out where the national electricity company, ICE, chopped down a line of trees in the conservation area for their electricity lines without consulting him first. Thankfully though, it was a small area, and his management practices would help reseed the area.

All in all, over the next month, Don Enrique and I completed 18 transects together and documented 364 individual trees that Don Enrique identified to 58 species. I categorized 302 trees into 28 different family groups using scientific nomenclature; 62 trees from seven different groups that Don Enrique identified with local Brörán or *naso* names I was not able to further identify. In the conservation area, we conducted 12 transects and documented 247 individuals, which I further categorized into 25 families. We documented one endangered *Ron-ron* (*Astronium graveolens*). In *finca de* Carlos, we conducted six transects and documented 117 individuals, which I categorized into 15 families. While Don Enrique knew that there were many trees on his properties, he was surprised and very pleased at the collective numbers and diversity that we found. His deliberate acts of place-making through forest

conservation will allow Don Enrique to fulfill his future imaginary of hosting researchers (see following sections).

Mutual Respect for the Land

I agreed to illustrate this forest transect work to a group of volunteers from CAMPS International, a company that promotes "sustainable student travel" through "ethical journeys."[8] Numerous groups from CAMPS were working within Térraba on a variety of projects over the summer of 2018 (see following sections). The transects were combined with cultural talks given by Jerhy, which included the history of the Brörán peoples, their territory, ongoing legal struggles, and resistance to hydropower. Jerhy and I took students to *finca de* Carlos and he described the importance of trees, medicinal plants, conserving forests, and maintaining traditional cultivation practices, all of which related to why they were resisting hydropower construction upriver. I translated what Jerhy said to the students and mediated questions. After we completed a demonstration of a 50-meter transect, Jerhy told us about the *duendes* (goblins) that lived nearby and asked if we would like to see their territory. Everyone eagerly nodded their heads yes and we followed Jerhy with anticipation.

Jerhy led us down an overgrown path to a small opening in the canopy. There stood a rock that has an imprint of a *caracol* (snail) on it, which marks part of the *duende's* territory (Figure 8). Sensing that the volunteers did not believe him, Jerhy said that although goblins are like legends or mystical creatures, they are also very real and are an important aspect of Brörán cultural and spiritual beliefs. The *duendes* protect the land and confront anyone caught within their territory who has not shown or earned their respect. Many people living near this area have reported to Jerhy that they saw his kids running around the forest in the middle of the night, but Jerhy assured them that his boys were not there; it had been the *duendes*. When the *duendes* were not keeping their territory clear, they would disappear into their home, a cave under the waterfalls that has only been visible to the occasional, unfortunate visitor

[8] CAMPS International website at https://www.campsinternational.com/

who has gotten trapped there. Many years ago, the *duendes* harrassed Jerhy and his brothers when they tried to work on their nearby farmlands, spooking one of his brothers to the point that he apparently does not return to *finca de* Carlos any longer.

Figure 8. Jerhy showing volunteers the rock imprinted with an image of a snail marking the territory of the goblins in the forest near *finca de* Carlos. The location of this rock and the cave are demarcated on the hand-painted community map shown on the title page of this chapter.

One student asked Jerhy how it is that he is still able to come work on the farm and in the forest, visit the waterfalls near the cave of the *duendes*, and not be harassed by them. He explained that they had an understanding—they knew that he was there to care for and protect the forest, and therefore they don't bother him. That respect and trust had taken decades to cultivate. He suggested if the volunteers wanted to test the reality of their power, to return one day without Jerhy present to see what happened. Jerhy said this with a chuckle under his breath and a slight shaking of his head, knowing that without his protection, the volunteers would be tricked and teased by the *duendes*; for they had not yet earned respect of the *duendes*. Jerhy's intimate relationship with the land and mutual understanding with the *duendes* reflects the Indigenous way of knowing and being in the environment, which are taught to them by Sibö and his Brörán relatives.

Identity: Family, Politics, and Governance

According to Doña Digna, the peoples who can claim Brörán Indigenous identity are those who can trace their lineage to one of the 12 original families who founded Térraba in the late 1600s. The Brörán peoples historically inhabited vast regions throughout the southern half of Costa Rica, in what is known as the *Gran* (Great) Talamanca region, which spanned over the Talamanca mountains from the Pacific to the Atlantic coasts (Figure 9). Guardia (1913:301) described the region as such: "With the rest of Costa Rica, Talamanca, as far as its geological formation, fauna, flora, and ethnology are concerned, is in perfect harmony." Homelands of the Brörán included the Diquís valley in Costa Rica (Nájera Rivera 2015:15) and the coastal region of Bahía de Almirante and the nearby island of Tojar, now known as la Isla de Colón, in Bocas del Toro province in what is now Panamá. In 1697, Spanish colonizers forcibly relocated a group of Térraba peoples from Panama to a mission settlement at the present day Térraba territory in Costa Rica in an effort to subdue them, as they were fierce warriors. According to Don Enrique, women from the Brörán peoples were abducted by the Spanish and the Brörán men tried to save them but failed, resulting in the capture and relocation of the whole clan. The group that was forced to relocate maintained Térraba ethnicity, but they distinguish themselves as Brörán peoples, referring to their clan name, while they refer to their Panamanian relatives as Teribe.

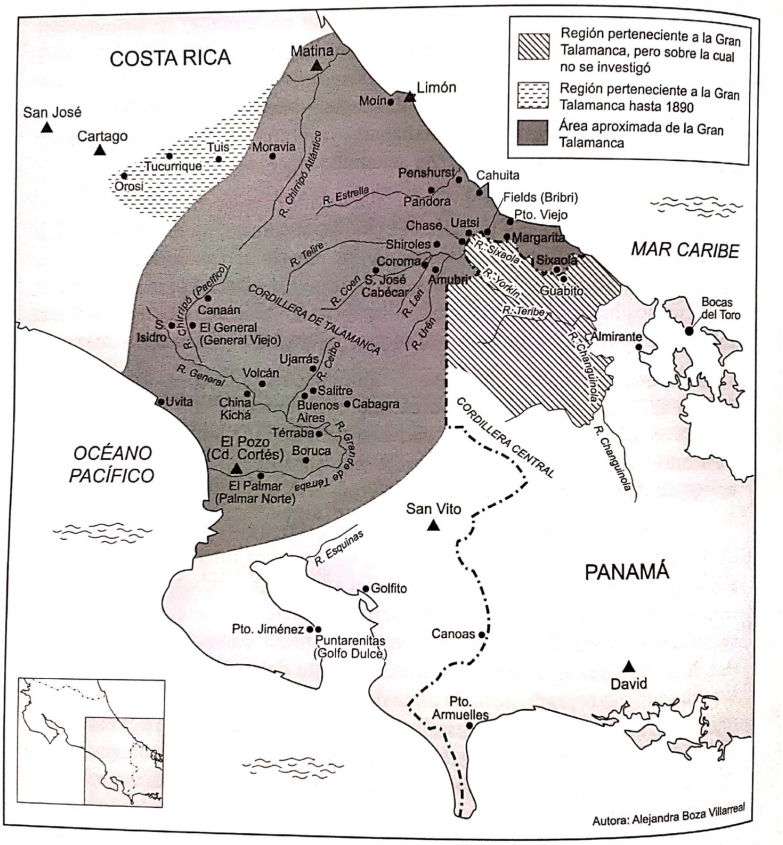

Figure 9. The Gran Talamanca region of Costa Rica in dark grey. Térraba is located in the bottom corner of the grey region, to the right of El Pozo. Source: Boza Villareal 2014:34.

Elders describe the separated groups as *"bien unidos en su corazón*" (well united in their heart) despite being in two different countries. According to Costa Rican historian Alejandra Boza, the Talamanca mountain range, while steep and rugged with peaks over 11,000 feet, did not present an economic, political or social barrier for Indigenous peoples during separation. Instead, Boza argues that "the Indigenous world of the Great Talamanca was far from being isolated and stagnant, but was dynamic, changing, fluid, and active" (Boza Villareal 2014:32). The two groups of Térraba peoples maintained contact despite forced separation and geopolitical borders, which has been key for retaining cultural practices, beliefs, language, and identity.

Since 1972, the two populations of Térraba peoples meet annually to develop "*acciones concretas de apoyo a revitalizer tradiciones culturales*" (concrete action plans to revitalize cultural traditions) (Rojas 2018:19). This exchange between the groups has meant that the Brörán language, *naso*, has been reintroduced into Térraba homes and schools by the Panamanian Teribe, who are fluent

speakers. The language had been gradually lost over time to those who lived in Costa Rica because of the strict Spanish Catholic education that was forced upon them. Don Enrique spoke fondly of the meeting in 1992 when a group of Panamanian Teribe came to Térraba for over two weeks. Don Enrique recalled celebrating every evening until dawn with his Teribe relatives. However, some of the younger Brörán peoples were excluded from the festivities by their teachers, because as one elderly woman described her experience as a schoolgirl, "*Pues no nos llevaron porque eran cosa de la cultural y quizás para los maestros era de poco valor*" (They didn't let us go because it was a cultural thing and maybe to the teachers it was of little value; Rojas 2018:20).

The most recent meeting began on the evening of October 21, 2018. Around 7 pm, a large charter bus arrived in town and somehow managed to maneuver around the narrow, single lane intersection, carefully edging past the six-foot deep ditches on either side, to deliver a group of about 30 Teribe peoples from Panama. It was a mixed group primarily made of middle aged and elderly peoples, with some teens. Many of them were staying in the *albergue* (hostel) run by the local group named *Organización de Mujeres Mano de Tigre*, who arranged the trip, while others dispersed through town to stay with relatives. The next day as I was watching TV with Doña Digna's youngest son Edgar, a group of about 11 Teribe elders walked into the salon, greeted us with friendly smiles, and made themselves comfortable around the table. Don Enrique arrived shortly behind them, strolling into the room in his cheerful manner. I helped Doña Digna serve coffee, cookies, and sweet bread to everyone.

I listened intently as each person recounted their ancestral lineage as part of their personal introductions. These lengthy genealogical explanations were common practice among the Indigenous peoples I worked with, frequently occurring at meetings and informal gatherings, among friends and strangers alike. I have also witnessed young women seek Doña Digna's knowledge regarding dating—to ensure that they were not related to their suitor. Among the discussions of identity and belonging at the Rivera home that evening, were stories of meetings past, descriptions of the challenges each community faced from hydropower projects, and strategizing about how to face the constant struggles in implementing autonomous governance. As the evening came to an end, one of the elderly Teribe

gentlemen played his guitar and sang for us (Figure 10). These reunions act to create place, while also reaffirming identity through ancestral relations, and sharing knowledges and resistance strategies.

Figure 10. A Teribe man from Panama seated at the table in a straw hat played guitar and sang in Spanish at the Rivera home. Jerhy stood nearby in the navy CAMPS shirt and Don Enrique leaned on the table to the left side of the photograph as other Teribe peoples sat and enjoyed the food, music, and friendly discussion.

Doña Digna and other elders are involved in a genealogy project to trace and document all the main branches of the Brörán families and establish "*un base de datos*" or database.[9] This database is used by the *consejo de mayores*, an elder's council made from 70 Brörán elders living in Térraba territory, to determine who qualifies as an *authentic* Indigenous Brörán person.[10] The database was recently signed into law on August 9, 2019 by the Costa Rican President, as the "Decree of officialization and declaration of interest of the Bröran."[11] According to the International Work Group for Indigenous Affairs (IWGIA), the database "makes possible to determine who the rights holders in a territory are and to avoid outside intervention in internal political decision-making, something the Bröran had suffered on their territory for decades" (Camacho-Nassar 2020:393). It is believed that this database will help satisfy identity politics

[9] The database was created by the Brörán *consejo de mayores* in collaboration with the Civil Registry of the Supreme Electoral Court. I had been told by various sources that there were 13-14 original families and I am unsure of how 12 have been determined in this case.
[10] In Térraba territory, the elder's council was reestablished in 2010, but has limited authority over policies or decision-making processes, which are the responsibility of ADI.
[11] The decree is announced at the following government website: https://www.presidencia.go.cr/comunicados/2019/08/costa-rica-garantiza-derecho-a-la-autodeterminacion-y-reconocimiento-de-la-identidad-de-los-pueblos-indigenas/

within town governance matters and aide the Brörán people in their work to enforce the Indigenous Act of 1977, such as reclaiming lands that are illegally occupied by non-Indigenous peoples.

At one elders' council meeting I attended in 2018, two groups of people stood before about 10 elders and presented their cases as to why they should receive the stamped document affirming their Brörán identity. Casually sitting in child-sized school chairs on the front shaded patio of the decommissioned elementary school, Jerhy positioned himself at a table in the front, slowly typing notes on a laptop. Two women stood and recounted their lineage and showed the group birth records and other documents to support their claim. A lively debate among the elders followed, as they tried to decipher if the surname was from the group of Brörán who relocated with the other Térraba peoples from Panama or if it was a group that had moved into the area more recently from Colombia. They questioned who the ancestors were and where they historically lived. They spent at least twenty minutes chatting and whispering among themselves as the women stood patiently at attention in the front of the group. Doña Digna explained to me later that many people want the official documentation so that they can take advantage of the few benefits that Indigenous peoples are eligible for from the government, such as vouchers for school uniforms and tuition. This case required further investigation to determine the true lineage, and the elders would have to meet again to make a final decision. Asserting whether or not someone is Indigenous is not an easy task or one that comes lightly—it has many implications for governance in Indigenous territories.

Once people obtain documents certifying their Indigenous identity, and are over the age of 16, they are eligible to become *afiliados*, the registered members of the community who are permitted to attend *asambleas* (meetings) and have voting rights. Until recently, the "de facto" local government, known as the *Asociación Desarrollo Integral* (Association for Integral Development or ADI), had the authority to determine who was Indigenous and thereby allowed many people (with genealogical ties or not) to officially claim the title. Granting non-Indigenous peoples *afiliado* status has ramifications within Térraba territory, spanning the violent continuum. Don Enrique and other community leaders who speak out against ADI and their non-Indigenous supporters have been physically assaulted and threatened.

Verbal confrontations are a frequent occurrence at *asambleas* and public gatherings. Peoples' homes have been burned, similar to the protective structure built at Mano de Tigre. The violence inflicted upon Indigenous peoples oscillates through periods of intensity, typically heightening when there are external development proposals on the election block.

This tension is stirred in part because the non-Indigenous *afiliados* tend to vote in line with more capitalist, Costa Rican government ideologies, in opposition to traditional or Indigenous values. *Afiliado* status, more specifically Indigeneity, is a significant point of contention when determining rightful owners and uses of land. Non-Indigenous *afiliados* have served to further disenfranchise Indigenous peoples from within their own territories. Additionally, some Indigenous and non-Indigenous peoples who do not live within Térraba territory have been granted *afiliado* status, which was also against ADI official regulations but allowed by the Térraba ADI in the past. To my knowledge, once one becomes an *afiliado*, they maintain that status for life. Brörán peoples living within the territory argue that they are the only ones who can fully appreciate and understand the daily life and struggles going on within the territory—and therefore those living outside the territory should not have voting rights to determine policies and programs that don't directly affect them.

On March 5, 2017, I crammed into my small, silver 4x4 rental with Doña Digna and Don Enrique as they said their usual Catholic prayers for our safe trip.[12] I drove us up the dusty, dirt road with the windows open, desperately trying to stay cool in the early-morning heat. About 30 minutes later, we arrived at the monthly *asamblea* held in San Cristoból, one of the larger communities of Térraba territory that has a meeting space sufficient for such events. The 200 attendees, 160 of whom are *afiliados*, spread out on wooden benches and plastic chairs, facing the ADI representatives who were seated at the front table. Women were dressed in fancy blouses with tight jeans, some wore heels, and they all had their makeup and hair perfectly styled. Men wore their cleanest slacks with cowboy boots and neatly pleated

[12] The Rivera family and many other Brörán peoples I worked with maintained their spiritual beliefs and also identified as Catholic.

button-down shirts. The children darted between aisles and played on the soccer pitch, soiling their clothes before the meeting began.

These monthly *asambleas* are a full day event that typically last from 10 am until around 3 pm. People arrived in caravans, buses, and crammed into the beds of pickup trucks. They traveled on the curvy, rugged, steep, and rocky roads for up to 35 km to attend this meeting, a trip that can take well over an hour. In addition to town politics, these meetings served as mini-reunions for many family and friends from throughout the territory to gather and catch up on the previous month's happenings. They discussed their crops, family, children, the weather, politics, and daily activities. The familial chit chat tended to continue through the entire meeting, which, mixed with those who answered their phones and disciplined children, made it difficult to understand what the speakers shouted over the microphones.

At the outset of the meeting, a crowd gathered around the entrance as *afiliados* paused to sign in at the registration table. Police officers monitored the meeting in their intimidating protective gear to ensure there were no scuffles between Indigenous and non-Indigenous peoples. Police were present on this particular day because it was a highly-anticipated meeting—it was the first ADI vote in over 15 years, the first official opportunity to replace the arguably corrupt ADI members who overstayed their two-year appointments. I leaned on the plastic folding table at the entrance, hovering in the doorway to hear the proceedings along with the other non-*afiliados* since we were not permitted inside.

After much arguing, debate, and conflict, an entirely new seven person ADI body had been elected by anonymous paper ballot. The long-running president was replaced by his 23-year old daughter, Daniella, known as Dani. While the Riveras were cautiously optimistic about the results, they said that Dani might not be knowledgeable enough about traditions, autonomy, and legal procedures to adequately fulfill the role, as she was still in school after all. Some people were also concerned that she could be nothing more than a puppet playing out her father's political agenda, which aligned with the development ideologies of the state and the national electricity company (ICE). Dani's father was president when the Diquís conflict began.

As I inquired more about ADI, Jerhy explained that ADI portrays itself as representative of the whole territory, but the Riveras recounted story after story of cases where the ADI president made decisions about the territory without consulting other community members or the elders' council. They were all upset that non-Indigenous peoples who had been granted *afiliado* status had been present and voted at the *asamblea*, likely upsetting the "true" Indigenous vote and election of "real" Indigenous representatives. Jerhy remained hopeful and maintained the belief that things would change one day, telling me (personal communication July 3, 2016):

> *Tengo la fe en que poco tiempo logremos contar una mejor forma de gobernanza de nuestro pueblo. Creo que entro de poco tiempo lograrámos de una verdadera de gobernanza que defienda toda la parte productiva ambiental, y cultral de nusetra pais*.
>
> I have faith that soon we will be able to have a better form of governance for our people. I believe soon we will achieve a true governance that defends the productive environment and culture of our country.

Thus, as Doña Digna has explained to me, identity is more than just Brörán lineage; it is a way of knowing, thinking, acting, and believing that only true Indigenous peoples understand.

Future Imaginaries

The faith that things will one day change filters into the dreams that Jerhy, Don Enrique, and others have for the future of Térraba and the actions they take to realize them. Their imaginaries include starting private economic ventures that align with their spiritual and environmental beliefs, creating new spaces and places through gardening, recuperating lands from non-Indigenous usurpers, developing cultural programs, building and improving shared community spaces, and hosting a river festival, among others.

While economic gain is not the primary motivational force for most Brörán peoples, they recognize the need for financial security and seek economic ventures that align with their cultural beliefs and respect for nature. [13] Some men make money by selling freshly-caught fish from the Térraba river out of their coolers (Figure 11a). A few women selling homemade *tamales* or sweets passed by the house

[13] Many people explained that they are forced into the contemporary, monetized capitalist system if they want their children to attend school beyond secondary institutions or have access to quality healthcare.

during my time in Térraba. Other people made jewelry, traditional clothing, carved and painted wooden ceremonial masks, sold vegetables at a regional Indigenous farmer's cooperative held weekly in Buenos Aires. Some peoples began to sell goods at a brand new local market in Térraba, which started after my fieldwork ended. Jerhy and his brother Jorge began an organic chicken business to provide affordable sources of protein to local families (Figure 11b). Don Benjamín was in the process of building an aquaculture enterprise to support his family and ensure continuation of local fish that were otherwise struggling to survive in the polluted river (Figure 11c).

Figure 11. Left (a) A door to door salesmen selling Doña Digna fresh fish from the Térraba river out of his cooler. Middle (b) Homemade chicken coop with chicks at Jorge's home. Right (c) Aquaculture farm at Don Benjamín's home.

Making New Places at Finca de Carlos

The Riveras were also involved in larger place-making strategies to create a future for their grandchildren. One morning in early March 2018, Doña Digna and Don Enrique walked down the road towards *finca de* Carlos. Jerhy came into the salon shortly afterwards as I was reading and asked if I wanted to go see "*la quemada*" (the burning or the fire). Realizing I was in the midst of that proverbial anthropological moment (cf. Lévi-Strauss 1955; Malinowski 1922), I threw my heavy rubber work boots on, grabbed some water and my camera, and practically skipped down the road in anticipation. I hustled to keep up with Jerhy, who walked surprisingly fast in the heat. We could hear toucans calling to each other in the

forest and paused for a moment to find them. I caught a brief glimpse of the chestnut-mandibled toucan (*Ramphastos ambiguous swainsonii*) resting on a branch before it took flight.

A few hundred meters further down the road, Jerhy unlatched the wooden fence to *finca de* Carlos, and I could already smell smoke in the air. Don Enrique and Doña Digna were both walking around the perimeter of the field, lighting small patches of dried grass on fire with matches (Figure 12a). I followed Doña Digna around the edge as the fire grew. They all chuckled at me when I covered my face to avoid smoke inhalation as they stood unfazed when the smoke engulfed them. The wind fueled the fire and it ripped across the field in less than 40 minutes, leaving a thin covering of fertilizing ash behind. I reveled in the fact that I was witness to this event, as they were finally prepared to develop the whole field, as opposed to the smaller, individual sections they had farmed previously. Barely two months later, in early May, I returned to the field with Don Enrique to help plant trees, and the whole field had regenerated into a crisp green pasture of new vegetative growth (Figure 12b).

Figure 12. Left (a) Burning the undergrowth at *finca de* Carlos in March 2018. Don Enrique is barely visible in a blue shirt in the far back right corner of the photo as he walks the perimeter after lighting patches of dried vegetation. Right (b) Regrowth at *finca de* Carlos in May 2018.

Don Enrique had decided we would plant *bejuco* trees across the 200-meter-long field, essentially creating a natural border to partition the space. Eventually the rest of the field would be further divided with various other crops, including corn, that he planted during the following full moon. All the crops were planted in alternative rows three meters apart across the vast field to create another large polycutlural medley of rotating, seasonal vegetation. *Bejuco*, also known as *guaco, huaco* or *vejuco*

throughout Latin America, are vine-like trees that grow deep roots and multiple large, entangled branches. Don Enrique told me we will plant them because the leaves provide good nutrients for the soil and their leaves can be used as a form of anti-venom for snake bites, so it is good to have them easily accessible in remote areas.

I followed Don Enrique across the field as he marked locations for me, and I began to dig foot-deep holes at the predetermined spots. He continued to meander across the field taking a variety of other measurements and planting some seeds. By the time I got halfway across the field, it was about 10 am and I was suffering the beginning stages of heat exhaustion. The sun beat me down, and all my inner hydration was sucked out into my heavy-duty black knee work boots. I took a break in the shade along the side of the field, rang out my soaking socks, and replenished myself with some fruit and water while I soothed my freshly blistered hands. Don Enrique continued to work without breaking stride through the long, hot morning hours. After about 30 minutes, I regained some energy and mustered the strength to finish digging nine holes in total. On the seventh hole, Don Enrique's daughter and her family arrived with the *bejuco* saplings. We started back at the beginning of the row and gently lowered each plant into its new home (Figure 13). Despite our exhaustion from working throughout the day, Don Enrique expressed enthusiasm as he planted, knowing that these trees would mature and be utilized by his grandchildren along with the rest of the crops he planted for them in the field.

Figure 13. Don Enrique laying the first *bejuco* sapling into a hole I dug at *finca* de Carlos in May 2018.

Deigni's New Home: Recuperating Ancestral Lands

As I worked with Don Enrique in his agricultural plots, he told me the history of his family's land and his desires to reacquire it. His mother had a 50-ha parcel that she sold in the late 1970s for about 8000 *colones* (US $16) to some non-Indigenous peoples who converted it into grasslands for cattle ranching. Don Enrique and Doña Digna's relatives sold parts of their ancestral lands because they weren't actively farming all of it by themselves at the time. Increasingly, the Brörán peoples were also becoming involved in Costa Rica's growing global economy, and they needed some money to feed their children. Additionally, many non-Indigenous peoples came into the territory, plied their Indigenous counterparts with alcohol, and convinced them to sell their lands cheaply, which is part of the reason why it is illegal to sell alcohol within Térraba territory—a rule that the elders still attempt to enforce with great difficulty. Don Enrique told his mom that it was illegal to sell her land, but she didn't listen, and the non-Indigenous peoples convinced her that it was not against the law. Later, when there was a growing push for people to

abide by the 1977 Indigenous Act, the non-Indigenous peoples wanted to sell the parcel back to the Riveras for 80 *millones de colones*, which in today's exchange rate would be more than $540,000.

Relatives of Don Enrique, Doña Digna, and many other Brörán peoples have been victims of such transactions, in which they sold their land for little return without knowing or fully understanding the consequences; the Indigenous land tenure system is not aligned with that of many non-Indigenous or Western groups. To the Brörán peoples, conceptions of ownership were fluid as land was utilized by different family members over time and rotated as part of their shifting agricultural practices. Lands were passed to relatives or new generations with mutual understandings of management among each other based on their responsibility to care for the environment. In contrast, non-Indigenous peoples perceived land purchases as definitive and irreversible, permanently separating the Indigenous peoples from using the land in the future. Such institutionalized systems have resulted in a long history of violence against Indigenous peoples as they fight to legitimize their claims to ancestral lands (Davis and Wali 1994; Li 2007; Mollett 2015).

Many families within Térraba territory attempt to recuperate land either through direct purchase, or by a form of legal squatting and recuperation provided through the guidelines of the Indigenous Act. On June 14, 2018, Don Enrique and Doña Digna's daughter Deigni bought back 34 hectares of family lands. At 6am that morning, a lawyer, the Riveras, Deigni, her husband, and their children gathered around the dining table to sign the final paperwork. Doña Digna, an avid soccer fan, had the flat screen TV turned so that we wouldn't miss the opening game of the FIFA world cup tournament, in which host team Russia was playing Saudi Arabia. Amidst the sound of TV commentators, children playfully yelling, and all the familial chatter, Deigni explained to me that she had been trying to buy the land for years. The property, located across the road from Don Enrique's conservation area, had previously been owned by her mother's side of the family.

Deigni had been unable to purchase the land until now because of a variety of legal roadblocks. As an Indigenous woman, Deigni was unable to get a loan from the bank to buy the land. Doña Digna explained that Indigenous peoples are frequently denied loans, a result of structural racism in the system

that refuses funding to those without collateral. Interest rates for loans are also more than 22%, making them not feasible for most Indigenous peoples who are denied equal employment opportunities. Deigni's husband, a non-Indigenous Costa Rican man, would have to sign the paperwork to purchase the house; however, that was a complicated manner, given that non-Indigenous peoples are not legally allowed to purchase Indigenous lands/homes within the territory. The Riveras were facing pushback from the ADI president over the situation for reasons that seem to stem from the historical feud between the families, but were not completely clear to me. Finally, after months of stressful and heated debates, Deigni was able to purchase the land in her own name with money obtained by her husband. Within a week of signing the documents, they began to build a new house for their family of six, in a pastured area overlooking the territory and Térraba river (Figure 14a). Don Enrique started the long process of collecting wood and palm leaves for building a traditional *rancho* in the yard almost immediately (Figure 14b). Deigni now had a home where she could raise her family while making places of their own and preserving ancestral connections to the land.

Figure 14. Left (a) Land recuperated by Deigni Rivera, with a new house built on the bottom left of the figure that overlooks the land and river in Térraba territory. Right (b) A traditional A-frame rancho being built by Don Enrique and some relatives for his daughter. The logs were collected from felled trees and the large palm fronds were dried in the fields for weeks before securing them onto the roof, which was only a quarter of the way completed at the time of this photograph.

Located in her new home, Deigni could collaborate and help Don Enrique fulfill some of his future imaginary. Don Enrique wanted to host guests at a new *albergue* (hostel) in his conservation area; one location near the road had enough open space to build some small rustic, one room *cabinas* that he hoped to fill with visiting scientists interested in local culture, botany, conservation, and birds. Deigni would help cook and care for the guests. Funds raised from those guests would allow Don Enrique to purchase a new engine for his *trapiche*, and then sugar cane processing would be integrated into a broader family enterprise. He once processed sugar cane into molasses with a *trapiche* set up at his home (Figure 15). However, around 2014, thieves stole the engine that ran the part of the processor, and his business was shut down. Everyone used to buy molasses from him to make candies, and he made up to one million *colones* per month (US $1700). It would cost about US $20,000 to replace the engine, so it was not a feasible option to pursue without a grant or loan. Even though Don Enrique knew the non-Indigenous peoples who stole the engine, he did not believe that the police in Buenos Aires would help based on his previous experiences reporting crimes to them.

Figure 15. *Trapiche* at Don Enrique's home. There are three different sized rusty steel vats atop a wooden kiln that is used for processing raw sugar cane or *caña* into molasses. The part of the *trapiche* with the missing engine stands in the background.

Doña Digna hoped to collaborate in the family enterprise by cooking traditional foods like tamales and selling cacao butter that she prepared annually. I had purchased some of the cacao specialty on previous visits and was looking forward to the opportunity to participate in the process of making the

butter during my fieldwork. The butter is commonly used as a lotion and the practice has been passed down by grandmothers to their female descendants. One day to my excitement, I turned the corner past Edgar's house to find that the seeds on the nearby cacao tree had fully matured. I quickly reported my find to Doña Digna and we returned to collect no less than 50 yellow fruit the size of a small, toy nerf-footballs in the rusty old wheelbarrow. After wheeling the cacao back to the house, Doña Digna cracked them all open with her machete (Figure 16a). I helped scoop the seeds out of the shell and gather them into a sturdy bag. We spread them out on a mat to dry in the sun at the end of the driveway (Figure 16b). After a few days, Carlos and I took turns pulverizing the dark-brown dried seeds into a fine-grain using the hand-crank grinder fastened to the corner kitchen table.

Figure 16. Left (a). Doña Digna cracked open each cacao shell with her machete. Right (b). Cacao seeds drying on a mat.

Days later, I woke to the smell of a wood fire on the kitchen stove. I came out of my room to find that Doña Digna and Doña Elisa, one of Don Enrique's sisters, had already begun the tedious process of boiling down the cacao grain in a large steel pot of water (Figure 17). Carefully managing the intensity of the fire, Doña Elisa maneuvered the sticks with her left hand as she stirred the rich ingredients with her right. Eventually, the oils from the chocolate separated from the dense cacao and Doña Elisa gently pressed a large spoon onto the top, precisely siphoning the oil from the top layer of chocolate. She then

transferred the oil into a small glass container, either glass baby food jars or empty film canisters. Each small container of cacao oil cools and hardens into a white cream used as an age rejuvenating skin lotion. Women like Doña Elisa and Doña Digna make a few batches of this each year and sell them for 2000 to 4000 *colones* (US $4-$8) a piece depending on the size. The remaining chocolate is saved and used for making rich hot chocolate for the family to enjoy on the cooler evenings or sold to those without cacao trees or the knowledge to make their own.

Figure 17. Doña Elisa stirs a pot of chocolate on the wood stove as Doña Digna and I observe.

Collaborative Community Building

One of the largest social-economic enterprises for the community, which provided them with economic stability and allowed them to pursue new forms of place-making, fell into the Rivera's lap unexpectedly. One day in March 2018, Jerhy received a call from friends in Longo Mai who asked if they would be interested in hosting a 'voluntourism' project in the community. Jerhy quickly organized a group of elders to discuss the prospect of a multi-year contract with CAMPS International. The original CAMPS location was in Nicaragua, but due to increased conflict over social security reforms and the ensuing protests, murders, and civil strife at that time, CAMPS sought alternative locations.[14] Fortuitously, the owner of

[14] Read about the Nicaraguan unrest at the following website: https://en.wikipedia.org/wiki/2018–2020_Nicaraguan_protests.

CAMPS was friends with some of the founders of Longo Mai, who are good friends with the Rivera family. Within weeks, CAMPS representatives arrived and began discussions with community leaders about prospective projects, as well as logistics for housing large groups of students and teachers in town.

It was determined that the old elementary school would be the best location to house the volunteers. After much tense deliberation between ADI, CAMPS, and the elders—primarily over funding, who would gain employment, and how the profits would be divided—it was agreed that Térraba would benefit from the partnership and a multi-year contract was signed. Soon thereafter, CAMPS paid for truckloads of hardware, wood, cement, shovels, and other supplies to be delivered to town and sent a team of workers to convert the school rooms into dormitories. The first group of students arrived in June, so they had little time to waste. They built brand new bunk beds in the classrooms. The toilets were renovated, and showers were installed for a very rustic, cold water cleaning experience. The kitchen area was refurbished, and new appliances were installed. It was an amazing transformation, complete with hammocks on the front patio, new dishware, mosquito nets over the beds, and curtains with mesh lining placed in the windows. The CAMPS website advertised the newly created Camp Térraba as follows:[15]

> Immerse yourself in the local community–formed by the indigenous Teribe people–who are proud of their distinct culture and have autonomous control over more than 900 hectares of forested land. Camp Terraba is based in a converted school and has spectacular views across the surrounding forests. You will be sharing the camp with your fellow volunteers and some local toucans!

Jerhy was intimately involved in all aspects of planning (Figure 18a), and many community members gained employment from the venture, either cooking, cleaning, demonstrating cultural practices (Figure 18b) or working in construction. I translated between Jerhy and one of the CAMPS leaders as we meandered through town discussing the possible construction projects that could be completed. It was eventually agreed upon by a representative group of community members that a kitchen and bathrooms would be constructed at the center of town alongside the soccer field. Soccer tournaments, religious gatherings, and cultural events are frequently held in Térraba, on rotation between the other Indigenous

[15] CAMP Térraba information: https://www.campsinternational.com/expedition/costa-rica-scuba-expedition/. Térraba territory is actually 9355 hectares not 900.

communities. However, Térraba was the only Indigenous territory without visitor services to support its guests, a source of embarrassment among some of the Brörán peoples. Working in close collaboration with community leaders and numerous Brörán peoples, CAMPS volunteers completed a colorful kitchen and bathrooms adjacent to the 50-yard line of the soccer field. At the end of their program, CAMPS volunteers gathered with community members in a closing ceremony to celebrate the work they accomplished (Figure 19). Jerhy was enthusiastically looking forward to the continued collaboration with CAMPS, as this form of funding and participation allowed the community to fulfill their future imaginaries through the methods of their choosing.

Figure 18. Left (a) Jerhy standing on the right side of the photograph in a teal t-shirt, camo cargo shorts, and black rubber boots, discussing plans for the kitchen and toilets that CAMPS will soon build at the edge of the town soccer field. Right (b) Ruth demonstrates the traditional methods of carving designs into the shells of the jicaro fruit (*Crescentia alata*) for one of the CAMPS directors.

Figure 19. Completed kitchen and bathrooms painted by CAMPS and community school children. CAMPS volunteers gathered with ADI and community members to celebrate the completion of the project. Jerhy and his father Don Enrique are kneeling in the front row on the left side of the photograph. Doña Digna is on the right side of the building among the CAMPS volunteers.

Additional community building happened periodically when Jerhy or other leaders procured funding for projects. Semi-annually, Jerhy applied at the municipality in Buenos Aires for community-wide job funding, which are hard labor positions that include digging ditches, landscaping, and making improvements of common spaces. He frequently held meetings at the house, calling for interested community members to come and sign up for one of the available positions.

In late spring of 2018, I joined one of these municipal-funded projects by working with a female road crew for a few days. As we shoveled, not one person complained of the heat, blisters or back pain that inherently accompanied such work. When someone needed a break, they simply passed the shovel or pickaxe to the next person, who took it eagerly and pounded away at the dirt and rocks until they needed to rest. Women ranged between the ages of 20 and 40; some were in better shape than others. Everyone made an honest effort. I think they were amused that I came to help and cheered me on as I chipped away at the steep bank as we slowly widened one of the town's dirt roads.

We sat in the shade and rested for lunch, which gave us additional time to chat about their personal lives and life in town. Upon inquiring about how they felt about this job, they explained that they

were grateful. They said that these were highly sought after positions and so they were relieved that it was available to provide them with some financial freedom and independence, although it was a struggle to balance this temporary position with child care, of which they were primarily responsible. I helped move large rocks and bags of dirt later in the week as we assisted a men's team in landscaping around an old run-down, abandoned police station (Figure 20). The neat, newly lined pathways around the station pre-empted the facelift that the station was slated to receive later in the year as it transitioned into an ADI office. Establishing a central meeting location for ADI would be an ideal step forward in the town's governance by providing a space for people to direct their concerns.

Figure 20. A group of workers at the abandoned police station in Térraba *centro*. Jerhy is seen in the red shirt on the left side of the frame, discussing the planned landscaping with another man, as women on the right side of the photograph take turns digging a ditch for a water-pipeline.

Jerhy's Future Plans

Jerhy decided to run for ADI president in the next round of elections. Doña Digna announced this to me after an *asamblea* on February 24, 2019, as we shared some cookies and drank coffee in the shade of her salon. She expressed her pride in his leadership role in the community and his ongoing work to increase Indigenous rights. She also shed tears as she confided her fears for his safety. She recalled the incident in 2013 when Jerhy was brutally attacked by non-Indigenous peoples and left for dead when he reported them for illegally logging. She thought he would be putting himself in the spotlight as a candidate and

endangering himself further. As Doña Digna was finishing her story, Jerhy returned home; he plopped down on a chair next to me, out of breath, with a beaming smile across his face. He reiterated what his mother had just told me, that he began his campaign for ADI president in the hopes that he would help achieve the true governance he believed was possible. As president, he would refocus governance on Indigenous-led development projects, which would be guided by the elders' council.

As another part of Jerhy's future imaginary, he planned to host a river festival in Térraba. He wanted to coordinate a large group of kayakers and rafters to make their way downriver from San Isidro de General, the largest urban area of Perez Zeledon canton, to Térraba territory. This route passes through the proposed Diquís dam site and was purposefully selected to illustrate the importance of a free-flowing river. At an out-haul area close to the town of Brujo, on the outskirts of Térraba territory, Brörán and Indigenous peoples would have food, arts, and crafts for sale. The event would attract support for their anti-dam resistance efforts, as well as allow many to earn income from tourists. Jerhy believed this event would raise awareness for the ongoing struggle to stop hydropower in the region, to celebrate the river, and to increase international support of Indigenous rights.

Jerhy planned to hire the family-owned *Autentico Adventures* rafting company out of Perez Zeledon to guide a group of community members down the river, also providing many Brörán peoples with the unique experience of rafting for the first time. Jerhy called ahead and spoke with Costa Rican owner Felipe Lopez Salazar, and we arranged to meet with him later that same day. On May 14, 2018, we made the hour-long drive north to the outskirts of San Isidro General. We passed the endless expanses of pineapple fields that border the Talamanca mountains along the 67-km route. Billowing storm clouds hovered above us, swelling in preparation for the afternoon showers. Driving along at the standard 40 mph on the two-lane highway, I listened to music as Jerhy dozed on and off in the passenger seat.

We met Felipe at his home-office. Standing in the driveway surrounded by large yellow rafts, he said he was interested in the idea of a river festival and expressed his support for the anti-dam movement. When he started the business ten years ago, his family thought he was crazy, but now, 15 family members work for him. He said there are about 150 certified river guides in Costa Rica, most of whom are also

against dams. The guides have an annual gathering and Felipe thought maybe they could coordinate their meeting with the river festival. That way, they could stay in Térraba overnight and bring more economic opportunities to people within the community and surrounding area. They have the capacity to take 62 people in their rafts, so it had the potential to be quite a large event. Jerhy and Felipe talked about dates, perhaps July, maybe in September they said. In the end, the date was left open for further discussion, and Jerhy said he would get back in touch with Felipe. Jerhy passed the idea by ADI president Dani when we picked her up on the way into Térraba, but she was not too thrilled. It turned out her disinterest was partly due to her inability to swim—and her fear of caimans.

I completed my dissertation research in Térraba without the festival ever happening. A year and a half after I had returned to the United States, on January 6, 2020, Jerhy wrote me to say "*Quiero realizar el evento de rafting para este año y queria preguntarte si me ayudas en la promocion por tu zona para atraer turistas que quieran participar*" (I want to do the rafting event this year and I wanted to ask you if you can help me in promoting it in your area to attract tourists who want to participate). I enthusiastically replied yes. Unfortunately, Jerhy would not live to see his dream festival transpire, as he was murdered just six weeks after this correspondence, forever altering the future imaginary of the Rivera family.

Discussion—Alternative Future Realities

This chapter provides insights into how the Brörán peoples position themselves in the world and view their future within it through an ethnographic exploration of the interconnected places, identities, and imaginaries of the Rivera family and their Brörán relatives. In Térraba territory, Brörán peoples have created a place-world through continued acts of place-making, which include individual and collective activities such as farming, reunions with Teribe relatives, and building traditional ranchos, among others. They combine acts of place-making with histories and memories that elders pass on about the ancestors who once lived there. The collective place-worlds of the Brörán peoples extends across physical and spiritual boundaries, encompassing land, water, animals, the heavens, and natural features, as evidenced by Mano de Tigre and the snail-shaped rock marking the *duende's* territory.

The creation and maintenance of this place-world is guided by the spiritual God Sibö, who has taught the Brörán peoples to care for, respect, and protect the environment and all its creatures. In return for their actions, nature supports the people. Their beliefs and actions illustrate that their respect is entangled with a fear of nature, particularly the river and its reptilian inhabitants. As we learned from Jerhy in his explanation of the *duendes*, when nature is not respected, people will not be respected. In Térraba, these spiritual beliefs and obligation to follow Sibö's teachings manifest in specific ways of knowing the world (cf. Kuokkanen 2006). Spiritual and cultural connections to place and knowledges of nature inform Brörán identity. While Doña Digna and other elders have created a database to trace the lineage of their Brörán ancestors, identity is also inherently linked to the respect of nature and Brörán peoples' epistemology, cosmology, and traditional pathways. The people who Doña Digna categorizes as Indigenous are not only those with genealogical connections to their Teribe ancestors but also the Indigenous peoples who take actions to protect Térraba homelands and vote according to cultural belief systems. Conflicting claims to Indigenous identity have created strife in the community that is palpable on a daily basis as Indigenous and non-Indigenous peoples interact in common spaces.

Furthermore, the state's mandated ADI governance system replaced the traditional elders' council, creating an increase in tensions between Indigenous and non-Indigenous peoples. ADI has allowed people to become *afiliados* despite their lack of ancestral Indigenous relations or habitation within Térraba. The non-Indigenous *afiliados* are voting along the Costa Rican, capitalist development agenda, which has included voting in favor of dams—where the majority of Brörán peoples resist dams for spiritual and cultural reasons. Additionally, non-Indigenous *afiliados* make it very difficult for Indigenous peoples to reclaim their ancestral lands, despite the national law prohibiting non-Indigenous peoples from living within Indigenous territories (and therefore should not be a part of governance).

The ability for Jerhy, his parents, and other Brörán peoples to protect the lands that have been entrusted to them by Sibö requires that ADI adhere to the newly established genealogical database that confirms Indigenous identity. Thus, clearly understood, defined, and implemented Indigenous identity will allow the Brörán peoples to enact their legal autonomy, make their own decisions regarding

development, and improve their standard of living in a future where they are no longer one of the most impoverished communities in the country (MacKay and Garro 2014). Maintaining autonomy within Térraba territory, and ensuring the ability to enact and enforce it, requires developing collaborations between conflicting factions within the territory, strengthening networks with regional Indigenous communities, rebuilding traditional Indigenous governance mechanisms, abiding by elders' decisions regarding Indigenous identity, and ultimately gaining legitimacy in the eyes of the federal government. Such autonomy will allow the Brörán peoples to fulfill the futures they have imagined for themselves and their community. The future imaginary of the Brörán peoples entails implementation of their ways of knowing, places, and respect for Sibö and his teachings, for themselves and future generations. Their future imaginary is one that is developed by, with, and for Indigenous peoples to specifically protects sacred spaces and places that are part of Brörán identity (cf. Lewis 2013).

The presence of non-Indigenous peoples illegally residing within Térraba territory has resulted in numerous daily acts of violence against the Brörán peoples. This was visible in the theft of Don Enrique's *trapiche* engine, non-Indigenous peoples' occupation of Indigenous lands, and the inclusion of non-Indigenous peoples in town governance, among others. These activities fuel the violent environment within which they exist and are the result of the state's inaction and lack of enforcement of the Indigenous Act of 1977 (see also Chapter One) and continued structural racism. In culmination of local- and state-level violence, community members are physically threatened, which eventually resulted in Jerhy's murder. The future imaginaries of the entire Rivera family are now disrupted as they were in large part reliant on Jerhy, his contributions, and his leadership. Jerhy will no longer be a physical part of the Brörán peoples' future, nor will he be able to fulfill his future imaginary for his family or community. However, he will continue in spirit and be remembered through the places he has created and the place-world he has shared with his family, relatives, myself, and so many others.

CHAPTER THREE

The Many-headed Hydra and the Rigidity Trap

Figure 1. Jerhy Rivera Rivera standing on a concrete berm on the right side of the photo, in front of the proposed location of the Diquís Hydropower Project on the Río General in Térraba territory. A tunnel entrance is visible in the background on the left side of the frame, surrounded by thick, green vegetation.

Hydropower: The Many-headed Hydra

"*El Gran Boruca fallecé, pero nació otro, nace el Boruca. El Boruca pasa por otras cosas, otro escenario. Pero vinó el Diquís. Ahora se va el Diquís y nacen otras. Imediatamente nacen otras*." (The Gran Boruca [dam] died, but another was born, the Boruca [dam] was born. The Boruca became something else, another scenario. Then came the Diquís [dam]. Now the Diquís is leaving, but others will be born) (pers. comm. Don Enrique 6 March 2019). At the time of that interview, it had only been about 4-months since the Diquís hydropower project was cancelled and already Don Enrique was worrying about the future potential threats to his family and community.

As I documented local narratives regarding hydropower development in Térraba territory, I began to understand that what was currently happening with the Diquís hydropower project was just the most recent segment of an ongoing historical cycle. I liken the repetitive momentum of what I refer to as the Indigenous-hydropower cycle to the many-headed Hydra. In classic mythology, the Lernaean Hydra is the aquatic serpentine monster whose heads regrew each time they were cut off. Hercules was sent to destroy the Hydra as one of his twelve labors.[1] Similarly, the Brörán peoples work to stop hydropower projects, but each dam they terminated, another one inevitably emerged in its place (see Figure 2). Térraba-led resistance has now stopped three dam projects, and as Don Enrique stated, the Brörán peoples anticipate more.

[1] Hercules is the Roman adaptation of the Greek hero Heracles.

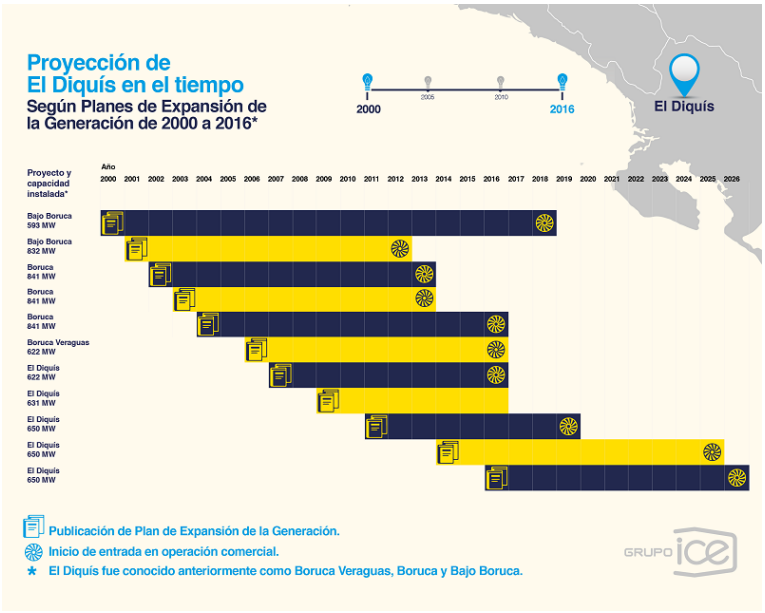

Figure 2. National electricity company's diagram illustrating their constantly shifting hydropower projects since 2000. It shows the timeline for the predecessors of the Diquís. The "Baja Boruca" refers to the Boruca-Cajón. The Diquís emerged in 2006, after it was renamed from the Boruca-Veraguas. Initially, it was supposed to be operational by 2016, as indicated by the turbine/fan symbol; in this 2017 report, it was projected to be online by 2026.

The legendary Hercules eventually cauterized the neck of each head he cut off and decapitated the one immortal head, ultimately sealing the Hydra's fate. In contrast, the Brörán peoples have failed to terminate their Hydra (hydropower). They have not exterminated the foundational (immortal) impetus of recurrent dam development—capitalism. Capitalist development initiatives inherently thrive on new resources as well as new modes of resource extraction, both of which are created within contested "frontier" spaces (Ferry and Limbert 2008; Fletcher 2012a; Foster 2000; Harvey 2006; Jacka 2015; Tsing 2005). Hydropower is part of a techno-frontier wherein an endless space of interactions are "made possible by industrial technology (Tsing 2005); water and carbon are extracted from the environment, transformed into resources, and sold on markets to fulfill newly designated roles in climate mitigation. Hydropower flourishes under the accepted neoliberal ideology that it is not only a solution to the climate crisis, but will also provide sustainable development for local peoples (Chaturvedi, Nautiyal, and Yaqoot 2020; Fearnside 2013; Frey and Linke 2002; see also Chapter One).

In this chapter, I localize the global climate frontier, situating it within Costa Rica where relations are primarily centered on the state/electricity institute versus Indigenous peoples. The specific subset of

interactions that I engage with, from within in the context of the climate frontier, pertain to hydropower, which occurs within hydrosocial territories—the hybridity of social-cultural-economic-political institutions involved in human-water relations (Boelens et al. 2016; Linton and Budds 2014; Swyngedouw 2004). The amalgam of interactions, frictions, and relationships entangled in the decision to build hydropower within Costa Rica, more specifically Térraba territory, result from differing conceptions of development—which are emblematic of peoples' connections to place, epistemologies, and imaginaries.

Divergent conceptualizations of development are a significant component of the frictions that drive the Indigenous-hydropower cycle as each side refuses to concede to the other. While I generalize into two sides—the *Indigenous* and the *modern* imaginaries for ease of discussion—this chapter illustrates the local-level detailed imaginaries of the Brörán peoples and ICE, focusing on the complexities of hydrosocial territories that are involved in globally-driven climate development initiatives. Much of the internal controversy over hydropower development in Térraba territory stems from the fact that some Indigenous peoples do want the projects for their perceived benefits. Broadly speaking though, the Indigenous concept of development in Térraba is informed by Brörán peoples' specific epistemologies, culture, relationships with nature, knowledges, and future imaginaries (see also Chapter Two). Therefore, the majority of Brörán peoples resist external, individualistic conceptions of development that are based on capitalist expansion, and instead position economic growth as a benefit secondary to other forms of development that focus on the well-being of families and communities.[2]

Doña Digna explained that to the Brörán peoples, development requires a focus on social and cultural prosperity, which must be achieved through self-determination and autonomy. Their positioning of culturally-focused forms of development are what Stavenhagen (1987, 2012) had termed ethnodevelopment, referring to alternative forms of development that consider and include Indigenous

[2] To see a video of Jerhy Rivera speaking about the impacts of dams, specifically the Diquís, in regards to development https://www.youtube.com/watch?v=jIXacVgcYbA. He begins at minute 8 and again at minute 27:30.

knowledges, epistemologies, and imaginaries. Indigenous concepts of development generally contrast with the Eurocentric, capitalist-based *modern imaginary,* as they are based on different worldviews and value systems (Little Bear 2000).

Costa Rica went through a period of broad neoliberal restructuring in the 1980s (Breitling 2020; Edelman 1999) that now drives its modern development ideology. This *modern* development paradigm in Costa Rica includes colonization and its lasting impacts, ongoing land usurpation by non-Indigenous peoples (since colonization), bauxite mining (early 1900s), deforestation for state-sponsored cattle ranching (1900s), state construction of the InterAmerican Highway (1950-1960s), and a series of three proposed hydropower projects (1970-2018). Each of those projects have threatened Brörán peoples, their cultures, identities, and place-worlds. Tsing (2003:5101) describes the double-edged sword of modern development whereby the quest for progress via capitalist resource expansion creates the conditions of overexploitation, saying, "Just as the fear of hell drives the marketing schemes of paradise, so too does the desire of paradise fuel the schemes of hell;" illustrative in Costa Rica where the two development ideologies clash, setting the stage for increased violence against Indigenous peoples.

Costa Rican anthropologist José Luis Amador (2004) explored the difference between development ideologies, specifically as they pertain to hydropower projects in Costa Rica. To Amador (2004:124), there is a contradiction between "two world views: the national development project, on the one hand, represented by ICE [the national electricity institute], and the project of ethnic continuity, to which the indigenous community aspires." Furthermore, as Satterfield (2002:4) explains, disputes over natural resources have "everything to do with imagined ideal worlds, with the creative manipulation of political discourse, the assertion of moral priorities and identities, and with how activists on both sides appropriate linguistic and symbolic tools in order to promote a cultural world that reflects their quests for change." By ignoring Indigenous conceptions of development while lambasting Indigenous peoples with *modern* initiatives, the state produces the violent environment within which the Brörán peoples live.

This chapter explores what happens when the Indigenous and modern world views clash within the realm of hydropower development. First, I situate the Indigenous-hydropower cycle within the

adaptive cycle (Gunderson and Holling 2002). I argue that the Indigenous-hydropower cycle is sustained by a rigidity trap, a persistent maladaptive state that prevents the production or implementation of innovative or alternative ideas (Carpenter and Brock 2008). As Rogers (2013) argued, overstandardisation reduces flexibility in a bureaucratic institution leading to a rigidity trap like we see with hydropower promotion within the climate governance arena. In this case, the rigidity trap occurs in the reorganization phase of the adaptive cycle as the state/industry fails to learn from, modify or adjust to changing social-ecological conditions or apply new technologies for energy production (Holling 2001).

Then I provide the chronology of the Indigenous-hydropower cycle in Térraba territory, which maps the rhetorical trajectory of hydropower on a national-transnational scale from being a symbol of economic and developmental progress (1950-1970s), to a mode of energy security and sovereignty (1980-2006), and finally to a climate mitigation strategy (2006-2020).[3] I present overviews of the three dams proposed during these time periods: the Boruca-Cajón, the Gran Boruca, and the Diquís, respectively. The Diquís section offers a comprehensive review of the complex interactions and relations informing the Indigenous-hydropower cycle, as it was the main focus of my dissertation fieldwork. In presenting this case study, I analyze the frontier by focusing on (1) multivocality: the people involved in the debate from around the country and within Térraba; (2) multispatiality: among governance systems of the state, international, and Indigenous communities; and (3) multitemporality: from the past, the present, and the future.

Next, I assess the nested feedback systems of the adaptive cycle as they inform various layers within a dynamic panarchy model. The trap is maintained locally by the autonomous power of the national electricity company (ICE) and globally by a lack of innovation by climate mitigation decision-makers. In the discussion, I assess the current situation and the likelihood of the cycle to repeat.

[3] See Appendix II.

Placing the Indigenous–Hydropower Cycle within the Adaptive Cycle

The adaptive cycle illustrates the dynamic nature of interlinked physical and social systems (Gunderson and Holling 2002). In its cyclical design as an ouroboros, or infinity symbol, the model provides a visual representation of continued cycles of adaptation. Its rhythmic shifting between change and persistence, growth, accumulation, restructure, and renewal illustrate the dynamic and constantly fluctuating patterns of order and chaos. The adaptive cycle is categorized into four phases: the exploitation or growth phase (r), the conservation phase (K), the release or creative destruction phase (Ω), and the reorganization phase (α; Figure 3). The complex interconnected relations of entangled, hybrid, spatial, and temporal factors in a system are represented by nested adaptive cycles that reciprocally impact and influence the others to varying degrees, in what is known as a panarchy. In a social-ecological system, the panarchy illustrates the ways in which large, slow systems interact with small, fast systems. The large systems act to stabilize through accumulated knowledges, while small, faster level systems experiment and bring about change. The multitude of interactions across scales combine learning and continuity so that a system can adapt or change in response to shifting variables (Holling 2001).

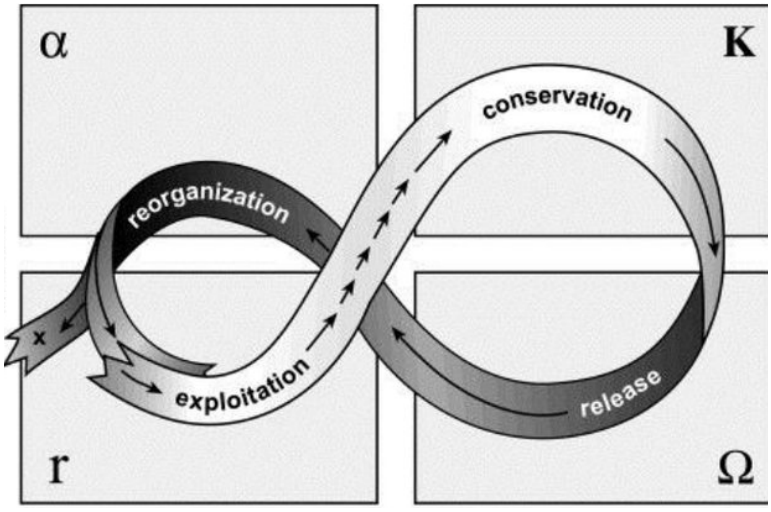

Figure 3. Adaptive cycle model showcases the four stages of persistence and change: the conservation phase (K), the release or creative destruction phase (Ω), the reorganization phase (α), and the exploitation or growth phase (r). Source: Gunderson and Holling 2002.

The adaptive cycle (and the nested panarchy model) has been used extensively to study adaptation, vulnerability, and resilience in various social-ecological systems (for example see Folke et al. 2005; Jacka 2015; Leslie and McCabe 2013; McCabe 2010; Pelling and Manuel-Navarrete 2011; Walker et al. 2004). It has been applied to studying environmental governance regimes as well (see for example Berkes 2017; Ostrom and Janssen 2004).

I apply the model as a heuristic to understand the stages of the Indigenous–hydropower cycle, which itself goes through six stages, all of which differ in length and complexity. Very simplistically the stages are: (1) **Proposal**: a hydropower project is introduced and supported by the state and/or the national electricity company; (2) **Resistance**: Indigenous groups oppose the project and work to stop it through legal means, including protests, marches, and lawsuits; (3) **Dispute**: opposing sides attempt to convince each other of the validity of their position and use new strategies or rhetoric to shift attitudes (mostly through legal battles or public settings), during which time there are lengthy delays in construction; (4) **Cancellation**: plans to develop the hydropower project are revoked by those who proposed it or by the national court system; (5) **Revision**: the project is modified by the state–hydropower industry and Indigenous peoples build their resistance toolbox; (6) **Repeat**: the cycle is repeated as a new project is proposed. Each new cycle, while following this pattern, is infused with a multitude of actions and interactions on an array of spatial and temporal scales, all of which are operating at different speeds and intensities. Each of these six stages fit into the four phases of change represented in the adaptive cycle.

The **proposal** of a hydropower project spurs the model's *exploitation phase*. This is when the state-energy collective decides to build a hydropower project. They accumulate resources like land rights and permits. They promote their project at local, regional, international conferences, media outlets, and civil or academic settings. Developers seek external support and resources to construct the project, develop a budget and blueprints, work on promotional campaigns, and hire contractors to begin risk and impact assessments. In this phase, the rhetoric for the project emerges in support of the decision to build a new dam, either for progress, energy sovereignty or climate mitigation, as was the case for the Boruca-

Cajón, the Gran Boruca, and the Diquís, respectively, as described in the following sections. Promotion of the project continues through its life.

Very soon after the project is proposed, Indigenous peoples respond with **resistance**, a movement that operates in parallel to the state-hydropower campaign within the *exploitation phase*. Resistance activities include marches, street protests, road blockades, writing to politicians, networking with human rights, environmental, and other NGO groups, social media campaigning, and filing legal suits with local-global government municipalities, among others. Actions and reactions during this time happen at faster time scales and intensities to keep up with quickly shifting methods on each side of the debate. The growing conflict between pro- and anti-dam positions eventually stabilize into a **dispute** during the *conservation phase*, at which time, the project is at a standstill while the two opposing sides fight legal battles. This phase is marked by lengthiness, less intensity, and slower reaction times. Both sides utilize the structures that they have previously built to support their position, hold their ground, and wait out court decisions. The dispute phase lasts years, sometimes decades, during which time both sides continue to promote their position at regional meetings or conferences, in the public and private arenas.

In each case discussed here, the decision to **cancel** the dam is made after lengthy dispute stages; the conservation phase ends and the cycle enters into the *release phase*. At this time, there are celebrations, disappointment, and general chaos as each side accepts the news. Within the Indigenous communities, fear sets in that it is not actually the end of the hydropower threat. At the state-industry level, decision-makers return to the drawing board to determine how they can fulfill their development imaginaries. The cycle then enters into the **revision** stage, within the *reorganization phase* of the panarchy model. Reorganization is a time to innovate, restructure, and develop new strategies. Within Indigenous communities, leaders make new contacts with external groups and expand their networks or strengthen the ones they have previously made. They continue to push for autonomy and rights under Costa Rican legislation, spread information about their rights to neighboring Indigenous peoples, and overall (re)organize themselves for what might come next. The state and electricity company take this time to review and revise plans, and decide how to ensure energy security, economic growth, and climate

mitigation for their country. It is a time for innovation, exploration, and experimentation. In the cases discussed in Costa Rica, each revision period ended in the decision to build a modified version of the previous dam, and the cycle **repeated**.

In the Beginning: Dams as a Symbol of Progress (1950-1970s)

The Indigenous-hydropower cycle began in the 1950s, when the Costa Rican government initiated plans to develop the southern region by capitalizing on its bountiful natural resources. In 1956, the government granted the Aluminum Company of America (ALCOA) a 25-year mining concession to explore for bauxite in the Valle del General, in Pérez Zeledón, near Térraba territory (Carls and Haffar 2010).[4] ALCOA explored the southern region for raw bauxite until 1968, at which point, the government reevaluated their contract and aimed to increase their financial gain in the partnership by processing bauxite in situ (Ibid). A hydropower project was **proposed** to accomplish this goal.

The Boruca-Cajón dam was proposed to be built on the Río Térraba, downstream from the Rey Curré Indigenous territory of the Boruca peoples near the town of Cajón (see Figure 4 below). As a mega-dam, it was designed to stand between 192-250 meters high and produce 832 MW of energy (Todd 2013). It would have flooded the entire community of Rey Curré and countless towns upstream, transforming the Rivera's hillside home in Térraba centro, at almost 400 meters above sea level, into waterfront property. The dam's reservoir would have been 12,581 hectares (Jenkins and Hunter 2011). At least 3500 Indigenous peoples would need to be relocated and compensated, although previous studies on hydropower-related displacement have shown that such compensation is rarely timely or adequate to cover the immeasurable environmental, social, and cultural losses (Oliver-Smith 2009; WCD 2000). Indigenous peoples in the region **resisted** the project for its projected detrimental social, cultural, and ecological impacts, the negative impact on their future imaginaries, and the fact that they were neither

[4] Also in 1956, the government established the Boruca-Térraba Indigenous territory in the same area to protect Indigenous peoples living in the region; see Chapter One.

consulted about nor included in the decision-making process. Both the proposal and resistance developed during the exploitation phase.

Despite growing opposition to the project, on April 24, 1970, the Costa Rican government passed a resolution to build the Boruca-Cajón dam for processing bauxite (Umana 2010). Indigenous peoples and university students joined in the resistance against hydropower development in the capital. According to ecology professor Gabriel Quesada, the Student Federation of the University of Costa Rica (FEUCR) protested ICE's collaboration with a foreign corporation and spent months demanding sovereign control of resources in front of the legislative assembly in San José in early 1970.[5] In April of that year, riot police were sent to disburse the students and other protesters, culminating in a violent confrontation—protestors were beaten and bombarded with tear gas, and more than 1700 people were arrested. In response, an additional 50,000 to 100,000 protestors, including high school and university students, and Indigenous peoples marched through the capital on April 22, 23, and 24th.[6]

As a result of continued protests and legal actions, construction of the dam stalled. The project entered into the **dispute** stage of the cycle, or the conservation phase of the adaptive model. In 1975, the *Centro Científico Tropical* (Tropical Science Center) published their own environmental impact assessment for the Boruca-Cajón dam, reporting that there would be large-scale negative impacts on Indigenous peoples and local ecosystems, prompting further protests and tensions throughout the country.[7] Indigenous peoples in the south maintained their protests, occasional roadblocks, marches, and attempts to enforce their territorial autonomy through legal complaints (*denuncias*). ALCOA ended its contract and left Costa Rica later in 1975, in an action nationally heralded as a victory for the protestors,

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[5] Gabriel Quesada wrote a brief history of the protests against ALCOA for the University of Costa Rica, available at http://kioscosambientales.ucr.ac.cr/opinion/46-opinion/331-nacimiento-del-movimiento-ecologista-y-alcoa.html

[6] At the time of the protests, the Committee for the Defense of National Heritage (CDNH) was created to support protests and boost protection of natural resources, becoming the country's first environmental organization. CDNH broadly worked throughout the nation to protect natural resources and restore national sovereignty.

[7] The Tropical Science Center is a research organization that works to "facilitate the coexistence between human beings and the tropical forests" at http://www.cct.or.cr/contenido/2351-2/.

specifically university students. The project was officially **cancelled** and the release phase began. This moment of successful resistance has come to be known as the birth of the environmental movement. However, not long after ALCOA's departure and the end of the Boruca-Cajón dam, the state **revised** its plans during the reorganization phase and they decided to forge ahead with a hydropower project in collaboration with ICE to develop the region on its own terms. The cycle **repeated** with the *Gran Boruca* project.

The New Wave of Hydropower: Energy Security and Sovereignty (1980-2006)

In 1980, ICE developed its second project, and **proposed** the Gran Boruca (Great Boruca) Project or *Proyecto Hidroeléctrico Boruca* (ICE 2002). The Gran Boruca was promoted as a way to meet the growing energy demands of the country, as well as support energy sovereignty. The dam would have been slightly larger than its predecessor, with a height of 300 meters, a reservoir of 25,000 hectares, and production of 1500MW (Figure 4). The Gran Boruca would have detrimental impacts on regional Indigenous communities, cultures, sacred sites, and would reduce the downstream Térraba-Sierpe wetlands by 1.5% (Carls and Haffar 2010). Indigenous communities immediately responded with **resistance** to its construction during this exploitation phase and the project quickly shifted into a nationwide **dispute** while legal cases were debated and archaeological studies were conducted. The dispute, or conservation phase continued for more than two decades.

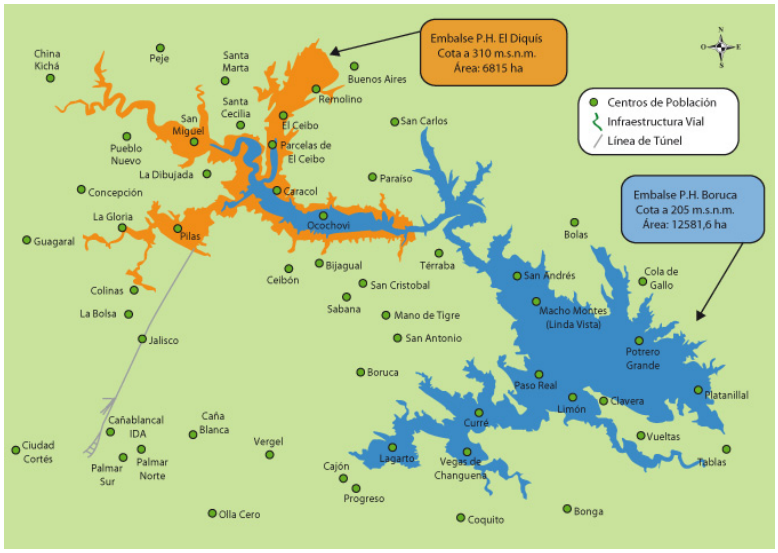

Figure 4. Comparison of the previous Gran Boruca hydropower project (P.H.Boruca) in blue on the right, lower half of the image, and the Diquis, in the upper left in orange. Cajón is visible on the map, just southeast of the start of the Boruca reservoir, where the first Boruca-Cajón dam would have been built. Source: ICE.

In 1980, archaeologist Robert Drolet led an excavation project in the region as part of an impact assessment sponsored by ICE and the National Museum (Frost 2009). Archaeologist Francisco Ulloa (2000:35-36) described this survey as a "major rescue project." The systematic archaeological surveys were conducted using one-km^2 units in four different ecological zones in order to understand the historical "settlement patterns, subsistence and territorial organization" of the Gran Boruca's proposed inundation zone (Ulloa 2000:36). After only 10% of the area was surveyed, Drolet's team found 56 sites that spanned two different historical occupation periods, supporting the ancestral land claims of Indigenous peoples in the region (Ulloa 2000).

In 1983, Drolet, the National Museum, and foreign archaeologists continued excavations under the name the Térraba-Coto Brus Project and then the "Man and Environment in Sierpe-Térraba Delta" in order to sample the region, search for hunter-gatherer sites, and establish cultural chronology throughout the Diquís region (Ulloa 2000; see also Drolet 1983; Fernández and Quintanilla 2003; Lange and Hammond 1984). Over 200 sites important to local Indigenous communities would be buried by the Gran Boruca (and by the Diquís), a fact that Jerhy and others repeated in conferences to make their resistance legible to decision-makers. Francisco Ulloa (2000:228-229) cautioned ICE about hydropower projects in

the area given the significant archaeological finds, stating "archaeological studies with the aim of evaluating history of occupation of specific territories may provide with elements for a more objective considerations of the impact of infraestructural development in archaeological patrimony and indigenous communities, and their rights to stay in the territories or at least treated with fairness."

Although attempts were made at revitalizing the Gran Boruca through the 90s, it stalled as ICE navigated the conflicts surrounding archaeological findings, Indigenous resistance, opposition from environmental groups, and legal battles. In 2001, the Gran Boruca received a boost when Mexico's president Vicente Fox proposed the Puebla-Panama Plan (PPP), now known as the *Proyecto Mesoamérica* (Mesoamerica Integration and Development Project or PM). The PM is a regional collaboration of Central American countries from Mexico to Columbia that aim to improve their citizens' quality of life through sustainable development projects, with foci in transport, energy, telecommunications, and health. The energy sector is known as the Central America Electrical Interconnection System (or SIEPAC for its Spanish acronym). Funded by the IADB and the Spanish government, the project would cost more than $500 million (IHA 2018). The Gran Boruca, and later the Diquís, were key components of the SIEPAC plan, as it would connect Costa Rica's more developed northern corridor with the less developed southern region, adding international pressure for its construction.[8]

ICE began work on the Gran Boruca by setting up camp within Rey Curré Indigenous territory in 2001. According to Costa Rican anthropologist (and former ICE employee) José Luis Amador, this was the first-time ICE worked with an Indigenous community and therefore ICE applied caution as it learned to navigate "ethnic-development;" they realized their actions would not only affect this project, but all future projects in Indigenous territories (Amador 2004:123). Carls and Haffar (2010) had reported that, according to ICE, between 1998 and 2002, ICE held 96 meetings with Indigenous communities to discuss

[8] *Financial Feasibility Study for the El Diquis Hydroelectric Power Project in Costa Rica*. Call for proposals of the Diquís, funded by the United States Trade and Development Agency. Reference-Number-0751009C, 541690.

hydropower development. ICE's positionality in regards to working with local Indigenous peoples was clear when they stated, "This [meeting] does not represent a complete impediment for the eventual execution of the project, but it will require specific agreements with Indigenous peoples, which will require a great deal of effort" (ICE 2001 *in* Carls and Haffar 2010).

Boruca women created a resistance movement to oppose the Gran Boruca, remove ICE from the territory, and worked with other Rey Curré residents to present a manifesto of opposition to the government, critiquing the project for its devastating social, cultural, and environmental impacts. In February 2002, Brörán peoples living in neighboring Térraba territory led some of the first marches against the Gran Boruca along the Inter-American highway. Indigenous protests garnered national attention and eventually the Costa Rican Ombudsman was called in by the state to mediate between Indigenous communities and ICE (Carls and Haffar 2010). ICE maintained that they were working in the best interest of the Indigenous peoples; however, there was obvious discontent on the part of the Indigenous peoples (see Amador 2004). Eventually in 2004, ICE hired a well-known contractor from Columbia (INGETEC) to conduct an impact study on the Gran Boruca. The company advised ICE not to build the dam because of its massive social-ecological impacts and dangerous proximity to a fault line near Cajón. ICE promptly **cancelled** the Gran Boruca in response and began to **revise** its plans. Yet again, the reorganization phase resulted in little technological innovation or experimentation. Shortly thereafter, a new hydropower plan was developed and the cycle **repeated** in the name of "clean energy."

Case Study of the Diquís Hydropower Project: A Climate Mitigation Strategy (2006-2020)

Exploitation Phase: Proposal

Within two years of the Gran Boruca being cancelled, ICE **proposed** the Diquís hydropower project, initially under the name the Boruca-Veraguas. ICE worked to gain support for these new development plans from regional communities by rebranding their hydropower sector. First, they held a competition for school students to name their newest hydropower proposal. In 2006, "Diquís" was selected because it means "great waters" or "great river" in the native language of the Boruca peoples. Next, ICE developed

a motto for the Diquís project, which was, "Let's produce electricity, but only while safeguarding that communities and nature receive as little impact as possible" (ICE 2007 in Carls and Haffar 2010). The project was positioned on the national scale as a response to the global movement towards a low carbon future. In 2006, the Costa Rican president signed a nationwide "Peace with Nature" accord, which declared that Costa Rica would become 100% carbon neutral by 2021, the bicentennial of the country's independence from Spain. Hydropower became a key component of achieving that goal.

ICE referred to the Diquís as the "*eje central*" (central axis) of its renewable energy plan (ICE 2017:2). They additionally stated that in order to fulfill medium and high demand scenarios of energy growth while ensuring their country's goals to reduce CO^2, "a project like El Diquís is required and furthermore, that "the strategy of the Diquís hydroelectric project provides optimal economic and environmental results" (ICE 2017:2). This is a position that ICE maintained throughout the life of the project. In ICE's 2018 Financial Management report, the Diquís is described as "a key project in the country's plans because it meets, in a cost-efficient manner, three of the goals of national planning: addressing the increasing demand, compensating for variations in new sources of electricity generation that complement the diversification of the electricity matrix, and reducing the country's CO2 emissions" (ICE 2018:31-32). According to the International Hydropower Association, Costa Rica cannot reach its renewable energy and climate mitigation targets without an increase in hydropower.[9]

Shortly after the project was proposed, the Executive branch of the Costa Rican government announced that the Diquís was a "matter of national interest."[10] This decree allowed for added funds and legal protections by the state to complete the project (Kaltmeier, Thies, and Raab 2014), thereby also allowing the project to begin in Térraba territory without consultation with Indigenous communities (Williams 2011). The Inter-American Development Bank (IADB) officially approved the Diquís project

[9] The International Hydropower Association provides information on Costa Rica in its country profile, available at: https://www.hydropower.org/country-profiles/costa-rica; see also Fletcher 2010a, 2013.
[10] In 2008, the government signed national decree (No 34312-MP-MINAE) proclaiming the project's necessity. See Executive Summary "The Diquís Hydroelectric Project and the Térraba-Sierpe National Wetlands: An Analysis of Potential Impacts and Options for the Future" by Dr. Alvaro Umaña Quesada, published by the Stanford Woods Institute in July 2013.

in December 2006, technical-cooperation agreements were signed in 2007, and financial disbursement was scheduled for 2009.[11]

Although a fraction of the size of its proposed predecessors, the Diquís would still be the largest hydropower project in Central America. It would be considered a mega-dam with a height of 179 meters (587 feet), width of 600 meters, and production capacity of 650 MW, enough to supply energy to one million people annually. The Diquís would be built on the Río General, about four kilometers upstream of where the river joins with the Río Coto Brus to form the Río Grande de Térraba (Grand Térraba River) near the town of Brujo. It would require 7363.5 hectares (24 mi^2) of land in total, which would include space for roads, a tunnel, and the reservoir. A 13-km tunnel would be constructed between power operating stations at Pilas and Palmar Norte (Figure 5). A reservoir of 6002 hectares (23 square miles) would be created and ultimately inundate 915.59 hectares (3.5 mi^2) of Indigenous lands, over 600 hectares (2.3 mi^2) of which are in Térraba and the rest in the neighboring China Kichá territory of the Cabécar peoples (Figure 6). Although the World Commission on Dams (2000) cautioned against building such mega-projects because of their large-scale social-ecological impacts, ICE was determined to develop the Diquís, defending its choice by arguing that "large reservoir dams are needed to provide power during the dry season" (Carls and Haffar 2010:134).

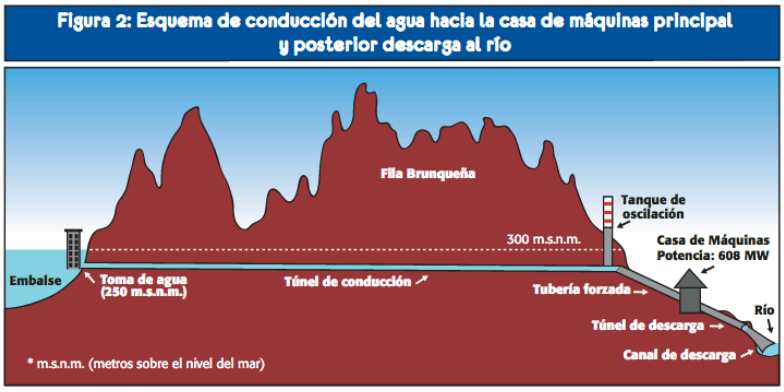

Figure 5. Cross section of the Diquís project illustrating the 13km tunnel from the planned reservoir on the left, in the town of Pilas, through the mountains to Palmar Norte's station on the right of the diagram. Source: ICE

[11] IADB agreed to provide the primary financial support for the Diquís project to ICE, which it estimated at $2,164,000 USD. IADB document entitled "Supplemental Studies for the El Diquís (Boruca/Veraguas) Hydroelectric Project" is available at http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=887211.

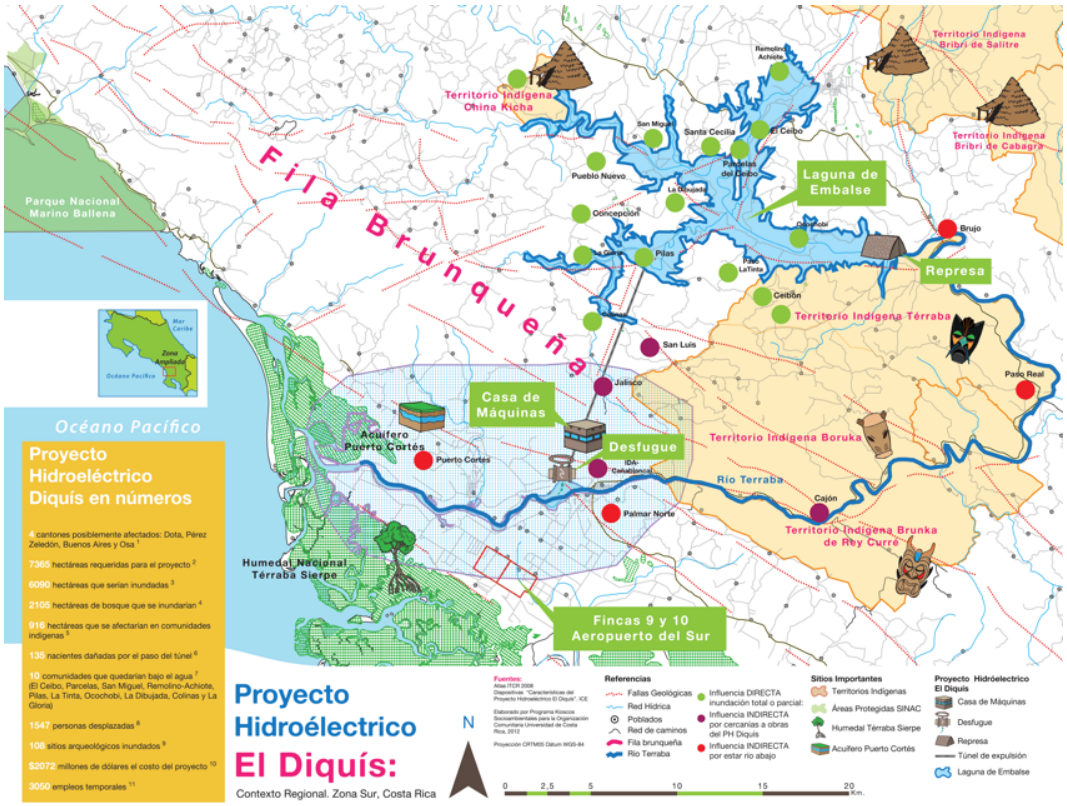

Figure 6. The map illustrates the proposed location of the Diquís and its reservoir, neighboring Indigenous communities, and the location of the tunnel from Pilas through the mountains to Palmar Norte. Source: *Kioscos Socioambientales*.

Additionally, the project was being promoted as a sustainable development platform to provide Indigenous peoples with needed employment opportunities, simultaneously allowing for economic growth in alignment with social and environmental well-being. ICE promised that 3500 jobs would be created during construction of the Diquís over a five-year period, many of which would be guaranteed to Indigenous community members. Further economic gain could be made from the project, as Alvaro Umaña, former Costa Rican Minister of Energy and Environment (1986-1990), explained, if ICE leased the land from Indigenous peoples, money from which could be used to recuperate land they had lost to non-Indigenous peoples and/or use it to build the infrastructure they needed, like schools and hospitals. [12] In 2010, Carls and Haffar had reported that "The Térraba community asked ICE for 860,000 *colones* (US

[12] See his full presentation at https://www.youtube.com/watch?v=gMpdOIUis7s.

$1,511) to be given to each person affected by the dam." That equates to a one-time payment of $2.5 million USD. In addition, Carls and Haffar (2010) reported that the community would receive 46 million *colones* (US $80,864) for inundated farmlands, which would be collected and managed by the local governance body, Association for Integral Development (ADI).

I met with Eugenio Barrios Castillo, a representative for the Boruca region's ICE, at his office in Palmar Norte to discuss the costs and benefits of the project for the Indigenous peoples. I shivered as I sat in his freezing, over-air conditioned room, which was a systemic shock compared to the heat and humidity outside. Throughout the course of our 30-minute discussion on June 8, 2018, Eugenio told me that most communities in the region want the Diquís because there are "*muchas beneficios por la comunidad…se reparan calles, se reparan escuelas, se van ayudas sociales… al final, de hace un lago precioso*" (many benefits for the community. They [ICE] repair roads, they repair schools, they bring social assistance… in the end, it [Diquís] makes a beautiful lake.) He went on to say that there will be "*monton de gente*" (lots of people) attracted to the region because although "*El Diquís, al final su funcion es producir energia*" (The primary function of the Diquís is to produce energy), the Diquís will have secondary benefits by bringing "*mas hoteles, mas restaurantes, comercios, transporte*" (more hotels, more restaurants, businesses, transportation). He never mentioned potential negative impacts that these changes may have on the Indigenous peoples, their communities or local ecosystems.

Exploitation Phase: Resistance

The Diquís project proposal was immediately met with Indigenous resistance efforts led by the Rivera family and their Brörán compatriots. At an *asamblea* in the early 2000s, Doña Digna and Don Enrique asked their fellow afiliados "*Quién estaba dispuesta luchar contra el Diquís*" (Who is willing to fight the Diquís)? No one raised their hands. Representatives from the local governance organization, ADI, who were leading the pro-dam position said, "*Solo los tontos pelear con ese proyecto*" (only the foolish fight that project). Doña Digna recounted to me proudly, "*pero esos tontos siguieron para adelante*" (but those fools kept going).

One day in June 2018, I drove myself, Don Enrique, and Doña Digna a few miles up the road to visit their friend, Don Benjamín, to discuss the Diquís. As we sat in the mismatched chairs in the small living space, the two open doors on either side of me allowed for a cross wind to pass through, keeping us all relatively cool. It also allowed for the occasional dog, cat or chicken to wander through. As is customary, the elders proceeded with their ailment check-in, one by one describing their various physical pains, old and new, accompanied by a description of the traditional medicines they use to soothe their discomfort and heal. Don Benjamín's daughter cooked *platanos* for us on their indoor wood stove. We were served coffee, which was filled with a handful of sugar, that somehow tasted refreshing on the muggy evening; they do not own a refrigerator from which to offer a cold drink.

After getting settled in, Don Benjamín described his experience with ADI when they came to his door seeking support for the Diquís over a decade ago. He told me, "*La primera vez que él vino, él y los dos gatos, la primera vez que nos dieron información, yo dije, 'no estoy de acuerdo.' Ellos intentaron convencerme, pero yo dije, 'nunca en mi vida estaré de acuerdo.' Para mí, esto nunca pasará. No voy a vender mi comunidad*" (The first time he [president of ADI] came around, him and the two cats, the first time they gave us information, I said, 'I do not agree.' They tried to convince me but I said, 'never in my life will I agree.' For me, this will never happen. I am not going to sell my community)" (12 June 2018). Don Benjamín nodded at Don Enrique and credited him with opening his eyes to the certain destruction of dams and sparking his continued resistance against their construction.

I had first met Don Benjamín two-years prior, after Jerhy took me hiking a few miles down treacherously steep muddy slopes, slippery from the afternoon rains, past his family's rustic *albergue* (cabin). We crossed over a local swimming hole and inched by a waterfall jetting over a cliff, until we reached the Inter-American Highway. From there we caught a 15-minute bus ride west to the home of one of Don Benjamín's sons, at *Finca Murciélago* (Bat Farm; see Frost 2009). We sat on wooden benches drenched in sweat in the back yard. We sipped lukewarm fruit drinks prepared by one of his daughters and tried to acclimate to the afternoon heat. Jerhy and Don Benjamín were chatting away about recent events and an upcoming *asamblea*. Don Benjamín's wife, Doña Aidee, joined us and the conversation

turned to Indigenous identity and relationships, as they often did. She is from a neighboring Bribri community; Bribri and Brörán peoples have a long history of friendship and intermarriage. They philosophized as to whether their children were Brörán or Bribri, but no conclusion was reached as Bribri identity is determined through the mother's lineage, yet they grew up in the [historically] Térraba territory of their Brörán father.

Two of their sons arrived with freshly caught fish from the Térraba River. Doña Aidee jumped up and started the outdoor wood fireplace by lighting a plastic bag under some wood and began to prepare the fish for dinner. Meanwhile, Jerhy explained that I was a student from the United States, and after a few good-hearted jokes at being careful not to say too much around an anthropologist (referring to negative past experiences with visiting anthropologists—specifically archaeologists that came and stole artifacts to put in museums)—Don Benjamín told me, "*Solo necesito tierra, no electricidad*" (I only need land, not electricity). In contrast, ICE advanced their hydropower agenda under the belief that "everyone wanted electricity, to be like the west," which I was told during a private tour of Grupo ICE's hydropower museum in San José in April 2019. As Carls and Haffar (2010:4) stated in regard to the Indigenous and non-Indigenous relations (and furthermore, issues regarding development), "ICE is rather ignorant of the interests of the Indigenous peoples of Costa Rica."

Sitting outside Don Benjamín's son's house, a four-walled, wood slat building with dirt floors and no electricity, chickens pecked scraps on the ground around us and cows grazed in the distant rolling hills. The afternoon winds eventually began to cool us down and the birds returned to sing in the sole shade tree behind me as we continued to discuss dams. Don Benjamín continued, "*No tengo un título, pero no necesito uno. Tengo todo el conocimiento que necesito para vivir de la tierra y sé lo que sucederá si construyen una presa. No necesito títulos para saber estas cosas, pero nadie nos escuchará porque somos indígenas*" (I don't have a [college] degree, but I don't need one. I have all the knowledge I need to live off the land and I know what will happen if they build a dam. I don't need degrees to know these things but no one will listen because we are Indigenous) (26 June 2016).

Don Benjamín and the Riveras were steadfast in their resistance efforts through the life of the project; not only was the Diquís antithetical to their ideas of development, it would permanently destroy the river, lands, and the social-environmental connections that the Brörán peoples have with nature (see Chapter Two). The Diquís would impact 15,000 Indigenous peoples living in seven territories by directly inundating lands of the Brörán peoples in Térraba territory and of the Cabécar peoples in China Kichá territory, and indirectly impacting the Boruca peoples living in Rey Curré and Boruca, the Bribri peoples living in Salitre and Cabagra, and the Cabécar peoples in Ujarrás.[13]

The Térraba river is the longest and one of the last undammed rivers in the country, formed by the largest watershed basin in Costa Rica (Cedeño et al. 2010). It swells seasonally with five meters of annual rainfall, which flows down from the steep Talamanca mountains. On its 160-kilometer journey to the Pacific Ocean, it winds past numerous small towns, Indigenous communities, and through the sprawling mangroves of the RAMSAR protected Térraba-Sierpe National Wetlands.[14] With almost 25,000 hectares, the Térraba-Sierpe Wetlands are the largest in Costa Rica, and among the largest in Central America, with a vast network of mangroves.

According to a comprehensive study by the Stanford Woods Institute, the construction of the Diquís would result in losses to vegetation biomass from the use of explosives, creation of roads, and transportation of building materials (Quesada 2013). The total load of sedimentation reaching the Térraba-Sierpe wetlands would be reduced, water temperatures would be altered, and the wetland's overall hydrological profile would be transformed (see review in Todd 2013). These factors would undoubtedly affect the productivity of the mangroves and have a cascade effect to all the other organisms that the system naturally supports (Arroyo et al. 2012). Additionally, the Diquís project would impact 365

[13] Manuel Villanueva stated impacts of the Diquís in a press meeting available at https://www.youtube.com/watch?v=jIXacVgcYbA.

[14] RAMSAR designated locations are sites recognized by United Nations' member states as a wetland of international importance that requires conservation and wise use. It is named after the city in Iran where the convention was adopted in 1971. RAMSAR was adopted by Costa Rica in 1992. The original area of the Térraba-Sierpe National Wetlands was 30,654 but was subsequently reduced (Quesada 2013). The Wetlands were established as a protected area by RAMSAR in 1995.

species of animals that utilize the river and surrounding environment, 13 species of which are endemic (Ibid).

Regarding CO2 emissions, ICE calculated that the Diquís project would emit 250 thousand tons of CO^2 in 2017 and in 2035, CO^2 emissions would be 404 thousand tons, after a relatively steady 18-year increase (Table 14.4; Electricity Generation Expansion Plan 2017). It is not clear if those calculations include the entirety of factors involved in the construction of the Diquís, like cement production for its retainer wall, emissions from the reservoir and energy production, or loss of carbon sequestration from destroyed vegetation and mangroves. The hidden greenhouse gases associated with construction, particularly from cement (Boden et al. 1995), can significantly infuence whether or not hydropower can be considered a "clean" alternative to fossil fuels (see Introduction). As ICE did not submit its environmental impact assessments to the proper government officials, they were not made publicly available and little is known of the specific impacts that the project would have (Quesada 2013).

Even if the assessments were made available, Pablo Sibar, one of the activist Brörán elders and leaders of Térraba, told me that their impact studies would be biased—if ICE is paying for the studies, then they cannot be trusted. Costa Rican newspaper *La Nación* reported in 2012 that although ICE is a successful model of energy development, they are unfairly acting as judge, jury, and executioner. [15] ICE would be conducting the baseline studies and impact assessments, controlling the design of the project, building the project, and they had representatives on the permit granting body. Instead, Don Pablo wanted an international team of independent investigators paid for by the state to conduct new studies that examined all social, cultural, and environmental impacts, and more importantly, he wanted all that information to be made publicly available.

As I sat with Don Pablo and his family at a picnic table at Crün Shürin one blistering day in June 2018, he explained that the Diquís would be "*un cambio total*" (a total change).[16] He said the dam would

[15] Original in Spanish, translated by author. https://www.nacion.com/archivo/el-ph-diquis-la-carreta-delante-de-los-bueyes/LQDMM4SYYFCJJCXD64FBJBO64Y/story/

[16] Pablo Sibar and other Brörán families are recuperating lands illegally occupied by absentee non-Indigenous usurpers. They renamed the farm in the Brörán *naso* language, Crün Shürin. Their make-shift

ruin "*la tierra, la cultura, tradiciones, la comida. Lo perderíamos todo. Afecta todo*" (the land, the culture, the traditions, the food. We would lose everything. It affects everything). He based his assessment on the changes that came with the construction of the Inter-American Highway in the 1960s, which cut through Térraba territory—exactly the same comparison that Don Enrique made to me in previous conversations. Don Enrique's son Jerhy described the negative impacts that the Diquís would have on the community and people of Térraba territory, telling me one day that:

> *La represa traerá sus cambios estructurales. El campo cultural es muy fuerte. [El cambio] será de la noche a la mañana. Muchas personas que no son de la comunidad vendrán aquí. Térraba es un pueblo que es muy tranquilo. [Será] de la noche a la mañana - más gente, economía en mano - eso hace que la parte cultural será muy afectada. No tendríamos la capacidad contra eso porque lo que va a tener mucho dinero.*
>
> *La traerá cambio del campo biológico. El cambio climático de la represa es uno de los daños graves que incluso experimentamos con el río. Como afectaría socialmente, el colapso mental actual, por ejemplo, por parte de los pueblos indígenas. Estamos defendiendo algo que es lógico, defender el río. El país necesita electricidad - así que no debemos oponernos. Ese aspecto es un golpe muy fuerte. La presa es una pregunta muy peligrosa*. (July 3, 2016)
>
> The dam will bring structural changes. The cultural component is very strong. It will change overnight. Many people who are not from the community will come here. Térraba is a peaceful town. It will change overnight. More people, money in their hands – that will greatly affect the culture. We do not have the capacity to fight against that because they will have a lot of money.
>
> It will bring biological changes. Climate change from the dam is one of the most serious damages that we will experience with the river. Its social impacts – the current mental collapse, for example, of the Indigenous people. We are defending something that is logical, defending the river. The country needs electricity – so we shouldn't oppose. This aspect is a very difficult fight. The dam is a very dangerous question.

Various environmental organizations are working in alignment with the Indigenous communities on legal measures to stop hydropower production in the region to avoid negative impacts. On July 16, 2018, I spoke via phone with Monti Aguirre, who is the Latin America Program Coordinator at International Rivers. She explained that her goal is to develop legal channels and make laws that provide permanent protection for the rivers of Costa Rica, like those in New Zealand where rivers have gained the rights of personhood (Muru-Lanning 2016). In a similar phone conversation the following month, Roberto de la

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encampment was burned down in March 2020 and much of the nearby vegetation was bulldozed in July 2020; both times he was personally threatened with murder. See also Chapter Two.

Ossa Thompson, President and Director General of *Alianza Nacional Ríos y Cuencas de Costa Rica* (National Alliance of Rivers and Basins of Costa Rica) told me that "there are new ways of producing energy that doesn't have to bother the rivers…We continue using the only source that we have been doing historically, that is building dams and hurting our main rivers. The best example is *Reventazón* [dam]." He continued to tell me that Costa Rica needs greater investment in solar and wind power, instead of the constant reliance on hydropower. But he said that they won't switch because "They [ICE] spent a lot of money in the tunnels and infrastructure." He was adamant that ICE must find another way to produce energy, telling me, "I will do whatever it takes to try to stop that [Diquís] initiative."

It must be noted that although the majority of Brörán peoples within Térraba territory and other Indigenous peoples are against the dam, there are a few who accept the project for the promises of employment. In March 2017, I accompanied my hosts to an *asamblea* (town meeting) where the *afiliados* elected new ADI representatives (see Chapter Two). An *afiliado* wearing a cowboy hat and a gold chain visibly displayed by his unbuttoned collar approached me while I sat at a table eating *arroz con pollo*. He asked me what I do. After I briefly explained that as a student from the United States I am here researching the Diquís, he beamed at me and said, "ahhh *Gringo-landia*!"[17] He immediately shifted into English and began telling me about his successful eco-tour business that he ran in a town on the Caribbean coast. He was the first and only Brörán person I met who spoke to me in fluent English.[18] He told me about his visits to California, Texas, New Jersey, and Colorado for work. In his perspective, "the Diquís could bring good jobs and tourism to this area and help the people. But there is no infrastructure here to support it." He implied that local Indigenous peoples would not be in a position to benefit from increased tourism that would inevitably come with a reservoir—even if they wanted it—they don't have the hotels or businesses in place to support a tourism industry or the access to money to be able to start

[17] Gringo/a is a term for a foreigner, non-Latino or Latina, or non-Indigenous person who may or may not speak Spanish. It typically refers to white people from the United States, Australia or Europe. It is used in general to refer to white people with no connotations but can also be spoken with derogatory intent.
[18] One other Brörán woman returned from working in the US while I was in Térraba, but we only spoke in Spanish. I have spoken in English with one other Brörán man who lives outside of Térraba.

such a business. Mendoza (2015) reiterated the lack of tourism capacity of the region in his assessment of development potential. The limited capacity for growth in the area is why my English-speaking friend travels to work on the Atlantic side of the country. He eventually asked what I thought of the dam. I replied that "it is hard to say without a social or environmental impact assessment available, but from reading about dam construction around the world the outcome has typically not been favorable for local Indigenous peoples." In response to my remark, he shrugged and said, "it could be good. I haven't made up my mind" as if to shrug off my concerns.

Many people in Térraba told me that they did not believe they would receive any compensation or benefits for the project, and that only the non-Indigenous peoples would gain direct financial benefits. According to Arroyo and colleagues (2012:43), compensation mechanisms that have been suggested by the state/ICE would not adequately account for the Indigenous peoples' true cultural, social, and territorial losses. Jerhy stated in an interview with *Cultural Survival* something I had heard him say many times, "We don't believe in the promises of employment for Indigenous Peoples, as up until today it had been demonstrated that all the qualified and best paid personnel have been brought from outside, Indigenous workers are used only to break rocks" (McPhaul 2017).

In a women's networking meeting in 2016, Doña Isabel, one of Doña Digna's sisters, stated that part of the problem of the Diquís is that only men would benefit from construction jobs. I was also told this by one of Jerhy's cousins, Ruth, a mid-40s Brörán woman. Years prior, at a meeting between ICE representatives and the Térraba community, Ruth asked if women could work on construction. She was told by ICE, no, only men. She asked, "*Qué trabajo pueden hacer las mujeres*?" (what work can women do)? ICE replied, women can "*servir cerveza*" (serve beer). Besides the overtly oppressive sexist reality of the comment and the fact that it is illegal to sell alcohol within Indigenous territories, the institutional level of economic exclusion points to the intersectional discrimination (Crenshaw 1989) faced by Indigenous women in the region.[19]

[19] The combined factors of gender, race, and class act as a threat multiplier to oppress women of color, in what Castillo (2016) has described further as "multiple injustices." For the women in Térraba, as in many

From the time the project was proposed, the Riveras and their allies worked to counter the misinformation spread by ICE and to inform other community members about the reality of impacts that would occur if the Diquís were built. Carls and Haffar (2010:171) stated that Brörán peoples accused ICE of using "doomsday" tactics to get the project passed, such as claiming there would be country-wide blackouts without the Diquís (see also Téllez 2011). It soon became clear to the community that representatives from the town's ADI granted permission to ICE for the project without consulting the rest of the territory's *afiliados*. It is believed that ICE bribed local ADI representatives, most notably the ADI president of Térraba at the time, with kickbacks if they agreed to and supported hydropower development (Todd 2013). This sparked direct resistance and actions by community to stop the project.

The *afiliados* and other community leaders made *denuncias* (legal complaints) against ADI and filed a lawsuit in court against ICE on March 21, 2010, citing violation of ILO 169 and the Declaration of the Rights of Indigenous Peoples' because ICE failed to obtain their free prior informed consent (FPIC) as is required by law (see Chapter One). On October 12, 2010, the community marched 11 miles up the Inter-American highway to the local municipality in Buenos Aires to demonstrate their stance against construction of the hydropower project.[20] Their slogan was "nothing to celebrate," drawing attention to the fact that they would not prosper from the Diquís because the money would be captured by non-Indigenous peoples and the electricity would be funneled up to the central valley or sold to other countries. Some of the Brörán elders filed a request for consideration under the early warning and urgent action of the United Nations Committee on the Elimination of Racial Discrimination for the lack of FPIC, rights' violations, and physical threats they faced from local non-Indigenous peoples. [21] Thus, the cycle shifted into the dispute stage.

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other Indigenous communities, Indigenous women are at the intersection of colonialism, racism, poverty, and social exclusion (in Castillo 2016:14).

[20] *El Día de las Culturas* or Day of Cultures correlates to Columbus Day in the United States and other countries, but now recognizes cultural diversity within Costa Rica.

[21] Description of the early warning and urgent action procedure, as well as all the documents regarding Costa Rica and Indigenous peoples' claims, can be found at the following website: https://www.ohchr.org/EN/HRBodies/CERD/Pages/EarlyWarningProcedure.aspx#about

Conservation Phase: Eight Years of Disputes

On July 21, 2010, the United Nations Committee on the Elimination of Racial Discrimination responded to Indigenous resistance actions and their requests for international assistance in ensuring their rights.[22] In their report on *The Situation of the Térraba Indigenous People of Costa Rica: A Request for Consideration under the Early Warning and Urgent Action Procedures* (Habtom 2010:1-2) they found that "There has been no consultation with or participation by the Térraba in relation to the Diquis dam" and furthermore that "their requests to be afforded the opportunity to participate in decision making to-date have been rejected by State officials as being premature, a position that has been endorsed by the Constitutional Chamber of the Supreme Court." [23] Regarding the potential impacts of the project, they found

> the Diquis dam, if built in the manner currently proposed, will also flood a large number of sites of sacred, cultural and archaeological significance to the Térraba people. These include sites of fundamental importance to their identity, cultural integrity, and spiritual and religious freedom, including many hundreds of burial sites and geographical features that are considered to be 'pillars of Térraba existence and identity' (Habtom 2010:1).

Also in 2010, the Human Rights Clinic from the University of Texas School of Law responded to the Brörán peoples' request for support and published a report on their research of the Diquís situation. It revealed "a failure on the part of the Costa Rican state to meet its international obligations and protect the rights of the Teribe peoples, in the context of the PHED and beyond" (HRC 2010:86). They continued to report that:

> Costa Rica has failed to respect and protect the human rights of its indigenous peoples in the areas of information, property, representation, and effective participation in decisions surrounding the PHED. Its national electricity authority, ICE, has not obtained the effective participation of the Teribe peoples as required under international law. Instead, ICE has moved forward with preliminary studies on the El Diquís project without the Teribe peoples' effective participation, operating under an incorrect and improper interpretation of international law's requirements. The Sala IV supplied ICE with this misinterpretation of international law in its conclusion that ICE has no obligation to consult with indigenous peoples during the feasibility studies. And furthermore,

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[22] The following groups participated in the international request include Asociacion Cultural Indigena Teribe (Teribe Indigenous Cultural Association), Mano de Tigre (Hand of the Tiger), Museo Comunitario (Community Museum), Movimiento de Juventud Naso Lokes (Naso Lokes Youth Movement), and many individuals including Don Enrique Rivera.

[23] The state had ruled that there was no need to consult with the Indigenous communities during the early stages of planning or during impact studies.

> the state-created structures for indigenous governance have thwarted participation by indigenous peoples at a time when robust institutions have been most needed for the consideration and resolution of these issues (HRC 2010:4).

On January 29, 2011, growing pressure prompted the ADI to unanimously approve of a measure to remove ICE from the territory, giving them eight days to vacate all equipment and personnel; it took them almost three months to comply, which they did only days before Dr. James Anaya, former United Nations Special Rapporteur on the rights of Indigenous peoples, visited Costa Rica. Dr. Anaya met with leaders in Costa Rica in April 2011 to assess the situation regarding the Diquís as it pertained to Indigenous rights. He met with government, ICE, and other representatives in San José, then traveled to meet local officials in Buenos Aires, and went to Térraba to meet with Brörán and other Indigenous peoples in the region.

Doña Digna and many women within the community cooked a large traditional Brörán meal and hosted Dr. Anaya and his colleagues at the Rivera's home. Indigenous peoples from around the region spent a day talking to him, explaining their perspectives regarding the dam, outlining the series of events that led to this point, and expressed deep concern over the socio-cultural and ecological impacts of the Diquís. They took him to see the tunnels that ICE already carved deep into the mountains. In many of my interviews with people who were present at this event, the experience was described as being monumental; Dr. Anaya is celebrated as an important ally to their cause.

Soon after his visit, Dr. Anaya wrote a report to the Costa Rican government recommending the need for consultation between the government and Indigenous peoples to develop a pathway to achieving free, prior, and informed consent—as is required by ILO 169. This order also allowed space for the capacity to establish a climate of trust between government, ICE, and the affected communities, establish equity in participation and representation of decision-making processes, mitigate the power imbalance between Indigenous peoples and the state/ICE, and employ independent experts to mediate the process (Anaya 2011). In a lengthy Facebook post in response to Dr. Anaya's report to the community in June 2011, Jerhy wrote on behalf of *El Frente de Defensa de los Derechos Indígenas Térraba* (Defense Front of the Indigenous Rights of Térraba) stating

> *Ya que el mismo viene a ratificar con claridad, las violaciones en derechos que habíamos denunciado. A la vez informa por este medio que seguiremos en pie de lucha e insta a las demás poblaciones indígenas a unirse más por la defensa de nuestra madre tierra, nuestras costumbres y tradiciones. En Térraba se ha denunciado en repetidas ocasiones por parte del Frente de Defensa de los Derechos Indígenas Térraba la manera en la que ha procedido el ICE al impulsar el Proyecto Hidroeléctrico El Diquis, ya que esto ha violentado los derechos colectivos del pueblo Teribe. En este sentido, el Relator Especial reafirma nuestras denuncias en su informe.*
>
> …it comes to clearly ratify the rights violations that we had denounced. At the same time, in the same manner we will continue to fight and urge the other indigenous populations to unite for the defense of our mother earth, our customs, and traditions. In Térraba, the manner in which ICE has proceeded to promote El Diquis Hydroelectric Project has been repeatedly denounced by the Front for the Defense of Indigenous Rights of Térraba, since this has violated the collective rights of the Teribe village. In this sense, the Special Rapporteur reaffirms our complaints in his report.

Around the same time, the United Nations High Commissioner for Human Rights (UNHCHR) corresponded with the Costa Rican government expressing concern regarding reports on the violations of the state against the Indigenous peoples starting in 2010. In August, the UNHCHR wrote in response to the March 11, 2010 *denuncia* made by Brörán peoples, requesting that the state take immediate action towards safeguarding Indigenous peoples and their rights. The second UNHCHR report came in March 2011 just before Dean Anaya's visit, the High Commissioner thanked the state for the efforts they were making to advance relations with Indigenous peoples regarding the Diquís (meaning meeting with Anaya). Again, in August 2012, the High Commissioner thanked ICE for its steps in opening dialogue with Indigenous communities. However, in response to a lack of action by the Costa Rican government, the United Nations Committee on the Elimination of Racial Discrimination wrote in August 2013, stating:

> the State party has not taken any action to protect the physical integrity of the leaders and members of the Teribe [Térraba] and Bribri people. Specifically, the information alleges that the alleged illegal occupants of the territories of this town have not been punished and that those responsible for the acts of violence have not yet been tried. The allegations also indicate that the State party has not issued measures to protect Mr. Sergio Rojas Ortiz who, after having been declared persona non grata ... suffered an attack in September 2012. [24]

An attack on Jerhy's life a month after that report was written, on September 1, 2013, prompted the Committee on the Elimination of Racial Discrimination to condemn the state's:

[24] Sergio Rojas Ortiz was shot at six times in 2012 but survived. He became a political prisoner and was jailed in 2014. He was murdered in his home in March 2019. See also Chapter One.

> pattern of pervasive, long-standing and inter-connected violations or denials of the rights of Indigenous peoples in the Republic of Costa Rica, and the ongoing situation of impunity in which they occur and persist. […Violations] include the massive and illegal occupation of titled Indigenous lands, the persistent violence and threats against the Indigenous communities, their leaders and members, the absence of adequate procedures to address rights to traditional lands outside of these titled areas, stalled legislative reforms, the unconstitutional advance of the Diquís Hydroelectric Project in the territories of Indigenous peoples, and denials of Indigenous peoples' rights to juridical personality and to govern their internal affairs through institutions of their choice (Habtom 2015:1).

Despite widespread recognition of state abuse against Indigenous peoples in the case of the Diquís, a Latin American energy data management company consistently critiqued Indigenous peoples for impeding Costa Rica's energy progress.[25] In a 2015 article, the organization reports, "It is time that the region starts to balance conservation policies with the needs of development so as to allow an escape from poverty for those who are currently held down by it and who at the same time are holding the rest of society hostage." This sentiment is also expressed in an article from 2014 titled "How to Ensure Eternal Poverty for Indigenous People" that implies the Indigenous peoples will remain poor without the Diquís to save them. In another article, the company stated, "Complaints by indigenous natives from the El Diquís area are jeopardizing the project." Finally, they seem to mock the Indigenous consultation process by calling it "intercultural dialogue" and saying it is needed in order to "give the green light to the construction of one of the most important hydroelectric projects for the future energy supply of the country," which clearly implies that they believe the consultation process is nothing more than a formality that will not ultimately prohibit the project.

The state finally responded to the protests and the accompanying urgent calls for action from the United Nations that were ongoing for over six years. The Constitutional Chamber of Costa Rica's Supreme Court ordered ICE to officially halt all construction of the Diquís on November 1, 2016, an

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[25] The Central American Data website describes various energy related news from the region. Two relevant articles related to the Diquís are available at the following websites: https://www.centralamericadata.com/en/article/home/How_to_Ensure_Eternal_Poverty_for_Indigenous_People
and
https://www.centralamericadata.com/en/article/home/Hydroelectric_Megaplant_at_Risk_in_Costa_Rica.

almost inconceivable and yet welcomed present for Jerhy Rivera to receive on his 42nd birthday. It appeared as though Luis Gomez, representative for ICE's public relations department, was wrong when he stated, "the country's progress cannot be stopped by a small group of people as minimal as the Indians" (*in* Todd 2013).

The ruling overturned the 2008 "national interest" decree, arguing it was unconstitutional because the boundaries of the project were not discussed with the Indigenous communities that would be impacted. The court reinforced its previous order from September 2011 stating that ICE cannot legally resume work until a two-year consultation process between the government and all 24 Indigenous territories was completed. The consultation process began in March 2016 and on March 6, 2018, the President of Costa Rica ratified the General Mechanism for Consultation of Indigenous Peoples (see Chapter One). While excited, the Rivera family expressed deep-seeded concern and fear about utilizing the consultation process. They would be expected to utilize it in negotiations regarding the proposed Diquís hydropower project and all eyes of the nation would be on them to examine how it was used and if it succeeded or failed. The future of the Indigenous-hydropower cycle was riding on their use of the new system as it would set the precedent for its applications from then on.

Release Phase: Cancellation and Creative Destruction

Months after the consultation process was completed, Irene Cañas Diaz, Executive President of Grupo ICE, announced on a live news conference that the Diquís project was "*suspensión indefinida*" (indefinitely suspended or cancelled). The announcement came on November 2, 2018, a day after Jerhy's 44th birthday. Within a week, all the national and local news stations were in Térraba interviewing leaders of the resistance movement. Doña Digna stood on her front lawn proudly recounting the tireless efforts of everyone who helped reach this outcome.[26] There was an electric, emotional relief throughout town. However, despite the gravity of this news, public announcements on TV, and celebrations within Térraba

[26] Doña Digna and Jerhy speak about the cancellation of the Diquís at https://www.youtube.com/watch?v=XyUd9f2v3iU

centro, many people I spoke with in March 2019 in other towns throughout Térraba territory did not know that this decision had been made. Two interviewees began to tell me that there may be some benefits from the Diquís, until my puzzled look gave them pause. I glanced at Don Enrique who sat there with a smirk as if he knew they didn't know that the project had been cancelled. I nervously waited for him to speak but he sat contently waiting for me to continue. I cautiously broke the news that the Diquís had been cancelled almost five-months prior, after which point the surprised interviewees and Don Enrique joined in conversation regarding the details.

A few months later, in May 2019, I spoke with Sra. Cañas directly at the World Hydropower Congress (see Chapter Four). The decision to cancel the Diquís was ultimately hers so I asked if she would discuss the factors involved in making that decision. She explained,

> A few months after I got there [ICE], the commission in charge of planning presented to me the expansion plan for the next years. When they ran all the simulations, taking into account the behavior of the demand and also the installed capacity from dams and other utilities, Diquís wasn't any longer in the expansion plan.[27] That means the system didn't require a plan as big as Diquís. The thing is, the last five years the utilities have been installing more capacity in hydro, in wind, and also in solar, so all those plans plus the plans from the private sector, plus Reventazón [dam], we have enough capacity to face the next 5-6 years without the need to build more plants. If we build the Diquís, we are not going to be able to put that electricity into the system. We have to pay for the project, but we can't sell electricity. There is no space in the system right now. Basically, that is all the criteria why we decided to ***postpone*** the Diquís (emphasis is mine) (16 May 2019).

As I let this statement sink in, I had two immediate thoughts. First, I was taken aback by her use of the word *postpone*. I recalled something that Doña Digna had said to me previously in April 2019,

> *…el Diquís no se ha ido. Va ha volver de otra forma. Pero cuando regresan, viene con otra peor. No tenemos nada firmado donde nos digan no volvemos nunca mas al interno de territorio Térraba. Allí todavía está ese gusanillo que siempre va estar en las mentes de nosotros. ¿Qué puedes hacer cuando regresen algo differente? O tal vez regresen y digan que quieren continuar con el Diquís.*
>
> …The Diquís has not gone. It will return in another form. But when it returns, it will be worse. We don't have anything signed that says they will never return to Térraba territory. There is still this little bug always in our minds. What can you do when they return with something different? Or maybe they will come back and say they want to continue the Diquís.

[27] Expansion Plan 4.0 lays out the nation's energy plan for 2019-2023, which does not mention the Diquís nor hydroelectricity at all. It was published May 10, 2019 and features CEO Irene Cañas Diaz.

With this in mind, I asked Sra. Cañas to elaborate on whether or not the Diquís or another hydropower project would be built in the future. She replied

> I can't be sure of that because we already a have renewable matrix. If we were another county in another reality, maybe, but we are already generating 98%. We already have enough. We can also face the needs for electric transport. Today we have 3700 mw installed and maximum demand is 1700, we have like double. We can't say that it is fully double, because… some is wind, some dams, we don't have that source all the time. It depends on how much water and how much wind. So we have enough, our challenge is how can we store it and how to manage in best way to use excess electricity to charge cars or electric train or whatever needs we will have in transport. Right now, we have enough. I don't know if we are going to need it, depends on a lot of things. If we are going to face a higher increase in demand, I don't know. Some people say it will increase. Electricity is always a necessity, but you can see there is a lot of international policy for energy efficiency, and also there is a lot of normative around the world for efficiency. Maybe we are going to have an increase, but I don't believe it is going to be that huge. I can't say, when are we going to need it, maybe we are going to need it. But I don't know when (16 May 2019).

Her statements were as obtuse as the mixed messages in ICE's planning documents. While ICE's 2019-2023 National Energy Strategy published in May 2018 (the one that Sra. Cañas referred to in our interview), states that the Diquís is not needed, Grupo ICE's financial report published one month later in June 2018 stated that the "PHED is expected to begin operations in 2026…[the] Diquís is a key project in the country's plans…" (ICE 2018:32-33). Additionally, it stated that ICE is ready "for beginning the preparation of the Indigenous Consultation of PHED" and "the consultation process is expected to begin in the second quarter of this year" (Ibid).

Secondly, I was interested in the reasoning for the stopping of the Diquís. In contrast to my suspicion that the decision coincided with the official formulation of a consultation mechanism, Sra. Cañas assured me, it was really based on storage capacity, national demand, and the company's inability to sell excess electricity on the regional SIEPAC grid because Nicaragua's infrastructure was inadequate. While I believe that Sra. Cañas' reasons were legitimate, I contend that Indigenous resistance efforts delayed the project for eight years and the prospect of engaging in another lengthy delay waiting for the consultation process to be completed was a significant deterrent. She did not mention the complicated legal battles that ICE had faced due to Indigenous resistance as part of the cancellation nor did she discuss the violations against Indigenous rights that had been perpetuated by ICE.

Moreover, legal battles and delays were likely responsible for skyrocketed final project costs that were much higher than initial estimates: originally slated to cost $1.4 billion USD in 2007, the project was running $3.6 billion in 2014 (Arias 2017). At the time of cancellation, ICE had invested over $146 million in the Diquís (McPhaul 2018). Much of their investment went into building roads and tunnels into the territory that have long since been abandoned, along with pipes and other tools left behind. Those altered spaces remain as scars in a form of what Gordillo (2014:5) termed rubble; "textured, affectively charged matter" that "is created by the destruction of space." The afterlife of that rubble is not only a reminder of the actual, violent transformation of place, but also the potential future destruction the community could endure if another project is proposed. The affective impact of that fear is a motivation for the community to continue resistance, strategizing, and revising plans during the reorganization phase.

Reorganization Phase: Revising Strategies

Since the Diquís project has been cancelled, the Brörán peoples have refocused their energy on increasing their legal rights and autonomy, as well as actively recuperating their ancestral lands from non-Indigenous peoples. As part of that effort, on March 14, 2021, a collective of Indigenous representatives and organizations published an open letter in favor of long-term protection of the Térraba river.[28] The group made seven specific declarations, stating: (1) We reject the current norm by which MINAE allows exploitation of up to 90% of water from river sources (blaming the state for destruction of the country's riparian systems);[29] (2) We reject the national environmental flow decree that may change the exploitation limit, and protect only 20% of water in rivers (arguing that climate change already decreases the amount of flow and this decree would cause further ecosystem destruction); (3) We reject excessive contamination from agro-industrial corporations and their monocultures (pointing out that increased job

[28] The groups collaborating in this call to action include Neighbors of Finca San Andrés (Térraba), Council Ditsö Iriria ajkönuk wãkpa (Salitre), Ríos Vivos, Participants from Volcán de Buenos Aires and TI de Boruca, and the Alliance of Communities for the Defense of Water in Puntarenas. Original in Spanish available at: https://feconcr.com/agua/pronunciamiento-en-favor-del-rio-grande-de-terraba/?fbclid=IwAR1F9lhm1aVr-YAQsC5pteEmIsfnUA9dFw-0-RH-9cpyBDodLuQ547XV0I8.

[29] MINAE is the Ministry of Environment and Energy.

opportunities do not negate irreversible damage to water quality from runoff); (4) We have a duty to care for our rivers and their biodiversity; (5) We have the right to resist neoliberal models of development. We support a just transition to dignified and sustainable life; (6) We call for the rapprochement of all organizations along the Térraba river to recover overexploited tributaries and defend them from threats; and (7) We recognize the Térraba river as a living being with rights to exist with dignity.

ICE, meanwhile, has been revising its future energy plans. In 2019, ICE collaborated with the state to launch its National Decarbonization Plan, which will focus on reducing greenhouse gas emissions from the country's leading polluting sectors: transportation, energy, waste management, and agriculture. According to a representative from ICE, the Diquís (or hydropower more generally) is needed for the country to reach its goal of transforming its fossil fuel-dependent transportation system into an electric one (pers. comm., 8 June 2018; see also Fletcher 2010a). Transportation accounts for 42% of Costa Rica's carbon emissions and is a major road block in achieving their climate goals (Bertram 2019). Although ICE will not build the Diquís, there are a variety of private companies that continue to propose new hydropower projects on rivers and tributaries throughout Costa Rica, and their energy generation is managed by ICE. It remains to be seen if ICE will innovate their technologies, knowledges, and practices to capitalize on other forms of energy production as their conceptualization of sustainable development is firmly situated in hydropower. Along with ICE's expertise in hydropower, the local-global climate governance system is poised to propose new projects, creating the rigidity trap.

The Rigidity Trap

These multi-scalar, local to global interactions and the conflicting tensions between two incommensurate conceptualizations of development have resulted in a 50-year Indigenous-hydropower cycle. I contend that the cycle continues because of a rigidity trap. During the reorganization phase of the adaptive cycle, the system should experiment, learn from previous mistakes, invest in innovation, and develop new technologies. Instead, the state-energy system revises its plans and proposes a new hydropower project of a different size, in a new location, and with a new name. The cycle has run three continuous loops thus

far, which I argue is because of specific sets of feedbacks that occur on a small, local scale through the institutional autonomy of Costa Rica's national energy company, ICE, and globally, on a large scale, as hydropower is maintained through the neoliberal logic of global climate governance (see also Introduction).

In Costa Rica, hydropower is supported by the technological expertise of ICE. ICE advances their agenda of increased hydropower through their institutional autonomy, which is maintained by its public, not-for-profit-nature, its technical expertise, and its political and financial independence from large-scale government regulation (Wilde-Ramsing and Potter 2006:78). These factors allow for a "degree of independence from short-term interests" (Wilde-Ramsing and Potter 2006:71) and has played a significant role in shielding ICE from the detriments of privatization that typically accompany neoliberal reform (Perry and Berry 2016). ICE's decisions to pursue hydropower as a form of sustainable development and as a climate mitigation strategy are supported by the international rhetorical shift that positions hydropower as a clean, renewable source of energy within neoliberal climate governance.

Discussion—Will the Cycle Repeat?

The Intergovernmental Panel on Climate Change (IPCC; scientific advisory board for climate policy-makers) affirmed in their 2011 report on "Renewable Energy Sources and Climate Change Mitigation" that hydropower is likely to continue expanding in its global importance in fighting the climate crisis. In the report, Kumar and colleagues (2011: 441) state "Hydropower offers significant potential for carbon emissions reductions …The significant increase in hydropower capacity over the last 10 years is anticipated in many scenarios to continue in the near term (2020) and medium term (2030)." Additionally, "undeveloped capacity ranges from about 47% in Europe and North America to 92% in Africa, which indicates large opportunities for continued hydropower development worldwide." Similarly, 74% of water resources in Latin America remain undeveloped (Ibid). The United Nations Framework Convention on Climate Change (UNFCCC) argues that hydropower remains a "cornerstone" of the world's renewable energy sector and therefore has a "key role to play in the implementation of the Paris Agreement"

(UNFCCC 2018). The combined local level control of ICE in Costa Rica and the promotion of hydropower by the transnational climate governance community curate a space that not only favors hydropower but also ignores alternative solutions.

The very same false dichotomy that positions "capitalist markets [as] the answer to their own ecological contradictions" allows hydropower to continue as a solution to the climate crisis despite its contribution to increased greenhouse gas emissions (Büscher et al. 2012:29; Fearnside 2004, 2005, 2013). The overall project to neoliberalize the atmospheric and environmental commons through development initiatives has relied on concealing the gap between the rhetoric of hydropower and the negative realities of its social, cultural, and ecological outcomes (Büscher and Fletcher 2015). That concealment has also created the conditions for the Indigenous-hydropower cycle to continue, which I explore through the adaptive cycle and its nested position within the multi-layered panarchy model.

Ideologies promoted by neoliberal institutions that prioritize capitalist notions of development, aggregate and compound discrimination and violence against the Brörán peoples. The Brörán peoples are marginalized by capitalist-centered, commoditized nature and climate mitigation strategies that ignore cultural and spiritual valuations of the environment (see also West 2016). ICE's autonomy places them in a hierarchical position of power regarding how resources are exploited. And although ICE proclaims to focus on sustainable development, they are not accounting for the development or future imaginaries of the Indigenous peoples in Térraba when they continue to revise and resubmit their plans for hydropower. The case of hydropower in Costa Rica, and the Diquís specifically, exemplifies intersectionality, the multi-layered, dynamic amalgamation of power inequities faced by Indigenous peoples, and Indigenous women in particular, who would not benefit from the proposed development projects.

There is no indication at the local or global level that pressures to build hydropower will cease (see Conclusion). Thus far, Brörán peoples have used the sword of Indigenous rights to sever the Hydra's (hydropower) heads; it is yet to be determined if they will ever be able to cauterize the one immortal head (capitalism), as the conditions that support hydropower across various scales have not altered.

CHAPTER FOUR

Harmonious Spectacles in the Climate Frontier

Figure 1. Mathis Rogner, Senior Hydropower Analyst with the International Hydropower Association sits in the middle of the table with his chin resting on his right hand during the panel entitled "Stronger Together: Showcasing Success of a Global 100% Renewable Energy System" which was presented at the COP24 climate meeting in Poland in December 2018.

It's Your Last Chance

At the closing plenary of the Global Climate Action Summit, Jane Goodall invited her friend and fellow environmental advocate, musician Dave Matthews to the stage. He was welcomed by a crowd roaring in applause as if it were one of his concerts from 1997. Blue and orange lights flashed brilliantly in the background, mixed with images of waterfalls and lush mountainscapes as he stood on stage with his guitar. After taking a sip of whiskey and setting the glass down on a stool next to him, he took a moment to speak to the crowd. First, he commended the engaged youth at the Summit for actively participating in the creation of a better future. He then gave a nod to the protestors gathered outside the venue, saying, "I think it is very important that we somehow bridge the gap between those of us with a voice and those people that feel voiceless and those people that feel *desperate* about finding a solution." He proceeded to play an extended version of *Don't Drink the Water* patriotically remixed with a few verses of Woodie Guthrie's *This Land is Your Land*. Before he could start his second song, there was a jostling in the crowd. A small group of five protestors stood up on their chairs and began chanting: "It's your last chance. Jerry Brown it's your last chance (2x).[1] Keep it in the ground (2x). Jerry Brown it's your last chance. It's your last chance. Keep it in the ground…"

I stood almost 25 meters away from the protestors at stage right, quietly filming the incident (Figure 2). It was initially hard to tell whether or not the audience supported the protestors, as most everyone in the venue had been caught off-guard; a mixture of reactions followed. Some empathetic audience members briefly clapped along to the chant, while others scowled. I could see security streaming down the aisles towards the protestors from all corners of the ballroom, intently focused on quelling the disruption. Within 30 seconds, the protestors were being pulled from their chairs by men in black suits and physically escorted from the room; they chanted all the way to the emergency exits. Once they were gone, the crowd erupted in applause. There was a tense anticipation among many on how to proceed next and the audience looked to Dave Matthews for leadership. He remained calmly standing on stage during

[1] Former California Governor Jerry Brown, one of the hosts of the Summit, was called out in this protest action because of his controversial political record on environmental issues.

the entire scuffle. He finally responded, stating "I think it's a good message. I think it is all of our last chance, not just Jerry Brown." This received enthusiastic support from the audience. He continued in a more sarcastic tone, "They took some of my time. I'll shorten my song. They weren't in harmony, but it was a good message." People laughed jovially and the show went on.

Figure 2. Dave Matthews on stage on the left side of the photograph, standing in front of a bright blue screen at the moment when he was interrupted by protestors standing on their chairs, visible in the middle of the frame.

As an ethnographer conducting research at international climate and hydropower conferences, I came to recognize this moment when disconnected narratives merged, as a common occurrence within the climate frontier: spaces of engagement between (dis)interconnected ideologies and epistemologies regarding climate adaptation and mitigation policies (cf. Tsing 2005; see Introduction). This frontier becomes a tangible space within conference arenas where climate science is represented, translated, and enacted by a disparate amalgamation of stakeholders who are part of what Haas (2015) refers to as an epistemic community—experts who serve to legitimate simplified technocratic solutions to complex climate problems. Their aim is to convince policy-makers and the public of a specific pathway to address the climate crisis utilizing a particular set of produced knowledges.

Beginning in the 1990s, non-state actors, non-government organizations (NGO), and corporations increasingly became involved in transnational climate governance in a global effort to address the climate crisis across multiple spatial and temporal scales. In the past two decades, celebrity involvement in this

effort has increased substantially, and as social media 'influencers,' celebrities are increasingly informing and shaping public perspectives on important issues. They have become the spokespeople responsible for translating complex political processes to the public in an effort to garner support. The conglomeration of these various stakeholders within the climate frontier contribute to "spectacular environmentalisms" which are "environmentally-focused media spaces that are differentially political, normative and moralized and that traverse our everyday public and private lifeworlds" (Goodman et al. 2016:677). Various forms of friction and violence are embedded within these "spectacular" spaces.

While climate policy decision-making may appear "to be equitable or sensible at one level, [it] may, in fact, have significant implications for slow violence in particular places where impacts of higher level decisions play out over time" (O'Lear 2016:5; see also Nixon 2011). For example, broad goals to end hunger, solve poverty, and fix the climate crisis—as promoted by celebrities and other non-state actors—negate to engage with the diversity of voices, perspectives, or knowledges required to effect sustainable change (Dieter and Kumar 2008). Jasanoff (2010:238) credits this fault to the impersonal knowledge of policy-makers regarding the "rhythms of lived lives and the specificities of human experience."[2] The global, umbrella strategy of building hydropower to mitigate climate change does not consider local realities for Brörán peoples, their daily lives, or cultures. Failing to account for the array of complexities in specific locations often perpetuates inequities in already marginalized communities, as celebrities reinforce structural norms of accepted neoliberal environmental policy and activism, primarily the technoscientific interpretations of climate (Abidin et al. 2020; O'Lear 2016; Partzsch 2018).

Research is only beginning to focus on the control, accountability, legitimacy, and power of celebrities and non-state actors within the climate governance arena (Boykoff and Goodman 2009; Craig 2019). In this chapter, I contribute to the discussion by broadening my investigation of the climate frontier from the local-national level in Costa Rica to explore the spaces where climate discourse and policy are orchestrated, produced, and performed on the international level (conceived and lived spaces, cf. Lefebvre

[2] Jasanoff refers to the Brundtland Commission's report on sustainable development in her discussion (WCED 1987).

1991, see Introduction). The greenwashed rhetoric of hydropower as a clean, renewable resource at these conferences reinforces ICE's efforts to increase production within Costa Rica, perpetuating the Indigenous-hydropower cycle discussed in the previous chapter.

In the following sections, I present ethnographic research from three conferences: The Global Climate Action Summit (hereafter, Summit) in San Francisco, California, USA in September 2018; the United Nation Framework Convention on Climate Change's 24th Conference of Parties (COP24) in Katowice, Poland in December 2018; and the International Hydropower Association's (IHA) biennial World Hydropower Congress (hereafter, Congress) in Paris, France in May 2019. The decisions that are made at these conferences incite local-level responses regarding climate mitigation strategies (e.g., hydropower) within Costa Rica by both the state and Indigenous peoples. Three themes emerged when assessing the decision-making processes and spaces of climate policy: knowledge, representation, and value, which will each be discussed in the following sections.

Global Climate Action Summit, California, USA (September 2018)

The Summit was essentially a who's who of the celebrity environmental movement with presentations by actors Harrison Ford, Nikolaj Coster-Waldau (of *Game of Thrones* fame), and Alec Baldwin. They casually mingled with politicians from over 70 international cities, including the Mayor of Paris Anne Hidalgo, former United States Vice President Al Gore, Congresswoman Nancy Pelosi, Governor Jerry Brown, and Mayor Michael Bloomberg. The politicians and celebrities shared common concerns over social-environmental issues as TV personalities like author and commentator Van Jones moderated their conversations. While I enjoyed the speeches and performances, I was personally most interested in the presentations by groundbreaking scientists Jane Goodall and Sylvia Earle as they have been my role

models since childhood.[3] I found the ease at which the presenters all corresponded with each other to be fascinating, as it illustrated the regularity with which they interact in the climate arena.[4]

Summit organizers declared that the gathering of these activists, celebrities, politicians, scientists, industry leaders, and civil society "represent[ed] the global spectrum of non-state actors" and "[were] central to doing the work of meeting the goals of the Paris Agreement." Each speaker took their turn parading across the stage, offering messages of prosperity, hope, and progress as peppy instrumental music blared over the loudspeakers. Jumbo-tron-style screens hung overhead to magnify images of all the speakers so that those sitting in the back or standing in the aisles could fully appreciate each talk. A row of booths lined the back wall of the large ballroom, housing translators to provide for the multitude of languages spoken throughout the conference.

Unlike the two other conferences discussed herein, I attended the Summit not only as a researcher, but I also wore the hat (yellow shirt) of a volunteer. While I was an invited guest to the opening dinner of GCF Task Force, volunteering was the only way I was able to access the Summit and enter the heavily guarded venue.[5] As such, I did not receive conference swag, although my badge did

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[3] Jane Goodall, an expert on chimpanzees, discovered the species' use of tools while consuming termites, documented their individual personalities, and assessed their social structures. She is an outspoken advocate for conservation issues. Sylvia Earle is a world renowned marine biologist and ocean conservation activist. She led the first all-female aquanaut team to Tektite II in the U.S. Virgin Islands, among 50 other ocean expeditions, and set a record for walking on the sea floor at a depth of 381 meters. She was Time Magazine's first 'Hero for the Planet' and was also the first female Chief Scientist of the United States National Oceanographic and Atmospheric Administration.

[4] The Summit is similar in concept to events that raise awareness of pressing global issues through collaborations that combine performances by musicians, celebrities, and politicians. The original *Live Aid* was one such concert in 1985 aimed at solving world hunger. Twenty years later, *Live 8* in 2005 aimed at eradicating poverty. In 2007, *Live Earth* was meant to inspire actions to combat climate change. I attended the *Live 8* concert in Philadelphia and *Live Earth* in New Jersey, both of which had presentations and performances reflective of those at the Summit. *Live Earth* was held simultaneously around the world, on all seven continents on July 7, 2007. It was developed in partnership between Al Gore and producer Kevin Wall. Similar to previous *Live* events, *Live Earth* "was built upon the belief that entertainment has the power to transcend social and cultural barriers to move the world community to action" (see https://web.archive.org/web/20100220005119/http://liveearth.org/en/liveearth).

[5] The Summit took place between September 12-14, 2018, halfway between the 2015 COP21 and the 2020 COP26, which is when countries would make updates to their original NDC pledges. Attendance was only feasible by becoming a volunteer as I had no network connections through which to receive a badge. In addition to the spaces of research mentioned, I conducted ethnographic research at the following side events: (1) the Governors' Climate and Forest Task Force annual meeting and their

allow me to take advantage of free entrance to the San Francisco Museum of Modern Art and see the Rene Magritte exhibit. My worries regarding accessibility to talks and presentations quickly dissipated, because as I came to realize, volunteers were omni-powerful. Wearing my yellow shirt and ID badge allowed me access to the plenary, all the talks, as well as more obscure spaces of the Moscone Convention Center. I slipped in and out of the backroom of countless panels, making observations of who was speaking, how many people were in attendance, and the content of the presentations. I sat and listened to panelists talk about ocean conservation and renewable energy, to name a few. The 5000 delegates, speakers, and media all viewed volunteers with authority and never once questioned our presence at the panels.

While my official duties were to primarily point people towards the correct room or to the toilets and give bilingual guidance, I also found myself in even more engaging positions, with little to no training. I was bequeathed the power of a bouncer at the VIP section during the opening ceremony. I was instructed to be strict and turn away anyone who didn't have proper security clearance. This required close inspection of each person's badge hanging around their neck. If the badge had a small star near their name, they were "high clearance" and could enter. I struggled to see the badges in the dark lighting and tried to respond with tact. After letting many people re-enter the space, a supervisor softly reprimanded me and reminded me to be strict. I stopped aides to former Vice President Al Gore, as well as Erik Solheim, former Environment Executive Director and Under-Secretary-General of the United Nations, all of whom contested their VIP status, but in the end abode by my decision to turn them around.

In another arbitrarily granted authoritative power position, I coordinated door opening and closing at the backstage of an event on ocean conservation. Essentially, when a speaker completed their presentation, they were led backstage through dark narrow walkways by a volunteer to a door that exited

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invitation only dinner entitled the "Governors, Indigenous Leaders & Foundation Lunch," (2) The panel titled "Meeting the Paris Goal: Strategies for Carbon Neutrality" held at the local Microsoft office, and (3) the "Climate Heritage Mobilization" conference at the California Historical Society. I paid $160 to participate in the Climate Heritage Mobilization conference; all other side events were free. I took photographs, notes, and audio recordings of speeches at each event. I also conducted informal interviews with a variety of attendees.

into a stairwell and then outside. The next volunteer opened the door to that stairwell, a 10 by 10 foot room. When her door closed, and those exiting were safely inside, I could open my door allowing everyone to exit the other side of the stairwell into broad daylight. Accidentally opening both doors simultaneously would flood the stage with sunlight and ruin the carefully devised ambiance. During door-maneuvering duty, I was momentarily closed into the claustrophobia-inducing darkroom with Fijian Prime Minister Frank Bainimarama and his ten other associates.[6] Next in the transition room came former United States Secretary of State John Kerry, who towered over me at almost six and a half feet tall and thanked me for my quality volunteer work with a pat on my left shoulder. When I was not volunteering, I was able to join the other participants in the audience of presentations and key note speeches.

The Summit was promoted for its capacity to "catalyze bold new commitments to climate action across sectors." Multi-million dollar corporations like Salesforce, Bloomberg, Cisco Systems, and Unilever kept the momentum going on center stage and side events between celebrity performances by periodically announcing their company's over-the-top pledges for fulfilling the Paris Agreement, seemingly each trying to upstage the other. Over the course of the week, USD $4 billion was pledged by numerous local governments and corporations for resiliency building, renewable energy investments, developing lowering emission technologies, and funding an overall just energy transition over the next five to ten years. As the conference proceeded, and as these pledges illustrated, I noted that speakers rarely discussed in detail the methods of achieving their proposed goals.

The umbrella terms "renewable resources" or "clean energy" were used without defining exactly to which technology they were referring. Based on the speeches given by industry representatives on those panels, they could potentially be referring to hydropower, solar, wind or nuclear sources. Divergent truths and fictions by industry leaders and governance representatives place those technologies into the same category of environmentally friendly, climate crisis solutions, thus producing an epistemic murkiness within climate governance whereby technophilia rules. For example, many countries are

[6] Frank Bainimarama inspirational climate work for the Alliance of Small Island States in Oceania

investing in nuclear as a way to diversify their energy portfolios, strengthen energy independence, and reduce carbon emissions, despite the potential risk from meltdowns or the multi-generational lifespan of radioactive waste (Suman 2018) that threatens multiple Indigenous groups (Fowler et al. 1991). Goldstein (2017) illustrates these technophilic beliefs in Brazil wherein nuclear professionals support nuclear technology for its potential rather than its flaws, continuing to support the industry even after lessons from the Fukushima disaster were well circulated. Likewise, hydropower received a seat at the renewable energy table for its perceived potential to contribute to reduce carbon emissions and sustainable development, despite the plethora of social and environmental impacts discussed throughout this dissertation.

The concept of sustainable development was also broadly discussed in connection with transitioning to a low carbon future at many panels. At a side event on Renewable Energy Technology at Microsoft Headquarters, Anirban Ghosh, Chief Sustainability Officer of Mahindra Group, stated that money is the driving factor for change and that environmental benefits are a secondary outcome.[7] He continued, stating "We are doing this [renewable energy transition] because it makes us more competitive. It brings costs down. It's the right thing to do, and so on. So today we have the opportunity of playing in the intersection between climate and profit and we *could end up doing the right thing*" (emphasis added).

In contrast to Anirban Ghosh's perspective, many speakers came from a more altruistic perspective when it came to developing an equitable energy future, one that focused on building relationships between non-Indigenous and Indigenous peoples. For me personally, the most impactful speech of the Summit came from actor Harrison Ford, speaking passionately in his role as Executive Vice Chair of Conservation International (Figure 3). As his hearty voice shook with intensity, he pleaded that we need to protect nature or soon enough "we will be shit out of time." He continued to argue that *we*

[7] The corporation is an Indian multinational conglomerate. They work in aerospace, construction, defense, energy, IT, finance, real estate, and other industries. They are one of the Summit's star financial supporters.

need to save nature, and in order to do so, *we* have to "empower Indigenous communities to use *their* knowledge, *their* history, and *their* imaginations [and] *our* science to save *their* heritage and *their* lands" (emphasis mine). Furthermore, he stated that we need to "educate and elect leaders who believe in science. Stop for god's sake the denigration of science. Stop giving power to people who don't believe in science…they know who they are. We know who they are…Let's kick this monster's ass [climate change]." He was the only speaker to receive a standing ovation.

Figure 3. Harrison Ford speaking onstage at a podium to the right, with an enhanced image of him overlaid on a backdrop of tall trees.

Darren Walker, President of the Ford Foundation, also argued in favor of the Indigenous pathway towards ensuring successful conservation initiatives at the GCF Task Force dinner, saying, "We need to move quick to support Indigenous people and *their* management of *their* resources because implications of doing so means that *our* planet will have sufficient food, shelter, medicine, water, and flourishing environment" (emphasis added). One woman working in collaboration with the Yurok tribe in California applauded "the partnership between governments and Indigenous leaders" created by GCF Task Force initiatives, calling it "a paradigm shift for tribal and Indigenous engagement." She continued to say, "I think if you had told many people just a few years ago that a California tribe [Yurok] would be using

these tools [carbon offsets] as a way to enhance their own land and culture to support their own economic development, people would have shaken their heads frankly in shock." In response, Yurok leader Marty Lamebear replied that their participation in the offsets program is just "one initiative of a diversified portfolio in addressing climate change and the impacts." He also acknowledged that many people will "disagree on some of the tactics in the climate change space" but he conceded that all attempts to solve the climate crisis were needed.

While celebrities and non-state actors frequently called upon the language of Indigenous knowledges and rights in their speeches or promoted their inclusion in decisions, they contradicted actions taken by policy-makers when developing mitigation strategies. When alternative solutions opposing the status quo were voiced, they were silenced. Büscher and colleagues (2012) describe these reactions as the disciplining of dissent, whereby heterogeneity is masked or veiled and alternatives are not able to adequately challenge the dominant neoliberal framework because they are portrayed as disruptive. Similar to the scene that transpired as Dave Matthews performed, Mayor Michael Bloomberg was also interrupted by protestors who stood on their chairs and chanted "the air is not for sale." In response, as the protesters were being removed by security from the ballroom, Bloomberg quipped, "Only in America do environmental activists protest an environmental meeting." Everyone in the conference room laughed and cheered in blind oblivion to the valid concerns of the protestors who do not view capitalist-based solutions as being "environmental." Many of the other alternative voices were likewise disciplined during the Summit, as they were precluded from participating in the event altogether and warded off by security outside of the venue.

For my final volunteer shift at the Summit on the morning of September 13, I offered to stand outside in the crisp foggy air to direct delegates towards the main entrance. I arrived before sunrise at about 6 am and gathered with the other volunteers in the back of the conference center to warm my hands with a cup of coffee. I was eager for this position so I could personally witness a recently announced protest march against the Summit. I welcomed the early conference arrivals who started sifting through security around 7 am and after a few hours, I heard the chanting of hundreds of environmental activists

echoing off skyscrapers in the distance. After winding through the streets gathering support and spreading their message, the protestors finally appeared at the gates to the conference center (Figure 4). Event security and city police provided a second line of defense against further encroachment.

Figure 4. From within the conference area looking out past security and over a barricade where approaching protestors are walking towards the frame, towards the Moscone center (not visible in this photograph).

Loud. Concise. Collective. Their chants were almost deafening. Motivational speeches by Indigenous leaders empowered and energized the group. Many protestors waved posters demanding governments and businesses end support for extractive industries and find alternatives to market-based adaptation and mitigation methodologies. They expressed dissatisfaction with the inequity in climate decision making. They demanded action that was equitable, just, and sustainable, which they argued seemed unlikely in a Summit funded by big corporations with controversial environmental records. For example, Keshub Mahindra, emeritus Chairman (1963-2012) of the Mahindra Group was convicted in 2010 of causing death by negligence, culpable homicide, and gross negligence in the December 1984 Bhopal disaster.[8] The following year, Keshub was awarded "Companion" status by the British Institute of

[8] The disaster was caused by a gas leak in which a reported 16,000 people died and almost 560,000 were injured.

Management, their highest honor, which acknowledges exceptional leaders of the highest caliber who have managed successful organizations and who employ the philanthropic principle of best practice.[9]

Back outside, marchers blocked Third Street between Folsom and Howard in downtown San Francisco so that attendees were forced to find another entrance. I inched forward towards the gates with a number of other onlookers from inside the venue. As I balanced watching the protests with greeting Summit attendees, a woman paused briefly next to me and we watched the protestors side by side. She shook her head and remarked rhetorically, "What do they think we are doing?" before retreating into the Summit. Shortly thereafter, a fellow yellow shirt told me someone should go explain to them what "we" (those inside the venue) were doing. I told her that I thought the protestors should be let in to explain their perspectives and have a voice in the discussions. Her response was that if everyone was involved in the talks, nothing would get done. My argument mirrors that of Landemore (2017), and instead contend that effective deliberative interactions between groups with differing ideas can effectively harness diversity via frictions, and decision-makers can thereby overcome the limiting capacities of individuals or small groups. One Project Director for a global state-run forestry initiative told me that she did invite protestors inside to talk at the Summit and was able to dissipate some of the frustrations regarding her organization's conservation strategies (specifically their promotion of REDD+).[10] Half-jokingly, she also admitted that she thought she might get fired for it.

The Summit was heralded as a success to all those who were a part of the decision-making process. As South Pole stated, "GCAS [Summit] 2018 truly delivered on its promise to *Take Ambition to the Next Level*, with the Summit itself exemplifying the gold standard in sustainable event management"

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[9] At the time, Keshub Mahindra was serving as a chairman of Union Carbide India Ltd., the company operating the Bhopal plant. He served no jail time and paid a $2,400 fine. In 1987, he was also awarded the highest civilian award in France and in 1989 he was named Businessman of the year by Business India. He continued to earn similar awards even after his conviction in 2010.

[10] REDD+ stands for: 'reducing emissions from deforestation and forest degradation.' The plus symbolizes the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.

(Kahkonen and Warden 2018).[11] Many of the individuals and companies that made the most innovative and progressive advancements in achieving carbon neutrality and advancing towards a low carbon future were presented with awards at a separate gala, which I read about after the conference was over. The company *kWh Analytics* was awarded the 2018 Finance Innovation Award for its support of solar power plants. The Vice-Chair of the IPCC and Head of Climate and Energy for WWF International were awarded "Climate and Clean Air awards" for their success in improving air quality and slowing the rate of climate change. Leonardo DiCaprio won (in absentia) for his advocacy work, as did Professor Ramanathan from Scripps Institution of Oceanography.[12] Erik Solheim presented some of these awards, stating "We have an optimistic message to share here. These awardees from every corner of the world are examples of what can be done to change the world." Many of the same organizations and attendees at the Summit were also present at COP24 where the focus was implementing similar changes within transnational climate governance.

24th Conference of Parties, Katowice, Poland (December 2018)

The United Nations Framework Convention on Climate Change's (UNFCCC) 24th Conference of Parties (COP24) was held in the city of Katowice, the capital of the Silesian region in southern Poland.[13] Upon landing in Warsaw, we were instructed to remain seated, even after we reached the gate. It felt like cruel and unusual punishment after the nine-hour flight from New York City. A man seated a few rows ahead of me attempted what we all secretly dreamed: to stand, stretch, and retrieve his overhead luggage. The flight crew firmly advised him to sit down, immediately. Moments later, a half-dozen, masked, SWAT-style military police rushed on board, moved effortlessly down the other aisle to the back of the plane,

[11] It is a self-congratulatory remark given that the authors wrote on behalf of South Pole, a sustainability solutions provider who was the official partner of the event. Their website states their goals are to "help realise deep decarbonisation pathways across industries" and their mission is to "accelerate the transition to a climate-smart society."
[12] Professor Ramanathan is the Edward A. Frieman Endowed Presidential Chair in Climate Sustainability known for his work in climate physics, atmospheric chemistry, and has received many prestigious awards for his groundbreaking work on climate change.
[13] COP24 website available at https://cop24.gov.pl/.

apprehended a middle-aged white male, and removed him in handcuffs. He was flanked by security wielding automatic rifles and hand guns. Tensions in the cabin were palpable. I and the other passengers watched, helplessly and confused, whispering to each other trying guesses about what international crime was committed and who the perpetrator could have been. Passengers and crew remained seated for another 15 minutes until we were finally given a green light to exit. Surveying the airport as I walked to the baggage claim, I saw no sign of the incident that had taken place. Later I had heard that environmental activists and protestors had been arrested upon trying to enter Poland and wondered if I witnessed one being accosted by police.

Before I even stepped foot on the plane, the process of receiving a badge to attend COP24 took a full year. I self-nominated myself to the University of Colorado Boulder liaison for one of their ten badges, which are awarded by the meeting's governing body, the UNFCCC. COP meetings are not open to the public; only organizations or universities that are awarded Observer Status by UNFCCC are able to send a select number of representatives. I sent four emails throughout the year to the University coordinator, as friendly reminders of my continued interest in attending COP24. I stood by hopelessly at the bottom of the 10-person waiting list for a chance to attend at least one week of the two-week meeting. In the end, I was awarded credentials to attend both weeks.

Approaching the conference center early on Monday morning, December 3, I was stopped by police on a sidewalk about two blocks away from the entrance. They requested to see my conference badge, which I had not yet collected from the registration booth. Instead, I showed them my acceptance letter as an Observer from the University and I was allowed to proceed. I shuffled along with the crowd through the long line towards the entrance. When we finally made it inside, we were corralled into separate lines—one for VIPs, one for Press, and another one for the rest of us. We patiently took turns unpacking our bags and stripping off our winter gear. We placed all laptops, cameras, audio equipment, and chargers in a bin and waited for them to pass through scanning devices for safe clearance. Meanwhile we took turns walking through metal detectors and being electronically scanned by security. Once I was deemed safe, I repacked my belongings and walked to the registration desk. I checked in and received my

COP24 ID badge and conference swag: a canvas bag, a bright red history book on Poland, and a clear water bottle, a portable electronics charger, and a hat, gloves, and neck-buff—all stamped with COP24 insignia. Now fully loaded down with new swag, I excitedly made my way into the main hallway and began the process of figuring out where to go.

I was one of around 30,000 registered attendees. People came from all over the world. Outside of the 1996 Summer Olympic soccer games in Atlanta, the scale and diversity of attendees were unlike anything I had seen before. There were "high-level meetings" that only invited delegates could attend, plenary talks, advocacy meetings, country-specific negotiations, side room chats, and roundtables, to name a few, and they each had their own schedules. I was struck by the intense sensory overload; large posters of harmonious nature scenes were mixed with blue screen teleprompters alternating between schedules and inspirational message boards everywhere I looked.

Hundreds of people stood in hallways, hindering easy passage, searching monitors and swiping their mobile apps to sort through the multitude of different schedules with the hopes of making it to the right room on time. The conference arena was a dizzying vortex, almost impossible to navigate, even with the color-coded diagrams of the venue hanging at every intersection (Figure 5). There was an overwhelming conglomeration of people and activities around every corner. The journey was made all the more complicated as attendees were herded through the exhibitor spaces, where each country and NGO had their own presentation schedules and attempted to lure you into their booths with more tempting swag. The exhibition space held innovative technological displays, models of efficient cities, food samples from sustainable agriculture sites, and regional music playing in each booth's mini-world. I stopped to taste coffee, get free samples of wood products from Poland, collect a daily stamp from the South Korea table for a prize at the end of the week (a small business card holder that is delicately embroidered with flowers), and collect informational booklets. The tangled path was accented by TV monitors broadcasting prominent speakers or events happening elsewhere. Maneuvering through the crowds to one of the many temporarily constructed event spaces on the other side was a solid 30-minute, sweat-inducing walk.

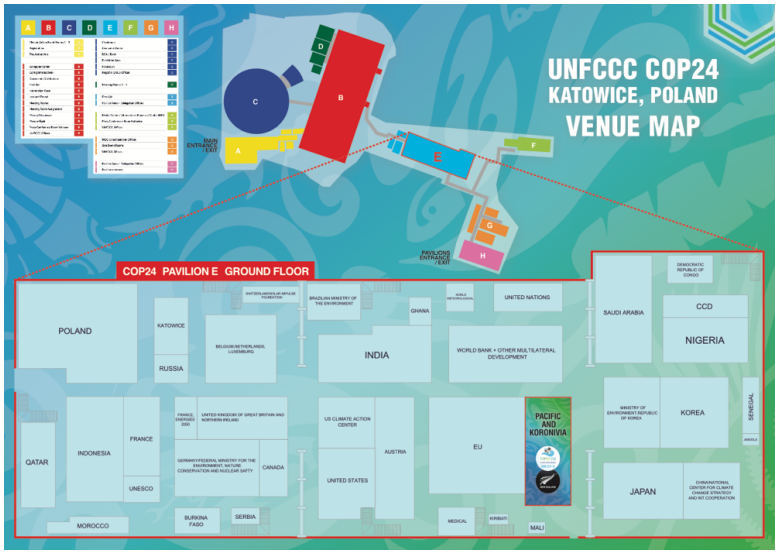

Figure 5. Venue map showing the various color-coded sections and individual rooms that housed the COP24 meeting, not including visual representation of the various floors in the sections. The dark blue circle labeled C is the Spodek Arena. The Red rectangle labeled B is the International Congress Center. The light blue rectangle labeled E is the pavilion where each country and NGO had their own display spaces, which is further zoomed in to show the location of each display space. Sections A, D, E, F, G, and H were all made from large white temporary tents.
Source: https://cop23.com.fj/wp-content/uploads/2018/11/Venue-Pavilion-Map.pdf

The climate conference took place in the city's Culture Zone, which included the Spodek Arena, the International Congress Centre, the Silesian Coal Museum, and the Polish National Radio Symphony Orchestra.[14] By booking my lodging almost six months in advance (in hopeful anticipation I would receive a badge), I was able to stay a short bus ride away from the conference center. At the time, I didn't know that this was the first COP where all the side events were held inside the gated entrance. A conference buddy whom I met through a mutual friend pointed out how extremely lucky I was to receive a badge, because otherwise I wouldn't have even gotten to see any side events. He also commented how unusual it was that the spaces were being controlled in that manner as it was the first time in his almost 10 years of attending these conferences that the public was excluded from entering the side events.

[14] Public transportation throughout the city was free for all conference attendees, most of whom had to stay in Krakow because they did not reserve a room in Katowice early enough. One day, I took the liberty of riding to Krakow, approximately an hour away through the Polish countryside, which was filled with coal smoke in every direction.

Each of the buildings of the event space were connected by temporary tent structures, all of which were built on top of a former coal mine. Katowice was purposefully chosen for COP24 because the Silesian region of Poland is the second largest coal producer in Europe; the meeting was an international attempt to pressure the Polish government to end their reliance on fossil fuels. However, in apparent defiance, Poland showcased the many uses of coal in the exhibition space, displaying coal earrings, coal soap, and shiny chunks of coal suitable for a mantel piece or paperweight. Many attendees seemed perplexed and even offended by the promotion of coal at the COP event, taking pictures and commenting on its absurdity at a climate conference to each other and on social media. The transition to renewable resources couldn't come soon enough for those people in the Katowice region who are breathing some of the most polluted air in Europe (Migiro 2018). During the two weeks I was in Poland, I could literally feel their pain as my throat burned and eyes stung from the coal smog that hung thick in the winter air. An additional focus of ridicule were the companies sponsoring COP24. The list includes the Polish Electricity Association, the Polish Oil and Gas Company, the Polish Mining Group (the largest coal mining company in Europe), Orlen (fuel and energy company), and JSW (largest coal coking company in the EU).

The primary goal of the climate conference, nicknamed Paris 2.0, was to negotiate a rulebook for the Paris Agreement to ensure that countries were following through with their pledges to reduce greenhouse gas emissions and stabilize the Earth's atmospheric temperature. The rulebook would become the ties that bind, so to speak, a standardized set of legal guidelines that would keep everyone on track towards fulfilling the NDCs they pledged in 2015 and would require an update every five years. The adaptation and mitigation goals made at the Paris Agreement essentially maintain the status quo with their continued reliance on fossil fuels and only gradually incorporates newer technologies and methodologies (solar, hydropower, wind, and carbon credit trading mechanisms).

Representatives from the United States federal government's fuel industry hosted a panel to promote the continued use of fossil fuels. It was a highly-anticipated event, given the country's self-recusal from the Paris Agreement. I arrived early to the room and watched the remainder of the preceding

panel. I sat in the back listening to the speakers, preparing my notebook and audio recorder. The back of the room was lined with media. We all were prepped in place for the upcoming talk; however, at the end of the current panel, security made all of us leave the room. Little did we know, there was a long line with hundreds of people outside, winding around the hallways, waiting to get into the US panel. We had to join them in the back of the line, and as a result, I was not able to get back into the room and see the events first hand. But soon thereafter, the conference was abuzz with the news that protestors had shut down the US talks. As soon as the fossil fuel representatives began to promote clean coal, protestors rose in their seats and filled the aisles, chanting "keep it in the ground" and "shame on you." They stood in the front with banners blocking space between the speakers and the audience, drawing all media attention to them. The speakers were not able to present their panel as they were outnumbered and outshouted by the opposition.

Meanwhile, back in the exhibition space, the U.S. Climate Action Center shared a small room with the World Wildlife Fund. Their slogan—"we are still in"—was plastered on the walls, handouts, buttons, and stickers, highlighting that the entire United States has not rejected the goals of the climate accords. Speakers were from state and subnational sectors, in attempt to assuage the fears of those who dread fallout from the US federal position to exit the Paris Agreement. The speakers argued that "nowhere in the US is safe [from climate change]" and that the impacts are underestimated. They believe that the action we take in the next decade will be critical because things are getting worse.

The slow shift away from fossil fuels was also discussed by many panelists speaking in side events. In another highly-anticipated panel, Johan Rockström, Swedish scientist and Vice Chair of the Scientific Advisory Board of the Potsdam Institute for Climate Impact Research, gave a powerful update of his 2009 seminal article on Planetary Boundaries (Rockström et al. 2009; Figure 6). I arrived early and found a seat before the room became overcrowded with attendees. A woman next to me asked what the fuss was about as she clearly did not know Rockström is somewhat of a celebrity scientist. As I explained, she immediately began taking notes alongside the rest of the people in our row. In 2009, Rockström and colleagues described Earth systems and the importance of keeping them within certain

boundaries. They argued that many of earth's thresholds were at risk of being breached or already were (including climate change, nitrogen levels, and biodiversity loss). These changes would lead many systems to shift into new, irreversible, and undesirable states that could be catastrophic for human well-being.

Figure 6. Johan Rockström standing at the podium on the left side of the photograph in front of his planetary boundary figure, which is displayed on the TV behind him.

Ten years later, at COP24, Dr. Rockström explained that the level of carbon dioxide (CO^2) in the atmosphere was now over 410 ppm. In their original analysis, they had suggested it should not breach 350 ppm, although it had already breached 380 by then. He continued by saying that although there was a brief stall in greenhouse gas emissions between 2014-2016, CO^2 emissions in 2018 increased by 2.7% and ranked as the worst year on record. Oceans, land, and the biosphere were also absorbing (and will continue to do so) less CO^2 than in the past. Rockström's advice to decision-makers was that the shift to renewable energy sources must happen more quickly, which paralleled the Intergovernmental Panel on Climate Change's Special Report on Global Warming in its assertion that "unprecedented changes" are needed to keep the planet from warming above 1.5 degrees Celsius (Masson-Delmotte et al. 2018). The currently pledged NDCs are already projected to be insufficient for meeting the Paris Agreement goals, further suggesting the folly of the status quo ideology that economic growth is compatible with mitigating climate change (Victor et al. 2017).

Attendees at the conference who disagreed with the continued reliance on fossil fuels highlighted their dissonance by presenting awards for "Fossil of the Day," mock prizes given to those who are not contributing to the just energy transition. Since the 1999 COP meeting in Bonn, the Climate Action Network developed this spectacle to recognize "countries that have done their 'best' to block progress in the [climate] negotiations." Appropriating the Jurassic Park theme, presenters wore dinosaur costumes and announced awards in absentia at the end of each day with great fanfare and media attention (Figure 7). Throughout the conference, some of the daily fossil awards were given to the United States, Germany, and the Arab Group during COP24 for their attempts to stall negotiations on the rulebook over verbiage disagreements (see following section). The grand finale showcased the overall COP award of "Colossal Fossil," which went to Poland for its adamant commitment to utilizing coal for the next 200 years.

Figure 7. Fossil of the Day awards. A crowd of photographers and onlookers gather around a person in a dinosaur costume in preparation of the announcement of the day's winner (the worst climate denier).

Indigenous Caucus

At COP21 in Paris in 2015, the international community attempted to mitigate disconnections between Indigenous and non-Indigenous peoples by finally recognizing the need to include Indigenous peoples' perspectives, holistic views, and traditional ecological knowledges in climate governance. The International Indigenous Peoples Forum on Climate Change (IIPFCC), also known as the Indigenous

Caucus, established the Local Communities and Indigenous Peoples Platform (LCIPP) as a working group to strengthen the role of Indigenous peoples in climate negotiations and decisions. At its inaugural panel at COP24 in Poland, LCIPP was filled with optimistic speakers from NGOs, governments, the World Bank, and a select few Indigenous peoples. As a white male representative from the World Bank stated, collaborations between large corporations and Indigenous peoples were once thought to be "on a collision course," so this partnership represented a true "novelty." It was clearly acknowledged by all the speakers that the platform was not yet operationalized and, as one person stated, there were "still mountain ranges to cross."

Out of the roughly 14,000 state sponsored delegates attending COP24, few were Indigenous, as the UNFCCC is negotiated between, by, and for state-level governments, and therefore, inclusion of Indigenous peoples in COP delegations is determined by each state.[15] Indigenous peoples not on state delegations have a status similar to the one I had, with an observer credential obtained from a research institute or NGO and thereby have no voice in high-level negotiations or decisions (Shea and Thornton 2019). However, with the creation of the Indigenous Caucus, 100 Indigenous peoples from around the world finally had representation at COP.[16] Despite the formation of the Caucus and the LCIPP, Indigenous peoples' effort to secure the language of Human Rights and the Rights of Indigenous Peoples in the Paris rulebook failed. Language that would have ensured more equity, as is provided in ILO 169 and the Declaration, was removed during state negotiations. The rulebook instead concluded that states should fulfill their climate pledges with the input of Indigenous Peoples "as appropriate."

Costa Rican representatives on another panel were members of Climate Change Consulting Citizens Council (5C), a non-government group working to integrate Indigenous communities into the national climate policy debate. Their work is unheard of in Térraba where I concentrated most of my field research (J. Rivera, personal communication, 10 January 2019). After one year of research, the 5C

[15] Party delegate breakdown is discussed in more detail at https://www.carbonbrief.org/analysis-countries-sent-most-delegates-cop24.
[16] More detail on the Indigenous Caucus is available at https://www.culturalsurvival.org/news/cop-24-katowice-concludes-historic-victory-and-some-disappointments-indigenous-peoples.

surmised there are many challenges that need to be overcome before Indigenous peoples are adequately integrated into policy making. Building trust is one of their main foci, as they state there is quite a bit of skepticism in Indigenous-government relations on both sides. Furthermore, one female Costa Rican panelist stated, "Indigenous peoples have a knowledge that is invaluable in this [energy] transformation." Yet 5C leaders were unclear how to legitimize and operationalize these knowledges within the country's climate policy. In a separate panel regarding long-term climate strategies, Felipe de Leon Denegri, Advisor to the Climate Change Director at the Ministry of Environment and Energy in Costa Rica (MINAE), stated that Costa Rica's climate work is innovative and their knowledge of decarbonization could be used as a lesson for other countries.

Later in the week, Senior Hydropower Sector Analyst for the IHA, Mathis Rogner, spoke on the panel "Stronger Together: Showcasing Success of a Global 100% Renewable Energy System." He spoke of the clean, renewable benefits of hydropower and cited Costa Rica among numerous success stories. Hydropower was on this panel next to solar, wind, and nuclear power. At another panel down the hallway titled the "Power of Water," hydroelectricity was heavily criticized by panelists. One speaker stated, "Mega dams are not a sustainable solution for climate mitigation;" while another pointed out that it was a "historical error" to ever posit them as such. The succession of speakers spoke to the multitude of Indigenous rights violations, specifically in Latin America, that were caused by hydropower development over the years. While these dissonant ideologies fill the climate frontier, I noted that most times, panelists were speaking to completely different audiences. Mathis Rogner was not at the "Power of Water" panel, nor did I see him at any of the other Indigenous panels I attended. Across the building, in a temporary room that failed to hold in the forced hot air, an Indigenous woman from Peru pleaded to the scant audience to listen to Indigenous peoples, allow them to build resilience, and give them investments, not only in funds, but in solidarity, saying, "Try to understand us and pay attention to our knowledge because it can be used to make solutions." I heard similar messages throughout the two-week conference at small side events.

One of these messages came from the Action Hub, a space near the conference entrance that was separated from other event spaces by a long, wide hallway. I shifted in my seat with the others in my row to make room for the growing crowd. About 150 spectators crammed into the mini stadium-style stage. I was in the last row at the top, situated well above the three rows of hungry photographers elbowing each other for positioning in the center of the stage. Hindou Oumarou Ibrahim, elected head representative of Indigenous peoples at COP24 and Coordinator of the Association of Peul Women and Autochthonous Peoples of Chad, spoke eloquently to Michał Kurtyka, Secretary of State in the Environment Ministry and head of COP24 negotiations. Hindou emphasized that Indigenous peoples need to be listened to and urged solidarity between Northern and Southern partners because "climate change does not have frontiers." She reaffirmed that funding is great, but it needs to be turned into actions. Patricia Espinosa, Mexican Diplomat who was serving as the Executive Secretary of the UNFCCC, agreed with Hindou and pledged to continue working to make actions become a reality.

Self-proclaimed, all-knowledgeable action super-star and former Governor of California, Arnold Schwarzenegger, joined the speakers on stage. In accordance with what Igoe (2010) describes as celebrity-experts who "reveal secrets of how to live a successful life," Schwarzenegger shared his personal success stories in fighting climate change to a wide-eyed audience. He advised: don't eat meat four days a week (by "meat," he was only referring to beef); buy an electric car; transform your Hummer's engine into electric or hydrogen; instead of cooling off for 15-20 minutes in a shower, jump into your Jacuzzi or pool; teach your kids to turn off lights, and each time they forget, unscrew a lightbulb until they are in the dark. Hindou smirked and the audience let out some chuckling gasps. These luxurious consumptive forms of planet saving are well beyond the reach of most people impacted by climate change—those who Schwarzenegger referred to as "average" people.

Wake Up: Protesting the Status Quo

Not all resistance-style activities took place in the regulated spaces delegated by conference organizers. On Friday December 7, Greta Thunberg sat alone, cross-legged on the floor by the life-sized #COP24

sign holding her weekly "*Skolstrejk för Klimatet*" (school strike for the climate). I paused for a moment to admire the placid stamina of this 15-year old as she was enveloped by a massive crowd of photographers. In other hallways and corners, people voiced their opposition and alternative ideas to anyone willing to stop and listen. I was hassled for a few minutes by two campaigners wearing oversized Polar Bear suits who wanted me to sign a petition to support nuclear power development, which they claimed was a green solution for a clean energy future. They seemed perplexed that I didn't want to sign it and didn't have a response when I said I wasn't so sure that nuclear is renewable or clean. I noted that waste is dumped in Indigenous territories in the United States (Kuletz 1998). Occasionally I passed other people demonstrating in the hallways calling for countries and companies to divest from fossil fuels and support funding for climate solutions. These were more performative than the protest actions held outside the venue, as they took place in designated hallways for specific amounts of time.

Returning from lunch one day, I crossed underneath Greenpeace's Climate Hub, a meeting space located in a train station across from the Spodek arena. I was met by at least twenty police in riot gear jogging to position. I barely managed to snap a photograph of them as the swaths of heavily armored men and women swiftly passed me by (Figure 8). I made my way across empty avenues toward the front of the protest action. Numerous stragglers emerged from alleyways with homemade signs and hustled to join their fellow protestors in the march that began further downtown that morning. Onlookers hung out on six-story apartment balconies overlooking the planned route. The goal of the approximately 4000 protestors was to urge leaders to "wake up" to the impacts of climate change.

Figure 8. Police in riot gear jogging up steps. They are seen with shields, bullet proof vests, helmets, and fire extinguishers.

The action seemed to be building at a multi-lane intersection spanning an overpass that connected the conference area to downtown. I stood at the corner next to a policeman who had a tear gas canister at his hip. I was keenly aware of the undercover agents communicating through ear pieces as they spread down the sidewalks. In front of me, trucks paused to drop off squads of police. Brigades of police cars accompanied water tankers and closed the on- and off-ramps of the overpass. Policemen methodically moved up the avenue to clear the streets and block traffic.

When the protestors finally arrived at my location, they were led by police on horseback and foot (Figure 9a), followed by police in armored vehicles. I cut through city blocks perpendicular to the protestors to get ahead of the march and gain the appropriate vantage point to watch them approach the Spodek arena. The heavily armored police lined both sides of the streets for the entire route. Handguns, batons, and fire extinguishers were readied. Another line of police stationed themselves in front of the venue and had water hoses hanging over the railings, poised to deter any wayward protestors. The environmental activists, Earth protectors, and other protestors were locked into the confines of a one-way avenue on the other side of the train tracks, 50 meters from the venue entrance (Figure 9b).

Figure 9. Left (a): A police officer on a horse leads police on foot, and in the background of the photo, the yellow truck leads protestors. Right (b): Empty street in front of the Spodek arena, blocked off by a line of police. A line of police vehicles lead in front of the protestors, again marked by the yellow truck in the background.

Protestors halted in front of Spodek for 30-minutes, chanting, singing, and professing their disagreement with climate leaders inside the venue. Similar to the Summit protest march, the protestors at COP24 waved a variety of signs and paintings. There were many signs with variations of "There is no Planet B" and "divest from fossil fuels." Other standard templates showed support for corporate transition to renewable energy and their NGO partners, including the World Wildlife Foundation and Friends of the Earth International. Many protestors held posters or flags with the Extinction Rebellion symbol.[17] One giant inexplicably obscure poster of Leonardo DiCaprio's face in front of a burning inferno was seemingly linked to a conspiracy theory about his involvement with the Angels of Enlightenment.[18] Many protestors wore masks to disguise their identity, and some wore gas masks in anticipation of clashes with police; however, the march was largely uneventful in that no physical confrontations occurred. The march was previously announced on teleprompters inside the venue, causing most

[17] Global decentralized environmental movement that employs nonviolent civil disobedience actions with the goal of compelling governments to act immediately to avoid social and ecological collapse. Their symbol is similar to an infinity sign.
[18] A Polish website claiming to support direct democracy, although otherwise too difficult to translate.

decision-makers attending COP24 to enter through VIP backdoors far away from the commotion. Therefore, there were only a few dozen conference attendees and volunteers who stood across from the barricaded street and watched the protest. The march concluded with more police in vehicles. All in all, it was an impressive display of Polish armed forces.

According to the secretariat of the World Meteorological Organization (2019), COP24 was successful in many ways, including its intended goal of adopting a set of guidelines for implementing the 2015 Paris Agreement. This rulebook and its operational guidelines are scheduled to go into effect in 2020. COP24 delegates also adopted the Katowice Climate Package, which focused on mitigation, adaptation, finance, technology, and global stock take (a form of assessing the implementation of the Paris Agreement). While most delegations "welcomed" the importance of the recent IPCC special report on 1.5ºC (Masson-Delmotte et al. 2018), the United States, Russia, Saudi Arabia, and Kuwait refused to use such *strong* language regarding the scientific results presented in the report, opting instead to "note" it or "acknowledge" it in their response.[19] Everyone in the hallways were abuzz with this seemingly inconsequential detail, yet no one seemed completely surprised given that the US was officially on its way out of the Paris Agreement at the time. In the end, language was softened to accommodate delegates from almost 200 nations, inevitably with many left feeling unsatisfied.[20]

Despite his critiques of the climate policy process, Clémençon (2016) conceded that the global inclusiveness and ambitious targets of the Paris Agreement could actually be a motivating force for action. Protestors were certainly motivated into action, as were subnational entities at the Summit, albeit in different manners. The International Hydropower Association (IHA) also took the Paris Agreement to heart, seizing the opportunity to further promote its industry as a clean, green, renewable source of energy, essentially declaring hydropower as the ideal cure to the climate crisis.

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[19] Executive summary for policymakers can be found at https://www.ipcc.ch/sr15/chapter/spm/.
[20] Read the entire UNFCCC outcome here: https://unfccc.int/sites/default/files/resource/Informal Compilation_proposal by the President_rev.pdf.

World Hydropower Congress, Paris, France (May 2019)

I wrestled my way through the dense crowd exiting the train at La Defense, on the outskirts of Paris. I hustled around the grand plaza, a broad space typical of most European cities, to find the entrance to the Congress. I scoured the area, searching for some indication that I was in the correct place, the open space before me encircled by a vista of high-rise apartment buildings and shopping centers. I arrived a bit agitated from literally being squished beyond movement on the red train line, which I had to take since the Congress was relocated a few weeks before it began. The Congress was initially planned to be held across from my hotel room at the United Nations headquarters; however, I had the added discomfort of navigating on the unfamiliar train system because it was moved to the outskirts of Paris. Organizers cited the need for more space as the rationale for the move; a fact I find unlikely given the crowd of a mere 750 attendees. More likely, I surmised, the event was moved out of central Paris to avoid protests.

As I climbed the steps to the Grande Arche, I gained a better vantage point. I passed hundreds of people sprawled out enjoying their lunch in the heavy mid-day sun. I asked for directions to the venue with my rudimentary French and misunderstood the directions numerous times. After I made a few unnecessary laps, I finally found the small subway-style underground entrance, which became visible only after I stumbled upon a group of two-dozen environmental activists collected around the Congress welcome sign (Figure 10a, b). Members of the Extinction Rebellion led the demonstration and were joined by representatives from global NGO International Rivers and Ríos Vivos, as well as leaders from the Munduruku peoples in the Brazilian Amazon.

Figure 10. On the left (a), the entrance to the Congress is visible behind the group of protestors at the Espace Grande Arche, which is partially visible in the background. On the right (b), a close-up of the protesters holding images of murdered land defenders, fish cutouts, and anti-dam signs.

A large banner in French read “Grand Barrage Grand Carnage” hung on the railing above the entrance. “Stop Mega-dams” signs called out those supporting hydropower, including the Green Climate Fund, Électricité de France (EDF), and China Three Gorges Corporation, which are among the three largest organizations that fund hydropower projects globally. Extinction Rebellion members held oversized fish cut-outs signifying the death of ecosystems. Indigenous peoples solemnly raised large pictures of activists who were killed fighting against construction of dams in their territories: Berta Caceras (Lenca, Honduras), Tomas Garcia (Lenca, Honduras), Saw O Moo (Karen, Myanmar), Adenilson Kirixi (Munduruku, Brazil), Sant Swami Sanand (India), and Atilano Roman Tirado (Mexico). Lengthy denouncements of hydropower were read aloud in French over a microphone. There was a small gathering of police keeping a watchful eye on the proceedings and a few spectators taking photographs as they passed by. Some conference attendees paused to watch, then slipped behind the protestors and into the venue.

After a while, disappointed by the lack of fervor and confusion as to why there were not more protestors, I too walked past the activists and entered the Congress. I presented my ID and attendance letter to the first security guard. Once allowed through the main door, another security guard searched my bag. When I finally made it to the registration counter, I signed in and received my badge, a copy of the program, and a ticket. I was instructed to take the ticket to the coat rack counter to collect my conference swag, a new black laptop case with IHA insignia embedded in a corner. I felt obliged to lug it around, though it eventually came in handy for storing all the promotional materials and hydropower reports I collected. The cost of attendance for students was 690€ (US $750), an almost 1000€ (US $1082) discount from the non-student early bird special registration fee. Late registration cost around $3000. In total, the 2019 Congress earned the IHA $1.66 million, its highest revenue stream of the year (IHA 2020).

The International Hydropower Association (IHA) is a non-profit International organization that represents the global hydropower sector. Their mission is to "advance sustainable hydropower by building and sharing knowledge on its role in renewable energy systems, responsible freshwater management and climate change solutions."[21] IHA's four objectives are to (1) advance policies and strategies that strengthen hydropower performance, (2) build an inclusive and proactive hydropower community, (3) create an open, innovative, and trusted platform for knowledge, and (4) deliver value to members throughout the world. Their members include hydropower corporations, consultants, and engineering firms from countries around the world, including the United States, China, France, India, Russia, Myanmar, Switzerland, Romania, and throughout Africa, among others. They have four membership categories listed on their website: (1) Platinum, costing 35,160 GBP (US $44,320), with 12 members; (2) Gold, costing 14,055 GBP (US $17,717), with 23 members; (3) Silver 3,510 GPB (US $4,425), with 47 members; and (4) Affiliate 9 members.[22] I became a member in order to participate in the meeting, which

[21] The International Hydropower Association website and information is available at https://www.hydropower.org/what-we-do

[22] IHA membership information is available at the following website: https://www.hydropower.org/corporate-membership. Costs reflect 2020-2021 membership dues.

was at a discounted student individual price of 110 GPB (US $139) (in addition to the conference attendance fee).

Venue staff dressed in sleek black uniforms ushered me down the escalator and towards the opening ceremony to the sound of elevator music. I broke from the intended pathway and made a few rounds before the speeches began. The large rooms were filled with standing tables, chairs, and repetitive upbeat electronic tunes. It was cold; the space was stiff, uninviting, and somewhat intimidating. With no windows in the meeting spaces we were reliant on our phone devises to note the time. The walls encompassing the reception area were lined with oversized promotional posters boasting the success of various hydropower projects, which later became the backdrop for countless smiling selfies and group shots (Figure 11). One man was putting the final touches on the small stage for the evening reception, while another topped off the coffee pots and arranged cookies neatly onto silver platers. Attendees made urgent phone calls and texted furiously in the hallways, as others passed around handshakes and business cards.

Figure 11. Wall size promotional posters in the reception area, with the heading: Advancing Hydropower, Delivering on the Paris Agreement and the United Nations Sustainable Development Goals.

I collected a headset for translation and selected a seat as close to the stage as possible. As I sifted through the meeting program, circling the talks I planned to attend, the room quickly filled. The

overwhelmingly predominance of men in the crowd blended together into a sea of standardized, anonymous black suits; Mathis Rogner stood out, recognizable by his dominating height alone. The more important dignitaries and delegates, mainly CEOs from hydroelectric corporations, sat in reserved seats at the center of the stage, while their assistants and other unknowns like me filled in the folding chairs at the back and sides of the room. I chatted briefly with the man sitting next to me. He did not understand why an anthropologist would be at a hydropower meeting. He asked me how much electricity cost per kilowatt hour in Colorado, but I was unable to answer.

Valuing Hydropower

Setting the tone for much of the conference regarding the positive image of hydropower, President and CEO of Hydropower for General Electric's Renewable Energy sector, Pascal Radue, stated in the opening ceremony, "I was shocked to learn that hydro is not seen as a renewable and sustainable form of energy production. I was actually shocked. I continue to be shocked. Fundamentally I don't think there is any reason why hydro is not seen as renewable and sustainable." Granted, Pascal is a recent convert from the coal industry, which he referred to as "the very dark side [of the energy industry]." People nodded and smiled in agreement with Pascal. I was shocked that he felt shocked. I continue to be shocked. I fundamentally don't think there is any reason for him not to know why hydropower is not seen as renewable and sustainable.

Also during the opening ceremony, Riccardo Puliti with the World Bank Group and Fatih Birol with the International Energy Agency agreed on the global need to increase hydropower in order to fulfill the Paris Agreement and meet Sustainable Development Goals. Guilio Boccaletti, Chief Strategy Officer for The Nature Conservancy, followed suit and further declared that "hydropower is the power system of tomorrow" and the industry needs to continue work to "de-risk" hydropower by taking a systems approach to its development. He additionally stated that hydropower offers a great opportunity and important role in a sustainable future. In agreement with other speakers, CEO of EDF, Jean-Bernard Lévy, said that hydropower is "essentially carbon free," and that the industry is key to reaching the goals

of both the Paris Agreement and Sustainable Development Goals (SDGs) promoted by the United Nations, specifically Goal number 7: Affordable and Clean Energy.[23] It was clear that these pro-dam supporters and their allies reveled in the industry's acceptance by the climate governance sector.

Unlike the other two conferences discussed, the Congress was primarily filled with industry executives. The only official representative speaking on behalf of the United States government was Assistant Secretary of the Office of Energy Efficiency and Renewable Energy, Daniel Simmons. The only "celebrity" in attendance was Ruslana, Ukraine's first winner of singing contest Eurovision and World REnew Day's first Ambassador.[24] Their participation in the opening ceremony represented opposite sides of the excitement spectrum. Daniel Simmons rambled in a somewhat incoherent monotone about the affordability and storage capacity of hydropower, and somehow, unlike every other speaker, managed not to mention the Paris Agreement, SDGs, or climate change in his speech. He exited stage to a few random claps. Ruslana, in contrast, bounced around, herself almost incoherent, as she rattled on with a hyper-emotional attitude towards the renewable energy future that we would have with the help of hydropower. She couldn't help but belt out a few chords of some song about clean energy as onlookers stared, unmoved and only slightly amused.

Throughout the Congress, there were only glowing reviews of hydropower's crispy-green image, a unified harmony that reverberated so loudly from room to room that it appeared to drown out any possible self-reflection. The only form of critical awareness I noted came from speakers who conceded that they were not great at effectively communicating the benefits of hydropower and that they needed to educate people on those facts by publishing more. They admitted they don't have enough peer reviewed material out there and also lamented how their good work was continuously being overshadowed by negative press. There was an excited buzz in many panels about Muller's (2019) recent article in *Nature* that not only promoted hydroelectricity, but essentially claimed anthropogenic reservoirs are better for

[23] Sustainable Development Goals (SDGs) were created in 2015 and are a "blueprint to achieve a better and more sustainable future for all." The aim is that all 17 SDGs are reached by 2030.
[24] A self-proclaimed soon-to-be annual, global event that is a personal expression of support for a sustainable future; see http://renewday.global100re.org/.

mitigating climate change than natural wetlands. In press, the piece immediately gained widespread criticism from prominent scientists like Dr. Philip Fearnside who has long argued that hydropower plants are not clean given the large amount of greenhouse gases that they create and release into the atmosphere (see Introduction).[25] A number of speakers actively tried to dispel any evidence that hydropower has a carbon footprint (Figure 12).

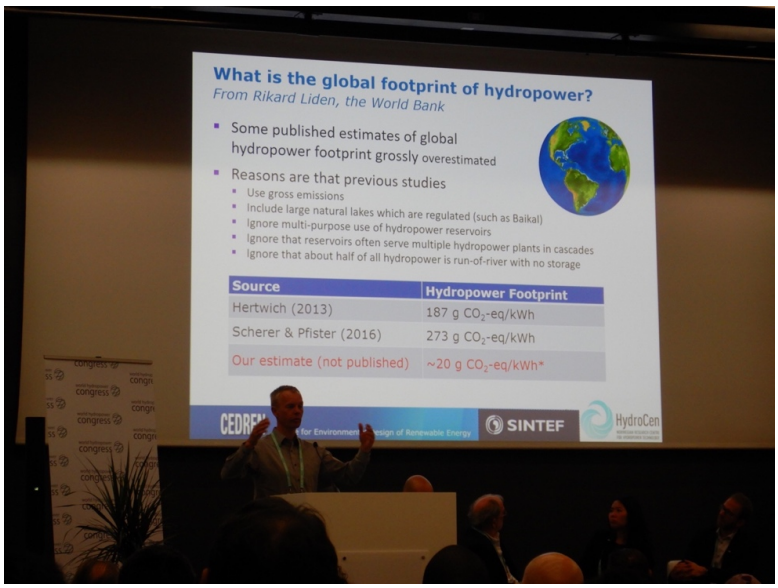

Figure 12. Panelist discussed what they believed to be the inconsistent and inaccurate academic, peer-reviewed studies that miscalculate the footprint of hydropower, arguing that it is actually much lower according to their non-published calculations.

At a panel titled "Hydropower Benefits," two female representatives from different NGOs questioned panelists on the negative impacts of dams. Each woman in turn individually suggested that corporations should incorporate other forms of value in their impact analysis, not just financial calculations. Pascal was eager to reply, stating that it comes down to determining "What is really real? What can we measure? Then we can have a debate about facts and not a debate about feelings…" Later, he doubled down on this perspective, stating in response to the second woman, "and *not like sentiments, not kind of emotions*, but really a fact-based discussion, where we can really make choices at the end of

[25] Philip Fearnside is one of the world's foremost scientists conducting research within Brazil on the Amazon. He works at the National Institute for Research in Amazonia focusing on the relations between forests, climate change, and hydropower, notably publishing extensively on the greenhouse gas emissions and other ecological faults of hydropower projects in the tropics.

the day" (emphasis added). As anyone who has faced the grounded impacts of climate change and hydroelectricity projects will attest, feelings, sentiments, and emotions are indeed facts; they are the reality of peoples' everyday lives and, as such, are as valid as any numerical statistics (Fourcade 2011).

Indigenous Consultation: Doing a Deal with the Devil

At the panel called "Projects affecting Indigenous communities," David Harrison, Senior Advisor to The Nature Conservancy, said that within the industry, obtaining free prior informed consent (FPIC) from Indigenous peoples has been viewed as "doing a deal with the devil."[26] He also recognized the reciprocity of such perceptions, acknowledging that some Indigenous peoples also view hydropower corporations as the devil. According to David Harrison, FPIC was feared by hydroelectric corporations because they assumed that such a forced collaboration would lead to their own downfall. I surmise these are unwarranted fears considering the well-recognized power imbalance between multi-million dollar global corporations and Indigenous communities regarding development projects (Jacka 2015; Kirsch 2014; Miller 2006; WCD 2000).

Harrison insisted such negotiations *can* work. Translation: FPIC does not give Indigenous peoples veto powers. Consultation can end in three ways: (1) approval, (2) approval with required adjustments, or (3) rejection (see Chapter One). However, these are merely recommendations by local decision-makers that high-level decision-makers are to consider before determining how they will proceed. If option 2, or even 3, were selected by the Indigenous peoples, governments could still construct a dam if it is considered a project of "superior public interest." Another panelist, Soledad Mills, CEO of Equitable Origins, noted that FPIC can work and companies could get lucky if they work with the "right" stakeholders. Stephen Sparks, Head of Environmental and Social Governance with Statkraft AS, urged fellow corporate representatives to be knowledgeable of the cultures where they work and suggested they invest the time to build trust, thereby avoiding lengthy legal delays.

[26] FPIC is a right guaranteed to Indigenous peoples since 1989 under the International Labor Organization's Convention on Indigenous and Tribal Peoples (No. 169). See Introduction for more detail.

Greg Guldin, Senior Applied Anthropologist with Cross Cultural Consulting, described a successful application of FPIC in Nepal. Regarding negotiations of the Upper Trishuli-1 (UT-1) Hydropower Project, he said, "although there were many concessions on both sides, it was a win-win." It took months of trust-building, and they had to directly address "legacy issues," the long-seeded issues of mistrust and perceptions of hydropower held by the local people. But in the end, it was a *success* because it was built *even with* consultation. A local collaborator from Nepal was on hand to corroborate the success. In direct contradiction, an article I later read by Ghale and Ghale (2017) elucidated the social and cultural conflicts surrounding UT-1. Similar to the situation in Costa Rica regarding the Diquís Hydropower Project, the people in the Rasuwa district of Nepal faced lengthy legal battles against project developers, eruption of local tensions within and among community members and regional stakeholders, a lack of or misrepresentation within the FPIC negotiation process, as well as severed ties between peoples, places, and cultures at the local scale. The audience at the Congress was not given the background regarding the UT-1 conflicts and seemed satisfied at the potential of instituting FPIC.

That talk was followed by an unconventional presentation by the only Indigenous peoples at the Congress, Chief Arnaldo Kabá, Alessandra Korap, and Candido Waro, representatives of the Munduruku peoples from Brazil. It was a late-breaking addition to the program that was lobbied for by Brent Millikan, Amazon Program Director with International Rivers. With only minutes remaining, Harrison invited the three representatives on stage. They shyly took their seats as the audience took pictures of the newcomers who were wearing headdresses, face paints, and jewelries that contrasted with the Western business attire of other attendees. Unlike every other single panel in the three-day Congress, no audio translations were provided. Millikan painstakingly translated sentence by sentence to an impatient audience. They chronicled, in the most serene and sincere voices, the decades of abuse that they have faced at the hands of EDF-funded hydroelectric projects on their territory: no consultation, no mitigation, no food security, compromised water quality, and broken promises. The list of rights violations was endless. The room was quiet. People shifted in their seats. We were kicked out of the room for the next panel.

By an IHA representative's own admission, FPIC is feared and "considered the devil." This reinforced my suspicion that Costa Rica's completion of an Indigenous consultation mechanism in March 2018 may have informed ICE's decision to cancel the Diquís Hydropower Project months later in November 2018.[27] The mechanism would require ICE to begin a lengthy dialogue and knowledge-sharing process with the Térraba peoples to fulfill FPIC requirements. However, as Irene Cañas Diaz, the new Executive President of ICE, assured me at the Congress, the decision was really based on storage capacity and the inability to sell excess electricity on the regional grid due to faults in Nicaragua's transmission lines (I. Cañas, personal communication, 16 May 2019).

Sra. Cañas was all smiles when I interviewed her, floating on the high of having just accepted the IHA Blue Planet Prize on behalf of ICE's construction of the Reventazón Hydropower Plant in southwestern Costa Rica. The winner is determined using the Hydropower Sustainability Assessment Protocol, a tool developed by the IHA in collaboration with World Wildlife Fund and The Nature Conservancy.[28] At the corporate dinner, which I did not attend due to its additional 100 € fee (US $125), ICE was recognized for its excellence in sustainability. According to the Chief Executive of the IHA, Richard Taylor, "Reventazón demonstrated remarkable sustainability performance…meeting or exceeding international good practice in all 19 assessment topics." Despite what the award implies, the dam spurred intense social and environmental controversy within Costa Rica (M. Irigaray, personal communication, 16 May 2019). Not only did it displace 15 local communities, it also dissected the Barbilla-Destierro Biological Corridor, which is an important conservation area for jaguar (*Pantera onca*). The dam was shut down for three months during spring 2018 because of a "strong water leak" in the spillway that allowed 180 liters (or 47.5 gallons) per second to escape.

In her opening statements at the plenary (Figure 13), Sra. Cañas said, "Costa Rica is a small country with big ideas" and the people who began hydropower development in the 1960s were "visionary." Although even for them the shift to renewable energy is challenging because, as she stated,

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[27] The *Consulta* lays out a pathway for FPIC as described in Chapter One.
[28] The IHA Sustainability Tool is available at https://www.hydrosustainability.org/.

"we are too dependent on fossil fuels. it is a matter of culture, people don't trust electric vehicles. But we have the capacity. It is time to share knowledge and experience." It is through this knowledge sharing process that, according to Marina Rubio, a representative of the United Nations Educational, Scientific, and Cultural Organization's Water Resources Division, hydroelectricity will be part of the paradigm shift from water as a source of conflict to that as an instrument of peace.

Figure 13. Sra. Irene Cañas Diaz in the tan blazer sitting second from the right, spoke in English on a panel flanked by her male counterparts during the opening plenary to discuss Costa Rica's role in the hydropower industry.

Ms. Rubio also spoke later at the Hydropower Women's Luncheon that I attended, entitled "Women in Hydro." About 30-40 women gathered in a small side space, huddled around standing tables, seated in lounge chairs, and snacking at dining tables. I took the opportunity to have a sandwich, a coffee, and mingle with some industry executives. They kindly asked about my research but seemed all too busy networking with their colleagues to invest much time in my queries. We listened as Linda Church Ciocci, representative of the US National Hydropower Association, spoke about the importance of supporting women in the hydropower industry, a work space dominated by men. She represents hydropower to Congress, the media, and to policymakers, and she was very selectively diplomatic in her remarks regarding the US federal decision to pull out of the Paris Agreement.

At the conclusion of the Congress, new IHA members were recognized, and a large group of them joined CEOs and staff on stage for a group photo to commemorate a successful meeting. Upon exit, the Congress finished with the same unexpected calm as it began, with five activists from Extinction Rebellion standing at the exit, holding signs and handing out pamphlets explaining the negative impacts of hydropower projects. One female representative from the hydropower industry paused to ask one of the protestors what they were protesting in apparent and complete confusion. A very concise response indicated the fact that the cost of attendance eliminated the possibility of them attending and that dams are not a "clean" source of energy. It was a brief and polite exchange, and it marked one of the only times I saw a direct conversation between proponents of opposite ideologies at one of these conferences.

Discussion—Knowledges, Representation, and Values

The three conferences discussed in this chapter represent a sample of the scientific, political, and social interactions and relationships that inform climate governance broadly, and Costa Rica's climate strategies specifically (cf. Jasanoff 2010). Similar to international biodiversity conservation meetings (Büscher et al. 2012; MacDonald 2010), the Summit, COP, and the Congress showcased energetic speeches by celebrities supporting their causes *du jour*. There were staged debates in the form of talk shows that weaved specifically curated narratives regarding the environmental crisis. Conferences inherently become "spectacles" or forums for producing and orchestrating a hegemonic and consonant vision (Gramsci 1971) as celebrities and other non-state actors reaffirm each other's values and beliefs.

The conferences were themselves violent environments where a continuum of intersecting and overlapping forms of violence occurred; tangible spaces that inequitably acknowledged, ignored, incorporated, and/or excluded diverse peoples, knowledges, and values. Within conference spaces, there is as palpable presence of structural violence as global climate governance, by its own operational format, curates the space allotted for subaltern voices, strategies, and counter-perspectives (Fadahunsi 2017; Okereke, Bulkeley, and Schroeder 2009; Paquette 2016). Oppression of diverse knowledges further perpetuates epistemic violence and although the heavy police presence may not have spurred physical

violence at the events, it is a form of affective violence that served to threaten people and make them fearful of what might happen if they stepped out of line.

In exploring these processes by which a diversity of perspectives at multiple scales inform the development and implementation of climate policy against the backdrop of the conferences, three main themes emerged: representation, knowledge, and value. First, in terms of representation, although all three conferences touted widespread promotional rhetoric of collaborative participation from diverse stakeholders, actions contradicted behavior. While the Hydropower Congress was the only one that had a hefty registration fee, both the COP24 and the Summit required credentials, which could only be obtained after arduous processes that greatly depended on network connections. These financial and networking roadblocks are demonstrative proof of control that organizers have over production of the spectacle. It also limited the diversity of attendees, and thereby the complexity of voices, ideas, and knowledges in the climate frontier. A veteran of the hydropower industry told me later at the 2019 World Hydropower Congress Women's Luncheon that she doesn't go to the COP meetings anymore because she believes they are intentionally complex so as to discourage participation.

Although the number, and perhaps impact, of protestors varied across the conferences, their message was clear: they disagreed with the business-as-usual [neoliberal] framework that forms the foundation of climate policy and wanted other options considered. However, at each conference, they were either mocked and/or largely ignored by those on the inside making policy decisions. This derision and dismissal were evident in both Dave Matthews and Mayor Michael Bloomberg's responses to protestors. The exclusion of dissenting voices contradicts the foundational environmental governance premise of the Rio Earth Summit in 1992 and subsequent UNFCCC meetings, whereby "participation" was key. But, as Bixler and colleagues (2015) have argued, even if participation was equitably operationalized, participation is not a panacea because unequal power relations persist and favor the interests of the powerful. When the division is breached, as in the case at the Summit, the fear of being fired becomes a tangible reality. Similarly, Gay-Antaki (2020) reviews the intersectionality at COP conferences, arguing that even though more women and Indigenous peoples are brought to the table, their

voices are compressed into homogenous entities that are silenced by oppressive structural systems that fail to interrogate the root of inequities in the climate discourse. This false representation was demonstrated by the lack of power or influence of the Indigenous Caucus and their failed attempt to include Indigenous rights in the Paris rulebook.

I contend that in addition to disciplined dissent, protestors' voices have also been weakened in their quest for justice and equity in decision-making processes because they are no longer backed by powerful environmental NGOs. The big international non-government organizations, or BINGOs, previously opposed hydropower (and nuclear) development for their environmental impacts. Yet, as the methodological quest to solve environmental degradation transitioned into a financial game of cost-benefit analysis, specifically with the introduction of the sustainable development paradigm, BINGOs began to side with corporations, industries, and politicians.[29] In contrast to Brazil where public protests of nuclear power lost steam because Greenpeace's reputation was tarnished (Goldstein 2017), global citizen protests of hydropower have lost support because mainstream, powerful BINGOs like the Nature Conservancy support hydropower as a green technology.

Secondly, at each conference, there was a distinct division between the knowledge of Science and traditional, local, and/or Indigenous ecological knowledges (see also Blok 2007). This division was evident in the constant use of *ours* and *theirs* when referring to non-Indigenous and Indigenous peoples, respectively. This debate between knowledges is linked to power inequities and has a long history in anthropological research (cf. Agrawal 1995; Turnbull 2003). There is a complex diversity of ways of knowing, understanding, and interpreting climate change around the world, resulting in a similarly complex diverse range of solutions that could greatly enhance contemporary climate governance (see Crate and Nuttall 2016; Dove 2014). Global governance, particularly regarding climate change, can thrive on inclusive deliberation if disparate views are harnessed effectively (Büscher et al. 2012). Numerous delegates, politicians, activists, actors, NGO representatives, and Indigenous leaders talked about

[29] A distinction has arisen whereby BINGOs is now interchangeable with 'Business and Industry non-governmental organizations,' and ENGO now represents Environmental non-governmental organizations.

combining the best of science with traditional knowledges at these meetings through inclusive and transparent dialogue, it appeared to be another idealized concept that lacked operationalization. Again, the unreality of this ideal became clear in debates over verbiage in the Paris rulebook, as well as lack of participation of Indigenous peoples at the Congress and Summit. Also obvious was the technophilic belief that despite the legacy of harm caused by hydropower and nuclear projects, they had the potential to address climate problems and therefore should remain prominent and preferred strategies within climate governance.

The third theme that emerged at these conferences was the measure through which society and environment are valued. The "neoliberalization of nature" is now common in the conservation arena, despite critique. Those who argue against monetizing resources fundamentally disagree with the ideology of selling nature to save it, because it perpetuates inequality and uneven geographic development. Pascal Radue with General Electric exemplified the value system that dominates climate and policy decision making when stating at the Hydropower Congress that he prefers factual science-based numbers to inform his decisions, not feelings, sentiments, or emotions. He thereby completely undermines and discounts other value systems. Such perspectives fuel the politics of knowledge debate (see Agrawal 1995; Turnbull 2003) by giving precedence to technocratic solutions that unjustly ignore equally valid alternatives rooted in traditional and/or Indigenous ecological knowledges.

Similarly illustrative of the difference in value systems were the awards discussed. A striking example of the contradictions in relevant value systems was exemplified by Summit support of/by the Mahindra Group; their former CEO received prestigious awards despite being directly involved in the Bhopal disaster, considered one of the world's greatest social-environmental tragedies. Perhaps the company is now attempting to repair their image through corporate-responsibility in climate-related work; however, that supposition was extinguished when Anirban Ghosh admitted that environmental benefits are secondary to economic growth. The "Fossil of the Day" awards at COP meetings highlight dissonance within the climate frontier, albeit in a seemingly transgressive spectacle; instead of presenting directly to the winner, the award is a purposeful, media-frenzy, theatrical performance. It is an example of how

activists work to disrupt the system through tactics that refuse to "engage in classic power struggles" (Klein 2002:XXVI), unlike the protest marches and the interruptions during presentations. The self-congratulatory pat on the back awards given out at the Congress ignored the large variety of social and environmental impacts produced by the Reventazón dam in Costa Rica. Moreover, the fact that Leonardo DiCaprio and Professor Ramanathan both won awards at the Summit is further illustrative of the dominant role of "experts" in the epistemic community, where celebrities and climate physicists are equally valued. Celebrity power to exert influences on the public and on policy-makers is as absurd as my authority as a volunteer controlling VIP and backstage spaces at the Summit.

Moreover, these events reinforce a "master narrative" of climate policy by "synthesizing and circulating discourses" that support the neoliberal framework (Wilshusen and MacDonald 2017). This process occurs in a manner akin to what West (2016) describes as representational rhetoric, a strategy that produces and reifies a specific "truth" where, in this case, overly simplistic, technocratic, and "clumsy" solutions are offered for highly complex or so-called "wicked" social-ecological problems (Rayner 2006). According to Jasanoff (2010), "the institutions through which climate knowledge is produced and validated have operated in largely uncharted territory, in accordance with no shared, pre-articulated commitments about the right ways to interpret or act upon nature." Therefore, I maintain that studying the spaces where policy is produced, while focusing on the gaps where dissent is legible, is imperative for developing more equitable and just climate policy.

CONCLUSION

In the Heart of the Climate Frontier

Figure 1. Jerhy in Térraba territory, overlooking the Térraba river.

A Death will not Make us Stop

This dissertation project does not explore how Costa Rica has been able to maintain its reputation as the exception in Central America, despite its faults. However, I believe it is because of this façade that the Brörán peoples have been successful in their bid to stop hydropower projects on the Térraba river. Most of their resistance efforts in the early years of fighting the Diquís were ignored by the state and the electricity company. Even legal *denuncias*, initiated by the Brörán peoples, were postponed by the national court and/or court decrees were not enforced. Meanwhile ICE drilled tunnels into the mountain side and bulldozed through forests and over streams for so-called geotechnical studies without consultation. Changes to ICE's operations did not begin to occur until the Indigenous resistance movement garnered international attention. Specifically, momentum of the Diquís project (and arguably previous hydropower plans) slowed when the international community became aware that the Costa Rican government was not upholding its legal obligations to protect Indigenous peoples; Costa Rica was systematically ignoring their autonomy in decision-making processes. Once committees from the United Nations became involved, visited the affected regions, and wrote damning reports of the state's actions, the Costa Rican government issued stays on dam construction. I believe that the Diquís was stopped because government officials did not want to taint the reputation of Costa Rica as a social-democratic oasis and furthermore, that ICE did not want to pursue construction under the legal circumstances imposed by the new Indigenous consultation mechanism. Yet as the case of Jerhy's murder has illustrated, the state has not taken further steps to rectify the inequities they impose on Indigenous peoples.

On the one-year anniversary of Jerhy's death, the community held a five-day memorial service for him. Events included spiritual, cultural, and ecumenical vigils in town and at the site of his murder. During this period of mourning, his loved ones reflected on his life, and shared stories, photographs, and artwork of him (Figure 2). They also gathered to discuss the continued injustices faced by Indigenous

peoples. A press release was published by his family members to accompany the community event, which in part, states:[1]

> As a people, we have strengthened ourselves in the conviction to continue fighting for the recovery of our lands. By demanding this right, we have had to pay with blood, and despite that, we have always stood with our heads high. It has given us more courage.
>
> On the penultimate day of Jerhy's vigil we made an offering to the river. The Río Grande de Térraba represents a lot for our territory. It is an element that as Indigenous peoples we have the mandate to protect. The offering ceremony served to give thanks for what it gives us. Protection for the river, so that it can flow freely, this represents the freedom and strength of the people. The fight for land will continue. A death will not make us stop.

Figure 2. Collage of photographs commemorating Jerhy's life presented at his memorial service. I am included in the top center photograph with Jerhy on one of our many trips to the river. Shared with me via Facebook by Jerhy's sister-in-law.

Life for the Brörán peoples carries on in Térraba now, much like it has in the past. Don Enrique spends his time gardening and working in his forested lands. Doña Digna cooks meals, makes medicines from her gardens, and cares for her family. Together they continue to serve on the elder's council, working towards securing the future that they want to leave for their grandchildren. I frequently message with Jerhy's family on social media. They update me on news in the community, activities at school, and family events. His siblings continue to work in subsistence agriculture and support their families. His sons, cousins, nieces, and nephews continue through their schooling. Jerhy's family and friends attempt to fill some of the void that his absence has created, to continue to recuperate lands, support his parents,

[1] The press release, original in Spanish, was published on the Mano de Tigre Orcuo Dbön Facebook page.

protect the river, and provide security to his children. It is a struggle at times to accomplish all the work that Jerhy was involved with, but they persist in order to honor him. Unfortunately, CAMPS is no longer able to work in the community due to the violence that has been made legible. Someone else has to apply to the municipality and organize community-wide jobs. Between all these activities, on top of their ailing health, Jerhy's parents continue to fight legal battles in attempt to not only prosecute those responsible for his murder, but to also ensure justice and equity for other Indigenous peoples in the country. There is no indication that their resistance efforts will cease and I doubt they will rest until they successfully bring an end to the violent environment in which they live. Ensuring enforcement of Indigenous rights throughout the climate frontier is one way that the Riveras and other Indigenous peoples can secure their futures.

Future Directions of the Climate Frontier

At the COP25 meeting in Spain in December 2019, the International Hydropower Association (IHA) announced its plans to hold the World Hydropower Congress in San José, Costa Rica in September 2021. The Congress' theme is "Renewables working together in an interconnected world." The IHA Chief Executive, Eddie Rich, expressed his enthusiasm for holding the meeting in Costa Rica, stating "with its strong commitment to hydropower and sustainable development, it's hard to think of a better host."[2] Costa Rica's Minister of Environment and Energy welcomes the Congress, stating "we are happy to share our experience with the region and the world, as we move away from fossil fuels and toward a net zero world by 2050." One month after the IHA announced its intentions to co-host the Congress in Costa Rica with ICE, ICE announced a national moratorium on all new hydropower development until at least 2028 (Perry et al. 2021).

The discrepancy in supporting hydropower's growth while one of its most reputable spokespersons (Costa Rica) pauses its own construction may provide interesting discussions at the Congress. For example, the moratorium highlights important considerations about hydropower's

[2] The IHA announcement can be read at the following website https://www.hydropower.org/news/costa-rica-to-host-2021-world-hydropower-congress.

economic viability. According to ICE, the decision to temporarily halt dam building in Costa Rica is linked to the exorbitant debt they owe to the international banks that have funded their large dam projects.[3] ICE's international credit rating was downgraded from stable to negative, meaning the corporation is a Highly Speculative credit risk for investors, making it less likely for them to receive funding. Furthermore, similar to the reason given for cancelling the Diquís, ICE reasoned that the country does not need the additional energy production to warrant more dams in the near future as their projected growth rate was slower than expected, and they are unable to sell the energy on the international grid.

Essentially, this means that Costa Rica plans to achieve their pledged NDCs to the Paris Agreement and fulfill the Sustainable Development Goals without the aid of additional dams. What does it mean to the rest of the world if Costa Rica, the exception, the model of progressive green environmental governance and hydropower development, decides that hydropower is not needed? Perhaps the decision will be acknowledged as a sign that social and ecological wellbeing are not compatible with economic growth. If Costa Rica truly is an exemplar, perhaps other countries will recognize that there are alternatives to achieving sustainability and follow in their footsteps by halting dam development in their own countries.

However, the moratorium comes amidst growing support for hydropower within the climate frontier; I do not foresee a paradigm shift in the governance arena as there continues to be sweeping support at COP meetings and within the hydropower industry, and their extensive epistemic communities of experts. The difficulty in shifting away from hydropower at the international scale may be due to what Hale, Held, and Young (2013) refer to as "institutional inertia," wherein large organizations have

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[3] According to Moody's credit opinion of ICE (October 2020), the corporation had to write off $150 million in debt incurred by stalls in construction of the Diquís project. The same report states that 70% of ICE's outstanding debt is in USD, and thus its exposure to foreign-exchange is a significant risk. Their debt for building the Reventazón dam is $900 million, but they were able to negotiate payoff of that loan in part by converting it to *colones*. Overall, Moody's rates ICE as B1, meaning they are a Highly Speculative corporation with a high credit risk and chance of default. Report available at https://www.grupoice.com/wps/wcm/connect/899aa1c1-adb0-4a59-972d-3a962543ea59/2020+Octubre+19.+Calificadora+Moody%27s.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE-899aa1c1-adb0-4a59-972d-3a962543ea59-npjQ4mL.

difficulty transitioning to new technologies or incorporating new interests into their agendas. For example, in Brazil, Hess (2018) describes that a variety of structural conditions support the country's "technological lock-in" on hydropower. Brazil's resource composition in part drives its reliance on and expertise in hydropower—there are plentiful water resources, a lack of coal, and a high mineral and agricultural resources that require energy for extraction (Hess 2018). In terms of the Indigenous-hydropower cycle in Costa Rica, a pause in hydropower development means that while a short-term moratorium is certainly welcomed, it is no different than other periods of revision or reorganization during which time each side of the hydropower debate prepares for the next stage or upcoming conflict.

At the time of writing, it is unclear if COP 26 will take place as an in-person event in Glasgow, Scotland as planned. The 2020 meeting was postponed because of the pandemic and there is speculation that this year the meeting will have the same fate. Inequity in the distribution of the Covid-19 vaccine potentially hinders equal participation from all UN member countries, leading many to call for alternative meeting styles or another postponement. Eighty countries have yet to receive any vaccinations, most of which are in the Global South (as of April 2021); they have the most to lose if they are not included in decision-making processes since they are the hardest hit socially, economically, and environmentally by climate change.[4] Excluding them from the climate frontier would have devastating effects on millions of peoples and would further fuel a crisis of representative politics (Nugent 2012).

According to Nugent (2012), the "separation of spheres" into the political and economic realms as suggested by Polanyi (1941) is no longer the case, as neoliberal reform in the 1980s molded them into a collective. Razsa and Krunik (2012) argue that "political representatives…have been captured by economic elites, [and] political parties increasingly represent the interest of financial institutions and other major corporations." Climate and hydropower conferences must balance addressing the apocalyptic reality of climate change (and mitigation strategies) and appease the powerful economic actors who control funding and credibility, thereby arguably weakening political options and alternatives. The

[4] For information on global vaccine distribution see BBC's Global vaccine rollout at https://www.bbc.com/news/world-56025355. See also Dyer (2020).

integration of politics and economics via neoliberalism forms the foundation of the climate frontier, and such market-based policies serve to sustain unsustainable capitalist enterprises (see Blühdorn 2007).

I aim to continue conducting research at climate and hydropower conferences by building a network of collaborative event ethnographers from a variety of disciplines. As Jasonoff (2010) highlighted, we need to address the lack of accountability in climate governance, specifically the science, policy, and diplomacy of the IPCC. Accountability, however, may be quite difficult to measure because of the 'polyvalence' of definitions and understandings of the term—yet there may be significant ethical implications for those who are held accountable (Cool 2019). The decision-makers maintaining the status quo in the climate governance arena must make space to incorporate diverse knowledges, imaginaries, and values to ensure that all steps are taken to avoid the worst case scenarios of a 3.2ºC warmer future. Jasanoff (2010:696) argues that the IPCC needs to "build trust and relationships with the global citizens whose future climate science has undertaken to predict and reshape." Anthropologists, alongside collaborators in the social, biological, and ecological sciences, are in the position to study up at these conferences, and hold the decision-makers accountable by providing the public with a detailed understanding of how they operate. The American Anthropological Association's (AAA) Global Climate Change Task Force points to the need for anthropologists to continue engaging with the impacts of climate change, as it is a "human problem…rooted in social institutions and cultural habits" (AAA 2014).[5] In agreement with the Task Force, I believe that we need to focus on the ethics, language, practices, and politics of transitioning to a low carbon future in order to ensure a more just, equitable, and sustainable future.

[5] See also the Global Climate Change Task Force's Statement on Humanity and Climate Change, available at http://s3.amazonaws.com/rdcms-aaa/files/production/public/anthropology_and_climate_change.pdf.

Dams and Justice in a Violent Environment

During an invited guest lecture in March 2021 entitled "Dams and Environmental Justice," a student asked me, "At what point does the benefit of the majority outweigh the needs of the minority?" We had been discussing the justice and equity issues involved in the confrontation between hydropower construction and Indigenous peoples. Within the context of the discussion, the student seemed to suggest that the benefits of hydropower as a so-called 'sustainable climate mitigation solution' are more important than their negative impacts on [a few] Indigenous peoples. After a moment, I asked rhetorically, 'Who are the majority? Who are the minority?' As I discussed in that talk and I describe in this dissertation, it is not *just* the 600 Brörán peoples who would be impacted by a dam nor would it be *just* a few hundred hectares of agricultural lands that they would lose (as implied in the student's question). The continued progression of violence that has been enacted upon them by the state's attempt at development has threatened their cultures, landscapes, and their connections with the environment for centuries.

Moreover, this conflict is not only happening in Costa Rica; there are hundreds of millions of peoples (at least) around the world who face severe short- and long-term consequences from dam development. As in Costa Rica, the peoples who are most significantly impacted by these projects receive the least benefits from them, as the energy and profits are funneled to cosmopolitan regions or other countries. Furthermore, considering the extent to which Indigenous peoples and decision-makers conflict across all extractive resource frontiers, not *just* hydrosocial territories within the climate frontier, I would seriously question who constitutes the majority and minority populations in reference to beneficiaries.

Through an examination of a hydrosocial territory, this dissertation research highlights multiple points of fracture within the climate frontier. Hydropower is a catalyst for understanding the complex realities of conflicting future imaginaries, contested productions of space/place, and the impacts of and responses to multiple types of violence. While the climate frontier encompasses a multitude of interconnected ideologies and epistemologies, disparities in the equity of how they are incorporated into decision-making processes span across local to global scales. A mixed-methods, ethnographic research project centered in political ecology intersected fieldwork in Térraba, Costa Rica more broadly (where

policy is enacted) with climate and hydropower conferences (where policy is produced). This framework allowed me to study the assemblage of relationships, frictions, and interactions that occurred within the climate frontier.

As discussed throughout this dissertation, the system through which inequitable (uneven) development is possible can be relegated to the founding principle of climate governance—neoliberalism, which prioritizes economic gain over social and environmental well-being. In Costa Rica, as elsewhere around the world, dams were first promoted as a source of energy sovereignty and as a form of economic progress, and more recently, as a climate mitigation strategy. The narrative of hydropower as a green, clean technology capable of addressing climate change as a sustainable development mitigation strategy has not been matched by an equal effort to make it sustainable in practice—hydropower projects continue to produce irreparable social and ecological destruction. Persistent injustices highlight the impossibility, or at least rarity, of achieving sustainable development in a system that thrives on economic growth via extraction of new resources. Widespread ecological devastation, cement production, and methane emissions likely cancel the benefits of hydropower in addressing climate change as well. Hydropower continues to be a maladaptive solution to the climate crisis that only serves to exacerbate social and ecological problems (see also Asher and Bhandari 2021; Shiva 2002); its positionality within the climate frontier is only maintained by manipulation of the 'green' narrative within controlled spaces. Conflict arises as the Indigenous and modern imaginaries regarding development collide.

Each **imaginary** is rooted in its own cultural milieu, incorporating distinct values, knowledges, relations with the environment, and connections to place. As such, while cautious not to overgeneralize, there are apparent distinctions between the Indigenous and modern imaginaries and their respective conceptualizations of development. As described in Chapter Two, the future imaginary of the Brörán peoples is connected to their reciprocal respect and care for the Térraba river and other physical and spiritual landscapes throughout the territory. The Brörán peoples' idea of development is clearly one that places significantly more importance on socio-cultural wellbeing than economic growth. The Riveras' and their Brörán relatives have sustained their cultures and imaginaries by maintaining their language and

identity, as well as kinship connections with Teribe peoples in Panama. Through these connections, the Brörán peoples pass knowledges of plants, animals, and agriculture to their grandchildren, participate in community projects, recuperate ancestral lands, and organize to stop hydropower projects. Doña Digna, Don Enrique, and Jerhy engage in daily acts of place-making to maintain connections to lands and ancestors, as well as ensure those connections remain in place for future generations.

Their ability to ensure that their imaginaries become realities in part relies on their capacity to enforce their autonomy. Despite legal avenues guaranteeing protection of Indigenous rights on national and international scales, there is significant discrepancy between their creation and application. The lack of operationalization results in the denial of Brörán and other Indigenous peoples the freedom to enact their imaginaries with ease; it is a constant and contentious struggle, particularly when confronted by modern imaginaries. The modern imaginary places hydropower as a priority in the governance arena, as its focus is economic growth. It depends on broad, technophilic solutions, which frequently ignore the local complexities of human-environmental relations. The confrontation between the Indigenous future imaginaries of the Brörán peoples and the modern, capitalist-based development imaginaries of ICE (and climate governance more broadly) lead to an ongoing Indigenous-hydropower cycle as discussed in Chapter Three.

The reasoning behind Indigenous resistance to dams has remained steadfast over time, while the rationale for building hydropower projects has shifted. Yet each side is unyielding in their resolve to fulfill their own imaginary, creating a rigidity trap that perpetuates the Indigenous-hydropower cycle. With no alternative solutions to the climate crisis being considered by policy and decision-makers, it is likely that the cycle will continue. If imagination truly lies at the heart of social change (Milkoreit 2017), inclusion of diverse imaginaries is essential in finding the most effective and sustainable solutions to climate change. Without the intersection of diverse knowledges, imaginaries, and ideas coming into contact, via friction, climate governance will continue to produce status quo policies and another 20 years will pass with minimal positive impact on climate change. Spaces within the climate frontier must be

more diverse, inclusive, and equitable towards incorporation of imaginaries to ensure the needed changes can be instituted.

The production of spaces and places are crucial components of realizing ones' imaginary and developing effective climate solutions. Through an engagement with Lefebvre's theory of spatialization, I illustrate how the real and imagined transformations of space and place via hydropower development (perceived), the dominant decision-making powers of climate mitigation (conceived), and the experiences, imaginaries, and livelihoods of the Brörán Indigenous peoples, as well as decision-makers (lived), all intersect with each other. The study of place-making in Térraba and at conferences has elucidated a range of inequities related to issues of power, autonomy, and control between Indigenous peoples and state institutions.

Within Térraba, the Rivera's and other Brörán peoples illustrate their autonomous control of their territory by constructing community centers, landscaping around common areas, building gardens, and recuperating lands. These are acts of resistance against state-sponsored attempts to gain control of the frontier region, as Indigenous territories in Puntarenas are less developed and less populated than the San José cosmopolitan region. While Doña Digna and others noted that the state has abandoned them, I agree in the sense that they are ignoring Indigenous conceptions of development and instead promoting their own agenda—production (and control) of space through dams. The state not only threatens to build dams without consultation, they physically transformed spaces in preparation for the Diquís. Real and imagined transformation of space (perceived) thereby intersected and negatively impacted the lived experiences of the Brörán peoples. In addition, their peaceful, subsistence lifestyles are interrupted by the constant need to network, organize, and hold meetings to counter state climate mitigation plans (conceived). In Térraba, the elder's council created a space through which they contest the power of ADI, creating conceived representations of space wherein the dominant institutional governance of Costa Rica can be challenged by Indigenous rights to autonomy and self-governance.

Control of the production of spaces at climate conferences illustrates the hegemonic decision-making powers at international levels of governance. Climate and hydropower conferences are tightly

regulated spaces that curate the diversity of peoples allowed to participate in decision-making processes, systematically limiting, hiding, or otherwise subduing alternative policies, epistemologies, and ideologies (see also Igoe 2010). Indigenous peoples fought for an official space within the climate frontier, but it is unclear how the recent formation of the Indigenous Caucus will impact decisions, particularly since they are outnumbered and out-funded by more powerful participants. It is ironic given the frequency with which speakers discussed the importance of incorporating Indigenous knowledges into policies, yet simultaneously excluded them from participating or neglected to include protections of those knowledges through policy actions. And yet, my research suggests that the neoliberal doxa of climate governance can be fractured by the framework of Indigenous legislation and therefore, Indigenous rights should be acknowledged, pursued, and enforced with more rigor within the climate arena.

The hegemonic structure of decision-making within the climate frontier maintains hydropower as a key component of solving the climate crisis, a positionality that acts to cover or greenwash its legacy of violence, displacement, and social-ecological destruction. Most notably, the World Bank pledged to fund more hydroelectricity projects at the Summit and Congress, and the IPCC supports continued growth of hydropower projects around the world. These neoliberal ideologies dominated conference narratives and were presented by the epistemic community as a cohesive harmony. In her analysis of community governance in Mexico, Laura Nader (1990) described how a community sought to avoid police confrontations through a feigned unified harmony. Similarly, the system of harmony presented at climate conferences not only creates an image of unity but, in so doing, staves off counter ideologies, values, and knowledges that might otherwise penetrate the *modern,* technophilic imaginary. These spectacles of unified harmony were employed to distract from, discipline, and/or dismiss alternative solutions to market-based strategies, effectively obscuring the violent environment generated within the climate frontier.

The uneven power dynamics underlying productions of spaces leads to a continuum of slow and fast **violence**. Violence materializes when disparate ideologies converge in frontier zones undergirded by power dynamics, visible when examining Costa Rica's national political mythology, and the climate

frontier more broadly. As discussed in Chapter One, Costa Rica's reputation as an exception is challenged by its history of violence that has persisted since colonization; one of many slow forms of violence that etches away at the Brörán peoples over generations. The contemporary national political mythology excludes Indigenous peoples, consigning them to exotic tourist attractions, if acknowledging their presence at all. Their knowledges are relegated to museums, a historical pastime; forms of epistemic violence that work to negate the importance of their contemporary existence, adaptations, and practices. Constant threats to transform sacred spaces, and other forms of affective violence, slow violence erupt into fast violence in the form of real transformations of space, e.g., tunnels and corporeal violence.

The continuous cycle of *terrorismo* (Mora 2018) is allowed to continue because the state and local police forces fail to fulfill their duties to protect Indigenous peoples. The state allowed the atrocities of colonialization to continue by disregarding their duties to remove non-Indigenous peoples from Indigenous territories. Protection at the state level has failed even when mandated by international courts and United Nations' committees. Verbal and physical violence has remained a constant in Térraba and made real by the murders of Sergio Rojas and Jerhy Rivera, two well-known leaders and land defenders, within the span of one year. Sergio was added to the Global Witness list of murdered Indigenous environmental protectors in 2020, and Jerhy will presumably be included in their 2021 report. The volume of peoples being murdered on a daily basis for protecting their lands, lives, and cultures from extraction activities is an epidemic, and even one of the world's most recognizable utopias is not immune. This dissertation exposes the reality of life in Costa Rica, which is not exempt from racial discrimination, injustice, or violence. The façade of Costa Rica as a utopic paradise appears to purposefully conceal historical injustices, ignore ongoing discrepancies in the establishment and enforcement of Indigenous rights legislation, and neglect to incorporate Indigenous peoples into the nation's environmental/climate agenda. These factors create a violent environment through which the Brörán peoples pursue their daily lives, which are locally contextualized examples of why the climate frontier must be examined and better understood.

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APPENDIX I: Field Sites and Methods

Field Site	Dates	Methods
Indigenous Territory, Costa Rica		
Coto Brus, Ngöbe Territory, Puntarenas Province	Spring 2014	Intercultural exchange with students; watched weaving and art presentations; preliminary informal interviews with community leaders about culture, hydropower, and rivers.
Boruca Territory, Puntarenas Province	June 9–11, 2015; July 3–7, 2016; July 6, 2017	Participant Observation: home stay with Indigenous families in Boruca; explored territory with hosts; visited host's agricultural fields; spoke with ADI representative; visited community museum; watched soccer games; watched traditional weaving and carving presentations; informal interviews about hydropower, agriculture, and Indigenous rights.
Ujarrás, Cabécar territory, Puntarenas Province	June 23, 2016; Fall 2018	Visited the community with Jerhy Rivera and a Canadian NGO working in the area. Spoke with local people about development; participant observation at a meeting between the NGO and ADI.
Salitre, Bribri territory, Puntarenas Province	July 7, 2017; Summer 2018	Visited cultural tourism hostel; visited friends and family of the Riveras; Jerhy gave me a driving tour of the territory.
Cabagra, Bribri territory, Puntarenas Province	July 8, 2017; Summer 2018; Spring 2019	Visited friends and family of the Riveras; went to a soccer game; Jerhy gave me a driving tour of the territory; spoke with elders at an elders' council meeting; went swimming in the river with Jerhy and some family members.
Rey Curré territory, Puntarenas Province	October 26 and 27, 2018	Attended cultural heritage festival with the Rivera family; participant observation and photography of dancing, cooking, art making, and other events; visited friends and family of the Riveras in the Curré community.
Térraba territory, Puntarenas Province	June 23–July 3, 2016; March 2017; June 27–July 10, 2017; February 2018–November 2018; January 2019–April 2019	Participant observation; Formal and Informal interviews; vegetation transects; bird surveys; ride-along interviews.
Meetings with University professors and NGO representatives		
San José, Costa Rica	Summer 2016; March 2017; Summer 2017; February 2018; September 2018	Meetings at UCR with professors and NGO representatives to discuss current research, legal issues, and knowledge about the Diquís, resistance, and consultation.

Field Site	Dates	Methods
Library and Museums in Costa Rica		
Biblioteca Nacional, San José	Summer 2015; Summer 2016	Researched archives on hydropower development, Indigenous rights, protest movements, and climate policy
Museo Nacional de Costa Rica (National Museum of Costa Rica), San José	May 30, 2015; Summer 2016; Spring 2018	Historical research on exhibits about Indigenous peoples and artifacts from Indigenous communities
Museo de Arte y Diseño Contemporáneo (Museum of Contemporary Art and Design), San José	May 29, 2015; Summer 2016	Learned about contemporary Costa Rican art and commentary on social-political issues
Museo Calderón Guardia (Historical Museum of Dr. Rafael Angel Calderon Guardia), San José	Summer 2015	Researched Costa Rica's political history, economy, and development
Museo del Jade (Jade Museum), San José	May 28, 2016	Researched exhibits about Indigenous peoples, Costa Rican history, and artifacts from Indigenous communities
Museos de Banco Central de Costa Rica (Central Bank Museum of Costa Rica, also known as the Pre-Columbian Gold Museum), San José	June 7, 2016; Fall 2018	Researched exhibits about Indigenous peoples, Costa Rican history, and artifacts from Indigenous communities
Teatro Nacional (National Theater), San José	Fall 2013; Summer 2016	Learned about the nation's cultural and performing arts; viewed theatrical and orchestra performances
Museo de Arte Costarricense (Museum of Costa Rican Art), San José	May 26, 2016	Viewed work by national artists and learned about contemporary issues represented in artworks.
El Sitio Museo Finca 6, Palmar Sur, Puntarenas	June 7, 2015 and February 17, 2019	Learned about Diquís region's Indigenous peoples and historical events through archaeological museum and discussion with archaeologists; Site of stone spheres; in 2019 visited with members of the Rivera family.
Grupo ICE Technological History Museum, San José	April 4, 2019	Private tour; history of ICE and the nation's energy and hydropower development; informal interview with tour guide.
Conferences and Presentations		
Precongreso Mesoamericano de Areas Protegidas por Pueblos Indígenas (Mesoamerican Pre-congress of Indigenous Peoples Protected Areas), San José, Costa Rica	March 17–18, 2014	Preliminary research to understand range of Indigenous issues in Costa Rica and the region; networked with Indigenous peoples and anthropologists
La Universidad Latinoamericana de Ciencia y Tecnología, *ULACIT*	June 8–10, 2016	Attended *Climate Impact Week* presentations; participant observation at panels on national

Field Site	Dates	Methods
(Latin American University of Science and Technology), San José, Costa Rica		climate change, climate neutrality, and related policies.
Organization of Tropical Studies, *San José, Costa Rica*	June 16, 2016	Attended presentation on Brazil's Belo Monte dam by Dr. Maria Irigary Castro; spoke with Dr. Castro about her research on hydropower, Indigenous rights, and climate policy
XI *Congreso de la Red Centroamericana de Antropología* (11th Congress of the Central American Anthropology Network), San José, Costa Rica	February 27–March 3, 2017	Participant observation; informal interviews with professors and researchers; learned about current regional anthropological projects and noted the language and rhetoric utilized. Audio recordings of talks.
Global Climate Action Summit, San Francisco, CA	September 12–14, 2018	Conducted participant observation and volunteered at various panels, presentations, workshops, and side events. Informal interviews with participants; networked; identified terminology, attitude, and power dynamics related to Indigenous rights, hydropower, and climate policy; photography and audio recordings collected at events.
UNFCCC COP24, Katowice, Poland	December 2–15, 2018	Participant observation at various panels, presentations, workshops, and side events. Informal interviews with participants; networked; identified terminology, attitude, and power dynamics related to Indigenous rights, hydropower, and climate policy; photography and audio recordings at events.
World Hydropower Congress, Paris, France	May 14–16, 2019	Participant observation at various panels, presentations, workshops, and side events. Participated in women's luncheon. Informal interviews with participants; networked; identified terminology, attitude, and power dynamics related to Indigenous rights, hydropower, and climate policy; photography and audio recordings at events.

Appendix II Chronology: Hydropower Development, Indigenous Rights, and Climate legislation in Costa Rica

Event	Year
Brörán population relocated from Chiriqui region to current territory	1697
Indigenous Reserves created by Executive Decree No. 34	1956
Aluminum Company of America (ALCOA) received a 25-year permit to explore for Bauxite in the Valle del General, canton of Pérez Zeledón in Puntarenas province. ALCOA explored the region until 1968.	1956
Térraba established as an Indigenous territory	1956
ICE builds its first hydropower plant, La Garita, in Alejuela province, west central Costa Rica.	1958
April 22-24, protests led by the Student Federation of the University of Costa Rica (FEUCR) and the National Front against ALCOA erupted outside the Legislative Assembly in San José, leading to confrontations with police.	1970
April 24, ALCOA and Costa Rican Government signed Law No. 4562 to develop Boruca-Cajón hydropower project for Bauxite processing.	1970
April 24, Committee for the Defense of National Heritage (CDPN), established, became the first Costa Rican environmental organization and gave birth to the country's environmental movement.	1970
The creation of the National Commission of Indigenous Affairs (CONAI), the organization responsible for representing the Costa Rican government to the Indigenous communities.	1973
Tropical Science Center conducted an Environmental Impact Assessment of the Boruca-Cajón dam project.	1975
ALCOA ended its Bauxite exploration in Costa Rica and left the country after continued conflict and resistance from various interest groups.	1975
Indigenous Act established by the Costa Rican government; Article 2 states that CONAI has the authority to purchase land back from non-Indigenous people.	1977
President Oduber declares it to be the "Year of Natural Resources"	1977
The Costa Rican government established the National Park Service.	1977
Arenal dam built, creating the largest lake in the country	1979
Government re-zoned Térraba without consultation	1980
The Great Boruca Project (Gran Boruca) is presented by ICE as a revised version of the previous dam. It is promoted as a way to meet the growing energy needs of the country.	1980
Costa Rica ratified International Labour Organization's (ILO) Indigenous and Tribal Peoples Convention (No.169), which guarantees the right of Free prior informed consent (FPIC) to all Indigenous peoples.	1993
Térraba-Sierpe National Wetlands named a RAMSAR site, wetland of national importance.	1995
Indigenous leaders submit the Autonomous Development of Indigenous Peoples Bill to the Legislative Assembly.	1995
The National Technical Secretariat for the Environment (SETENA) created.	1995
Harmonious Law of the Environment (Ley Orgánica del Ambiente): promotes sustainable development and requires environmental impact assessments for electricity projects that must be approved by SETENA.	1995
ICE established a camp within Rey Curré, in Cajón to begin Gran Boruca Hydropower development	2000
An Indigenous women's group from Rey Curré was created to oppose the Gran Boruca Project	2000
Manifesto of opposition to the Boruca project released by members of Rey Curré and Térraba	2001
Mexico announced Plan Puebla Panamá, an international project that would link Mexico to Panama through regional development and energy projects to reduce dependence on foreign energy sources.	2001

ICE, INBio, and UCR collaborated on an environmental impact assessment of the Gran Boruca project on the Térraba watershed (Arroyo 201)	2001
The Ombudsman Center for Environment and Development (OmCED) attempted to mediate between ICE & the Costa Rican government, the Ministry of Environment and Energy, and the Indigenous peoples affected by the Gran Boruca Project.	2002
Protest actions in Térraba territory on February 15 against Gran Boruca Project.	2002
ICE hired Columbian company INGETEC to do a new environmental impact assessment. They concluded that the Gran Boruca Project had too many negative potentialities and ICE abandoned the project.	2004
ICE developed a smaller version of the previous dams called the Boruca-Veraguas Project	2004
The Boruca-Veraguas project was renamed the Diquís Hydroelectric Project. Promoted as being sustainable clean energy source; eventually promoted as being essential for carbon neutrality; SEPEC line; Paris Agreement NDCs	2006
Costa Rican president signs Agreement No. 24 on December 7, 2006 named "Peace with Nature" declaring that Costa Rica will be carbon neutral by 2021.	2006
United Nations Committee on the Elimination of Racial Discrimination expressed concern that the Government has failed to adopt the Autonomy bill for Indigenous peoples	2007
United Nations Declaration on the Rights of Indigenous Peoples was created; Costa Rica voted in favor of it and adopted it the same year.	2007
Costa Rican Executive Branch signed Executive Decree No 34312-MP-MINAE on February 6 declaring the Diquís to be a matter of national interest	2008
ICE National Development Plan: sought to "reduce dependence on imported fuels, take greater advantage of sources of renewable energy in the country, and eventually produce 100 per cent of the electricity of the country through sources of renewable energy"	2008
ICE began building Diquís infrastructure within Térraba, including roads and 200-meter deep tunnels into the mountainside.	2010
October 12, Indigenous peoples from the region protest on Inter-American highway demonstrating their stance against Diquís. "Nothing to celebrate" was their slogan.	2010
Indigenous communities filed an official complaint with the government against ICE highlighting their disapproval of the Diquís	2010
Several Térraba organizations and NGOs filed a request for consideration under the early warning and urgent action procedures of the United Nations Committee on the Elimination of Racial Discrimination for the human rights violations suffered under ICE and their building of the Diquís.	2010
Human Rights Clinic from University of Texas School of Law produce a report detailing Indigenous rights violations by ICE in building of the Diquís.	2010
On March 21, 2011 ICE received a court order to discontinue operations until a consultation occurred.	2011
United Nations Special Rapporteur for Indigenous Rights, James Anaya visited the region in April. He published a report in May for the government and in June for Indigenous peoples recommending consultation for mediating Diquís development and a pathway to return Indigenous lands to Indigenous peoples.	2011
In September, the Constitutional Chamber determined the 2008 executive decree was constitutional as long as Indigenous consultation occurred within 6 months.	2011
In January, UCR asked the executive branch to repeal the decree of national interest; Article 8 of the No. 34312-MP-MINAE executive decree is declared to be unconstitutional because the Indigenous consultation had thus far failed to occur	2012
INOGO published their assessment of the ecological impact of the Diquís on the Térraba-Sierpe Ramsar protected Wetlands, declaring significant ecological damage would occur if it is built.	2013

September 1, attempted assassination of Jerhy Rivera Rivera when he attempted to report illegal logging within Térraba territory.	2013
The United Nations Committee on the Elimination of Racial Discrimination published a report detailing Indigenous rights violations by ICE on the people of Térraba.	2015
Costa Rica submits its first Nationally Determined Contributions (NDC) to COP21 Paris Agreement; which projected the carbon neutral goal could be achieved by 2085.	2015
On November 1, the Constitutional Chamber of Costa Rica's Supreme Court ordered ICE to stop construction of the Diquís; ICE failed to comply with the court's 2011 order to consult. Construction could not resume until the consultation was completed.	2016
A 2-year process of consultation began between state representatives and Indigenous communities living within the 24 designated Indigenous territories to develop a mechanism for free prior informed consent (FPIC) as required under ILO 169.	2016
Térraba voted for new ADI representatives in March	2017
On February 12, 22 Indigenous communities ratified the new consultation mechanism, on March 6, President Solis signed it, and on April 12, the Constitutional Chamber ratified Executive Decree 40932-MP-MJP, General Mechanism for Consultation of Indigenous Peoples.	2018
National Decarbonisation Plan announced by the government, updating the projected date to become carbon neutral to 2050.	2018
March 18, Bribri leader Sergio Rojas was murdered in his home in Salitre for defending Indigenous land rights.	2018
In May, Irene Cañas Díaz became the new CEO of Grupo ICE	2018
May 10, Grupo ICE published Estrategia 4.0 2019-2023, a National energy plan for the next 4 years. It does not mention hydropower or the Diquís at all.	2018
In June, Grupo ICE published its financial report detailing the necessity of the Diquís project and the intended commencement of the consultation process to be held with Indigenous communities by the end of the year.	2018
On November 2, the Diquís project was indefinitely suspended by CEO Sra. Irene Cañas Diaz of ICE.	2018
On February 24, Jerhy Rivera Rivera was murdered by a group of non-Indigenous land usurpers while he was defending Indigenous land recuperation efforts in Térraba	2019
February 26, scheduled ADI *asamblea* to vote for new representation; Jerhy was running for president.	2019