

What if there is a cure somewhere in the jungle?
Seeking and plant medicine *becomings*

by
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Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Philosophy

in the
Department of Sociology and Anthropology
Faculty of Arts and Social Sciences

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SIMON FRASER UNIVERSITY

Fall 2018

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Abstract

This thesis is a critical ethnographic exploration of meanings emerging at the plant-health nexus and the in-between spaces when seekers and healers meet in efforts to heal across epistemological borderlands. In both British Columbia, Canada and Talamanca, Costa Rica I investigated the motivations underpinning seeking trajectories structured around plant medicine and the experiences and critical reflections on these encounters made by healers and people who work with plant medicines. In this dissertation, I expose the contested space around understandings of efficacy and highlight the epistemological politics emphasized by participants who seek to de-center plants in popular therapeutic imaginaries, to bring out these tensions and the way they interpolate ideas about sustainability and traditional knowledge conservation. Field research was carried out in 2013 during a period of one year with the support of an SSHRC Doctoral Fellowship. Over fifty participants who work with plant medicines were consulted for this research, including healers, apprentices, herbalists, ethnobotanists, forestry specialists, and anthropologists of varying backgrounds- Afro-Caribbean, Bribri, Cabécar, Tican, American, Canadian, Hawaiian, and Anishinaabe. Their concerns around the sustainability of traditional healing practices are juxtaposed to the various ways plant medicinal identities are being constituted and instrumentalized, as subjective beings, actants, causal agents, material objects, alkaloids, teachers, relatives, or parts of “nature on the move” (Igoe, 2014). I discuss the way the burgeoning popularity of plant medicine today in some ways challenges the mainstream biomedical paradigm for thinking about medicine, as plants are re-animated with identities adopted from their cultural origins, exemplified with the popularity of ayahuasca in British Columbia. However, there is a proviso in that emerging anthropomorphisms in some instances repeat colonizing gestures even as they reflect agency and counter-hegemonic challenges, by upholding dualisms in understandings of efficacy that separate plants and healing practices from their local contexts. I argue the impactful ways thinking about plant medicine as *becoming*, as a verb rather than a noun, can support the sustainability of traditional healing practices and economic opportunities for the cottage industry production of plant medicine by de-centering plants in constructions of medicine.

Keywords: Seeker; healer; plant medicine; knowledge politics; epistemological borderlands; traditional knowledge conservation

For my mother Josée (Zeffi) Ferenczi

Acknowledgements

This thesis could not have been completed without the support and participation of many wonderful people too numerous to name individually here. Thank you to all participants in this research in Costa Rica, British Columbia and Kona, Hawai'i, for sharing your stories, reflections, and insights. Your contributions have shaped this thesis in important ways. I am grateful to have met you and appreciate being welcomed into your homes and gardens. Your warmth and hospitality are forever remembered and treasured. I would like to express deep thanks to my thesis committee, Dr. Marianne Ignace, Dr. Dara Culhane as well as to Dr. Stacy Pigg for your wisdom and impeccable practices that leave me inspired and invigorated to continue this work. Thank you to the Department of Anthropology and Sociology at Simon Fraser University for your support and to the Social Sciences and Humanities Research Council for a doctoral fellowship that helped me see this research through. I would like to also thank Dr. Kathleen Inglis, Kathryn White, and Dr. Julie LaPlante for insightful feedback on particular sections in this thesis, and to my family for precious words of encouragement. The words filling these pages could not have been written without the support of my husband, Sebastien Ouellette, who acted as cameraman, support network, and companion, as well as our daughter Billie and dog Calvin. Most of all, I want to thank my mother, Josée Gandol Ferenczi for being a continuous inspiration throughout this research and always helping me to see things differently and through multiple lenses.

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List of Acronyms

B.C.	British Columbia
IP	Intellectual Property
SFU	Simon Fraser University
TEKW	Traditional Ecological Knowledge and Wisdom

Glossary

Awá	Plural-Awapa. Specialists in Indigenous medicine and keepers of oral tradition. Great sages who cure via sacred songs left by Sibö to help people. A distinct song exists for every illness. The awá must have a strong command of all these songs and through the song an awá can communicate with Sibö's helpers to receive help in eliminating an illness. Depending on the illness a song may last up to eight nights, but generally songs last four nights (Murillo & Segura, 2011, p. 11). Translated as <i>médico</i> [doctor in Spanish].
<i>Bikákala</i>	Translated as a <i>ceremonial servant</i> and <i>master of ceremonies</i> (Spanish translation by Murillo and Segura (2011, p. 266, 269).
<i>Bikili'</i>	translated as <i>interpreter</i> (Spanish translation by Murillo and Segura, 2011, p. 265).
<i>Bukulú</i>	A powerful devil and guardian of certain animals, a malevolent spirit.
<i>Chocolaté</i>	Beverage made from cacao by combining it with hot water.
Icaros	Sacred songs corresponding to particular plants and their healing powers often associated with Shipibo shamans in Peru as well as other Indigenous peoples of South America. The needed plant spirits are summoned to heal a participant. Some icaros are repeated from ceremony to ceremony and participants may know the melodies and sing along, but those sung during individual healings are often specialized and less known (Beyer, 2009, p. 21).
KéköL	The name of a tree, and refers to the staff belonging to an awá, and di means river, or water (Palmer, Sánchez & Mayorga 1991, p. 28). The spring from where the KéköLdi river originates is home to some of these trees, from which great awapa made their ceremonial staffs, which only they are allowed to touch (ibid.). The tree is kèikar meaning "untouchable" (ibid).
Óköpa	During death rites those who bury the dead are called óköm (pl. óköpa), meaning "one who handles ó" (translated as axe or as blood), handle axes, a symbol that people are trees and the dead are dead trees (Bozzoli, 1975, p. 5).
Siã	Sacred curing stones used by awapa for divination.
Sĩã'tãmĩ	Guardian of the sacred curing stones, Siã. Before being born, Sibö was Siã, the first healing stone.

Sibö	God, the creator, and cultural hero (Murillo & Segura, 2011, p. xxii). Is sometimes spelt with an acute or grave accent over the trema- also spelt Sibü, Sibó, Sibö, Sib'ö, and Cibu.
Sibökomo	Sibö's father.
SuLa'kaska	The place where all good spirits go, the place of destiny (Murillo & Segura, 2011, p. 193).
Tsuru'	Cacao.
Uséköl'	High priest, highest authority, head of the highest rank among Bribri and Cabécar people (Murillo & Segura, 2011, p. 238). Translated as <i>supreme priest</i> (Spanish translation by Murillo and Segura, 2011, p. 269).
U-suré	Spelt U-suré in González Chaves and González Vásquez (2012), and ù sule in Murillo and Segura (2011). The conical structure is a sacred structure that models the structure of the universe.

Prologue

What if there is a cure somewhere in the jungle? If you were diagnosed with something constituted as “hopeless” in Western medicine, would you perhaps wonder about other cultural expertise or medicinal perspectives on the subject? I posed this question to myself when my family received the world-shattering news that my mother, at only fifty-seven years old, had terminal lung cancer and a predicted three weeks left to live. It was here that I began my own desperate seeking trajectory in search of a *magic-bullet cure*, ready to grasp at any straw that might challenge the foreclosure of hope that was delivered with such practiced indifference. Friends came to visit our home where my mother spent her final weeks, some with their own stories of seeking trajectories intended to offer hope, hopes anchored in trying this or that medicinal tea or fungi. “This tea really works. Check out all these testimonials on-line.” We readily embraced the suggestions given without much critical reflection. When trying to save someone there is no time for philosophical considerations around epistemology and ontology, nor to research cultural contexts to thoroughly understand the medicine at hand. Hopeful, and out of options, we brewed large quantities of Essiac Tea, which we stored in empty wine bottles, giving several ounces to my mother on a daily basis-what she began referring to as her *magic potion*. Three weeks later she passed away graciously. People continued sharing stories of healing trajectories, stories that produced a strong affect around treatment and biopolitics today.

My decision to write a thesis on the subject began in a very embodied and inductive way, casting a wide net with the question “what is plant medicine?” and participating in a diversity of both Indigenous and non-Indigenous contexts in British Columbia and Costa Rica linked to plant medicine (herb walks, ethnobotany classes, clinics, conferences, seminars, workshops, and ceremonial contexts), which fostered opportunities to examine my own assumptions about plant medicine, including through embodied practices like making plant medicines, farm work, and consuming medicines. Among these was a two-week course in Kona, Hawai’i focused around the notion of people-plant relationship, communication and plant intelligence. This course (elaborated upon in chapter two) helped to broaden the way I think about plant medicine, seeking and what it means *to communicate* with plants.

Thinking about my own seeking process and the seeking trajectories shared by others, led to me to explore how seeking trajectories are charted, the intentions that motivate them, and what is produced when seekers and healers meet across epistemological and ontological borderlands in efforts to heal. I decided to conduct pilot research by taking a medicinal botany course on a farm in Costa Rica that was recommended by a friend in Quebec who had recently taken the course, to think through the possibility of carrying out ethnographic research.

It was while volunteering for two months in 2010 on this farm under the guidance of Luke, a Naturopath who teaches tropical medicinal botany, that I heard of Don Isidro, rumored to have a cure for cancer and concerned over his intellectual property. He wanted to sell his recipe to the Costa Rican government before bioprospectors stole it. I was able to track down his small clinic and meet with him, learning of his seeking trajectory and how it evolved into his current practice. Don Isidro started off our conversation by normalizing my presence (as a *gringa*) in his clinic, telling me that there are many foreigners who come to visit him, even a well-known oncologist from the United States.

These embodied experiences formed the foundation of my research, which weaves together the stories of over fifty people interviewed who work with plant medicines, and the innovations and tensions emerging from these healing encounters. A focus on seeking trajectories is a study of hope as it is embodied and enacted through space, and as it generates new kinds of medicines, medicinal imaginaries and meanings. Seeking is productive, and this dissertation explores what is being generated at the people-plant-health nexus.



Don Miguel's Clinic
Photograph taken by N.K. Ferenczi, June 2013.

Chapter 1.

Introduction

Cancer, diabetes, Parkinson's disease, I've cured. I've cured a doctor, an American, with Parkinson's disease."

On a hot humid afternoon in June we sit in his hut in Talamanca, Costa Rica. Don Miguel, exuberant as usual, proudly lists off in Spanish his successful treatments, each one detailed in its own narrative of a person who journeyed, in some instances from far away, to his small farm, to seek healing.

Look at my Facebook page. I began treating people when I was ten years old.

At fifty-two he is the only one out of eight brothers and sisters to learn the healing techniques of his Bribri mother. He uses *piedras*, stones of varying shapes, as part of his diagnostic procedure. The *piedras* are neatly arranged on his desk. He demonstrates to me how he places the stone on a particular *punto*, a point anywhere on the body.

The brain communicates with the point and the point communicates with the *metal*.

He explains how the metal tells him about a range of relationships in the body, the nervous system, right down to the cellular and molecular level.

There are three thousand *puntos* on the body from the crown of the head to the feet. My daughter is eighteen and she has learned one thousand of them. Three of my children are learning. When she is thirty-five, she will be a person who *knows*.

Don Miguel does not think of himself as a *curandero*, *awá*¹ or shaman. "Soy *científico*." [I'm a scientist.]

"I'm a scientist," he states, with a pound to his chest. "I feel the ground." He cleans the surface of some soil near his desk and carefully

¹ Awá or awapa (plural) [translated as *médico*, meaning "doctor" in Spanish], is the title given to traditional Bribri healers. Awapa are described as important keepers of ancient knowledge and great sages (Murillo & Segura, 2008, p. 4, in reference to García Segura and Jaén, 1996).

rubs a smooth circle. "I feel the temperature. If my hand is moist there is humidity. At 8:00 a.m. I stick my hand out here."

He stands by the back entrance holding his hand outside.

"I write down the temperature. At noon I do the same."

He opens up copybooks filled with notes on climate change, air temperature changes at different altitudes, and changes in rainfall patterns. He shows me water samples that he has been collecting from the river.

"Would you drink this?" he asks rhetorically. "Plant medicines are affected by all these things."



Figure 1.1 Don Miguel's most recent water sample.
Photograph taken by N. K. Ferenczi

Don Miguel brags to me about many professionals in health-related fields and individuals seeking treatment from North America who visit him to be healed or to learn about plant medicines. He tells me that people hear of him through Facebook and by word of mouth. I refer to such people as seekers, people who travel to seek out healers for healing and/or to learn about plant medicines.² His clientele encompasses both local and translocal patients, including Indigenous Bribri and Cabécar and Afro-Caribbean locals, as well as Europeans, Americans, and Canadians. Personal testimonies of healing experiences fill his active Facebook page. An American visitor suggests that he raise his rates and wear a white lab coat. At the time of this research he charged five hundred dollars for diabetes, and for cancer, one thousand dollars. I never saw him wear a lab coat.

During our interviews Don Miguel often fumed about how capitalism and egoism are destroying everything, and how competitive and ruthless many people in Talamanca are becoming. He throws his arms up, as if helpless, saying he can't bring me with him to collect medicines because the neighbors will expect payment. Many medicines grow along well-trodden *senderos*, or pathways that weave around people's yards, and neighbors will assume that I am paying him for a plant medicine walk that passes through their backyards, thereby entitling them to a cut of his earnings.

He frames such condemnations within a broader critique of the commoditization of plant medicines and the valuations imposed by transnational seekers, heatedly telling me about non-local visitors, often people who work in health-related fields, who want to learn about plant medicines.

[DM] Four women came here to study with me," he begins in Spanish. "One German, one Italian, one Tican..." He tapers off. "They said they had four days. Four days! We're going to study the earth. We're going to study the soil, what type of soil is here? What type of insects? So that we can know what kind of plant will be produced. It's not teaching "this plant for this, that plant for that." The whole world wants *that* type of information.

² Seekers and healers are not mutually exclusive categories and do not necessarily represent encounters between different worlds. Seekers can become healers and vice versa.

He digs with his fingers tossing up some soil under his small desk.

[DM] You have to start with the soil...there are stages to this specialization. You need to know the soil, the climate, and how it's changing, the air, the vegetation, the sun, water contamination ... all this takes years to learn. This is a five-thousand-year-old science. This is not something you can learn in just a few days! [...] They think this plant serves this or that. No. It doesn't work that way. Four days!

“*They* think this plant *serves* this or that, the *whole world* wants *that type* of information.” Who is Don Miguel referring to as “*they*” and the “*whole world*”? What notions of efficacy underpin the idea of a standardized plant *servicing* a medicinal function, and what epistemological politics inform his designation of *that kind of information*? I wonder to myself what type of narrative he wants to convey to me, the anthropologist, asking about his practice and about plant medicines. My research focuses on what is nuanced by his allegation. Our many conversations clarify who is grouped under *they* and *the whole world*. He refers to people who visit him with assumptions about medicine and efficacy that impose a decontextualized, concise, taxonomical approach on his scientific knowledge and fragment relationships among different human and nonhuman beings. Don Miguel responds to my questions about plant medicine by decentering plants and emphasizing the biotic environments that plants interact with, relationships through which medicine emerges. Any knowledge shared about plant medicines must start with the soil and not sever connections between living things. His emplacement of plant medicine as emerging from a web of interaction, and not as a *thing*, is an important conceptual shift to support the sustainability of the jungle he loves and his practice as a healer.³

This thesis is about encounters between healers and seekers across cultural landscapes at a time of burgeoning interest in plant medicine, and the ways these interactions shape different materialities of plant medicine and of human and nonhuman bodies and subjectivities.⁴ This thematic focus addresses how such interactions

³ “Plant medicines” refer to all botanical medicines, including tree barks, lianas, and roots, emplaced in biotic relationships that are always shifting, in dynamic interaction, and in processes of “becoming” (Deleuze & Guattari, 2000). Plant medicinal knowledge and practices are influenced by climate change, changing ecosystems, endangered species, new botanical or animal species, and new ways of thinking (Anderson, 2011, p. 2).

⁴ Plant medicine is on the rise through its popularization in media, ideologies of wellness, and health optimization in North American healing contexts, and, as noted elsewhere, due to the inadequacy

interpolate the sustainability of plant medicines and the conservation of traditional knowledges and practices of healers who specialize in them. I am interested in exploring the human-plant-health nexus and the various ways plant agencies are formulated and enacted in the improvised spaces of cross-cultural healing encounters, and I relate this to local sustainability concerns in Talamanca around plant medicine. The popularity of traditional medicine begets the question of how to constitute the efficacy of such therapeutic approaches. The hegemony of mainstream Western orthodox pharmaceutical norms in constitutions of medicine and valuations of plant medicine are apparent in the production of medicinal meanings, efficacy and objects of healing. These observations have been noted elsewhere (Langwick, 2011, p. 24) in works that address the linkages between medicines, bodies, and imperialisms, and the ways these shift the material constructions of medicine. The value of examining such linkages becomes particularly compelling amid the expansion of transnational seeking and the role such healing trajectories play in co-constructing medicinal realities and *materialities*. The healers and people whom I portray, and the specific practices that I describe in this thesis, speak to these co-constructions of meaning and collectively negotiated therapeutic trajectories. I highlight both healers' and seekers' agency and the innovations enfolding their interactions with one another, and the different cultural constructions of medicine, selfhood, and relationships between human and nonhuman bodies emerging from these encounters. These relationships come into view most clearly through the juxtaposition of, and tacking, between healers' and seekers' narratives of experience, criticisms of epistemological imperialisms around medicine, visions for conservation of traditional practices, and stories of healing encounters.

At its core, this discussion centers around power relations, and how they are experienced by healers struggling to continue their practices. I adopt a critical ethnographic approach that begins with an ethical responsibility to attend to processes of injustice occurring within a specific lived context (Madison, 2012, p. 5). The narratives selected highlight underlying axioms in meaning-making that contribute to obscure functions of power. These stories, and the theoretical framings that I have assembled around them, intentionally disrupt the status quo and “common-sense understandings,”⁵

of health care provision as a result of growing economic pressures of neoliberal reform (Langwick, 2011; McNamara, 2016).

⁵ Soyini Madison explores what it means to “resist domestication” in critical ethnography, and to contribute to emancipating knowledge (Madison, 2012, p. 5-6).

highlighting uncertainty and movement in understandings of wellness and medicine, and destabilized epistemological certitudes.

Reanimating a contextualized understanding of plant medicine was a recurring theme among many participants in both Talamanca and British Columbia (B.C.). I discuss some concerns that people working with plant medicines have with seekers, and with methodological approaches to plant medicine and to conservation based on imagined divides separating humans and nonhumans. These concerns are related to precarious environments and livelihoods, disturbed ecologies and the indeterminacies of survival. These themes have been examined elsewhere (see for example Tsing's (2015) discussion of *precarity*), and precarity in terms of plant medicine and practitioners involves, in this context, government regulation, soil contamination, species loss, unemployment, forced displacement, and the adverse effects of climate change.⁶ Decentering medicinal plants in constitutions of medicinal meanings and contexts signifies constrained efforts toward supporting cultural and environmental sustainability. For example, Don Miguel's characterization of medicine in ways that decenter plants and emphasize the productive agencies found in ecological interactions. Such performances speak to a hegemony implicit in imposed notions of self-contained individuals and self-contained plants standing for units of analysis. I explore the tensions and innovations around cross-cultural healing encounters in terms of plant medicinal configurations and valuations based on Western medical understandings of efficacy and emphases on measurability.

These participants' concerns are echoed in contemporary anthropological analyses that encourage theorists to address "multiple temporalities" and the ways "[o]rganisms enlist each other and coordinate in making landscapes" (Tsing, 2015, p. 21). I hope to contribute to the body of work on the indeterminate meanings and medicines emerging from encounters between seekers in search of plant encounters, or perhaps *magic bullet* cures, and healers, who are in most cases also seekers themselves. These examples I discuss illustrate human and non-humans (people, plants, trees, lianas, insects) being transformed by such encounters. By juxtaposing different approaches to *plant world-making*, I hope to show the indeterminacy of

⁶ Tsing (2015, p. 3) describes human awareness of our ability to destroy the "livability of the planet" (contextualized temporally from the atomic bombing of Hiroshima to current intensified awareness of pollution, climate change and mass extinction).

medicinal meanings and plant statuses and the consequential ways that they are stretched and pulled in new directions. The most evocative way to carry this out is through telling a “rush of stories,” defined by Tsing as a *method* and an *addition to knowledge*, whereby the research object is “contaminated diversity” and its unit of analysis is “the indeterminate encounter” (2015, p. 37).

A rush of stories instantiates varying constitutions of plant being and becoming, and ideas around medicinal efficacy in the *in-between spaces* of nature-society divides. The various themes entangled in these productions include: 1) contemporary, emergent North American constructions of plant medicines as subjective beings and causal agents that pattern a *plant-centrism* that can also uphold strong nature and society dualisms 2) healers perpetuating relational models for plant medicinal becoming that emphasize context 3) academic approaches to animating nature and anthropomorphism, and 4) seekers’ embodied experiences and reformulations of people-plant relationships. These stories are framed within a political ecology characterized by an erratic climate, disappearing species, usurped landscapes and seascapes, and precarious survival. This epoch, ubiquitously referred to as the *anthropocene* at North American anthropological conferences in recent years, is a period wherein humans have become key agents in environmental disturbance emerging with modern capitalism (Tsing, 2015, p. 19).

Theorists have argued that hybrid healing practices made up of incommensurable understandings dissolve into a melting pot of practices whereby *incommensurability doesn’t matter* (Anderson, 2016). This proposal seems to assume a level playing field that downplays colonial legacies that persist in most areas of medicine today. Epistemological encounters between colonial medical paradigms and Indigenous healing paradigms have rarely taken place on completely equal footing, and there is a long history of colonial imposition of medicinal healing in Costa Rica (under Guatemala’s *Proto Medicato*, which is based on European models) and Western “common sense notions” of medicine that are axiomatic to the hegemony of orthodox medicine. In Talamanca, constraining Indigenous and bush medicines are local health regulations and prohibitions, FDA regulations, enforced health programs, prohibitions on midwifery, and various local bureaucracies required to navigate permissions, alongside strict labeling procedures that must be followed (e.g., not claiming that a medicine can help with healing a particular illness). I focus on some stories where incommensurability

includes instances of asymmetry, hegemony, ethical conflicts, and negotiated agency amid constraints that do indeed matter. Agency is here defined as a “constrained capacity to act” amidst meaning constraints (Ahearn, 2001, p. 54). Constraints relate to what Descola (2013) refers to as *naturalistic materialism* and biases that privilege an individualized intentional agent.

There is a careful distinction that must be made here between acknowledging dynamic living Indigenous traditions and hybrid practices and not essentializing “traditional medicine,” and also not flattening the significance of constraints imposed by an enduring colonialism in constitutions of medicine. On the one hand, I aim to acknowledge states of emergence in traditional medicine that are always in dynamic interaction with lived contexts (e.g. innovations, species loss, surges in therapeutic seeking). And on the other hand, I suggest that the argument that hybrid plant medicines emerge from contexts wherein incommensurabilities peacefully co-exist, is an oversimplification, particularly in the Costa Rican context. Efforts to integrate plant medicine into markets locally and globally are mitigated against by a heavily stratified, regulated, bureaucratic context around producing plant medicines, by the bioprospecting of pharmaceutical giants from the United States with the laboratory resources to industrially produce (and thus legitimate) Costa Rican plant medicine, and by state regulation, wherein Afro-Caribbean bush medicine is illegal, and Indigenous plant medicines are “technically” only tolerated in raw form at local markets, (however *what* these plant medicines treat is not supposed to be advertised, nor can these plant medicines be sold in *macrobíoticas* [herbal shops]).

A priori assumptions about how plant medicine *works* that regard plant medicine as a *thing* that enacts a standard type of healing effect decontextualize plant medicines from their biotic environments. This understanding of efficacy is based on a conceptual distinction between people, plants and animals founded on a nature and society dualism. Mainstream Western perspectives assume medicinal plants to be bounded, discrete entities, interacting with other entities in only superficial ways.⁷ This forecloses the possibility that medicine emerges through dynamic relationships, and by extension de-

⁷ Tim Ingold writes that the conception of the organism in mainstream theory in biology (evolutionary and environmental) is as a “discrete, bounded entity, a ‘living thing’,” one of a group of such things that relates to other organisms “along lines of external contact”; these *things* do not shape one another, their inner natures remain unaffected by contact (2000, p. 3).

emphasizes the habitats in which plant medicines grow. Participants discuss how severing medicinal function, or even state of being, from growth context is an oversimplification, and one that eclipses local understandings of medicine and the sustainable development of plant medicine. Don Miguel performed this sentiment when he dug up the soil by his desk. The imposition of valuations that decontextualize plant medicine dissolve biotic and social relationships that co-create medicine, and this is deterritorializing, as it negates relationships between social and physical environments.⁸

[L] I'm leaving Puerto Viejo tomorrow. Couldn't I just buy the tea and take it when I get back to England? [*Lucy is a tourist visiting for ten days, now finishing a consultation with Don Miguel, who advises her to visit a doctor upon her return and thinks that she needs treatment. I translate her question into Spanish. Don Miguel shakes his head.*]

[DM] No. It doesn't work that way. How will she know if it's the right medicine for her? Something that might work for one person might not work for the other. Her treatment must be followed by a specialist. I don't just sell plants.

Descola (2013) provides an impressive array of examples to show how porous boundaries are in taxonomies of living beings among many Indigenous people from around the world. Interestingly, he addresses the environment as a possible explanation for why many Indigenous people in the Amazon appear “*unable to objectivize nature,*” which he speculates might be a product of the incredible diversity reflected in roughly fifty thousand species of vascular plants in Amazonian jungle ecosystems, with less than twenty or so growing freely together (p.11). “Forced to settle for a mirage of diversity, they perhaps found no way of dissociating themselves from nature because they could not discern its profound unity, which was obscured by the multiplicity of its singular manifestations” (Descola, 2013, p. 11). People’s experiences with non-human beings, experiences that are at once scientific and inter-relational, explain this absence of

⁸ A number of factors complicate 1) a more sustainable use/production of plant medicines 2) efforts to connect the burgeoning popularity of plant medicine to greater support of Indigenous practitioners and plant experts, and 3) the conservation of places where strong medicines grow. Anderson comments on how exploitative relationships are between corporations and Indigenous groups, and patenting rights privileging large firms have undermined the development of cottage industry (Anderson, 2011, p.10). He writes, “Many ethnobiologists know excellent remedies that would help the world, but their lips are now sealed” (ibid).

“macrocategories.” Descola (2013) adeptly constitutes an epistemological history of naturalism that expertly clarifies an organic melding of synchronous ideologies, the origins of what he terms “naturalism,” postulating that the dualistic approach to nature emerged in the 17th century, whereupon a synergy among a few philosophical approaches- Enlightenment thinking, Christianity, a belief in the end of the world and in exogenous rescue-cemented particular nature-society relationships. Descola (2013) approaches a “naturalist ontology” as something absolute and definitive of “us” who are “the moderns.”⁹ Ironically alongside an effort to move past nature-society dualisms and situate this world-making in recent history, is the reification of a self-contained individual that remains untransformed by experience. The implication of this is a kind of environmental determinism, proposing the biotic environment as a causal explanation for perceptions, which de-emphasizes the agency, innovation, scientific knowledge, and generational wisdom involved in epistemological constitutions. What I hope to evince are shifts in notions of people-plant relationships as people meet across epistemological borderlands in efforts to heal, which provides a more dynamic conception of traditional and modern.

Theorists have convincingly argued that alterations in Indigenous medicines make them more relevant and meaningful to present day circumstances (Borofsky, 1989; De Burgos, 2014).¹⁰ But *what* is being made meaningful and carried forward, what is left behind, and what is patterning these movements towards supporting the sustainability of Indigenous medicine cannot be separated from the political, legal, economic, and ideological structures supporting pharmaceutical monopolies over medicine. Absent is the recognition of *precarity* in neoclassical economic contexts. Tsing argues that it is through an appreciation of “current precarity as an earthwide condition” that we can become aware of the situation of our world (2015, p. 4). Such an assumption underpins this exploration into seeking and the forging of new people-plant

⁹ Descola refers to “us” (2005, p. 395) “for us, the dead are not still-active despots who regulate our daily lives. They are just benign puppets to which we turn when involved in affairs that no longer concern them.”

¹⁰ Hugo De Burgos (2014) analyzes contemporary transformations of Indigenous medicine in Nicaragua and discusses how in the past two decades several Indigenous leaders in Nicaragua have sought to instrumentalize traditional medicine as a political tool for signaling and asserting cultural boundaries (p. 399) and revitalizing ethnic identity. De Burgos analyzes circumstances under which medical understandings and practices become political tools and markers of cultural resistance and cultural identity (ibid.).

relationships. It is important to recognize dynamic processes in knowledge production and avoid essentialized portrayals of “traditional Indigenous medicine.” Yet it is also important to politicize open, dynamic concepts of traditional medicine and hybrid practices and “structures of feelings” (Williams, 1977) that emerge in biopolitical contexts of therapeutic authority.¹¹ People in Talamanca carve out spaces for their innovative practices and businesses, and they also must negotiate the asymmetries that exist around ideas of “legitimate” medicine. The idea that stimulating cottage industry production of traditional plant medicines is a win-win situation, supporting cultural and environmental sustainability, and providing sick people with access to this ancestral knowledge, is complicated by different cultural constructions of “natural medicine,” in a context wherein “facticity” is fixed through institutional and technological use, and not all understandings of “facts” have the same “reach of facticity” (Pigg, 2005, p. 59). What is plant medicine? Bribri, Cabécar, Canadian, First Nations, Tican and Afro-Caribbean healers and producers of plant medicines negotiate their practices in dialogue with a dominant lexicon for thinking about nature and medicine that insists on “standardizations of quantitative value measure” (Büscher, 2014, p. 193), and increasingly abstract ways of perceiving nature, and what Büscher (2014) terms “liquid nature.”¹²

It is illuminating to analyze healing practices in terms of “constrained agency” (Ahearn, 2001), to provide a more nuanced understanding of the way hybrid healing practices interface with hegemonic medical ideologies and protocols, and the sustainability of Indigenous and Afro-Caribbean healing practices. Knowledge politics also shape people-plant relationships, revealing the limitations of an approach that implies a static identity of *us* (white Euro-Americans) incapable of transcending the nature-society divide and hegemonic structures (Enlightenment, Christianity), and *them* (Indigenous people) incapable of objectifying nature.¹³ All people, even the so-called

¹¹ I refer to *traditional* knowledge instead of *Indigenous* knowledge to include Afro-Caribbean knowledge of bush medicine in my designation. Afro-Caribbean and Indigenous communities face similar challenges relating to land rights, agrochemical pollution, discrimination and poverty.

¹² Büscher defines “liquid nature” as “nature made fit to circulate in capitalist commodity markets” (2014, p. 185).

¹³ Determining and detailing the foundation and the framework upholding this conceptual hegemony over nature-society relationships is of value, and Descola (2013) makes a very detailed contribution to decolonizing methodological approaches. However, there is a uniformity in the descriptions of the so-called “moderns” as naturalists against an intricate account of a wide variety of cultures that do not separate nature and people.

“moderns” interact with experiences in on-going processes of world-making. Rather than emphasizing the entrenched structures solidifying particular people-plant relationships, I offer a more indeterminate *bricolage* that elucidates different processes of reformulation and animation of nature and plant medicine among seekers and healers. What I seek to generate is an understanding of innovative practices and experiences in a context of therapeutic authority, pharmaceutical bioprospecting in a global capitalist economy, and oppositional movements that in some instances challenge and in other instances might enclose nature-society dualisms.

Perceptual categorizing practices stem from scalability, not from an innate way of perceiving (Tsing, 2015). Can we really argue that there is an inclination among white North Americans and Europeans to perceive primarily macrocategories? Or do we rather find arbitrariness in the ways people will have relationships with a particular garden, rock, tree, flagship species or river that is set apart from the rest? Rather than focusing on structural determinants of perception, I illustrate dynamic understandings of people-plant relationships that emerge from people’s social interactions around plant medicine.

What I endeavor to show with the examples in this thesis are dynamic contexts that lie somewhere in-between these polarities, with white Euro-Americans seeking plant medicines, and in some cases seeking to change their relationships with plants or find plant allies, and with Indigenous and Afro-Caribbean seekers and healers trying to cultivate and invigorate new sensibilities, within their local communities in Talamanca, and with visiting seekers, about plant medicines and foods. These sensibilities and ways of knowing endeavor to dismantle the dualisms around nature and the body, and food and medicine. Practitioners also experiment with devising new ways to market healing practices, and plants and tree products, and to protect, or make public, their intellectual property, and the ingredients in plant medicines.

Traditional medicine is dynamic and so-called modern and traditional knowledge are co-created; the traditional and modern *exist inside one another* (Langwick, 2011, p. 17). Don Miguel’s practice epitomizes how enmeshed so-called “traditional” and “modern” are, as do the practices of other healers who participated in this research. His criticisms evoke an epistemological borderland emerging from his interactions with non-Indigenous seekers and conflicting temporalities. His adaptations for a Western clientele

come through in a glossy medical diagram of the brain that he shows as he explains his diagnoses, and in his patients' avid Facebook posts. The hybridity in his healing practice tells a story of the cross-fertilization of knowledge emerging from contact with other Indigenous groups, Spanish colonization, the introduction of African slaves, the Guatemalan Protomedicato and more recent scientific studies on certain plant medicines and Facebook networking. His disquiet shows that within his particular "melting pot" of practices incommensurability indeed matters, because of pressures to unify temporality in conditions where multiple temporalities converge in medicinal plant becomings. Indigenous peoples also experienced contact with colonizers and analyzed their ways of seeing or *worlding*. Don Miguel is aware of Euro-American tendencies to objectivize nature; indeed, so conscientious is he of this fundamental impasse, that he clarified this analytic foundation as being vital to his concerns over contemporary inquiry and interest in traditional medicine.

The affect of these narratives aims to capture the "generativity of the emergent" (Stewart, 2005) and conjure a multivalent yet patterned response in words, actions, and critical reflections around concepts of nature. Constructions of plant medicine as sentient and in dynamic interaction are, to use the oft quoted phrase of Claude Levi-Strauss, "good to think with." Hegemony is never absolute and is continually resisted, altered, and challenged, and dissent can be located in "emergent formations" and "structures of feelings" that reflect an oppositional relationship to dominant discourses (Williams, 1977, p. 112; Ahearn, 2001, p. 250). These new patterns in ways of thinking are consequential and productive. Hegemony is situated in what is silenced, what is positioned beyond "the thinkable," what as "common-sense," remains unchallenged and not the subject of explication.¹⁴

Nature's increasing abstraction (Büscher, 2014) is met with some local efforts in Talamanca to emplace plant medicine, and to resist the generification of plant medicine or its division into a strongly empirical herbal part and a sacred-magical part.¹⁵ This is

¹⁴ Hegemony is described as consisting of cultural practices that become taken-for-granted realities that, being axiomatic, are naturalized and not the subject of critical scrutiny or argument (Cited in Goldstein, 2013, p. 37, quoting Comaroff & Comaroff, (1992, p. 28-9), citing and expanding on Bourdieu (1977, p. 94).

¹⁵ Anderson (2016) links theories of causation and the division into empirical herbal components and "religio-magical" ones in the context of Mayan medicine. The practical sensible brewing of teas is easily absorbed into North American epistemologies around healing. Anderson argues that

done by constituting efficacy as contingent on emplaced plant identities that are connected with particular locales, soils, and socio-ecologic relationships, and what Anna Tsing terms “the indeterminacy of self-and-other transformations” (2015, p. 29). Emplacing or reterritorializing plant medicinal identities as “becoming” (Deleuze & Guattari, 2000), as dynamic, processual and interactive with a biotic community, is a vital part of conceptually connecting plant medicine production with the conservation of social and physical environments. This involves contextualizing medicine as a verb rather than a noun and shifting plant actors from the center to the periphery to leave room for other actors (practitioners, soil, insects, water, and so forth) involved in the co-production of medicine.

Analyzing “emergent medicines” (Langwick, 2011, p. 4) and their relationships to broader economic, political, environmental and social processes, reflects some of the ways socioecological contexts interact with the trajectories of seekers, and the contested conceptual space of people and plant relationships when seekers and healers meet in efforts to heal.¹⁶ I bring out stories of “precarious livelihoods and precarious environments” (Tsing, 2015, p. 4) by looking at cottage-industry production and ecology, and the ways people working with plant medicines at these epistemological borderlands negotiate agency within this conceptual asymmetry around what constitutes plant medicine. What is at stake in upholding a plant-centric and standardized perspective of plant medicine?

People-plant relationships are a particularly relevant area of research today given the budding popularity of ethnobotany and plant medicine in the West and the growing awareness of precarity (Tsing, 2015) in the healthcare system and in nature with climate change, biodiversity loss and extinction. I suggest that this interest is part of a broader shift in people-plant relationships, expressed in a variety of ways and relating to the precarity of life today.

this dualism is bridged by some plants that are used in sacred ceremony. The ceremonial uses, as I will show in chapter 6, show the porosity of these boundaries.

¹⁶ Healer in this context espouses Osseo-Asare’s description, referring to a variety of health practitioners with training in folk medicine and healing plants, gained through family lineages and apprenticeships (2014, p. 13). My research recognizes traditional knowledge and practices as dynamic, innovative, interactive and adaptive, with the understanding that localities are linked with the wider world in countless ways at various levels and are not simply products of the modern world (Osseo-Asare, 2014, p. 73, in references to Massey, 1993).

Many social scientists have followed geologists in referring to this era as the Anthropocene, denoting a time period wherein human disruption surpasses geological forces (Tsing, 2015). As the pendulum swings to the extreme in terms of alienation from nature and quantification of fragmented parts of nature, it swings back to the opposite extreme-being earthbound and reformulating nature-society relationships. In the words of Tsing, “If categories are unstable, we must watch them emerge within encounters. To use category names should be a commitment to tracing the assemblages in which these categories gain a momentary hold” (Tsing, 2015, p. 29). An underlying theme in this thesis is the possibility that we are shifting into a different paradigm for conceptualizing relationships between social and physical environments, levels of interaction that extend right down to the molecular level with cutting-edge epigenetic research. The unprecedented pluralism in healing modalities contributes to different experiences and envisionings of embodiment. Alongside these new optics are shifts in the regulation of plants in this post-war on drugs, including the legislation of marijuana with pharmacies in Vancouver already expressing interest in distribution, along with innovations in health care, such as MDMA use for post-trauma treatment of soldiers and police officers in Vancouver, psilocybin in cancer pain management in Canada, and ayahuasca and iboga ceremonies in Vancouver. An increasing number of North Americans are looking to plant remedies instead of pharmaceutical drugs. The general growth in tourism around “ethnobotany,” the growing popularity of traditional ceremonies involving plant medicines like ayahuasca and iboga, and the proliferation of medical marijuana dispensaries in British Columbia, all reflect shifting legal status of plants, social identities, medicinal understandings, and people-plant relationships in North America.¹⁷ The popularity of ethnobotany today has been noted elsewhere (see for example Nolan and Turner, 2011) and also finds expression in the unprecedented numbers of people visiting botanical gardens in North America, and the expansion of educational programs organized by some botanical gardens, which include in-situ and ex-situ conservation and Indigenous

¹⁷ Robust research into botanical gardens and educational programs and new technological approaches that facilitate people’s relating to plants also exemplifies tangible representations of efforts to propel ethnobotany in new directions. At the Leaders in Conservation Conference (2014), Professor Jill Didur from the Loyola Sustainability Research Centre presented “Walk This Way: Curating Botanical Gardens with Mobile Media” and launched “(Mis)Guide in the alpine garden,” a new I-phone app in the Montreal Botanical Gardens. Visitors first locate, via headphones, barcodes subtly placed in front of particular plants, then scan those with their phone to generate a virtual map of information on historical, social, economic, political, Indigenous, geographic, and biological dimensions of the plant, (including histories of Indigenous uses, biopiracy, and transnational movements) accessed by opening up doors and listening while sauntering through the garden.

elders offering teachings.¹⁸ There may be a connection between structures of feeling (Williams, 1977) vis-à-vis *precarity*, and such *lines of becoming* in ethnobotany.¹⁹ For example the Manitoba Museum in Canada has a new “adult evening” series “Surviving the Apocalypse,” that offers guidance for post-apocalypse adaptation, including how to make knives and arrowheads and how to distinguish edible and toxic plants.²⁰ It takes naming only a few examples to produce an affect of change in people-plant relationships, of what might elsewhere be termed incipient “unconscious stirrings” of thoughts and feelings (Ahearn, 2001, p. 52; Williams, 1977, p. 132). How are configurations of nature negotiated in encounters when seekers and healers meet in efforts to heal? What is generated as a result of these encounters?

1.1. Reconfiguring people-plant relationships

The need for a paradigmatic shift in how we relate to other species in nature has been a recurring theme throughout this research and particularly at conferences where plant medicines are animated, sometimes in very experimental ways, to broaden our imaginations and help us think through this shift. This need is nuanced in academic work that aims to write sentience into nature and animate *non-human* beings. It also finds expression in different forms of biodiversity governance such as, for example, in New Zealand’s Waitangi tribunal and the designation of the Whanganui River as a living entity to address Māori concerns around its increasing degradation, privatization, and new proposals for hydroelectric dams.²¹ Focusing on the ways plant medicinal identities are being constituted and instrumentalized, as subjective beings, actants, causal agents, material objects, alkaloids, teachers, relatives, and community members in relationship with a dynamic ecosystem and climate, or as parts of “nature on the move” (Igoe, 2014),

¹⁸ For example, Espace de la Vie Montreal Botanical Gardens is a leader in some of these educational initiatives.

¹⁹ The extreme global reach of capitalism and the loss of utopian belief in a better future, in development, and in secure employment all coalesce into what Tsing calls “living with precarity,” leading one to question how people are dealing with blasted landscapes and what is emerging from the ruins (2015, p. 3). An example is Bayer and Monsanto merging under Bayer’s name to control 25 percent of the world’s seed production.

²⁰ Jones, B. (Nov. 1st, 2016) “Adult evening: Surviving the apocalypse” Toronto metro.

²¹ See Dame Anne Salmond’s explanation of this process in a conference presentation entitled “Tears of Rangī: Water, Power, and People in New Zealand” at UBC April 11, 2013 and available on YouTube. <https://www.youtube.com/watch?v=f2-8Ha7pH34>

draws attention to some of the ways notions of people and plant relationships interpolate healing encounters and the consequences this produces.

Experiences and plants imprint themselves on bodies (Laplante, 2016). Perhaps a fruitful way to venture past these binary assumptions that have so plagued the discipline is to move past the fixity of claims that Western Euro-Americans are “naturalists,” (Descola, 2013) and to focus instead on circumstances in which imagined boundaries become more porous. I attempt to treat humans and plants not as subjects or objects, but as “open-ended life forms,” as *becomings* (Laplante, 2016, p. 17). Discussing structural forces at work is crucial to establishing the political context; yet looking more closely at engagements tells a much richer story, and one that perhaps provides a way forward. I hope to contribute to this body of literature, by enlivening contemporary interactions between people and plants and the narratives, concerns, incommensurabilities, and innovations that occur as people work out *relationships*, and what that means. The examples discussed are as diverse as a Cabécar woman questioning the ethics of tree grafting and a Canadian man apprenticing to become a Bwiti Shaman. I have tried to hold plant identities in motion, emergent, and unstable, and to draw attention to the productive space that opens up when seekers, healers, and plants meet in efforts to heal.²²

1.2. Encounters around healing

Arguably, these days people are contemplating a broader range of therapeutic options and healing modalities than ever before. While this assertion may seem more in line with the cosmopolitanism of the affluent, migrations of people, health development projects, traveling healers and health practitioners (e.g., Médecins Sans Frontières, the Red Cross) broaden the variety of healing modalities available and can influence conceptualizations of what causes illness and what “healing” means. Although seeking is not new or exclusive to the middle and upper classes, transnational flows create new boundaries (Fechter, 2007) and asymmetries (Amit, 2007) and create new forms of

²² Kohn (2013) posits that a vital part of finding a way to practice an anthropology that does not drastically separate humans from non-humans lies in grasping the relationships between distinctive forms of representation (p. 9). We partially share “semiotic propensities” that enable multispecies relations, and analysis (ibid.). He further states that improving the ways we attend to our relationships with non-human life forms demands that we “make ontological claims—claims about the nature of reality” (ibid.).

social exclusion (Johnson & Clisby, 2008).²³ Seeking interacts with local cultural constructions of medicine and channels knowledge “conservation” and plant medicinal production in particular directions, primarily concerned with empirical herbal components of knowledge.

What is perhaps more unique to the kind of seeking happening today is the density of health care professionals, integrative pharmacists, doctors, and patients involved. This wave of seeking is happening at a time when the philosophical underpinnings of medicine are being questioned and when an attending “theoretical chaos” has emerged from the recognition that all healing practices are socially constructed (Kleinman, 2010, p. 86).²⁴ “Does it work?” This seemingly innocuous question often unwittingly participates in a colonizing discourse on plant medicine and the body in cross-cultural encounters around healing. The question narrowly circumscribes the way it can be answered, a response that effaces context as a variable influencing efficacy and function. A smaller body of research looks at the implications of how *efficacy* is determined and what it means to assert that a medicine “works” (Craig, 2012; Langwick, 2011).²⁵ Craig juxtaposes biomedical understandings of efficacy to sociocultural understandings, the former evaluated through measurement in controlled clinical contexts, the latter as the ability to produce desired outcomes (2012, p. 4).

Emergent therapeutic practices and contexts, and the way they interact with public health discourse and Western allopathic understandings have been examined in-depth elsewhere (Langwick, 2001, 2011; Pigg, 1992, 1995; Vandebroek, Balick & Yukes et al., 2007; Viladrich, 2007). Theorists have addressed the way plant medicines and

²³ Diane Luckow (2011), in reference the research conducted by MTRG, describes how large numbers of wealthy patients from “First World” countries are travelling to “developing countries” for treatments; for example, for elective cosmetic procedures, multiple sclerosis liberation therapy, contentious stem cell procedures and much more (Luckow, 2011, p. 1). Anthropologists such as Nancy Scheper-Hughes (2000) bring out the ethical issues and social justice concerns this has given rise to, for instance global organ trafficking from poor countries to wealthy countries for transplant surgeries, which inevitably exploits poor and marginalized people.

²⁴ Seekers might also be driven by less serious illnesses, curiosity, an interest in learning more about plant medicines, and a variety of other motivations.

²⁵ Langwick (2011, p. 13) alludes to a Tanzanian artist’s cartoon drawing of a “mganga” selling medicine to a Western client. The artist depicts the client’s concern over whether it is true that the medicine works, revealing his perception of what the client means by *it*, based on his imagination of formal education and science, the World Health Organization, and pharmaceutical bioprospecting.

articulations of the body are negotiated around cultural constructions of “efficacy” (Craig, 2012), different therapy models for mental disability (Hernandez-Wolfe, 2011), different classificatory schemes (Kleinman, 2010), different “emplotment” practices (Mattingly, 2010), different notions of “science” and “modern medicine” (Adams, 2001; Berkes, 2008; Harvey, 2011; Langwick, 2011), distinctions between “medicines” and “narcotics” (Viladrich, 2007), affordability and availability (Vandebroek, Balick & Yukes et al., 2007, Viladrich, 2007) and pharmaceutical bioprospecting and the de-sacralization of nature (Islam, 2010; Posey, 2002).²⁶ Movements of Latino migrants and corresponding movements of plant medicines and healers have been explored in-depth in research on cross-cultural processes and intracultural movements across local rural, urban and transnational spaces (Ososki, Balick & Daly, 2007; Vandebroek, Balick, Yukes, et al., 2007; Viladrich, 2007). Herbal shops and *botánicas* (Viladrich, 2007), also referred to as *macrobióticas* in Costa Rica, are burgeoning in big cities like New York in North America and San José in Costa Rica.²⁷ Viladrich explores *botánicas* as implanted cultural spaces that become important points of social connection for the Latino immigrant community of practitioners and those who seek them out for matters that generally do not separate the spiritual from the physical. Viladrich (2007) goes on to note that Latino healers in New York City have greater opportunities there to build businesses based on their knowledge than they do in their home countries. She further notes that healers practice in contexts of improvisation and experimentation, partly due, materially, to the extreme reduction in ingredients available to make medicines, and culturally, in the shift from informal knowledge-sharing toward building businesses and generating profits from knowledge. This raises questions around intellectual property and *benefit sharing* in the commoditization of plant medicine (for more on this see Hayden, 2003, 2005, 2007; Posey, 1996; Yamin & Posey, 1993). These cultural contexts provide contemporary

²⁶ The term bioprospecting refers to the pursuit by biotechnological, pharmaceutical and agricultural industries of biochemical and genetic resources that have commercial value, in order to develop new products (Posey, 1996, p. 9).

²⁷ Latino and/or Afro-Caribbean herbal pharmacies that sell botanical remedies (fresh, dried and processed plant medicines grown in North America, Caribbean, Central America and elsewhere) as well as offer religious and spiritual products and services (Viladrich, 2007, p. 65; Vandebroek, Balick, Yukes, et al., 2007, p. 41). *Botánicas* are also defined as “invisible hospitals,” “ethnic healing-religious enterprises” (Jones et al. 2001 cited in Viladrich, 2007, p. 65) and “sites of healing and community support” (Hernandez & Jones, 2004, cited in Vandebroek, Balick, Yukes, et al., 2007, p. 41) that address spiritual, religious and physical wellbeing (ibid).

examples of the types of social formations around conceptions of bodies and medicines that cross borders.²⁸

Botanical medicines, and the knowledge people have of them have long histories of movement (Anderson, 2005; Ososki, Balick & Daly, 2007; Vandebroek, Balick, Yukes, et al., 2007; Viladrich, 2007). Medical pluralism is not *new*. Cultural approaches to healing are not bounded, and healing knowledges have traveled for thousands of years, through various networks and colonial exploitation and imposition (Leslie, 2010).²⁹ Anderson describes horticultural trade in the United States in the late 1800s whereby the sheer volume of bulbs, corms and tubers harvested by Indigenous peoples led to movements of thousands of bulbs across the country (2005, p. 297).³⁰ In China, India, Japan, Sri Lanka, and elsewhere the institutional structures of professional healing practice and education have been adjusted to Indigenous medical traditions (Leslie, 2010, p. 55). Hybrid healing practices have become “the norm.”

I do not posit the idea of authentic traditional medicine nor of a romanticized traditional healer unchanged by outside influences. Healing practices interact with historical, social, political, and economic contexts. New illnesses and objects of therapeutic attention arise from political and economic shifts (Gaur & Patnaik, 2011; see also Zhang (2007) on the birth of nanke medicine in China’).³¹ For instance Gaur and Patnaik use a liminality framework to discuss and understand the health experiences of the displaced Korwa as an “embodiment of their social and material conditions of existence” (2011, p. 85). Million (2013) examines the colonial processes entrenched in the biopolitics that have emerged in bureaucratic protocols and the way pathologizing

²⁸ The growth of botánicas in large American cities may reflect growing interest in herbal medicine, but also reflects affordable healthcare options, a healing ideology that is more familiar, a sense of community, and the opportunity to discuss healing options in one’s own language, among other things. Access and choice are largely constrained by socio economic factors, political factors, and spatial factors such as remoteness of villages, and are influenced by spiritual or religious beliefs.

²⁹ Charles Leslie gives the example of humoral theories such as “hot” or “cold” foods, or the way negative emotions such as fear and envy are toxic and affect body equilibrium, ways of knowing held by many Asian cultures, large portions of European and African cultures, and that were imported to the New World through colonialism, where they continue to play an important role in Latin American communities (2010, p. 55).

³⁰ Anderson mentions as an example Carl Purdy, who harvested roughly 75,000 bulbs of Diogenes’ Lantern (*Calochortus Amabilis*) annually to send to New Jersey at a price of \$1.50 per 100 bulbs (2005, p. 297).

³¹ Kleinman points out how healing modalities are closely connected with notions of disease causation and objects of therapeutic attention (2010, p. 86).

discourse around trauma is used to detract from questions of self-determination of First Nations people in Canada.³² The imposition of Western health development projects gives rise to new therapeutic contexts (Langwick, 2001, 2011; Pigg, 1992) as do Western images of what constitutes medicine, or at least the impressions some cottage industry producers in Talamanca have of Western ideas of medicine, and that, along with transnational flows of migrants and plant medicines, broadens exposure to different therapeutic modalities.

There are places in people's narratives where individuals speak in ways that essentialize either their Indigenous identity, or traditional medicine. Why essentialize oneself? I suggest that what is being essentialized is a notion of self that is not separate from nature, and this is in contexts wherein Bribri and Cabécar, as well as Afro-Caribbean participants are facing challenges relating to their relationships with their cultural landscapes and are having to reaffirm very vocally these relationships to continue fighting for their lands, their kinship relationships with human and nonhuman beings, and their ancestral traditions.

Deviating from the classical anthropological approach of conducting research on a particular ethnic group of people, this research takes only a superficial approach to ethnographic description of "a people," to highlight instead a conceptual space and its implications.³³ Part of "decolonizing methodologies" (Tuhiwai Smith, 1999) involves itinerancy and allowing participants conceptual input, particularly where medicinal natures are concerned in this conceptual asymmetry around efficacy.

The pathways taken in therapeutic questing form a *meshwork* (Ingold, 2007) of interweaving lines that connect Indigenous healers, bush medicine doctors, seekers of plant medicines, ethnographers, and bioprospectors across transnational spaces and multiple temporalities. Meshwork captures the innovations generated along entangled threads and pathways that connect seekers and healers, as opposed to connected

³² Dian Million points out the way Indigenous "self-determination" is so interpolated in state-imposed biopolitical programs for emotional and psychological care grounded in a carefully constructed "trauma" a strategy of channeling attention away from self-determination and land rights in Canada (2013, p. 6, 12).

³³ This relates to Ingold's (2013) critique of descriptive accuracy in ethnography versus the open-ended character of engagement in the arts. Ingold (2013, p. 6) refers to the "way of the craftsman," an "art of inquiry" whereby knowledge grows from practical and observational engagements with life forms and things (in reference to Dormer, 1994; Adamson, 2007).

nodes of a network (Ingold, 2007, 2011). Much recent ethnographic work focuses on dynamic processes of knowledge production and meaning-making practices and experiences that encompass emotions, inner worlds, motives, values, continuities, discontinuities, reformulations, generative capacities, ambiguities and paradoxes (Adams, 2001; Harvey, 2011; Irving, 2007, 2010; Langwick, 2011; Lester, 2005; Parke, 1995; Tsing, 1993). Ethnographers have documented instances where a wide-range of healing approaches were consulted by an individual for a particular ailment (Parke, 1995), where shamanism was adapted to a transnational context (Pettigrew & Tamu, 2002), or of First Nations' Elders carrying out healing rituals in Canadian prisons aggregating members of different nations (Waldram, 1997). These frameworks do not simply focus on individual experience; they bring out diversity within structures that extend beyond the individual, exploring individual practices that are interwoven into broader processes and knowledge practices. I could have focused on any number of places where seekers from advanced neoliberal societies meet with healers in biodiversity "hot spots" of the global south.³⁴ This itinerant research looks at threads connecting Vancouver, British Columbia (B.C.), and Talamanca, Costa Rica.

1.3. Conclusion

Returning to my opening narrative, when Don Miguel and I sat in his hut he continuously evoked contexts of ecological relationships when discussing plant medicine and the possibility of treatments.

[DM] *Matar! Matar! Matar!*" [kill, kill, kill] Western medicine is killing Indigenous medicine!

His peroration cited above is a frustrated expression of the construction of therapeutic legitimacy underway in his lifetime. His sense of alienation is shared in countless stories of displacement, dispossession and polluted landscapes and seascapes. Relationships must be the focal point of biodiversity conservation. This theme formed the subtext of his narratives, bringing to my attention the ways in which methodologies too often sever relationships in approaches to plants and knowledge conservation. Advocacy is heavily

³⁴ I refer to Costa Rica as a biodiversity "hot spot" because Costa Rica's biodiverse ecology has drawn the attention of European and North American researchers since the mid-19th century (Blum, 2008, p. 37, in reference to Janzen, 1983).

invested in making ecological relationships the focal point of biodiversity conservation, and not focusing on relationships between social and physical environments. I contextualize Don Miguel's reaction to seekers within a broader discourse around plant medicine and assumptions around *how it works*, and I look at how some contemporary constructions of plant agency, though they are structured and imagined in opposition to mainstream biomedicine, actually uphold in many ways a similar imagining of people-plant relationships.

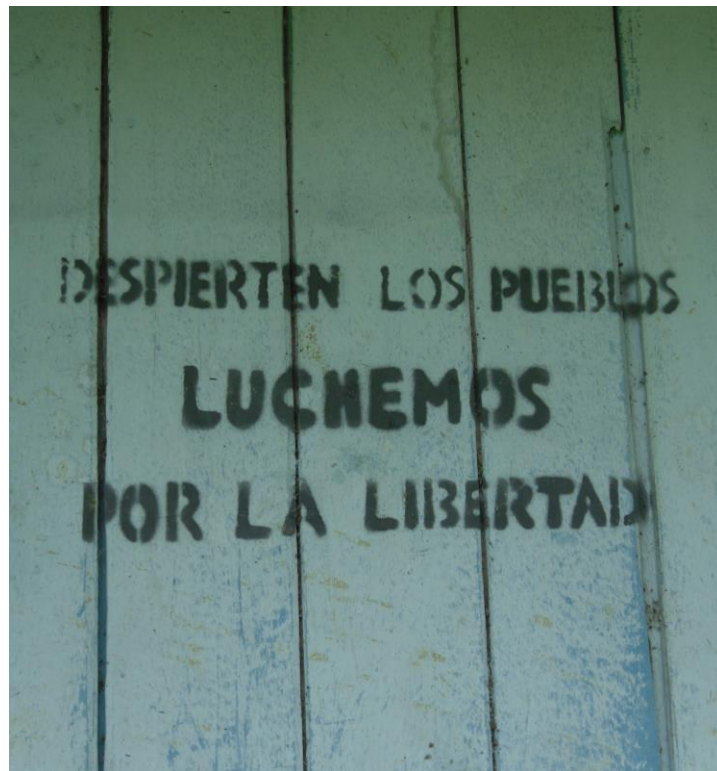


Figure 1.2 Graffiti on the side of a building on the Bribri reserve that states, “Awaken the villages let us fight for freedom.”

Photograph taken by N. K. Ferenczi

These narratives address processes of reformulation and reconceptualization of structures of feeling concerning people and plant relationships at this historical moment. The affect produced by these narratives, and people's critical responses to productions of people-plant relationships, reveal a shift in ideas about how to relate to plants that is occurring at various levels of society- socially, politically in the governance of biodiversity, and academically in reformulating methodologies and theorizing nature in new ways, as well as a corresponding attention to meanings and to producing a lexicon for defending title to land through ancestral connections (for other examples see Muru-

Lanning, 2012 on Mātauranga Māori Science). These efforts to enliven nature occur at a time of unprecedented resource extraction that is displacing people globally.

It is through the juxtaposition of a variety of narratives articulated by healers, seekers, and participants who are aggregated around the cottage industry production of plant medicine that I hope to politicize the organization of knowledge into categories that sever relationships between them and explore how some healers and seekers negotiate these dualisms. Seekers' and healers' concerns about plant medicine and individual ideas about *natural* medicine and people-plant relationships, open up a discursive space within which it becomes possible to analyze plant popularity trends and how they might interface with sustainability efforts. This approach to agency is an effort to move beyond a "resistance-accommodation dichotomy" (Ahearn, 2001, p. 55) and recognize that these things are sometimes pieced together in uncanny or even incommensurable ways. It is in the contours of dialogue about the degree of effort and often struggle involved in producing and selling homemade medicine that *ambivalent agency* (Ferenczi, 2005) becomes more understandable. The stories of innovation in times of precarity underline the resilience of the people who will be introduced in the following chapters, with expanding layers of context.

In chapter two, which follows, I discuss my methodology and the relevance of an itinerant approach to examining these themes. It is a methodology that resists enclosures by centering theoretical frameworks of analyses on encounters and the shifts and inversions of meaning emerging from them. I detail my approach to data collection and contextualize my use of a critical phenomenological approach. I also elaborate on my approaches to data collection, such as a walking methodology, shared farm-work, embodied participation as a client, informal interviews and *observant participation* (Tedlock, 1991). I adjusted my methodological approaches to local ethical concerns in my field settings. Intellectual property emerged as a prominent theme among participants from the very outset, as evoked in my opening narration. When these concerns were revealed to be patterned sentiments, these friction points became the ultimate focal point of my analysis.

My methodological approach in Vancouver and Squamish differed to that in Talamanca adapting to the local context wherein there is less opportunity for sustained contact with healers. I based my approach primarily on interviews and public talks about

plant medicine. During these talks I focused on the modulations in meaning attached to plant medicine, the contexts presented for thinking about plant medicine, and the construction of plant identities. I relate these various plant *becomings* to ethical concerns that participants from all field locations addressed about ideas of what plant medicine is. In chapter two I also discuss a brief two-week period of participant observation conducted during an ethnobotany course in Kona, Hawai'i. The course was organized around the theme of people-plant relationships and involved various activities meant to expand our level of interaction with plants as teachers and also as agents of change in consciousness. My participation shed light around the theme of seeking by learning about the motivations for why the various participants attended the course and what they hoped to learn.

Chapter three provides a richer understanding of why contextualizing plant medicine as dynamic, as a verb that factors in ecological relationship, is considered by some participants to be important for supporting the sustainability of cottage-industry practices. I approach this as a political response to the de-contextualizing imposed in colonial and neo-colonial processes. This chapter speaks to the tensions and challenges around using plant medicinal knowledge as a way into global markets and uncertainty over how to regulate traditional plant medicine. A historical sketch provides more context for understanding landscapes and meaning in Talamanca, where Indigenous peoples and Afro-Caribbean wayfarers from Central America and the Caribbean islands tended the forests and the coastline and created sustainable communities without state support. I discuss the transition into becoming an area dominated by the United Fruit Company and the effects of fruit plantations.

This chapter addresses the challenges to integrating traditional medicine into local economic practices. It also addresses the improvised space of attempting to market *cultural knowledge*, mainly in the context of common household remedies that *everybody knows*. I further frame difficulties in accessing global markets in terms of the *politics of matter* (Langwick, 2011) and the connection between knowledge politics and the sustainability of healing practices.

The narratives selected for chapter four aim to highlight the negotiated space of legitimacy in healing practices and efforts in Talamanca to emplace medicine so as to foreground political concerns around the increasing abstraction and decontextualization

of plant medicines. Narratives of seeking and healing include the practices of several women and men who work with plant medicine in Costa Rica and pay particular attention to their critical reflections on perceptions of plant medicine and sustainability, as they participate with institutions in efforts to market their forest products. I organize their stories around *emergent medicines* and *emergent natures*, focusing on the space between ‘constraint and creativity.’³⁵ These stories elucidate how the sustainability of physical and social environments may hinge on a conceptual shift over what constitutes plant medicine, and how medicine interacts with the senses.

Picking up on the theme of soil introduced in Don Miguel’s narrative, this chapter discusses soil socially, politically, economically and within environmental discourse around the contested spaces in Talamanca, where concepts of industrially produced food and medicine are increasingly imposed conceptually and physically, and land is reformulated in ways that involve the displacement of local Indigenous and Afro-Caribbean people. This provides context for understanding *structures of feeling* (Williams, 1977), as they relate to reactions to Western categorization and standardizing approaches towards plants. In chapter four I take my discussion of a plant-centric perspective as deterritorializing in two directions. I present a Bribri narrative on the origins of soil to evoke a sense of the porous boundaries between people, plants, animals and supernatural beings. I also present the structures of feeling that emerge from policies and methodologies that still the experience of being in the world and sever connections between people, plants, animals and the supernatural. This clarifies a key theme, which is that de-centering plants is important in efforts to decolonize knowledge about plant medicine and support the sustainability of social and physical environments.

In chapter five I explore contexts for seeking and structures of feeling vis-à-vis plant medicine and around particular “big plant actors.” This chapter focuses on stories of seeking and trajectories exploring *structures of feeling* as they relate to 1) motivations to interact with particular plants and cultivate relationships, and 2) the rejection of mainstream biomedical approaches, in healing contexts in North Americans and in

³⁵ Tsing (1993) looks at marginality as a source of both constraint and creativity, and she focuses on the space created by this tension, and on the creative ways that individuals interact with and within structures. Social actors have influence within circumstances of domination (Williams, 1977; Ortnor, 2006) and it is important to recognize that adapting medicines to Western notions of legitimacy occurs alongside innovative practices in the marketing of medicines.

Costa Rica. The notion of “structures of feeling” helps to clarify the mood set in iterations of people-plant relationships, of various and shifting ethnobotanical interpretations of meanings and interrelationships, or, to use the words of Raymond Williams (1977), “meanings and values as they are actively lived and felt,” not as rigid structures but as emergent “patterns in the process of being formed” (p. 132, cited in Ahearn, 2001, p. 53).

This chapter analyses re-imaginings of the body and medicine, and the ethnobotanical consequences they produce. A wider angle provides an optic of this current seeking phenomena against a backdrop of historical transnational movements of healers and plant medicines and research tracing some of the ways healing practices interact with public health discourses, and with historical, social, political, and economic contexts. The structures of feeling examined involve subjective reformulations of selfhood and embodied experience. The preponderance of seeking in connection with cancer and healers’ intellectual property concerns around cancer medicines lead me to devote a small section to this illness, and its related plant and tree medicines.

Chapter six explores different patterns in the composition of sentient nature and the social in people-plant relationships. I explore these emergent plant identities as *re-enchantments* that express re-configurations of the senses and embodied experience. Plant characterizations in public discourse in Vancouver on entheogens are presented as a foil to examine the concerns of healers and seekers elaborated on in chapter five and the generativity of plantcentrism ensconced in neoliberalizing processes, such as therapeutic optimization, ideas of efficacy and pharmaceutical monopolies. Perceptions of people-plant relationships, in particular with big plant actors ayahuasca and iboga, are explored here under the following prevalent themes emerging from my research: plants as teachers and the framing of intersubjectivity and subject-object inversions, genealogy and the idea that plant knowledge is innate and intuitive and accessed by the tapping in to collective Indigenous roots. And lastly, I explore the idea that the *cross-fertilization* of ethnobotanical knowledge across different cultures is inherently positive and supporting the sustainability of these ancestral practices and living traditions.

Chapter seven concludes this discussion by taking it back to the body, and to the separation of science and belief that has prevailed in anthropological analyses of bodies and bodily experiences. I reaffirm that to support practitioners and engage ontologically

inclusive and sustainable approaches to knowledge conservation demands a robust reflexivity into the emergent ways human-plant relationships and agencies are constituted and the innovative ways they engage, collude with, or challenge hegemonic forms of normalization and regulation that are consistent with enduring forms of colonization.

1.4. Notes

*All participants are referred to by pseudonyms.

*All translations from Spanish to English are done by the author, with English translations in square brackets.

*I have capitalized Indigenous following the rationale of Anderson, E.N., Pearsall, D. M., Hunn, E. S. and Turner, N. J. (2011) (Eds.). *Ethnobiology: Overview of a Growing Field*. Hoboken, N.J.: John Wiley & Sons, Inc.

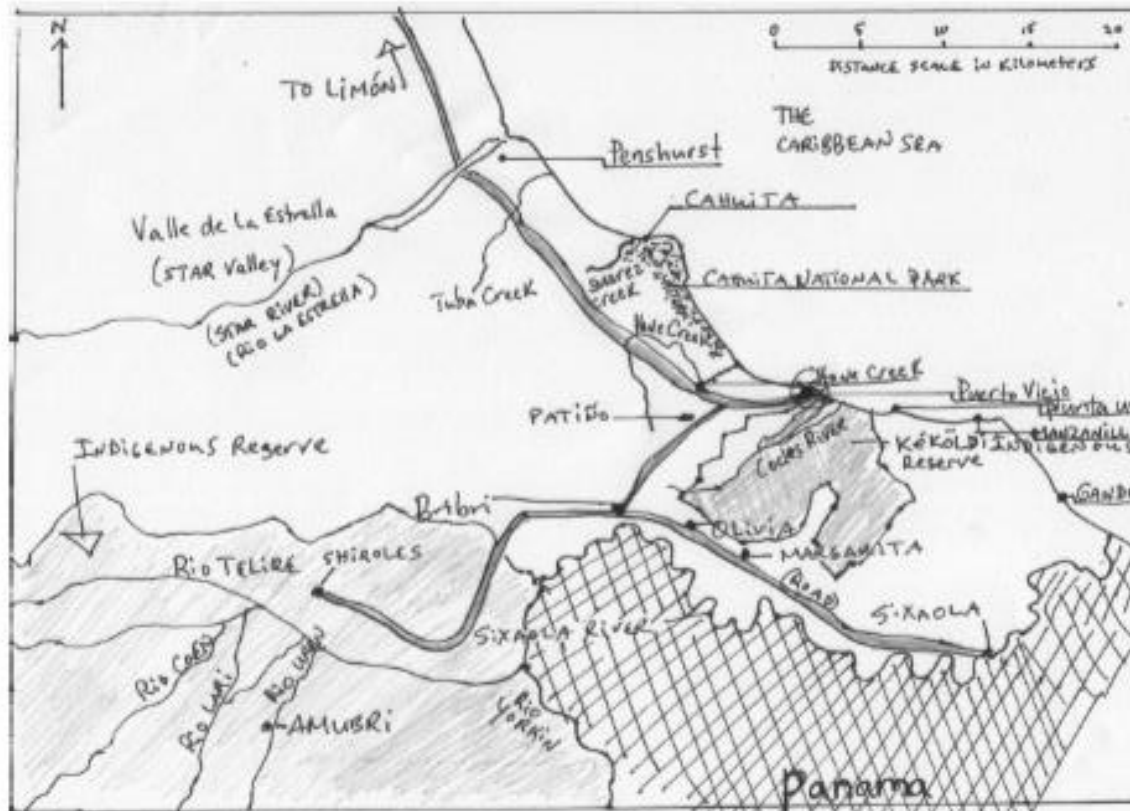


Figure 1.3. Map of Talamasca with shading to indicate the Indigenous Reserves.

Note: Not to scale.

Chapter 2.

Methodology as meshwork

2.1. Rain

Arriving in Puerto Viejo in the rainy season automatically makes all planning tentative. In a place where average annual rainfall can reach 3,500 mm, research must adjust to rain patterns. A single road connects all the towns nearby from Cahuita to Mazanillo (towns named after trees), and the bike ride is long to volunteer in Hone Creek or meet for a walking interview on a farm in Playa Chiquita. Rain overflows the rivers, carving up the Bribri reserve and quickly converting *senderos* [pathways] in the jungle into mudslides and rivers, producing a sticky mud that yanks the rubber boots off an unsuspecting wayfarer. The howler monkeys yak up a storm when thunder rattles the little shack that has become home. When my alarm rings at 5:30 a.m. I listen for the intensity of the storm to decide whether to bike to the bus station and make my way to the Bribri reserve or carry through with plans with some participants to go collecting plant medicine. The heat and humidity from the summer rains make the bike ride on the sunbaked road particularly arduous later in the morning. Jungle walks provide a much-desired shade but demand constant vigilance and sensory awareness as snakes can be up in the trees or on the ground. Dengue mosquitoes hover around us as soon as we pause for just a moment. One learns quickly that eyelash vipers like to hang out in guava trees, that bullet ants pack a nasty bite, and to always carry a lime in case of a sting or bite to kill “it,” whatever “it” is that sometimes *lives on* underneath the skin. Rain also affects plant medicine. When I arrived for one of my more-or-less weekly encounters with Don Miguel he looked up from his desk and shook his head sadly.

[DM] “The dog will die,” he stated helplessly.

The dog had been bitten by the highly venomous *Terciopelo Viper*.

[DM] “Normally I could save him...He shrugs. Too much rain, all the leaves are on the ground. I can’t make the medicine. I told the lady the dog will die. There is nothing I can do.”

Medicines are affected by the weather and climate change. Heavier than normal rainfall this season had an impact on his practice, the medicines available, and the dog’s life.



Figure 2.1 A Bribri guide expertly navigates the hurtling river on the way to Yorkín

Photograph taken by N. K. Ferenczi.

It was during a particularly violent rainstorm that my husband and I were stranded for several days at Don Enrique’s finca [farm] while we were on our way “más dentro” [deeper into the mountains] towards Amubri and Kachabri to meet with a renown awá. The river was not safe to cross and so we waited for the rains to calm for the crossing into Amubri. We were given an elaborate tour of his organic farm and seed bank and we volunteered there for several days, harvesting and helping to process foods to prepare for market day. “Pop!” I push the cacao and mocuna beans around the pan over an open fire with a long stick, my eyes tearing from the smoke. We then grind the beans and package them in bags tied with a short piece of string. The whole family works together. In the evening, we all watch the footage that was filmed of Don Enrique’s seed bank and farm. He is very pleased, requesting a copy of the footage. He has a Facebook page. We are happy to give something in return that might help his project, which involves raising awareness about the dangers of genetically modified seeds and expanding his seed bank. After viewing the footage, he shows us a video

featuring Navaho people dancing. He expresses his great admiration for their culture and traditions and tells us that several Navaho people have visited his farm. He states his desire to unite Indigenous people from North America and Latin America, an intention also echoed by Don Miguel.

When the storm abated, we left, although we continued to see each other frequently at the market. I later returned to their farm as a translator/chaperon to escort a group of teenagers from the United States who were visiting Talamanca for two weeks to learn about global issues affecting the area. These different social contexts for visiting provided greater insight into his mission and pedagogical approach, and the activities on his farm fostered by his social activism that bring together various Indigenous people from different countries in Central America and from North America, as well as Afro-Caribbean locals, and Tican and American students.

The nature of this research does not lend itself easily to describing “a people and place.” There is a diversity of voices included here that share perspectives on plant medicine and encounters around medicine that have brought together Indigenous and non-Indigenous people in British Columbia (B.C.) and Costa Rica. This itinerant research weaves together narratives from a variety of cultural frameworks to evoke a sense of the emergent in plant medicinal identities and concepts. In 2013 I conducted field research in British Columbia, Canada, and Talamanca, Costa Rica, funded by a Doctoral Fellowship awarded by the Social Sciences and Humanities Research Council. A short period of research was also conducted in other parts of Costa Rica, and in Kona, Hawai’i, (an extension of research carried out in Vancouver, B.C.). While carrying out this research and narrating this story my imagination is expansive and brings together a broad diversity of perspectives, knitting together observations, experiences and conversations about encounters around healing. In this peripatetic approach, there is no ideal of completeness or pretense of descriptive accuracy, but rather to think through some of the concepts we use in anthropology, ethnography and ethnobotany, and their relationship to ideologies, epistemological politics and colonialism. These emplacements are the outcome of an anthropological holism (Ferzacca, 2001, p. 6) focused on cross-cultural interactions across epistemological borderlands that have significance in people’s lives. Drawing on the insights garnered from my interactions with participants and their stories, I propose ways of making research more ontologically inclusive and broadening the ways we think about medicine.

A focus on praxis and embodiment in the context of cross-cultural interactions between healers and seekers, departs from traditional anthropological field research that focuses on a particular ethnic group. The strategy for contextualizing 'culture' has shifted: no longer reified as an entity. Culture can be regarded as "a space that embraces the process of knowledge production itself" (Hastrup, 1994, p. 2). Hastrup and Hervik (1994) state that cultural models do not reveal "systematicity in culture" but rather bring forth distinct "thematicities" in comprehensive, intersubjective studies of practices and motivations (p. 6-7). The departure in anthropology from the concept of researching 'social wholes' to particular realms of cultural phenomena, reflects a recognition of the problems with a notion of 'objective' culture shared by a group of people, and structural models whereby meanings and practices are associated with systemic influences and constraints caused by structures and internal relations within them (Kempny & Burszta, 1994, p. 124-5). Much important ethnographic work now also focuses on dynamic processes of knowledge production and meaning making practices and experiences that encompass emotions, inner worlds, motives, values, continuities, discontinuities, reformulations, generative capacities, re-creations, ambiguities, and paradox (Adams, 2001; Irving, 2007, 2010; Langwick, 2001, 2011; Tsing, 1993, 2015). The shift in focus from cultural wholes to discourse or practice directs attention to more heterogeneous structures (Kempny & Burszta, 1994, p. 125), in "motivation" instead of "prescription" (Hervik & Hastrup, 1994, p. 9), and individual creative engagements rather than collective representation. These frameworks aren't totalizing cultural structures, nor do they simply focus on individual experience, they bring out diversity within structures that extend beyond the individual, exploring individual practices, creativity and invention that are interwoven into broader process and knowledge practices.

My research was anchored in observation and participation and involved a mixture of methods, beginning with pilot research conducted near San Isidro del General, Costa Rica in 2010, where I volunteered on a farm in exchange for room and board, and courses on tropical medicinal botany and permaculture taught by an American naturopath. This was followed by a wide variety of ethnobotany classes, a short-term apprenticeship with Laura, an American herbalist in Talamanca, volunteer work at a soup kitchen and an iguana farm in Talamanca, as well as attendance at conferences on plant medicine and more specifically, plant spirit and big plant actors like ayahuasca. Methodological approaches varied in accordance with local contexts and

norms for social engagement, as well as ethical concerns (which I will elaborate on later in this chapter). In Costa Rica research was primarily carried out in and around Puerto Viejo, on the KéköLdi and BriBri Indigenous reserves, as well as a brief period in Turrialba and in San José. In Costa Rica, just over forty participants contributed to this inquiry- a combination of herbalists, medicine plant walk guides, *Awapa*, a scientist/healer, naturopaths, organic farmers, mothers, grandmothers, organic market organizers, Indigenous leaders and Indigenous women's group representatives. Observant participation (Tedlock, 1991) in this context involved a more embodied participation than in B.C., including plant medicine walks, the processing and consumption of plant medicines, undergoing treatment, doing farm work, helping to prepare herbal medicine and cacao for market day, and serving soup to primarily Bribri people.³⁶ I also spent time at "pipa stands" (street vendors who sell coconuts and sometimes other homemade products) and Saturday markets. "Interview dynamics" often took on a form of communal exchange,³⁷ and were defined by self-awareness (colonial legacy as on-going and my positionality as a white graduate student), disclosure, *humility* (Stoller, 1997), and sharing stories and vulnerabilities.³⁸ I conducted semi-structured interviews, at times audio or video recorded, during medicinal plant hikes, while searching for particular *lianas*, like *cuculmeca* and *sarsaparilla*, during farm work, in homes, clinics and in the traditional *U-suré*.³⁹ Maps at times became revealing, generating discussion about historical change, inter-ethnic relationships and national involvement, colonial incursions and meanings connected with places, and the *maps we cannot see* (Rocheleau, 2005, p. 331). This will be elaborated on in chapter three. Semi-structured interviews were complemented by several specialist-based interviews

³⁶ Talamanca has the largest Indigenous population in the country, the majority of whom are Bribri, and to a much lesser extent Cabécar.

³⁷ Ezzy (2010) argues that good interviews feel like communion, not dominated by the interviewer's voice or agenda (p. 164)

³⁸ Werry and O'Gorman (2007), in reference to Todd's (2003, p. 11) discussion of Cornell West's critique of students' ego-centered identification with the protagonist in Toni Morrison's "Beloved," quote, "[with] the best democratic intentions to recognize and empathize with a protagonist's pain, the students annihilate and appropriate both otherness, and other's pain, in their accomplishment of readerly/audience pleasure [...] The intersubjective dynamics of empathy and sympathy-the putative ground of the theatrical and democratic community ("I feel your pain")-produce the affect of fellow feeling (Berlant) but risk (as Brecht so acutely noted) suppressing awareness of the structural, historical, and indeed affective factors that divide us. They do violence to difference, attempting to "de-Other" the Other, without imperiling the self" (p. 224).

³⁹ My husband acted as cameraman.

that were all audio-recorded and carried out in more formal settings with ethnobotanists, forest managers, Indigenous leaders and anthropologists at locations including the CATIE gardens, the National Biodiversity Institute (InBio), and the University of Costa Rica in San José.⁴⁰ Interviews focused on narratives of practice and experience. Under the rubric of themes explored during these interviews were the practitioners' daily routines, including plant collection and processing protocols, healers' relationships with physical and social environments, locations where medicinal plants are collected (or imported from), distribution in markets and exportation, and "place making" (Gupta & Ferguson, 1997) in healing rituals and in seekers' trajectories. I also observed and analyzed some local media, advertisements and graffiti in public places.



Figure 2.2 Medicinal plant guide who offers tours in the jungle behind his home demonstrates his technique for separating the husks from the cacao.

Photograph taken by N. K. Ferenczi

⁴⁰ Semi-structured interviews with local academics and forest specialists working with Bribri, Cabécar and Afro-Caribbean people enlarged my perspective on institutional and academic efforts to stimulate forest production in these communities.

2.2. Walking Methodology



Figure 2.3 Searching for cuculmeca

Photograph taken by Sebastien Ouellette. Reproduced with permission.

I encountered Delina at the market in Puerto Viejo while purchasing some of her produce and banana flour. I noticed small plastic bags filled with chunks of dried *cuculmeca* (*Smilax lanceolata*) on her small table and so I asked her about the *liana*. She describes to me the way she chops a portion of the root into small chunks that are boiled in water to make a deep reddish tea. The tea is commonly used by children and adults to “clean the blood.” She tells me that it is used to treat physical weakness and anemia. Cuculmeca commonly grows on slopes near very tall trees, which are needed for it to mature. She knows of three varieties- red, white, and purple, and my interview with Félix at the CATIE gardens brings to my attention a fourth variety. The variety that she primarily uses for medicine is red cuculmeca. On Saturdays, Delina pushes her produce in a cart for several kilometers to sell *cuculmeca*, plantain, cacao and other homemade and homegrown products and produce at the market in Puerto Viejo. On week-days she helps to organize the annual produce festival on the Bribri reserve. This

particular year the featured fruit is plantain, and she tells me how pleased she is that the important local fruit is finally getting a turn in the limelight (a turn long overdue in her opinion).⁴¹ When I ask Delina whether I can join her the next time she harvests the *liana* she agrees, saying that we must leave very early in the morning on a Sunday once the rains ease up. We exchange cell numbers. It took several weeks of early morning phone calls from Delina to cancel our plans to go collecting *cuculmeca* before we finally had the weather on our side on a Sunday. She is Bribri and she and her sister each have a house on the land that their parents used to tend to meticulously. The rain abates early in the morning on a Sunday in late July. We meet at her home and her sister, her son, my husband, (and cameraman), and I make our way along a narrow path through the brush behind their houses. I am impressed. At roughly sixty years-old she easily hikes from 6:30 am to 4:00 pm. As we walk, she points out different trees and areas that need to be taken care of, reminiscing on how bountiful it used to be, and all the fruit and vegetables that their parents used to grow. One sister optimistically tries to convince the other that they can bring it back to its former glory. The sisters marvel at how beautiful this monkey's ladder (*Bauhinia guianensis*) is, or that sarsaparilla (*Smilax ornata*), taking pictures with cell phones and asking to have *selfies* taken with particular trees and plants.

⁴¹ Talamanca is known for its plantain.



Figure 2.4 Jungle in Talamanca.

Photograph taken by N. K. Ferenczi

As we walk, they point out different plants, trying to remember how their parents prepared them, piecing together their collective memories while caressing them with their fingers. Delina points out an anthill, explaining that the soil the ants produce is good for the skin. She explains that the leaf cutter ants eat the leaves from particular trees and are full of calcium. The ants have plant medicine in them. The anthills become medicine too. My cell phone rings and my nephews' voice on the other line sounds surprisingly clear to be reaching me in the jungle on a mountain top! I am reminded of home, and comforts now so distant. After a day of walking we return to their *fincas* empty handed. We found a few small *cuculmea* lianas on the mountain, but Delina, after checking to see whether the head had emerged from the root, explains that they were far from ready for harvest. We did harvest other medicinal plants as we continued our hike, and she handed me a branch bearing fungus that glows in the dark. She instructed her son to harvest some *caraña* bark (*Trattinnickia aspera* (standl.) Swart) and in Bribri, *döLijkwö* (Palmer, Sánchez & Mayorga, 1991, p. 92). They notice that many trees have been cut on their property. In the distance, her son spots a large crop of marijuana. When I ask about whether she often has difficulty finding *cuculmea*, Delina shakes her

head. She tells me how people, who just want to make money, take the whole root, but to harvest *cuculmeca* sustainably you only take a small piece. The *liana* climbs up to thirty feet, reaching out its twining tendrils. I reflect on the crateful of *cuculmeca* roots I saw at the herb market in San José, many of them moldy from not being dried properly. It is possible that we were never meant to find the mature *cuculmeca* - there is a tradition of secrecy surrounding lianas.

The lianas, the leaves for making thatch and the mastate tree are also protected. Sibö gave these plants to us to use, but not to waste or destroy. We say the bejuco de hombre (a liana) is the moustache of the culebra [snake]. If we say out loud that we're going out to get that liana, we have to take care that a snake doesn't bite us. The snake is always nearby protecting the liana. If we say we are going out to get some lianas to make baskets to sell, we always find the lianas eaten up by those little wood mites, polilla. Duarö knows you're going to take his lianas, so he makes them useless to you. You peel them and find them all rotten in the core. So, it's better not to say anything out loud. If you go quietly and tell no one, you may find some good, strong lianas (Palmer, Sanchez and Mayorga, 1991, p. 43).



Figure 2.5 The escalera de mono liana [monkey ladder-*Bauhinia guianensis*] .
Photograph taken by N. K. Ferenczi

Jungle walks took three forms (1) as guided medicinal plant walks organized through a small, local ecotourism office trying to support Bribri people in the marketing of their knowledge in culturally appropriate ways that maintain context. (2) As ethnobotany walks led by Americans, and (3) walking interviews with Indigenous Bribri elders. During walks in the jungle, plants, lianas, insects and anthills trigger memories leading participants to share narratives about harvesting practices, medicinal uses, and stories. Participants would instruct me to smell this, taste that, or hold a piece of bark in my mouth to keep the plant, as actor, present on different sensual levels.⁴² Holding interviews in context also shed light on plant collection and processing protocols and the co-construction of knowledge as participants collectively remember teachings and reminisce on the uses of this vine or that anthill soil. The “mnemonic contexts” (Irving 2007, 2010) propitiated by my research elicited different types of dialogue between participants and their physical and social environments; “as events happen and dramas unfold, habitual roles are re-cast and the field is ‘made strange’ for locals and anthropologist alike” (Irving, 2007, p. 185).⁴³ Teaching me about plant medicines and socio-ecological relationships triggered memories and partial memories that were pieced together through dialogue. My presence elicited the two sisters and Delina’s son to share memories and knowledge, and to take photos. Later on, after I left the field, Delina and another non-Indigenous participant in this research collaborated on a cuculmecca workshop to plant more lianas and teach sustainable harvesting practices to visiting groups. Peña (2011) comments,

Embodied performances have always played a central role in conserving memory and consolidating identities in literate, semiliterate, and digital societies. Not everyone comes to ‘culture’ or modernity through

⁴² Research also involved spending time in people’s kitchens talking while peeling mangoes or doing garden work, volunteering at a Bribri soup kitchen, preparing for market day by processing medicine and cacao, packaging, loading trucks, and going to markets and interacting regularly with vendors selling plant medicines.

⁴³ Irving (2007) combines walking and narration with performance ethnography by having participants perform photographs. In his fieldwork performance “life as it is lived,” (2000) the main subject, Daniel, walks Irving through his neighborhood to different locations where he had planned to commit suicide. In both the empty places and crowded places is a palpable feeling of his isolation (Irving, 2007). These images are arresting. They are experientially accessible to the reader, and individual life experiences are not reduced by theoretical artifices nor determined by social structures. Irving draws inspiration for his approach from Jean Rouché and Edgar Morin’s endeavors to use film to access the imaginary, as well as an experimental theatre company “Forced Entertainment” (Irving, 2007, p. 186). He is also influenced by Michel de Certeau’s (1984) observations on “walking the city” (ibid.).

writing...[I]t is imperative to keep re-examining the relationships between embodied performance and the production of knowledge (p. 60).

Irving states, “this active redefinition of place puts the body back into experience reinforcing Merleau-Ponty’s (1968, p. 242) suggestion that ‘being’ is also a type of place” (2007, p. 206).

2.3. Research in British Columbia

In B.C. my research involved primarily interviews and attending conferences and public events in Vancouver focused on plant medicine and plant spirit. I analyzed the way plant identities were discussed in academic contexts centered on shaping a new paradigm for scientific and medical acknowledgment of spirit plant medicine, and the efficacy of ayahuasca and other entheogens in the treatment of addiction. Ten participants included an Anishinaabe shaman grandmother, a Canadian woman who conducts ayahuasca ceremonies, a man apprenticing with a West African Shaman in the iboga tradition in Costa Rica, a few herbalists, an ethnobotanist, a homeopath, and a naturopath practicing in Vancouver, Squamish and elsewhere in British Columbia, and individuals experimenting with ayahuasca and iboga.⁴⁴ These conversations took place primarily in homes, and also in apothecaries, on herb walks and over the phone and Internet. Some of these participants traveled to Costa Rica as part of their healing practice or apprenticeships.

My point of departure was a variety of public academic discussions in Vancouver on spirit plant medicine that aimed to shift perceptions, regulations and practices around particular plant medicines in Canada (e.g. ayahuasca, iboga and marijuana), and recognize their medicinal value. These events provided people with opportunities to participate in ethnobotany workshops, courses, information sessions, plant walks and ayahuasca ceremonies in Vancouver, Hawai’i and Peru.⁴⁵ My attention during these talks was drawn to the ways plant identities and spirits were being constructed and

⁴⁴ In Kona, Hawai’i, observant participation was conducted, as well as a focus group interview with six participants in the group attending the course, and four one-on-one interviews with both instructors of the ethnobotany course, and two other participants from Vancouver (one naturopath and one graduate student in ethnobotany). These observations clarified intentions around seeking plant medicines.

⁴⁵ In Talamanca ayahuasca ceremonies were available as well, organized by expats and sometimes guided by visiting ayahuasqueros from Peru.

enlivened, formulations that also involved their individualization and decontextualization from their living biotic contexts. The presentations explored the possibilities of upholding multiple species' perspectives, in particular a plant-centric perspective, wherein plants are the protagonists charting the course of the future of the Earth, using their intelligence and survival strategies to move their seeds around with the help of wind patterns, humans, birds, animals and insects. The ontogenesis of ayahuasca was identified spiritually as a becoming with an agenda to expand human consciousness and restore balance in the world, shifting us into a new paradigm for thinking about people-plant relationships. In discussions on ayahuasca's *agenda*, was a forthright and explicit challenge to positivism and a recognition of nature as sentient and plant spirits as having specializations, intelligence and intentions. Ironically, the vine (*Banisteriopsis caapi*) and perennial shrub (*Psychotria viridis*) making up the primary ingredients in the brew were discussed in the singular as "ayahuasca."

My notebook, spiral, hard-covered and unlined gradually became interspersed with sketches of these beings, cartoon like images drawn to capture the particular ways discussions enlivened plant spirit. The drawings blend inner and outer worlds (Tausig, 2011, p. xi), the iterated interacting with my imagination and my critical interpretations emerging from this dialogue and skepticism over framing ayahuasca's current popularity as the product of *her* "agenda" to expand to the West. The superhero-like anthropomorphism related to people's genuine concern with the state of humankind and desires to shift towards more profound relationships with plants. Ironically, caricaturing ayahuasca as an intentional global messenger here to rescue us from unbridled capitalism also decontextualizes the plants used to make the brew. Furthermore, ayahuasca's expansion inevitably leads to increased demand, overharvesting, and higher prices, all justified under the assumption that "ayahuasca *wants* to expand to the world." Discussions of ayahuasca's *spirit* in Vancouver also centered on medical applications and *efficacy*, and the testimonials of recovered addicts to authenticate these claims. Shamanism is *in*. Visionary plants are at the heart of reformulations of people-plant relationships and plant spirit in Vancouver.⁴⁶

⁴⁶ Ayahuasca's rising popularity is evidenced in films (e.g. "Wanderlust") and magazines, described as the "next therapeutic fad" in Marie Claire, as well as in an article entitled "the new power trip: inside the world of ayahuasca" (see Abby Aguirre (2014, Feb 18). "The new power trip: Inside the world of ayahuasca." <http://www.marieclaire.com/politics/news/a8965/ayahuasca-new-power->

At conferences and public events ethnobotanical excursions obscurely referred to as “meditation retreats” are in effect strongly linked to people-plant relationship (in this case ayahuasca). Ethnobotanical tourism offered during these events included ethnobotany courses, which became part of my enquiry.⁴⁷ I participated as a researcher in a two-week intensive course in Kona, Hawai’i attended by several individuals from Vancouver and the majority from the United States. We were twelve students in all, mostly women and three young men between the ages of seventeen and sixty years old. Our class included a mixture of herbalists, naturopaths, a pharmacist, a mycologist, and ethnobotany university students, from a diversity of backgrounds- Wall Street to a rural town in Vermont. I’m told that participants in these ethnobotany courses generally tend to be females. Several students stated on the first day of the course that they were particularly interested in learning about entheogens. The class focused on Hawaiian ethnobotany and the history and global movements of botanicals from the times of the Columbian Exchange (Crosby, 2003) to more recently, and on visionary plants and fungi, plant deities and plants as teachers. The pedagogical approach was hands-on, mixing theoretical discussion with a curriculum focused on *how* to connect more profoundly with plants. This was done genealogically by tracing ancestral relationships to plants, relationally by connecting with “plant allies,” self-consciously by thinking about the textiles used in our clothes, products and food, subconsciously by sleeping with a plant ally under our pillow, intuitively by explaining the doctrine of signatures, and epistemologically by spending every day in a classroom and on a field trip learning about plants and plant spirit.

During the course, we were encouraged to think about our own histories of plant relationship and to reflect on “plant encounters.” Coursework was embodied, phenomenological and multi-sensorial. We touched, tasted, smelled, and acknowledged the embodied states of plants (e.g. “look at the swollen belly of that pregnant sugar cane”) and were taught Hawaiian traditional knowledge about ecological indicators (e.g. sharks are out when the Wiliwili blooms).⁴⁸ We were encouraged to find our plant allies, plants that have come to us during walks or in our past and through family histories.

trip/). An article in the LA Weekly featured the provocative title: “Ayahuasca can change your life-
-as long as you’re willing to puke your guts out” (Olivia Lavecchia, November 21st, 2013).

⁴⁷ Participation and payment was all arranged on-line.

⁴⁸ We experienced plants tactically by collecting a few that we were drawn to and taking turns sweeping one another’s bodies with the selected plant leaves in a sweeping, repetitive motion.

Encounter was characterized as a cultivated third being (the space in-between two subjects in relationship). This is the space we were tasked with exploring and we were encouraged to think of these encounters as two-way interactions between subjects. The concept of encounter encompassed the plants and trees that we met with all our senses on plant walks, the food we ate at mealtimes, right down to the fibers in the clothes we wear and our lip balm. For homework, we were tasked with taking note of our *plant encounters* three times a day in any artistic medium, (be it poetry, drawing, note-taking) to encourage us to reflect regularly on relationship and communication, and to connect knowledge taught in class with embodied experience. We learned about plant uses in magical, symbolic and religious contexts and were encouraged to take note of our own uses, whether they are to invoke, protect, sweep, celebrate, mourn, aesthetically, as incense, initiatory, visionary, and as offerings. I had not thought of genealogy in this context, recalling in my sketches and notes the cork trees of Costa Brava that steered my own family trajectory to Cuba, New York and Montreal. In lectures, we learned about plants and their histories in ways that inevitably translated them into objects of academic attention, discussing broad movements of plants, and as subjects with big stories like tobacco (*Nicotiana tabacum*) and grasses (*Poacea*) and the will to act, as subjects already deeply embedded into our lives and genes.

Our Hawaiian instructor, Aina tells me one morning over breakfast,

[A] For us our ancestors are on our shoulders, like behind us [...] communication is not necessarily talking, there are other forms too. That's how we learn about the plants, medicine and spirit. No one needs to teach us. You know, it's in your genes.

Tapping into ancestral relationships with plants and the Doctrine of Signatures were presented as ways to develop instincts for what kind of medicine a plant provides and for cultivating the aforementioned in-between space. For example, standing in front of a Noni tree (*Rubiaceae*) we were prompted to analyze its medicinal uses by using our imagination and instincts.

[A] "What does it look like? Brain? Heart? Cancer cell? Eyes?"

[Me] "Cancer cells," I mutter.

[A] "You know I *can't say* this is a cure for cancer, but I *can* tell you a *story!*"

She shares a story of a woman who used Noni leaves to treat her breast cancer.

[A] This is what she says, the noni leaves just pulled it out...like it *popped*. Like a pimple.

Recurring themes throughout the course were participants' stories of illness and treatment by using plant medicines exclusively and in conjunction with orthodox medicine, (e.g. Noni and Chemotherapy). Another participant shared with me that her son was born with Kawasaki disease and described how she devoted herself to searching for a cure. Several participants told similar stories about seeking quests and stories about plant encounters. The main instructor, Josey comments:

[J] We're (Euro-Americans) going through revival because of herbal medicines since the 60s and LSD helped this [...] In the 1950s we didn't have good bread [e.g. quinoa infused, gluten free], yoghurt, blenders, these things came in during that period of questing, midwifery, turning attention to other possibilities. It may not be all and everything in our life, but it is part of our reality, like carrying "Bach's Remedy", or trying herbal medicines-often first with your children (instead of pharmaceuticals). Some of my students after six years of pharmacy school don't know where medicine comes from. Plants! Now they want to know, they become integrative pharmacists. They had to study the side effects of pharmaceuticals and counter indications, so now they're even more keen on natural medicine.

One of our plant walks in Kona is on an organic farm that opened as a non-profit several years ago, inspired by Josey's organization and also devoted to conserving traditional medicines and their lore. It functions as an education center and students receive sustainability certificates at the end of the course. Participants are mostly American, comprising a combination of woofers (World Wide Opportunities on Organic Farms), AmeriCorps Vista volunteers and other young wayfarers in their twenties and thirties. We are encouraged to collect a small amount of any plants that speak to us from the variety of gardens, each featuring the plants endemic to different continents. I collect a few sprigs of *awa* (Kava), a canoe plant skilled in opening channels of communication, used to communicate with ancestors, its notched stem likened to arthritic old hands.

We were later invited to sit in a cozy outdoor shelter nearby serving as a classroom. Comprising twenty or more bodies we filled the space. Josey began with a small introduction and then asked us to each introduce ourselves and our intention for

taking these ethnobotany courses. The responses referred to people-plant relationships, protecting the physical environment, and health broadly speaking. One by one moving around the room each person tried to express what it was that they were seeking.

“What is real...”

“Connecting with something bigger than myself.”

“Our health is dependent on plants.”

“Cultivating relationship.”

“Environmental stewardship.”

In course lectures in Kona *seeking plants* was contextualized historically and extensive lectures focus on the histories of many plants and the transnational movements of plants, shamanic practices and regalia throughout history.

[J] Humans always quest for food, fundamentally. Ancient trade routes and the Columbian exchange among others [...] Ethnobotany is integrative. I don't want to essentialize and lament losses of purity, new age glorification. Everyone wanting to be a shaman, the glorification of becoming native.

The lectures emphasized the cross-fertilization of knowledge and ideology, and the importance of this cross-fertilization to protect traditional knowledges. The structure of the course manifested this, as a collaboration between an American and an Indigenous Hawaiian ethnobotanist. We also addressed ethical tensions as they arose, including protecting intellectual property while teaching about plant medicine, or the tensions arising from objectively discussing relationship with landscape in the context of teaching Hawaiian cosmology and not actually performing the chants we learn to honor the sacred landscapes that we visited.

Aina described a university student from UH Manoa asking whether she could interview her on the uses of pua kala [*Argemone glauca*]. She rhetorically asked, “Do we want people over harvesting our puakala? Do we want them learning from a research paper? I don't think so.” She expressed concern over pharmaceutical companies accessing and using the information and the justified goal expressed by the student, “so that others can learn.” She described the difficulty in determining educational boundaries while also encouraging interest in plant medicines. Workshops are

particularly concerning for in the embodied process of making salves or tinctures students can attempt to replicate local products that are sold commercially and also perpetuate simplistic understandings of the process of making medicine that underestimate the practitioner's expertise and the importance of the sources of the ingredients.

On a sunny afternoon we sit down in the gazebo for a Kava ceremony. The group is eager, some of whom had anticipated more embodied explorations of people-plant relationships in the course and were a bit disappointed with the emphasis on a seminar-based structure. Several stated that they expressly took the course to expand their understandings of entheogens, a few mention ayahuasca in particular. Everyone seemed pleased to be taking the subject out of a theoretical framework. We formed a circle and took turns sipping kava from a small bowl that was passed around. Individuals are invited to state an intention before sipping.

[A] This is *educational*, not a *real* ceremony. In a *real ceremony* there would be no talking.

The theme of ceremonial authenticity recurred again later in the week. We learned a Hawaiian chant to honor a sacred landscape that we would visit the following day. When we arrived at the site it was decided that we should not chant. Ironically, the educational context that was geared towards building relationships with plants also distanced us from the subject through theoretical abstraction. The course created the context for learning the chant, but not the capacity to authentically perform it in a sacred landscape.

In Kona I carried out observant participation (Tedlock, 1991), taking notes in class and during herb walks and making tinctures and salves. I also conducted several interviews with the instructors and some participants, one of which was a voluntary focus group discussion I set up one evening after dinner with six participants ranging in age from eighteen to fifty years-old. We discussed our personal reasons for taking the course in greater depth, which provided clarity around the theme of seeking and

motivations for wanting to invest in shaping their personal relationships with plants (e.g. the course cost a few thousand dollars).⁴⁹

The experience also shed light on collaborative educational frameworks for revitalizing and conserving TEKW between Indigenous and non-Indigenous specialists in plant medicine in an approach wherein tensions, ironies and ethics were handled in transparent and discursive ways during class discussions. During a discussion focused specifically on ethics and intellectual property, Aina described the awkwardness of teaching how to make salves in a class workshop (which she also sells elsewhere locally), and yet not wanting students to start making their own products to market. The instructors in Kona are experimenting with ethnobotanical knowledge sharing in an improvised space, exploring ways of both marketing and disseminating knowledge and environmental stewardship values (and simultaneously accumulating resources to support conservation projects run in Hawai'i and a few Latin American countries, supporting Indigenous healers in Peru and Bribri healers in Costa Rica). On a more intimate note this ethnobotany course in Hawai'i allowed me to expand my reflexive awareness of my own relationships and ancestral connections to plants, and to deepen my knowledge of ethnobotany and cultivate new ways of interacting with plants.

2.4. Analyzing embodied experience

“The complex amalgamations of thought, mood, and emotion that inhere in any given moment may help define the content and character of people’s interior dialogues, but equally importantly people’s social, cultural, and material surroundings continually generate different possibilities for inner expression” (Irving, 2011, p. 24).

Fieldwork is a corporeal process, and the connection between reflexivity and embodiment, which Stoller (1997) referred to as *sensuous scholarship*, emerges through engagement with the ideas of participants and also learning about them via one’s own embodied and sensorial experiences (referenced in Hopwood, 2010, p. 4).⁵⁰ Don Miguel

⁴⁹ During initial introductions, I presented my research and presence as a participant and an observer writing notes.

⁵⁰ Basso’s (1996) description of the meaning behind returning from ‘Trail Goes Down Between Two Hills’ is a good example of this. Beyond the story of Talbert’s personal experience falling off the wagon, the exchange tells us about cultural responses and social values (the need to remind Talbert of his behavior earlier that week without being condescending, kinship protocols in determining who can speak with him about such personal matters (older matrilineal kin), about

insisted that treatment contextualize our interactions and interviews. After examining me during our second encounter, he diagnosed me with *di boro boro* [*dirty blood*]. It can be treated, and he tells me that I can pick up the medicine in a few days once he has collected it. This established a treatment context to frame our visits and also structured payment into our interactions as healer and patient. Pulling out a copy book he indicates the pricing breakdown for a three-month treatment period, just over a hundred dollars. Smelling, holding and embodying medicine under his care were conditional to learning about his practice, an embodied, phenomenological approach becoming a vital component of participation. It was alongside the treatment of my condition, *dirty blood*, for several months that he described to me his practice and his experience as a healer and a scientist working within in a global capitalist context. During our many interviews in his little consultation hut on his farm, “observant participation” (Tedlock, 1991) involved shifting subject and object, displacing plants when speaking about medicine, and thinking of medicine as a verb, rather than a noun, as generated through relationships between different actors.

In this research, *sensuous scholarship* involved boiling plant medicines into teas, splitting cacao pods, making tinctures, taking medicines, smelling barks, squeezing herbs, washing turmeric and ginger, jungle hikes, suspicious insect bites, and the exposure to monsoon rains. It also involved bike rides, bus rides, farm work and a long line-up to see a reputed botánico. These embodied experiences widened contexts for understanding and discussing plant medicine, and establishing these contexts is of importance socially, culturally and politically. A walking methodology makes the subjects of conversations, the plants, literally in presence and allows for the inter-animation between places, my interlocutors (people, plants, trees, insects) and myself. Evoking “interiority” cannot be achieved through theoretical abstraction, and must be addressed through fieldwork, alongside the participants of research (Irving, 2010, p. 34). Corresponding to Ingold’s “dwelling perspective” walking in the jungle, sitting or working

Dudley’s pleasure in telling the humorous story, the way they recall the ancestors, and the way the land provides a concrete anchoring of a lesson learned and refers to phenomenological states: ‘smoothness of mind, resilience of mind, and steadiness of mind (Basso, 1996, p. 60-64, 73). Dudley’s comment “wisdom sits in places” becomes clarified through a process of narration of events occurring on the landscape (1996, pp. 60, 67-71). Basso (1996) comments reflectively on how his perceptions of the landscape changed, the narratives transforming a geographical site into something resembling a theater, a natural stage upon the land (p. 66). Such references in everyday speech shed greater light on meanings than a formal interview, creating contexts for grasping relationships with landscapes.

in people's gardens, and receiving treatment (and ingesting medicines) positioned me in active interaction with the surroundings (2000, p. 5). Although observant participation may not be adequate grounds to form "a shared embodied understanding of action" it does open up possibilities for different types of knowledge and appreciation of experiences that do not "presuppose commonality" (Irving, 2010, p. 35). One can "*dwell* in another person's expressive actions, including their words and bodily expressions, but not dwell in the specificity of their experience" (Irving, 2010, p. 34, in reference to Polanyi, 1969, p. 220). In order to *dwell*, an attunement to the senses and the sensory dimensions of life worlds is essential, such as meanings associated with landscapes (Basso, 1996; Ignace & Ignace, 2017; Ignace & Turner, 2011; Peña, 2011), soundscapes (Feld, 1991, 1996), smellscapes (Classen, Howes & Synnott, 1994)⁵¹, and haptic sensation (Kuriyama, 1999), including cutaneous contact and kinesthesia (Van Ede, 2009).⁵²

People's gardens and the places where they collect medicinal plants are expressions of self. Spirn, in reference to a Swedish landscape architect, discusses the way he interprets the "autonomy of nonhuman actors," revealed in the stories that underlie his garden designs (1998, p. 39). "[H]is garden is full of such dialogues—a single rose stem "decides" to grow through the privet hedge and blooms alone against clipped green" (Spirn, 1998, p. 39). Spirn (1998) comments, "most people do not consider making a garden as speaking, and do not begin to garden by reflecting on what they want to say, and yet, nonetheless, they are speaking, even praying, through their gardens" (p. 192-3). Place-making always involves a construction, rather than merely a

⁵¹ Howes and Classen (1991, p. 260) describe different "sensory profiles" as well as how to become more attuned to one's own sensory biases. They refer to a wide variety of cultural examples to expound connections between "cultural orders" and "sensory orders" (1991, pp. 257-285). For example, in reference to Wilbert's (1987) the Warao of Venezuela, they mention that both medicinal herbs and diseases are identified by their odors (Howes & Classen, 1991, p. 280). Yet although they acknowledge that sensory orders develop and change over time, and may vary interculturally based on age, gender and occupation, their strong adherence to culturally determined sensory orders leaves little space for experiential, rather than cultural, catalyst for sensory perception. In what ways might illness and healing experiences re-order sensual and embodied perception? Feld emphasizes how propensities for sensory dominance continuously change in response to contexts of bodily emplacement" (1996, p. 96).

⁵² Van Ede (2009) points out the epistemological limitations of a "five senses scheme," a position also argued elsewhere (Classen, 1991; Howes, 1991; Howes & Classen, 1991; Classen, Howes, & Synnott, 1994). She elaborates that historically in the West touch was mainly defined as haptic sense, only later to include cutaneous contact, (contact with water and temperatures), as well as body movement or kinaesthesia, which exemplify other tactile categories that are gaining anthropological attention (2009, p. 69).

discovery (Gupta & Ferguson, 1997, p. 13). Intimate place making is an intrinsic feature of the stage for the therapeutic encounter and ritual performance.⁵³

In this type of approach embodied action becomes an object and method of study, recognizing the ethnographer and research participants as interlocutors in *sensual communication*, what Elaine Peña (2011) terms *co-performative witnessing*, referring to “the rich subtext and often deeply coded moments of bodied exchange—that produces knowledge, ideas, opinions, mores, and traditions,” expanding beyond explorations of oral histories, narratives, archives, maps and statistics (Peña, 2011, p. 3).⁵⁴ Various ethnographers look at the way embodied practices create meaning in people’s lives and the way ideological, embodied, spatial and material transformations that emerge from rituals are carried forward into daily life (Lester, 2005; Mitchell, 2006; Peña, 2011). Jon Mitchell (2006) draws attention to the ways ritual events and transformations in “extraordinary performances” can initiate considerable transformations of character or status on things, persons and places, and transformations in everyday life (p. 385). He reworks “ritual” to focus on the experiential, maintaining an actor-centered focal point from which transformations are discussed. In this approach, the body is not the object of the mind, nor the structured outcome of social processes. The body, the materials and space become subjects, animated within the performative process (Mitchell, 2006, p. 399). Shaping my exploration of the cottage industry production of botanical medicines is the shifting of *materia medica* and subject/object constitutions in the transformation of plants into medicine, the transformation of subjectivities, the transformation of conceptions about healing (e.g. healing as process and the role of harmony with physical and social environments), and the transformation of space into therapeutic place.

The juxtaposition of multiple interpretations to relativize categories that are often assigned and essentialized (e.g. postulant, pilgrim, shaman, plant medicine) is used

⁵³ Stoller suggests that ethnographic writing be “not only sensitive to audience but to distinct social settings. [...] [f]orm and styles of ethnographic expression should vary with the subjects being described” (1997, p. 38).

⁵⁴ Peña (2011), in her research on Pilgrimages, brings out diverse expressions of sacred space that are distinct, yet connect different spaces and elucidate the ways in which practices and ideals are adapted to different settings, including rural, suburban and urban environments.

elsewhere in ethnographic writing (e.g. Lester, 2005; Peña, 2011; Tsing, 1993).⁵⁵ Lester (2005) and Peña (2011) show that the performances of postulants and pilgrims are more than demonstrations of religious belief. They may connect to national discourses, offer a mode of communication, be a declaration of independence, relate to economic circumstances, express gender identities and much more. Similarly, reconstituting plant medicine is about more than spiritual beliefs and economic needs, but also connect to global discourses, constitutions of nature as capital, transnational seeking and epistemological politics.

Kirsten Hastrup (1994) points out that that “we lack the words for, rather than the experience of, the unity of body and mind” (p. 228). Ontological politics manifest in the writing process, thus writing about inner experiences is not necessarily a “serious epistemological obstacle” (ibid.). “We are imaginable to one another” (Hastrup, 1994, p. 9). In instances where fellow feeling is foreclosed to the ethnographer, disjunctures, confusion, shame, embarrassment or speechlessness can provide an “optic that makes palpable the contours of power” (Werry & O’Gorman, 2007, p. 214). Halliburton suggests that polarizing the “mentalistic West” and the “embodied other,”

[...] [L]eads not only to possibly mischaracterizing the already reified, “non Western” subject. It also, wrongly, implies that the Western person is not living in an embodied state and is unable to transcend mind-body dualism (2002, p. 1131).

Embodied participation, whether through my treatments with Don Miguel, farm work, jungle walks and scrubbing, peeling and chopping, fostered a recognition, acknowledgment and appreciation of the importance of a relationship based model for conceptualizing plant medicine- one that recognize soil, insects, water sources, and songs as among the actors participating in plants becoming medicine, and that acknowledges the way fruit and other foods become medicine in certain contexts and with certain preparations.⁵⁶

⁵⁵ Peña (2011, p. 85-6) elucidates the different meanings, intentions and significances of pilgrimages (intracommunity and interethnic social relations, spiritual membership, consumption, entrepreneurs, government leadership, and so forth). She frames the political and economic context of pilgrimage without reducing the phenomenological experience and sensual ways of knowing to economic or psychological needs, or to corporate interests.

⁵⁶ Termed elsewhere as “knowing from the inside” (Ingold, 2013).

Embodied experiences are emplaced experiences. The embodied experience of the ethnographer in the field and the intersubjective space created between ethnographer and interlocutors is an expressive performative space. The travel and the immersion and relative disconnection from external life factors that are often involved, foster a unique experience of time and space, and relationship between ethnographer and participant in the research.⁵⁷ Irving comments, “a person’s thinking and being are not wholly contained by the boundaries of the physical body but are an emergent property of the interaction between body and world” (2011, p. 40, in reference to Clark, 2008). He elucidates the ways memories of places influence sensory worlds, and inner expressions generated by the dynamic interaction between person and world (Irving, 2011, p. 40).

My focus on lived experiences recognizes the broader political contexts and health discourse that constitute bodies, health and illness in particular cultural ways, yet emphasizes the body as subject, as a producer of knowledge, and as the “existential ground of culture” (Csordas, 1988, p. 5). The body is understood as a relationship, as both subjective and objective, personal and social, meaningful and material (Van Wolputte, 2004, p. 256, in reference to Turner, 1994, p. 28). I look at people’s articulations of embodied illness experience as they try to “escape constraints and articulate new systems of perceptions and action” (Biehl & Locke, 2010, p. 336). These materialize in unique ways, such as with cooking classes that challenge food-medicine dualisms, or the refusal to simply sell medicine without following a patient’s treatment or to summarize medicinal properties for interested visitors, students, and prospectors on limited time schedules.

Much analytic attention has focused on regimes imposed on the body by the state (Foucault, 1977), and the body as a site of biomedical control (Chesworth, 1996; Illich, 1996; Mardiros, 1996; Rose, 2007; Szasz, 2001). Within critiques of biomedical hegemony is research that critically examines the ecological relationships between humans and nonhumans (e.g. plants and animals) within the biomedical paradigm (Fox, 1996; Hufford & Chilton, 1996; Mitcham, 1996; Proctor, 1996). An ethnographic focus on people’s day-to-day lived experiences highlights the potentiality and creativity of people

⁵⁷ Michael Lambek likens anthropology to a vocation that constitutes a distinctive chronotype (2005, p. 237). He states, “[A]nthropological labour is (relatively) unalienated; fieldwork is a chunk of one’s life, not a hole in it, and a part of growing up” (2005, p. 237).

within regimes of control. Top-down approaches are too deterministic about the connection between “cultural epistemologies and individual experience”; feelings, selves and inner worlds are far more unique and complex than simple reflections or outcomes of cultural constructions or exterior influences (Lester, 2005, p. 34, 39, in reference to Chodorow, 1999). Chodorow furthers that research should address “the relations between inner and outer, individual and social, psyche and culture, that place where the psychological meets the cultural or the self meets the world (1999, p. 6, cited in Lester, 2005, p. 39).⁵⁸

Bakhtin saw narrative as playing a powerful role in countervailing disaggregation in hegemonic institutions, in “holding things together” (Cruikshank, 2005, p. 63-4). He characterizes the “problem of history” as its frequent way of fostering a sense of randomness in the order of events (Cruikshank, 2005, p. 63). Perhaps this thesis takes the countervailing potential of narrative a step further, by making the effect of narrative its very subject in discussions, challenging the disaggregation of natural, social and cultural worlds. The narratives shared in chapters four and five are both referential and constitutive, they discuss external influences such as colonial processes, neoliberalism, environmental degradation, species loss and transforming landscapes, and they are also constitutive, they shape new understandings of plants and medicine, and contexts for discussing conservation.⁵⁹

Attending to sensorial experiences and embodiment, as well as the macro processes bodily experiences interact with, involves combining phenomenology with critical interpretations. An embodied critical phenomenological approach recognizes

⁵⁸ Emphases on individual narratives reveal personal experiences but also speak to broader cultural processes, history, community relations, landscapes and much more. Such stories can at once be “very personal and culture specific” (Cruikshank, 1998, p. 41). Cruikshank points out that stories can be about the telling of stories, and about the contexts in which they used to be told (1998, p. xii-xiii). She explains that narratives ground local ethnohistory and provide greater context for understanding unfamiliar events (1998, p. 47). “[...] [N] either passively stored nor encapsulated in individual narratives; rather, its telling involved active engagement with the world, and its performance in a particular situation made a specific point” (ibid).

⁵⁹ Cruikshank (2005, p. 74) describes the narratives she included in “Do Glaciers Listen?” as constitutive and referential, reflecting external influences and efforts to shape new understandings of social relationships with glaciers.

political and historical contexts, without reducing or bounding' experiences and practices to them.⁶⁰



Figure 2.6 Preparing a crown made up of seven medicinal plants of my choosing for a Temazcal.

Photograph of the author taken by Sebastien Ouellette. Reproduced with permission.

2.5. Analyzing embodied experience

In Talamanca and elsewhere it appears that the most intransigent obstacles to the sustainability of social and physical environments lie at the level of presupposition and dualisms separating bodies, and dividing nature and culture—the great chain of being. More recently there has been a shift in anthropology from attention to social experience and how it shapes and is shaped by social relations and practices, to how the discipline should deal with inner experiences of individuals and the ways circumstances and events are “received by consciousness” (Widlok, 1994, p.181, in reference to Bruner, 1986, p. 4). This has led to work that brings together

⁶⁰ Peña (2011, p. 3) uses the term co-performative witnessing, whereby embodied action functions as both object and method of study, recognizing the ethnographer and research participants as interlocutors encompassing sensual communication.

phenomenological experience and social practices, framed within political and historical contexts both local and transnational (Feld, 1991, 1996; Good, 1994; Irving, 2007, 2010; Langwick, 2001, 2011; Lester, 2005; Peña, 2011; Tsing, 1993, 2015). Contemporary ethnographic focus on irony, narrative, parody, moral imagination and memory, among many other things, emphasize intersubjectivity (Van Wolputte, 2004, p. 260-1).⁶¹ In these ethnographies the goal is not to “solve” these paradoxes, ambiguities, uncertainties and contradictions (Van Wolputte, 2004, p. 260) or seek a coherent, singular interpretation, but to holding open plural interpretations that are, at times, incommensurable. The politicization of illness and medicine warrant research that creatively and incompletely grapples with the challenges of research on embodiment. Theoretical de-centering and the juxtaposition of plural interpretations (without ranking them) is not about getting at a “truth,” but enlarging understandings, exposing assumptions, and destabilizing orthodoxies and commonsense notions.⁶² Although the self cannot be mobilized as a “source of knowledge” independent of social context (Lester, 2005, p. 43), embodied experiences create. They generate knowledge. Asking “what is plant medicine?” brings together multiple characterizations of plant medicine and bodies, which produce political, economic, environmental, and social consequences. Most interviews were semi-structured in terms of guiding the general interview themes with several mostly open-ended, experience and opinion-based questions. With seekers questions would center around their trajectory, the location and place they sought for treatment, their reflections on their experience, the healing encounter, and in some instances their current healing practice. Questions posed to healers asked about their practice, experiences with seekers in healing encounters, social, political and economic experiences, new types of encounters around healing and adjustments to their practices.

⁶¹ Research on the subjective altering of one’s experience of physicality that polarize conceptual options into “subjectivity as essential truth and practice” and as an “illusion of discourse” (Lester, 2005, p. 43), seem to set up a fallacious illusion of needing to choose one or the other. Unless what Lester is implying here is that “the illusion of interiority” is given, in that all experiences are essentially intersubjective and interact with cultural constructions of the body and state control over it.

⁶² Language is an important and implicit part of evoking people’s life worlds (Porcello et al., 2010) but it is not enough. Producing “sensuous texts” requires multi-genre approaches (Stoller, 1997). Engaging in “sensuous scholarship” (Stoller, 1997) can evoke inner dialogues, embodiment, life experiences and life trajectories, as well as senses of time and place, making life experiences more imaginable. Conjuring a sense of the emergent in ethnography can avoid giving the impression that the contexts described are timeless and evoke an existence beyond the final word of ethnography, an existence full of continuities, discontinuities, reformulations and changing motives.

Research on embodied and sensory experience in tandem with analyses of historical, political and economic contexts bring out the way the experiential interacts with macro processes. The body is both subject and object. A critical phenomenological approach encompasses an interpretive approach to analyzing embodied and sensory experiences, within these broader contexts. The challenge of thinking about the relationship between contingent bodies constructed in and through political and social discourse, and subjective embodied experiences, involves thinking about the body as both locus of experience and object of analysis (Lester, 2005, p. 37).⁶³

But the question remains as to how we analyze subjective experiences that are “fundamentally foreclosed to the ethnographer” and for which we often lack the words (Garcia, 2010, p. 11)?⁶⁴ Fieldwork is an intersubjective experience. Subjective states (feelings, emotions, sensations) manifest in ways that can be observed and related to in face-to-face interactions and observant participation. Imagination, theoretical decentering and humility and transparency about the limitations of analysis are important ethical approaches.⁶⁵ Despite the messiness and ambiguity of meaning that are the consequence of looking at people’s deep concerns and cares, to avoid the uncertainties and challenges such areas of exploration present, would mean neglecting profound experiences in people’s lives (Desjarlais & Throop, 2011, p. 96). Deborah Bird Rose discusses silence within “normative anthropology” as signs of “amputation” not

⁶³ A key problem in critical phenomenology is to acknowledge the social and historical within human consciousness and forms of self-deception and distortion, while not diminishing local claims to knowledge (Desjarlais & Throop, 2011, p. 42).

⁶⁴ Okely describes how the ethnographer connects with their own experiences and feelings using “body, soul and intellect” to approach understanding the experiences of their interlocutors (1994, p. 61). Garcia (2010) does not know the experience of overdose; Lester (2005) does not know what it feels like to hear God’s call as a Mexican acolyte, (or at least at the time of writing their ethnographies they did not reveal any direct experience). A further critique of phenomenology relates to the methodological challenges of extending research to focus on experiences of interiority, usually more descriptive than analytical and explanatory (Desjarlais & Throop, 2011, p. 95). Critics of phenomenology further challenge that concepts of subjective experience are themselves the invention of particular “genealogy of thought” in the contemporary West (Desjarlais & Throop, 2011, p. 96). Desjarlais and Throop (2011) refute this and point out that much non-Western cultural knowledge also includes ideas of phenomenological investigation and awareness (p. 96).

⁶⁵ For example, Angela Garcia (2010) refers to Stanley Cavell’s (1976) distinction between the “failure of knowledge” and “failure of acknowledgement”, the former signifying a “piece of ignorance”, and the latter a deliberate avoidance of the presence of “confusion, or indifference” [...] (p. 213).

repression, as superficial tendencies that diminish meaning in favor of instrumental modes of explanation (2007, p. 95). She argues,

Our boundaries around what is sayable, and our elisions that treat as real only that which can be subject to constricted modes of social analysis, have the potential either to excise a great range of experience and knowledge, or to drag it back into the familiar, thus depriving it of its own real power (2007, p. 97).

Goulet and Miller, in reference to Fabian (2000, p. xii) discuss how logic and rationality, and the theoretical apparatuses they buttress, do not make science, they promote “ascetic withdrawal from the world as we experience it with our senses” (2007, p. 11). They advocate that anthropologists write about *ecstatic* experiences that challenge them to think outside of personal assumptions about reality and true knowledge, both academic and worldly (Goulet & Miller, 2007, p.5).⁶⁶ I would not characterize my personal fieldwork experience as ecstatic, but it did bring me beyond personal assumptions about medicine, selfhood and ethnobotany. My own experience of seeking and hoping to find a “miracle cure” gives me a path of access to seekers in search of *magic bullet* cures. My research also reveals how such temporalities are rooted in Western dualisms, a realization that broadened my understanding and fostered a sense of porosity between living things of this world. Pivotal experiences that broaden perceptual and conceptual understanding of field research and human phenomena can enhance ethnography and “sense making” processes (ibid.). Of course, there remains the question of whether the ethnographer’s experience of such phenomena can be likened to those of other actors (Meintel, 2007, p. 152). However, even if experiences are divergent, the intersubjective space, and tensions and discussion around meaning and interpretation, are revelatory. The experience of surprise in the field and the very fact that something does not fit within an existing epistemology supports its inclusion for a number of reasons (Cerwonka & Malkki, 2007). These circumstances demand

⁶⁶ Fabian’s (2000, p. 8) definition of ecstasy as a “quality of human action and interaction—one that creates a common ground for the encounter” with the Other in their social and physical environment (Goulet & Miller, 2007, p. 5). According to Barbara Wilkes, “To be “out of mind,” in this way, is not to be mad, unscientific, or non-objective [...]. Nor does it signify that one has “gone native.” Instead, it is an opportunity to glimpse the moral, emotional, physical, intuitive, and spiritual realities and experiences of others firsthand as we take part in the transformations our hosts experience” (2007, p. 76).

reflexivity, and force one think outside the box and find new ways of speaking and thinking about the body.

[...] [T]he anthropology of the body focuses no longer on the abstract or ideal(ized) body, but on those moments during which the body and bodiliness are questioned and lose their self-evidence and on the experience or threat of finiteness, limitation, transience, and vulnerability (Van Wolputte, 2004, p. 263).

Contemporary phenomenological approaches address ontological difference by predicating frameworks of analysis on goals of destabilizing “unexamined assumptions that organize our prereflective engagements with reality” (Desjarlais & Throop, 2011, p. 88). Thus, the object of concern in Ho’s (2008), “ontological breaks,” becomes a theoretical subject and methodological object, reflecting a “shift in orientation to the taken-for-granted,” by addressing complex constructions and processes of consciousness, intersubjectivity, and experience (Desjarlais & Throop, 2011, p. 88, 95). While it is impossible to have direct access to anyone’s consciousness academics are challenged with the task of developing new methodological and theoretical approaches. Dwelling in possibilities of different ways of rendering human and plant bodies participates in efforts to decolonize knowledge about the body and plant medicine.

“The orderly systems and determinate structures we describe are not mirror images of social reality so much as defenses we build against the unsystematic, unstructured nature of our experiences within that reality” (Jackson, 1989, p. 3, as cited in Stoller, 1997, p. 23).

2.6. Ethics and intellectual property

I will take a moment to briefly discuss the unfolding of my research, which clarifies some connections I am drawing between seeking and states of emergence of medicinal plants. In 2010, I travelled to Luke’s *finca* (small farm) in Costa Rica to take a course on tropical medicinal botany and conduct some pilot research on healers’ practices. For two months I scrubbed ginger and turmeric, learned how to remove cambium from trees and learned about permaculture design. In exchange, I worked on his farm, labour that included planting seeds, maintaining the compost pile and worm compost, harvesting, and digging holes. Luke is an American naturopath who began his healing practice in Costa Rica a few decades ago. His decision to relocate related to the

trauma of witnessing police violence at a university protest against the Vietnam War on a campus in the United States.

It was on Luke's farm that I first heard of Don Isidro on the radio. He was being interviewed about his "cure" for cancer and his work with plant medicines. He declared that we wanted to sell his cure to the Costa Rican government. He stated that he did not want the recipe, a combination of twelve plants, to be stolen by a pharmaceutical company. He sought state support and media attention for support. Don Isidro tells me that he learned how to make this medicine from the Indigenous people in the mountains of Costa Rica. He went seeking therapeutic alternatives when his wife was diagnosed with breast cancer. The plant medicines worked. Once she was cured, Don Isidro's role shifted. He went from being a seeker to becoming a healer and running a small, but very busy clinic. Standing in-line with number 108 it took some time before Don Isidro came to greet me. When he did, he thrust a business card in my face. I stared down at the card, confused and blankly looking at the American name printed on it. He states triumphantly, "un doctor, un oncólogo de los Estados Unidos!" [A doctor, an oncologist from the United States.] He expectantly waits for a sign of approval from me that acknowledges that this is important! 'An American doctor gets treatment from me! That is how good I am' form the subtext of the prominently displayed piece of cardboard. He gestures to his wall of fame featuring framed magazine and newspaper articles about his cure for cancer and HIV and testimonies from those he has cured, a performance he projects to the people crowding the waiting room, reminding them of his popularity, a fame that extends across international borders. He invites me to visit his storage facility behind the clinic. Garbage bags packed with plant medicines are stacked to the ceiling. The plants are carefully chopped into small pieces making the contents difficult to decipher. I did not inquire into their contents, much more curious about the types of healing encounters these medicines moved through. The queue stretches down the road for a block and appears to be peopled mostly by local Tican and Afro-Caribbean people. Based on Don Isidro's wall of fame the clinic is also visited by Americans and American celebrities. An armed security guard sits by the clinic entrance. The air smells like fried chicken and urine and stray dogs hungrily roam the badly paved streets. The squalor stands in sharp contrast to the flashy cars that occasionally speed by.



Figure 2.7 A framed newspaper article hanging inside Don Isidro’s small clinic stating that Hollywood stars are interested in visiting the famed botánico

Photograph taken by N. K. Ferenczi

Luke’s story fits within an earlier period of density of mostly *hippies* seeking in the jungles of Latin America in the 1960s. Don Isidro and Don Miguel’s stories reveal that the current wave of seekers arguably encompasses a much more diverse group of actors than movements in the 1960s, involving integrative pharmacists, doctors and other healthcare professionals. This increased interest in learning about plant medicines from Indigenous healers and connoisseurs teaching ethnobotany courses raised concerns for intellectual property (IP) and people trying to work out innovative ways to protect personal knowledge while treating patients or teaching workshops on making plant medicine.

Don Isidro’s concerns for *his* intellectual property (which is ironic because he tells me that he learned about the plants medicines to treat cancer from Indigenous people in Costa Rica) were echoed by other participants in this research. There was an understandable taciturn reaction to my interest in researching plant medicine when I returned to Costa Rica in 2013, this time going to Talamanca. I made it clear right away

that I was not after “recipes.” A few people I spoke with- Afro-Caribbean, Tican and Bribri shared IP concerns based on previous experiences with outsiders. Cici mentioned that she had put together a book on bush medicine, collating narratives from different bush medicine doctors (Afro-Caribbean plant medicine doctors) and other plant medicine specialists (grandmothers and grandfathers) in the area, several connected to her through family lineages. Lowering her voice, she told me about an American woman in town who had it published under her own name and was selling copies as part of her ethnobotany course on plant medicine. Don Miguel echoed similar feelings of IP violation, and spoke of an American pharmacist who filmed a plant medicine walk that he guided him on. The footage was made into a documentary without his permission and without giving him any credit or money.

The idea of translocal encounters between seekers and healers motivated by desires to heal seems to have the potential to generate positive things, being both an economic opportunity for people who are often poor and marginalized and providing sick people with medicine and perhaps a new way of imagining the body.⁶⁷ Ethnographers have shown the way research can support community empowerment, land claims and knowledge conservation (see Cruikshank, 2005; Ignace and Ignace, 2017). A large body of work acknowledges the value of TEKW (traditional ecological knowledge and wisdom) for biodiversity conservation, managing key resources, ecosystem restoration, species preservation, agricultural techniques, forest management and so forth (Anderson 2011; Ford, 2011).

Before beginning research in Costa Rica, I had already reflected on the questions of *how to ethically conduct research* and *What can I contribute?* I entered the field with awareness of the exploitative ways Westerners have profited off of Indigenous knowledge and with a curiosity about how traditional knowledge is being conserved and passed on and the role anthropology can play in supporting this. I directed questions along themes relating to people’s practices and how they learned about plant medicines, their perspectives on seekers from abroad, and state regulatory approaches.

⁶⁷ I also balance such reflections with an acknowledgment that botanical medicines are not just about healing and have even been mis-used as instruments of war. Michael Kenny (2004) illustrates the eugenic goals behind the uses of *Dieffenbachia Seguine* among Nazi camp prisoners in interwar Germany and in other parts of the world as a way of exacting revenge of one’s enemies or for inter-tribal warfare.

In conducting the research for this dissertation an important ethical decision involved looking for patterns among people's various concerns in order to better understand what issues and questions were most important to them. I had read of a bioprospecting agreement between Costa Rica's National Biodiversity Institute's (InBio), a non-profit organization, and pharmaceutical giants Merck, Sharp, and Dohme, that was cited as an exemplary model for future policy-making, an agreement negotiated with conservation requirements and policies for sustainable production, with profits said to go towards developing conservation infrastructure (Balick, 1996). Posey (1996) challenged that the Indigenous groups in the areas where plant samples were extracted were not consulted, nor did they benefit. This led me to think about the dynamics connecting plant medicine popularity and economic opportunities for impoverished people. Is the growing popularity of plant medicine supporting cottage-industry practices? For such a shift toward "bioprosperity" to occur, (meaning more equitable ways of sustaining plants, people and pharmaceuticals) it is important to address local concerns and the legacies of colonialism and the open access to plant medicines that was cultivated a result of them (Osseo-Asare, 2014, p. 202, 205). We must also critically address the knowledge politics in biases relating to nature-society relationships that stem from the Enlightenment Period and continue to shape regulatory approaches. There is also the need to recognize the real temporal geography of plants and knowledge and to examine assumptions about efficacy (that I will elaborate on in chapter four). The answer to the questions, "*how can I contribute to understandings of traditional medicine conservation?*" and "how to carry out this research in an ethically responsible way?" was to unpack the category of "medicine" and illustrate the epistemological politics that mitigate the sustainability of practices and the conservation of TEKW.

To develop economic opportunities for cottage-industry producers of plant medicine mandates adequate processes for determining the ownership of intellectual property. Who owns knowledge? What kinds of knowledge can be owned? The long histories of movement of plant medicines and the knowledges about them and their wide circulation today make it complicated to determine patents and benefits. *Constructions of priority* are difficult to prove (Osseo-Asare, 2014, p. 203) and in some cases not

supported by the historical record.⁶⁸ As will be elaborated upon in chapter three, lengthy clinical trials for plant-based drugs also can exceed the life spans of healers who provided the knowledge about the medicine, making it perhaps more realistic to implement intergenerational benefit-sharing to adjust to these long time frameworks.

There is understandable disagreement over whether or not popularizing “traditional knowledge” is beneficial to Indigenous communities. On the one hand is the argument that “scientifically” validating TEKW and applying it to government land management projects will bring benefits to Indigenous communities in the form of prestige, economic opportunities, and environmental conservation (Anderson, 2011, p. 28). On the other hand, there are people who argue that the exploitation of Indigenous knowledge will erode cultures and the ecosystems communities dwell in, undermining Indigenous rights to traditional knowledge and resources and *biocultural heritage* (Anderson, 2011, p. 28, in reference to Bannister & Solomon, 2009). Even framing traditional knowledge as “intellectual property” or “cultural resources” interpolates it into a Eurocentric institutional cultural construction wherein legal “protection” implies the idea of knowledge as data (Hardison & Bannister, 2011). A response to this at the international level is the use of “collective bio-cultural heritage” that conveys the holistic dimensions of traditional knowledge (Hardison & Bannister, 2011, p. 37, in reference to Swiderska, 2008). Technoscientific reformulations may make Indigenous knowledge more widely accessible but accessibility and generalizeability are often reductionist.

2.7. “Did she smoke?”

[Q] How did she die?

[A] Lung cancer.

[Q] Did she smoke?

A seemingly innocuous question, “Did she smoke?” is a query that implies explanation and even justification. It nuances current ideas on responsibility for health

⁶⁸ Osseo-Asare (2014, p. 204) mentions that *hoodia*, a plant that brought economic opportunity to the San of the Kalahari Desert who were able to establish a “claim to plant priority,” was not exclusively used by the San according to written records.

and optimizing wellness in advanced neoliberalism in North America.⁶⁹ If she did smoke there is an explanation for her misfortune. If the person asking is a non-smoker there is no need to confront their own mortality. Responding to the question “are all plant spirits good? Even tobacco?” a speaker at a conference in Vancouver on plant spirit joked: tobacco isn’t *bad*, “it just had a rough childhood.” Tobacco’s “becoming” as a symbol for peace, cleansing, ceremonial offering and protection has more recently also become a symbol for illness, cancer, and poor self-care in North America, incongruous with current ideologies around optimizing health.⁷⁰ It is a fine balance to be reflexive without being narcissistic. The ethnographer must really explore what reflexivity should entail in order to avoid “solipsistic dwellings” (Meneley & Young, 2005, p. 7) while positioning one’s self critically within the research.

It is here that I situate myself, as a seeker who for three weeks searched for a “magic bullet” cure. The medical foreclosure: terminal lung cancer and three weeks left to live. My own lived body is a “path of access” to seekers reacting to human lives shaped and foreclosed by orthodox Western medicine.⁷¹ Critically reflecting upon my own seeking experience and the stories shared by participants in this research illuminates further the epistemological politics that emerge from seeking, colonial histories, assumptions of medical efficacy, ideologies of health *optimization*, and the ways plant medicines are re-constituted as they move across cultures. Affect and the body are resources that provide a deeper critical understanding of our “changing investments” while in the field, thereby generating more ethical research (Cerwonka & Malkki, 2007, p. 36).

“Subjectivity’s many forms-embodiment, affect, and so on-should complement and enrich, rather than replace, critical reason as a mode of analysis” (ibid.). Uncomfortable, unanticipated and awkward moments of absence in understanding can broaden our scope of understanding by challenging common-sense assumptions embedded in conceptual categories (Cerwonka & Malkki, 2007, p. 36). My narration of

⁶⁹ For greater discussion on this theory of *responsibilization* in the “therapeutic state” see Nikolas Rose (2007).

⁷⁰ Szasz (2001) writes that “The medical doctor treats cancer of the lung. The political doctor treats smoking, preventable by legislation, litigation, and taxation, and curable with nicotine administered by any route other than inhalation” (p. 510).

⁷¹ Dara Culhane, 2011, SA 875 class notes.

Don Miguel's complaint of "*that kind of information*" is a *point de départ* that positions us: me- a graduate student hoping to study plant medicine with him, and him- a healer trying to foster a more contextualized understanding of medicine.

Chapter 3.

Senses of place

A hopeful assumption underlying the early phases of this research, and prior to ethnographic field research in Talamanca, envisioned possibilities opened up by a burgeoning herbal industry, creating a demand for plant medicine that might help practitioners to maintain these traditions and practices and pass them on to younger generations. Increased plant popularity appeared to have the potential to be a “win-win” situation, providing economic opportunities to generate much-needed sources of income, and simultaneously revitalizing healing practices and invigorating Indigenous pride in culturally specialized knowledge. This new wave of seeking seemed to offer a potential way for some of the poorest people economically, living on one of the richest coasts (literally “Costa Rica” means “rich coast”) to access global markets through encounters around healing. The image also had the allure of patients gaining access to effective medicines not yet “discovered” in orthodox medicine that comprise less invasive and damaging approaches to treatment. These visions related to my own experiences as a daughter seeking a cure and as a social activist hoping that a consumer trend around shamanism might become a source of support for traditional healing practices, which are diminishing according to some participants in this research.

In what ways does plant popularity both support and undermine cottage industry production? In what ways do more contextual understandings of medicinal natures put into motion greater support for practitioners and their knowledge of traditional medicine? The effects of the increasing popularity of seeking are multidirectional, in some instances supporting practices and in others undermining them. Sustainability is largely connected to the “politics of matter” and the affiliated *politics that matter* (Langwick, 2011).

The complexities of integrating tradition healing practices in public health provision are discussed by Langwick in the Tanzanian context, where the state is trying to articulate an internationally recognized category for “nonbiomedical healing practices” (2011, p.75). Langwick describes how Tanzanian officials along with those from other African countries, are embracing the commercialization of traditional medicine as a potential way into the global market in herbal medicine, an industry valued by the World

Health Organization (2002) to be USD sixty billion and increasing (2011, p. 28). She elucidates the way the configuring of traditional medicine marginalizes earlier forms of differentiation and makes “biomedical science” the necessary departure point in any innovations to develop or integrate traditional medicine (Langwick, 2011, p. 75).

The contemporaneous access to botanical healers through the Internet and the growth in popularity of plant medicine in North America, do have the potential to shift understandings of medicine, to provide economic opportunities for the cottage industry production of plant medicines, and to provide seekers with access to important medicines with strong curative potential. But for such synergy to be possible ideologies will need to shift around the “politics of matter” (Langwick, 2011). An analysis of reconstitutions of medicine-materially and in terms of meaning-reveals that they are not arbitrary and correspond to the commoditization of plant medicine and of nature more broadly.

This chapter contextualizes Talamanca in a particular way, oriented around the social lives of plants and trees, and the stories people shared that contribute to a better understanding of what is involved in creating sustainable development in Talamanca.

3.1. Wa’apin man?

Being healthy is normal. Being sick is not normal. Our bodies know how to be healthy. Before people died because they were *old*, not because they were sick. Now so many young people die because they eatin’ poison. (Miss Eliza)

I am told that just over a decade ago a great breadfruit tree was felled in Puerto Viejo, (a town commonly referred to by Afro-Caribbean locals as “Old Harbour,” a name given by the British). A new road was being built, connecting the area on the coast to the Panama border (Palmer, 2005, p. 14). Palmer (2005) writes that some people still remember that it was “Old Dan” who planted it over eighty-five years ago and refer to the tree as the “mother tree” of breadfruit trees from Old Harbour to Monkey Point (*ibid.*).⁷²

⁷² The breadfruit tree originates from the South Pacific and was introduced to the Caribbean in the 18th century based on the recommendations of Captain James Cook who recommended that King George III use the nutritious, high-energy food source to feed slaves.

The road is a mixed blessing facilitating transport up and down the coast but bringing with it opportunity for greater incursions on the land.

“Wa’apin?” is a common greeting among the Afro-Caribbean population. The greeting is comparable to “what’s up?” or “how’s it going?” functioning both as a question and a statement. Wa’apin also nuances the assault on their people, manifesting in overt and covert racism, and other types of exclusion and oppression, such as a lack of public services like high schools, the banning of midwifery and bush medicine, displacing people, and in other details, like the absence of a proper soccer field, street signs and poor road conditions. “Wa’apin” also speaks to changes in health that have accompanied the rise in industrialized food production in the area. While travelling around the reserve I was surprised to meet several residents well over a hundred years old. I am told how common this is. “People didn’t die of disease. People died of old age or accidents,” Miss Eliza tells me, a declaration verified by Palmer (2005), who cites snakebite, accidents, and childbirth as the main events requiring medical attention (2005, p. 86-7). Diabetes was virtually unheard of before and is now widespread, concurrent with the shift to industrialized food production. Infant mortality was infrequent because of the highly skilled midwives who served most towns between Cahuita and Manzanillo. Impeded by health regulations midwifery was forced underground where it continues, albeit enfeebled by these health policies.⁷³

There is a long history of attempts to regulate botánicos and discourage women from working with plant medicines. In 1770-1810 the Guatemalan Protomedicato had jurisdiction over Costa Rica and the country continued to be under its authority after its independence as a “republican Protomedicato” (Palmer, 2003, p. 54).⁷⁴ The new version included informal mechanisms that allowed empíricos to receive license to practice in regions without access to qualified professionals (Palmer, 2003, p. 55, 60).⁷⁵ “*Empíricos*” signals men only, and initially only those empirics skilled in general medical or surgical practices (Palmer, 2003, p. 57, 60). Ideally such empirics would replace

⁷³ A decline in midwifery and traditional healing is also noted in other research in Latin America (Anderson, 2016).

⁷⁴ The Protomedicato was widespread all over Latin America during the Spanish Empire.

⁷⁵ The Costa Rican Protomedicato formally acknowledged a category of healers called “*empírico*” meaning men who were not fully licensed professional but who had experience with conventional medicine or surgery.

curanderos, and *curanderismo* was actively suppressed when possible. Later on, only male *curanderos* were recognized and allowed to treat patients under the authority of a licensed professional (Palmer, 2003, p. 60). The unrecognized *curanderas* excluded from these permissions comprised almost half of *curanderos/as* in the mid nineteenth century (Palmer, 2003, p. 61). The postcolonial state repeatedly sought to recruit healers and give them conditional rights to practice during periods of health emergency (Palmer, 2003, p. 61). *Curanderos* were provided with medicines and earned a salary amounting to 1/3 that of a doctor (ibid).

“We bein’ blasted on all sides” Anton, an Afro-Caribbean man sighs. It was early Saturday morning, on market day. Riding my bicycle to the market as usual, I stopped to purchase a young coconut at a *pipa* stand. We stood there with the *pipa* [coconut] vendor, waiting for the farmer’s market to open. He described the changing landscape and seascape, lamenting over species loss of plants both terrestrial and marine. He described the sea fans that once thrived on a nearby reef and that had disappeared. The sense of hopelessness behind his description of his community’s situation extended far beyond plant medicine and encompassed institutionalized racism and assimilated values relating to food and medicine. His sober, weighty tone echoed the concerned expressions of most Afro-Caribbean participants in this research. He tells me that there are still practitioners making bush medicine on the coast, but that bush medicine is illegal, and this is why I do not see bush medicine openly advertised. This stands in contrast to the Bribri Reserve where inconspicuously painted wooden two-foot long signs saying “plantas medicinas” [plant medicines] can be observed, and plant medicine walks can be arranged through an ecotourism office.

[Me] “What is bush medicine?”

[At] “Everything is medicine. Trees, plants, insects, too, is medicine. Coconut, too, is medicine.”

Glancing at the coconut in my hand he adds,

[At] “they are not all the same kind of medicine see... that one there has spots, so it’s good for kidneys, that young green one you holdin’, that one for fertility.”

He differentiates the coconuts by appearance and age, each age-set with its own unique medicinal role. His effort to bring more context to my understanding of medicinal

function resounds with earlier clarifications of medicinal meaning-the inter-relationships comprising medicine include temporal factors. He critiques the over-reliance of his young family members and friends on public health services.

[At] "No one wants my bush teas, they want Coca Cola."

"We bein' blasted." Colonial and neocolonial encroachments on their ancestral lands and cultural assimilation make up the "blasts" to which he is referring, including fruit plantations, oil prospecting, mining, and marina and hotel building, developments that are dispossessing people of their lands and ways of being.

While there are emergent distinctions crystalizing around the regulation of Bribri plant medicine and bush medicine, it should be mentioned that Bribri and Afro-Caribbean ethnic groups themselves are not separated by solid divisions. There has been much inter-marriage, and inter-ethnic families have become common, though often subjected to discrimination. Historically Afro-Caribbean and Bribri people have had good trade relations, worked together, cultivated thriving cacao groves, engaged in reciprocal food exchange, and visited one another's healers.

Bribri participation in ecotourism was relatively recent at the time of this inquiry in 2013. Maya, a woman working at a local ecotourism office, tells me that they have been very careful in progressing with ecotourism on the reserve, that tend to mainly include a plant medicine guided walk that, in Yorkin passes through the village, until the river and loops back, and in other areas meanders through a section of jungle, often leading out of someone's backyard.⁷⁶

⁷⁶ As the mother of a daughter who is part Afro-Caribbean and part Bribri she knows closely the racism targeted at people embodying both ethnicities, expressed in the derogatory word *Cholo*.



Figure 3.1 A large gathering structure on the Bribri Reserve modeled in the u'suré style and used for meetings and to welcome visitors.

Photograph taken by N. K. Ferenczi

3.2. Murder of a lemon

Talamanca's history is etched on the land, revealed in place names that tell stories of trees, of streams, of nonhuman beings, of Spanish conquistadores, and American and British corporate giants. The place-names reflect different ethnic groups, the Bribri and Cabécar, fisherman pioneers from neighboring countries, Spanish colonizers, and American and British agents of the United Fruit Company. The Miskito of Nicaragua also historically marked and claimed the land that is called *Talamanca*. 'Talamalka' means "the place of blood" in the Miskito language. The Indigenous Miskito came to claim Talamanca by boat under the orders of their king (Palmer, 2005, p. 22).⁷⁷ More equipped for battle, they chased the Bribri and Cabécar into the mountains of Talamanca, slaughtering many in a bloody attack.

⁷⁷ As recounted by Mr. David Alejandro Kayasso whose Miskito uncle told him the story (and confirmed by a few Bribri participants).

Tree names identify certain towns on the coast like *Cahuita*, *Hone Creek*, and *Manzanillo*, and the greater region of *Limón*.⁷⁸ The name Cahuita comes from the Caway trees that grow at the point jutting out into the Caribbean Sea, and “ta” means “point” in Miskito (*Sangrilla* or *sangregao* in Spanish) (Palmer, 2005, p. 24). Manzanillo is named after a great Manchineel tree located on its coast (Palmer, 2005, p. 38). Grape Point, (*Punta Uva*) takes its name from the wild grape that once grew there in abundance but is scarcely found anymore.

The town “Mata de Limón” designates the murder of the lemon tree that once thrived in the area. The town name is testimony to the power of consumer demand, and the impact of fruit corporations. The name literally expresses a status change in the life of the tree; a once cherished fruit that lost its value (though still referenced in the name of the region encompassing all these towns, *Limón*). Miss Eliza told me that the fruit is becoming progressively scarcer.

[E] I don’t care for it, but I eat it for my health.

[Me] It is hard to find, I remark, (*I had been looking for the fruit for some time, as it was an ingredient to include in the plant medicine that I was brewing under Don Miguel’s guidance*).

[E] It’s because the people don’t plant it, there is no demand for it. Some people don’t like it, so you don’t see it so much now. Before, yes.

Palmer (2005, p. 108) quotes Frankie Mcleod describing lemon trees in the area in the early twentieth century as follows.

[...] We had one lemon tree right where Sorrows is, another was in Mr. Mike’s yard. That breed of lemon die out. Afterwards they start to bring the sweet lime. But we lose the lemon complete out of Cahuita. The lemon is a fruit more like the sweet lime but it has a pointed bottom most like a lime. Yellow when properly ripe. That lemon is die out from Cahuita.⁷⁹

⁷⁸ *Hone* is described as a short-type of palm with big roots that grow alongside that river, which produces bunches of small fruit that are used to make oil (Palmer, 2005, p. 37). The fruit is rubbed on a big stone and hot water is added, extracting the oil (Palmer, 2005, p. 37).

⁷⁹ Mata de Limón evokes the specter of the “old days” that still find expression in the subtleties of day-to-day life, such as carrying a *limón* in your pocket, a quick treatment for poisonous bites from insects and snakes.

The Spaniards also shared a hand in place naming, sometimes via erroneous interpretations of the Bribri words for places, like *Blatsie* which is a Bribri word for a type of tree, which became mapped as “*Bratsi*.” “Monkey point” is rumored by some to have been named by Christopher Columbus himself, because of the howler monkeys that live in the swampy area (Palmer, 2005, p. 37). The Spanish claimed Talamanca intent on finding more gold and attempted to colonize and evangelize, but they did not settle it or control it, pushing the Bribri deeper into the forest with their arrival in the sixteenth century (Palmer, 2005, p. 13).

The Bribri connection to these lands is rooted in pre-Columbian antiquity and they named places based on the features of the land and the beings (nonhuman and supernatural) that reside in particular areas. Siting at Rosa’s kitchen table, she bends over a map of the Bribri and KéköLdi reserves. A Stihl chainsaw resting in the middle of the floor of an adjacent room catches my eye, the bright orange color seems oddly out of place in the otherwise monochromatic traditional thatched house resting on a packed earth floor with tattered curtains hanging in the cut-out doorways and windows. She is weary, not her usual spirited self. She shares with me her concern that she still has not given her mother a proper funeral. Atypical of traditional Bribri protocols, her mother died in a hospital, and her body was not buried under a tree as culturally prescribed. She sadly explained that she did not have enough money to pay for an appropriate ceremony, which would require a feast and hiring a *Bikákala* to officiate.⁸⁰ She changes the subject and returns our focus to the map that I brought with me.

[R] The writing is too small.

She squints her eyes at the map and asks me to read the place-names to her, and then she explains their meanings. I ask her about a place called *Suè*.

[R] It is the name of a tree resembling a guava tree, she explains. But it doesn’t have those long leaves like a guava, it has a shorter, broader shape.

She gestures how the leaves look.

⁸⁰ *Bikákala*, translated as a *ceremonial servant* and *master of ceremonies* (Spanish translation by Murillo and Segura (2011, p. 266, 269), and by Rosa (Bribri participant] as *maestro de ceremonias* [master of ceremonies].

[R] It is a sacred place. It is the place of origin of “dioces” [gods], hermanas [sisters] that came from a supernatural source, not human. *Suè* are not from earth, they came from another planet, but when God (Sibö) brought them here he gave them human shape.

She elaborates in Spanish that overtime these beings mixed with humans and had human children. No longer *dioces* and now with children of this world, they can live there with their husbands or wives. “Los uséköl” she explains, “are like Jesus Christ for the Bribri.”⁸¹

We continue examining the map.

[R] “*Ktúdi* is a small fish, but *tiny*, she gestures curling her fingers, and *di* is water, river. *Yuedi, quebrada del laurel*,’ [stream of the Laurel] is a tree.⁸² *Diklö* refers to “*klo*,” a rock in the form of a foot. *Loblo*, is the king vulture [*el zopilote rey*]. His name is *Duchi*, but we can’t speak his name, because he’s a god only the *awá* can, because we can’t communicate with them, only the *awá* can do this.’

She pauses clarifying,

[R] “This is okay, us talking about this now, because I am explaining to you, but we can’t just say this name thoughtlessly.”

Place-names like Olivia, Margarita, and Chase starkly contrast places named by Bribri and Afro-Caribbean communities, referencing powerful British and American corporate families and plantation superintendents responsible for the more recent colonial intrusions of the last century. “Fields” ordered the burning of homes and crops of any Bribri who did not succumb to his intimidation to leave their lands.⁸³ Palmer (2005, p. 129) quoting a research participant, Mr. Paul, writes,

A man named Fields, an English agronomist, opened the farms in Costa Rica from Olivia to Suretka. He got a concession from the government,

⁸¹ Uséköl’, is translated as *supreme priest* (Spanish translation, by Murillo and Segura, 2011, p. 269).

⁸² Similar to the designation “*di*,” in Kona Hawai’i “*wai*” in place names signals fresh water (e.g. Waikiki) because homesteads would be established close to fresh water sources, important for drinking water and irrigation practices.

⁸³ The United Fruit Company, a giant multinational, occupied 28, 202 hectares of Costa Rican land in the early 1920s, stretching from the Panama border at Sixaola to upper Talamanca Valley and employed over fifty thousand workers (Palmer, 2005, p. 127-8).

and he bought out the rights from the people who had that land. He give the banana farms the name of the first owners Olivia, Margarita, Volio, etc. Chase was named after an English superintendant, and Fields gave his own name to the place called Fields.

3.3. UsekLa awá and organized resistance to the United Fruit Company

When the United Fruit Company started building railroads up the Sixaola and Telire rivers in 1910 the Indigenous people who lived there protested the incursion to the Costa Rican government (Palmer, Sánchez and Mayorga, 1991, p. 40). The planting of bananas continued, Indigenous houses and crops burned, and the Salkwak King, Antonio Saldaña, who lead the struggle against the Company, was murdered (ibid.). More bridges were erected to help carry bananas across the tough landscape, pushing the Bribri and Cabécar deeper into the mountains (ibid.). The situation called for a whole hearted intervention, and the people sent the *bikili*⁸⁴ to talk to the awá in Kaspáspa, who ordered a month long diet for the communities to keep, involving staying inside their *palenques* with everything tightly closed to block out the sun (and wearing a large banana leaf over their head should they need to go outside), sleeping on mastate blankets on the ground and following a strict diet (Palmer, Sánchez and Mayorga, 1991, p. 39-40).⁸⁵ The diet is remembered as a success. The UsekLa awá made the rivers overflow and the great flood in 1935 eliminated all the Company's bridges, warehouses and the railroads, and the water-logged valley forced the Company to forsake their plantations (Palmer, Sánchez and Mayorga, 1991, p. 40). The respite was short-lived, and a few years later the expansion commenced again, responded to with another one-month diet that was diligently kept (ibid.). This time the awá created a disease in the banana plantations, referred to as "Panama disease," destroying their business and casting out the company (ibid.). The last UsekLa awá passed away from a measles

⁸⁴ *Bikili* is translated as "interpreter" (Spanish translation, by Murillo and Segura, 2011, p. 265).

⁸⁵ The UsekLa awapa are tasked with helping people as a whole when they suffer from a "collective evil." The dtsö awapa cure individuals (Palmer, Sánchez, & Mayorga, 1991, p. 39). Juanita Sánchez narrates that when people were instructed to keep a diet for a month they would go out and collect the foods they needed so that once the diet began there would be no need to leave the palenque with the exception of relieving oneself. No one was to see the sun (ibid.). An elderly woman would be nominated to cook for everyone and no one else could share in this task (ibid.). Sweet and salty foods were strictly prohibited (e.g. ripe banana and plantain), along with laughter, and people spoke as little as possible and were not allowed to sleep in hammocks. When the month was over people returned to normal life.

epidemic after driving out the Company (Palmer, Sánchez and Mayorga, 1991, p. 39). Sánchez writes, “Now there are no UsekLa awápa left, just their family, who are guarding the stones in Kaspáspa. But the family still calls for diets when the people complain of great suffering” (Palmer, Sánchez and Mayorga, 1991, p. 40).⁸⁶

3.4. The rise of the banana

Banana trees have left an imposing mark on the social and physical landscape. Many Bribri suspect banana plantation owners of assassinating the last king, Antonio Saldaña. He was poisoned in 1910, the very same time the United Fruit Company started exploring bananas in the area (Palmer, 2005, p. 129).⁸⁷ The United Fruit Company already had banana plantations in Panama, an economic success that led to expansion into Costa Rica in 1908, and the construction of a bridge across the Sixaola River connecting Guabito, Panama and Bridgefoot, Costa Rica, (and subsequently a railroad into the Talamanca mountains, flanked on both sides with banana trees) (Palmer, 2005, p. 63). In 1910 trains ran twice a week between the United Fruit Company banana plantations in the Estella [Star] Valley and the docks in Limon (Palmer, 2005, p. 79). Mr. Johnson an Afro-Caribbean man whose family owned property on the Costa Rican side of the river, tells of how the company took his land without consent when he was a boy.

Because my father dead and I was a little boy and I was here [Cahuita] and when I go see, they take it over and cut it down and plant bananas. And all they give me was two hundred dollars Balboa [Panama currency]. They had a *comandante* which rule there, and since the land didn't title, he give them access to go as they like [...] (Palmer, 2005, p. 63).

⁸⁶ Juanita Sánchez narrates: “In 1988, for example, there were floods again in Talamanca, and the water Tiger killed about ten Indigenous people. Only the UsekLapa can protect us from the Water Tiger. They have to walk far up into the mountains at night, wearing only mastate skirts, and they call the Water Tiger and it comes to them and they pet it and soothe it till it gets smaller and smaller, and finally it turns into a tiny stone. They take the stone home and guard it in a basket so it can't fly away and start killing people again. So, when the Water Tiger was loose in 1988, the UsekLapa called for a diet of three days. Many people in the KéköLdi Reserve kept the diet. In our house, we kept the diet for one day only, but we kept it very strictly. We didn't speak, and we didn't eat or drink water the whole day. We just lay down on our mastate blankets and kept quiet, while the UsekLapa worked to tame the Water Tiger. Even though the people only kept the diet one or three days, the UsekLapa kept it for a month. They suffer a lot to help the dtsö, and they get very angry sometimes because not all the people appreciate their work on our behalf. Some people don't even keep the diet one day.” (Palmer, Sánchez, & Mayorga, 1991, p. 41).

⁸⁷ Palmer also points out that worker strikes began as early as 1913 (2005, p. 137).

Despite these impacts the United Fruit Company never owned the Talamanca coast between the Estrella River and Monkey Point, and it remained a place made up of small-scale farmers (Palmer, 2005, p. 127).

3.5. Early Afro-Caribbean settlers

In the late nineteenth century, the first Afro-Caribbean settlers came to the area following green and hawksbill turtles on their migratory routes to Tortuguero (named after turtles, *tortuga* in Spanish) from Nicaragua, Panama, (which at that time belonged to Columbia) and the Caribbean islands (to eat and also sell the prized meat). Many of these fishermen later became farmers, bringing seeds by boat from their homelands and planting various fruit trees, cassava, yams and much more along the coast, this is evidenced today by long coconut walks on the beach. Many were English speaking Protestants, their history connected to British Colonies in the Caribbean Sea (Palmer, 2005, p. 84-5).⁸⁸ These settlers were for the most part ignored for almost a century at this colonial historical moment.

Trees and streams were a way of informally ascribing title to lands. One participant demonstrates how land plots were claimed. She holds her hand to shield her eyes from the blazing sun as she gazes in the distance. “Where I can’t see no more that where next land start.” A journalist’s comments bear out the described approach to land division.

[J] You know how they divided the land with each other, [pause] one fisherman would come here in his boat with his family and say, “okay so I want a piece of land,” and so somebody who was here would say, “okay, go walk until I can’t see you, my land is all this land until I can’t see you and yours starts from there.”

The numerous creeks connecting the interior to the Caribbean Sea created natural partitions on the coastal lands, and farmers established their ranches by the creeks. The creek names on maps of the area recall the first settler families, and their

⁸⁸ Palmer writes that in 1915 there were two grocery stores maintained by a farmers’ cooperative and a cocoa farm, as well as an English school and Baptist and Seventh day Adventist congregations in the town (2005, p. 103). The Universal Negro Improvement Association organized plays and concerts, as well as cricket matches (ibid.).

relationship with the land, such as “George,” Victor,” and “Old Sam,” who built their homes out of the weather resistant Rawa tree (Palmer, 2005, p. 32, 37).

3.6. Trade and Reciprocity

A seed is so amazing. God’s gift. You plant it and all the limbs, the arms reach out bearing lots of fruit and that can feed you, your whole family, share with the community, even sell a little. Before we used to share. My harvest time came before yours, so you come and help me harvest, then one week later I come help you. But now people want to be paid. It’s not just about money. People can exchange knowledge, time working, whatever means you have, ...you know? (She holds my eyes with her stare). People are fixated on money. They think that means happiness-many people have money and they not happy, there are people that have no money who are happy. You look around at nature, we came into this world naked, with nothing, we have everything we need- oxygen to breathe, food to eat, water to drink- everything. Gifts from God. In the Bible it says to take plant medicines, to plant seeds, go through the bible. (Miss Eliza).

Miss Eliza is devoted to her community and trying to reinvigorate sharing practices that have diminished in the last few decades. She volunteers by collecting food and clothing to donate to a home for the elderly on the Bribri reserve, and elsewhere in Limón, as well as with a group of Seventh Day Adventists who bring supplies to flood victims in the area and provide them with accommodation. Beyond this, her own volunteer programs on her farm draw people internationally and participants from all over the world visit her to learn about plant medicines, while her husband teaches them about the trees and the history of the area.

Sharing once comprised a vital part of life for all ethnic groups in the area. The unpredictable Caribbean waters encouraged settlers to be self-sustaining and grow as much of their own food and other provisions as they were able to, cultivating fruit trees, rice, beans, cabbage and more, gathering salt from the sea water, and producing their own coconut oil and home brews from fermented corn or sugar cane.⁸⁹ Some Cabécar and Bribri people left the Talamanca mountains in the 1920s to live in what is now known as the KéköLdi Reserve, to work on the cocoa farms belonging to black coastal farmers on the coast all the way to Mazanillo (Palmer, Sánchez & Mayorga, 1991, p. 57). More came in the 1930s after a measles epidemic in the Talamanca highlands (ibid).

⁸⁹ For greater detail see Palmer (2005, p. 47-8, 53).

Bribri, Cabécar and Afro-Caribbean participants in this research agree with historical accounts and historic murals and paintings that affirm that there were always harmonious relationships between the Indigenous groups and the Afro-Caribbean settlers. Trade relationships were established with merchants from Bocas del Toro, Panama, and Greytown, Nicaragua, and Afro-Caribbean merchants made their way into the interior to trade with the Indigenous people in exchange for sarsaparilla and rubber (Palmer, 2005, p. 36). Traded goods expanded with the road connecting the Bribri Reserve, Puerto Viejo, Hone Creek, Cahuita and Penshurst, completed in 1967 (Palmer, 2005, p. 73).

At 6:30 am one sunny morning I bicycle to the KéköLdi reserve to meet with Luís, a young Bribri representative, in a large wooden structure built to accommodate community meetings, workshops, reunions and assemblies.

[L] Thirty-five years of fighting, he sighs. Now forty-nine hectares have been recuperated.

He explains that the entrance to the reserve was blocked on the Hone Creek side.

[L] Big fights. They tried to block us from our land. We have a lawyer, but that's *so expensive*, and we have no support from the government.

He goes on to discuss tensions and divisions within the community.

[L] Lots of assimilation here and internalization of the influence of whites."

He tells me how it is a constant fight to hold on to their lands, elaborating that attempts have been made on his life. I am told in a later interview with a member of the Mesa Indigenous Rights Organization that some Indigenous groups in Costa Rica have lost up to 90 percent of their lands. Land loss through expropriation or encroachment are identified as some of the key challenges Indigenous and Afro-Caribbean communities are facing.⁹⁰

⁹⁰ Land struggles and migration away from reserves to urban centers are also exacerbated by lack of employment, and the lack of public services such as education and health (Dubois, 2002, p. 11).

He continues that the Bribri used to also live on the coast here, not just in the hillsides.

[L] In 1977, we had a much bigger area. KéköLdi included the coastal area in Cocles. 1996 is the yellow line.

He traces the line on the map with his finger, indicating the boundary of the reserve.

[L] In 2001, we exchanged coastal lands for a larger territory *más dentro* [more inland in the mountains]. There is a decree for that.

He goes on to criticize that the Afro-Caribbean populations are selling their lands to white people on the coast. As our interview comes to a close, I make my way out the side door where a group of young teenage girls are waiting. The director tells me they are volunteers for *Manos de la Obra* [loosely translating to ‘hands getting down to work’]. “What do “Manos de la Obra” do?” I ask her. She smiles shyly and says, “whatever the community need help with. Sometimes it’s more manual, like today we are clearing out an area” (clearing the brush of the recuperated lands).

3.7. Indigenous rights, Land struggles, and deforestation

During the 1970’s an Indigenous movement was formed and initiated with the establishment of the National Commission on Indigenous Affairs (CONAI), with the goal of promoting projects to support Indigenous communities (Palmer, Sánchez, & Mayorga, 1991, p. 63). A number of Indigenous reserves were established, including the Talamanca Indigenous reserve that contains an administrative annex, the Cocles Indigenous reserve, (here referred to by its Indigenous name KéköLdi).⁹¹ KéköLdi was one of the first Indigenous reserves established in Costa Rica.

In the 1940s, 75 percent of Costa Rica was forest, mainly tropical rain forest, an area the was reduced to 26 percent by 1983, mostly due to unchecked logging (Blasiak, 2011, p. 1). Palmer, Sanchez and Mayorga (1991, p. 9) reveal that close to thirty years

⁹¹ “KéköL” is the name of a tree and refers to the staff belonging to an awá, and “di” means river, or water (Palmer, Sánchez & Mayorga, 1991, p. 28). The spring from where the KéköLdi river originates is home to some of these trees, from which great awapa made their ceremonial staffs, which only they are allowed to touch (ibid.). The tree is kèikar meaning “untouchable” (ibid).

ago over 60,000 hectares of rain forest were being destroyed annually, a rate of deforestation that ranked among the highest in the world. It was also in the eighties that the first road through Talamanca was built, allowing easy access to the rich resources and forests abundant in the area that until then could only be accessed by train or boat. In the 1990s rates of deforestation dropped and forest cover was restored to 52 percent according to national research (ibid.). However, it was common in 2013 to hear people in Talamanca talk about Costa Rica's "fake greenness" under President Laura Chinchilla. Despite these documented improvements in forest management the participants in this research, who live in Talamanca, expressed a continued deep concern around deforestation. The consensus was that the forests continued to be under-valued and cleared for agriculture, cattle pastures and timber harvesting. Participants at the time of this research did not speak to me about recovering forests, they described rampant logging. An American couple living in the area bought land to protect it from being deforested, telling me that they had to hire a guard to ensure that the land was not cleared.

There is an expression for clearing a plot of land in Talamanca. "Limpiar" [to clean]. A clean lot is one where the trees have been cut down and all the brush removed, usually burned. When the trees are cut the lianas (*bejucos*) that have clung to them for often several decades also die. They exist in relationship with the trees they cling to and climb. Rosa explains how long it takes the liana to grow to such heights, gesturing with her hand she reaches upward.

[R] Up, up, up, she points to the tree tops, then returning down, down, down, making its way to the ground. Her eyes glisten as she describes their life course.

[R] It will take over fifty years to achieve that.

Important medicinal lianas like *cuculmeca roja* (*smilax dominguensis*) and *sarsaparilla* that are commonly used rely on the old growth trees in the forest and therefore are particularly impacted by deforestation.

The KéköLdi Development Association is raising funds needed to help CONAI (The National Commission on Indigenous Affairs), to purchase hundreds of hectares of non-Indigenous farms within the KéköLdi reserve, to prevent further deforestation and

hunting, and try to regenerate the flora and fauna that have become increasingly scarce (Palmer, Sánchez, & Mayorga, 1991, p. 87).⁹²

The KéköLdi reserve sits on land that was at one point leased to, and later deserted by a multinational banana company (Palmer, Sanchez, & Mayorga, 1991: 64).⁹³ The Land and Colonization Institute (ITCO) and CONAI felt a reserve on these lands would be trouble free and offer Indigenous residents permanent land rights (ibid.). When the reserve boundaries were mapped out by ITCO it was done via aerial photographs, which gave the appearance of virgin forests in an area that in fact was comprised of cacao plantations. The KéköLdi reserve came to include many coastal farms that were owned by non-Indigenous people, in particular Afro-Caribbean residents (Palmer, Sanchez, & Mayorga, 1991, p. 65), who are also marginalized and discriminated against by the Costa Rican government.

The Indigenous Bribri and Cabécar groups have always had harmonious relations with Afro-Caribbean fishermen and farmers that settled the coast, and they regularly engaged in trade. Most of the Bribri and Cabécar did not agree with taking the Afro-Caribbean farmers' land (Palmer, Sanchez, & Mayorga, 1991, p. 67). The Indigenous communities attempted to eliminate many non-Indigenous properties from the reserve by reducing the reserve boundaries (ibid.). The ministry of the interior rejected this request (ibid.).

The ambiguity this mapping has created around where boundaries actually lie has made the reserve vulnerable to squatters. While on the one hand Indigenous people want to maintain positive relationships with Afro-Caribbean families and not interfere with their farms, they on the other hand must constantly fend off squatters who clear the forest and try to establish claims to the land (Palmer, Sanchez, & Mayorga, 1991, p. 67). People from both communities speculated over whether or not there was an intentional effort to spur animosity between the Afro-Caribbean and the Bribri communities, and the mapping "mistake" a divide-and-rule strategy.

⁹² The semi-domestication of the green iguana is part of a project to repopulate the forest with this over-hunted reptile, to create an abundant source of the desired protein for people to hunt, which will protect other wild animals in the jungle from being over hunted (Palmer, Sánchez, & Mayorga, 1991, p. 75).⁹²

⁹³ As a result of Usëkol Awapa holding two periods of fasting to oust the United Fruit Company.

3.8. A tended landscape: Coconut walks

The coconut tree was the first tree in Talamanca to become a “cultivated product” and remains important socially and economically today. The Afro-Caribbean people planted the coconut [*pipa*] walks along the beaches with the seeds they brought by boat. In the words of Mr. Augustus Mason:

The people that don't know or don't want to know, they say it was the sea that cultivate those coconuts, but there were no coconuts here in the olden days. These coconuts was plant from Panama and Nicaragua. When the people run from the war in Panama in 1903, they came up this side, from Sixaola bar coming [...] After they land here they arrange among themselves that I am going to work from this creek to that creek, and you work from that creek to the other creek, as a limit against the beach (Palmer, 2005, p. 41).

Much of the coconut crop was sold elsewhere as cooking oil produced by Afro-Caribbean women. Coastal men marketed whole coconuts, and still do so at *pipa* stands perched near the parked fishing boats by the water. The oil-making process is very labor intensive. To produce one “tin” of oil, (twenty-five bottles) valued at six colones, required approximately two hundred coconuts to be husked and grated (Palmer, 2005, p. 43).⁹⁴

Miss Eliza reflected on this collaborative work that would bring people in the community together.

[E] Industrialism spoiled people. Young mothers here won't squeeze the lemon for juice, instead they just buy the powder to mix. This is making people sick.

We talk in Miss Eliza's tidy kitchen while peeling mangoes. She shows me a cinnamon leaf, crushes it and beckons me to smell it.

[E] We used to just use our own homegrown everything and then when the industry wanted to bring in their... market, they come and tell us “stop using coconut oil, stop using this, stop using that, don't make that anymore because that is toxic and what's getting the people sick”-a lot of that. So, we started drawing away from our traditions and stopped making our own things and started depending on the industries. So that's how the big

⁹⁴ Today one Costa Rican Colón equals 0.0023 Canadian dollars. Palmer (2005) elaborates on the process, involving washing the grated meat with water to wring out the oil and discarding the pulp, and then boiling the milky substance over open fires fueled by burning the shells (p. 43).

supermarkets existed, because, they uh, they are lying to the people, so you can support them. I am surprised to see these industry's drinks are way up in the mountain [in Talamanca] and uh, [inhales sharply for dramatic effect] how they get all the way there! They find a way and go to the people that have been using their natural things all these years. But you know with the fancy presentation and looking nice and a pretty color, and they're ...spoiling these people, that, now even the people who are so far, they find them, and, and they are offering them these poisonous drinks. Especially these young mothers, maybe they are lazy to make some lemon juice, squeezing the lime, because there is a pack of powder, you know, because the market find a way inside their products to sell to the people that is influencing a way inside [deeper in the mountains] that was only depending on nature, now they are getting sick too. Just like the ones that is living outside [outside these remote communities in the upper Talamanca mountain range].

[Me] I heard about people suffering from illnesses that many say did not used to exist here before.

[E] Hmm. [agrees]. At first, it wasn't like that. What is the type of food that they are eating? What is *the way* they are eating? Too much refined...even in schools, they discover that there's too many children that are already with diabetes and blood pressure problems, because of what they are eating at snack hour. The snack hour is the little shop right there with all these poisonous foods and drinks.

More heatedly Miss Eliza elaborates about the collapse of local coconut oil production.

[E] Coconut oil, every house had it, everyone, everything coconut. Oil, milk in the food, then "they" [advocates for the use of industrially produced oil] say it's not good for cholesterol and something else, they say better to buy the oil in the shop and you feel all fancy [she performs rolling a shopping cart down the aisles, flippantly picking which items are desired] looking in the shop, the oil in the basket, it has pretty colors on the label, it's a nice color, the media is powerful! And now we use that store oil and people is getting sick. It's rancid!

[Me] I guess it must have also hurt family businesses that relied on making the oil?

[E] Yes, that too. They stopped making it. Before, every 15 days, we'd get together, cook, and grate lots of coconut.



Figure 3.2 A traditional coconut grater designed by Afro-Caribbean people to grate large amounts of coconut, here in preparation for a “rondón.”⁹⁵
Photograph taken by N. K. Ferenczi.

The local coconut economy was undermined by the introduction of industrialized foods and claims that the homemade oil is rancid and that store-bought alternatives are better. Once this was debunked a second imported value undermined the local market for coconut production. The expat community brought with them the ideology that cold-pressed oils are healthier than hot pressed oils.

Graham, an American farmer living near Puerto Viejo describes the recent history of Talamanca.

[G] This wasn't even a country! It was run by United Fruit. I mean it was *part* of Costa Rica, but no roads, and no...nothing. This was a company, run by a banana multinational company, the banana people, historically, so a lot of that has lingered on. You go towards Sixaola, all those little towns, they are banana

⁹⁵ A rondón is the local name for a Caribbean dish similar to the Jamaican “rundown” that is comprised of fish, coconut, green banana, breadfruit, and other ingredients.

workers. They still work, they make nothing. It's really a horrible life. They work, they get doused with chemicals, they're sprayed from airplanes, it's really... they have *nowhere* to be. Sometimes they have a little soccer field, like Paraíso has one, a little bit of social life...but most of them, if you drive that back road from Bribri to Sixaola you'll see them standing out on the road, their whole social life is on that asphalt road. It's just bleak. [...] A lot of the banana people are just tied in to the old ways, you work for the company, your life is the company.

The Sixaola river basin weaves its way through La Amistad International Park, carving the border between Costa Rica and Panama. Scattered villages flank its sides, among them Yorkin, Amubri and Cachabri, primarily Bribri communities but also Cabécar and occasionally Indigenous peoples from Panama.



Figure 3.3 Yorkin when arriving by river.
Photograph taken by N. K. Ferenczi

River management brings legal and social challenges for equitable water governance. An old railroad bridge connects both countries and the towns of Sixaola, Costa Rica and Guabito, Panama that flank the river. Graham describes the government's plan to relocate the people living along the river who are constantly being flooded out, losing homes and lives, a series of knee-jerk reactions in developing legislation.

[G] "Let's just make it illegal to live within half a kilometer of the river...and displace everyone." What are they going to do with five thousand people who don't know what else to do?

He cynically describes a small development near Paraíso with just over a hundred little houses peopled by families left without any resources, educational or employment opportunities. Two years after our interview (2015) twenty-five communities become isolated by floods in the Sixaola, Chirripó, and Sarapiquí rivers when one summer day in June sixty-five mm of rainfall fell in twenty-four hours, leaving many bridges, homes and property in 114 communities destroyed.

[G] This country, it's sad. The Central Valley makes the decisions. The Central Valley are Ticos, with their own...Latin Ticos with their own agendas, their own history. The Caribbean isn't part of their world. It's always the red-headed step child, so to speak...doesn't get the funding, doesn't get the schools...it's always promised, it doesn't happen. Like the free trade zones, for example, to stimulate foreign investment. They're all in the Central Valley. Why won't they put one in Limón? It makes sense, there are a lot of people to work. They don't do it in this province. They don't do it in Talamanca. They do it where their great grand kids are, where their history is. Funds aren't distributed equally so Talamanca gets left out. There's a historical prejudice against black people. When United Fruit pulled out the government passed a law that black people couldn't pass Cartago.

Graham states that the main reason Costa Rica is not developing the coast is because wealthy Tican families from the Central Valley joined up with North American corporations like the Marriott that are established on the Pacific Coast.

[G] "We went through the whole global economy crunch, so every tourist dollar counts. So, what you [strongly invested owners] really want is to keep people over there. You don't want to develop this area [the Caribbean coast] you want it to be *dangerous*, you want things *bad* here because you want tourist dollars over there."

He describes half built condos, their rebar spikes poking into the air on halted projects, frozen by the grinding halt of retirees moving to Costa Rica between 2008 and 2010. Now that the economy is recovering there is a need to lure tourists away from the Caribbean side.

[G] The Pacific side is *gringolandia*, you're either a retired gringo, traveler or you're a Tican. They often don't mix with each other.

He elaborates on the way Limón is constantly stigmatized to detour tourists from visiting the Caribbean side.

[G] In the eighties, you heard the same story as now. "There's crime and drugs-you know how these black people are! Go to the beach, go to the Pacific." I get the alert, so if something bad happens in the Caribbean there'll be a U.S. travel alert, don't go travel to the Caribbean side.

He gives the example of the Jairo Mora case. Jairo was murdered in Tortuguero National Park soon after I arrived in the field. He was protecting turtle eggs at night from illegal poaching. Theories circulated on the circumstances causing his death. Some blamed drug dealers coming from the south by boat, who refuel on the dark beaches where Jairo was watching over turtles. Some stated that he had been warned before, and that he took a risk. None of the other volunteers that night were murdered, only Jairo. According to Graham the government put out a travel alert to capitalize on the isolated case by once again drawing attention to "the dangerous Caribbean." He argued that there was no circumstance of generalized risk to the public, Jairo had been warned and knew the dangers he faced.

[G] "When things happen on the Pacific side they cover it up...U.S. embassy why would they be involved? U.S. corporations? It's no big surprise. They're all in bed. So, Caribbean gets no press or bad press."

He adds that despite the negative stigma Talamanca is starting to get more recognition because of the Internet and the stunning beaches that are attracting an increasing number of North Americans and Europeans.

A British local resident declares,

[K] Oh, they blame everything on the drug dealers! (She rolls her eyes, her voice raised and argumentative). It was the CIA! You

know that guy Paul Watson with that...organization, they protect the waters, like internationally, well he's offered thirty-five thousand dollars to catch whoever did this. Someone who is actually really doing something, who will expose Costa Rica with their fake greenness!

George, an Afro-Caribbean man, comments dryly,

[G] Jairo Mora. Jairo Mora is celebrated as a hero for taking care of turtles. What about our grandparents? What they did for this land? Their photos are not on a map. Jairo had been warned by drug dealers before, he got his hands dirty and got killed. The only wrong thing *we did* was take care of nature. Thirty years ago, this place was paradise. Then "progress" came, destroyed everything, wash our brains with Spanish, destroyed our bush medicine, built roads, brought drugs, hospital, and jail. In 1986 electricity came, in 1973 roads, and in 1987 phones. Killed all the jobs in Limón so no wonder there is crime. I was a congressman.

George spoke to the irony of a huge public outcry and vigils to honor Jairo, contrasting the relative invisibility of generations of environmental stewardship maintained by the Afro-Caribbean community.

[G] In 1973-our peace finished. Before they came, there was no theft, no drugs, we had our own bush medicine. Now, they built a hospital 5 km from here, and we can't use bush medicine. If someone gives bush medicine to a person and they die, you go to jail. My sister assisted births, now it's not legal. Everything we used to do is illegal. Stopped our bush medicine, stopped our English schools, they said it's not English-some people call it patois. It's strange for them that we speak three languages, so they call it "broken language" or "Creole."

[Me] What happened in 1973 that changed things?

[G] The Road was built. Star Valley. You used to go to Limón by train. We had a truck take chocolate to the river, would leave at 3 am to get there at 5:30, come from Star Valley. And if the sea was calm you could go by land. When they built that bridge all our peace ended. They brought a disease called *monilia*. At first, they wanted to plant sugarcane, and then it didn't work so they brought bananas. All those plantations you see was *our land*.

A local journalist proposed a different rationale for why the richest part of Costa Rica (in terms of minerals, natural reserves and marine reserves, and beaches) is also economically the poorest. A sustainable community does not contribute to the national

economy. The discussion took place around a kitchen table, my recorder sitting in the middle. Two journalists one, a Puerto Rican local, Joaquine, and the other, a local American, Amy, try to evoke the local context.

[J] It comes a time when you *need* the government to take responsibility about providing education, providing health, providing pension for the elder, and, also providing titles, *land titles*, so that people can have security to their land, about their land. People have to struggle here because the government didn't understand, and it wasn't a priority, because, uh there was *already the idea* that people should be supporters, supported people are people who are contributing to the *national economy*- whatever that means. Those are the people who have value and people here *lived their own sustainable livelihood*. So, it becomes a contradiction, because in human rights framework and standards *every* government in the world has the responsibility of providing services *for all of its people*, even those who are *self-sustaining*. *Still*, there isn't a high school in Puerto Viejo. They have to travel a *long way* to be able to go to a high school, we're *still fighting* for a high school in Puerto Viejo and this is 2013. Well, we've been working very hard on it, and *now*, the step that we need, is *one signature* by the municipality and it's taken it two years to provide the signature. And that's what I mean about the *lack of responsibility* about people's *rights*. Once we get that signature, the land [for the school] is already provided- it was donated by people here, and the money to construct the school is there.

Living sustainably has been a double-edged sword, on the one hand justifying the nation's neglect of support and infrastructure for Limón, and on the other hand state neglect is allowing for the usurping of Afro-Caribbean lands because land titles were never formally recognized. Joaquine continues,

[J] So what we are facing now in this richest natural part of Costa Rica that has been preserved by a population that is the poorest population in the country, also, is the pressure of corporate tourism that come and grab these resources. We have faced, only between the year 2000 and now, in these last thirteen years, we faced the threat of having this ocean become a place to extract oil by the Harkin company from Texas. To exploit oil here and also in the Indigenous reserve, and the government sold concessions to companies to do this, and the people reject the project of oil explorations because of the way it was going to damage everything here. About four years later came a project by a *sect*, the Maharishi, a sect in Portland Oregon. They wanted to come and create a charter city, in the Indigenous reserve here, by offering every family on the Indigenous reserve one thousand and two hundred dollars a

month just for doing what they do. In exchange, the sect would have autonomy, they would create their *own laws*, their own *coin*, their own... political and economic system outside of the system of Costa Rica, and they would provide the wealth to do that. You can imagine what they wanted in exchange, to have their own country!

[A] And the Bribri wouldn't have any say, they were also going to give them each a house. They would basically be just, be handing over their land and power.

[J] So again the people rejected that and said we can't have one state within another state. And that's not the way to solve the poverty of people by offering them money to give up their own autonomy, their own national autonomy as Indigenous people and so on. And later on, five years later came the project of *huge yacht marina*, a marina, yacht club that would do away with the beach in Puerto Viejo, where the barge is, and would create an immense yacht place for rich people to come and go around in their yacht and ruin the livelihood of the people and the beaches themselves.

[A] And probably tear down all the little arts and crafts stands and the little restaurants and all of that to put in big fancy ones.

[J] And people organized and rejected that. And *now* what we're facing *today* as you sit here, is the *need* for the population to organize themselves to be able to reject not every project that comes along and tries to do something here, which people have done here very successfully, but to reject the *huge* projects between the government and those corporations of tourism and for the extraction of minerals, because the highlands of the Talamanca, the mountains, have the highest levels of minerals- gold, copper, and one other, iron, I think, that have *made a commitment* with the Costa Rican government to help them change the laws so that they can come and take this away from the people. So, what we're facing *now*, is that our government has sided with the corporations, and after people have for two or three hundred years *preserved* this area, *then* it becomes the *big place* for extraction of minerals and for corporate tourism, and what is needed is to get the people out of here, because people resist that. And that's what we're facing today. But for me it's really sad, that you would get to a moment in history where people have *protected their livelihood, their culture, the natural environment*, and a way to survive *all-historical moments, the monilia, the impoverishment, the types of local tourism, the projects* that have come, and have been able to resist all of that... to continue living here and are now threatened to lose the titles of their land, to get them out of here so that corporations can have the land and the resources, that have been here, and have been developed by the people.

3.9. Configuring landscapes and worlds

Neocolonialism persists, evinced by plantations owned by giant multinationals monopolizing the landscape. Forced displacement threatens many Afro-Caribbean families on the coast from Cahuita to Manzanillo, where ancestral homesteads and small restaurants, *sodas*, and businesses that are located within fifty meters of the sea are in violation of the beachfront law that now declares it public area.⁹⁶ George comments,

[G] Having the fifty-meter public is not an issue. What's not fair is the way they want to impose it. With climate change there are people within fifty meters, who one hundred years ago were not within fifty meters."

The law is based on a static perception of the sea, whose shoreline extended out up to two hundred meters beyond the beaches today. The sea has been growing, hurling its waves farther and farther inland, today hiding beaches, docks and dwellings of the settlers (Palmer, 2005, p. 73). Joaquine states,

[J] 88% of the land is protected by some kind of reserve! Who do you think reserved it? The people. Governments *declared* them protected areas, because they were protected by people before governments established the decree. The establishment of the laws to protect the environment come after people have really protected and created it, *co-created* it, with the rest of nature that is here, so the credit has to be given to the people, and the credit has to be given to the government, insofar, as when they created the reserve they recognized that it has been the people who have lived here for more than a hundred and fifty years who protected these lands. So, *the main political issue is how* do you protect the environment today with global warming, with the deterioration of the environment, with the policies of many corporations about grabbing the last of the natural resources that are left in the world, how do you protect the environment, *while* protecting the historical rights of people

⁹⁶ The Costa Rican tourist institute (ICT) has declared four beachfronts, "tourist zones," between Tuba Creek and Manzanillo, with plans to extend boundaries to include most beach property in the area. Many are being forced off their homesteads on the coast from Cahuita to Manzanillo, particularly Afro-Caribbean people. Ancestral lands and small restaurants, *sodas*, and businesses that are located within fifty meters of the sea are in violation of the new beachfront law that now declares it public area. The law is based on a static perception of the sea. The beachfront law (*Zona Marítimo Terrestre* no. 6023 passed in 1977) declares the first fifty meters of beach land as public; no private ownership is recognized in this zone. The next 150 meters inland is under the supervision of the municipal government allowing concessions to be purchased on an annual basis (Palmer, 2005, p. 276).

who co-created the environment and who have protected it.
That is the *big challenge*.

3.10. Reconfiguring sustainable development in Costa Rica

Sustainable development is among the paradigms now guiding applied anthropological work, demanding close attention to what is implied by *sustainability* (Bozzoli, 2000). Maria Bozzoli politicizes the way this concept “sustainability” is used, for instance as part of a discourse, or tied to notions of economic growth. As an anthropologist with a long history of carrying out research and collaborating in projects with many Bribri communities, when asked to research and coordinate the culture sector of the Costa Rican National Strategy for sustainable development (ECODES) in the late 1980s, among her goals was to devise a way to interpolate culture into the strategy alongside and on equal footing with the other sectors included (economy, agriculture, health, industry, energy, marine resources and forestry) (Bozzoli, 2000, p. 275-6). A big challenge involved fitting culture into national strategies for sustainable development in an inclusive way, because of the absence of models for dealing with culture as “a sector among other sectors” without collapsing culture into the sum of institutions and programs officially identified as the “culture sector” (Bozzoli, 2000, p. 276). The approach used included describing the culture sector’s relation to conservation and sustainable development and tracking recent historical connections between development and the culture sector’s evolution.⁹⁷ Bozzoli addresses the need to configure culture around a new paradigm, connecting culture and habitat and the relationship between social ecologies and development, and factoring in the environmental crisis and need for a new worldview (p. 277).

The changes proposed by the strategy necessarily implied a cultural change. These changes involve eliminating patterns of waste and abuse of the habitat, enhancing patterns of resource use that guarantee social continuity, and stimulating innovation in ideas and customs to improve the quality of life.

⁹⁷ Bozzoli shows this with the example of extensive cattle ranching encouraged between 1960 and 1980 in Costa Rica, an environmentally devastating developmental model that created economic advantage only for a small wealthy elite of meat exporters (2000, p. 276). She argues that this unilineal evolutionary approach has directed developmental models in Costa Rica and, at the turn of the century, continued to do so (ibid).

Bozzoli acknowledges the need for the internalization of concepts like “sustainability” by the majority of citizens to render them meaningful. She furthers,

From the cultural standpoint, it seemed that the environmental crisis demanded a different ideology or worldview. Its premises would not necessarily be all new, but old and new elements had to be framed in the relationship between humans and the natural environment. The new elements could be taken from sociocultural systems best capable of responding to the environmental challenge; from environmental social movements; from specialists and knowledgeable people concerned with the problem; from the study of our Indigenous, peasant, and urban pasts. This study must identify sustainable traditions to be maintained, modified, or created so the new paradigm would be rooted in our own history. The science of ecology would be our guide; we would be cautious about any science that encouraged loss of resources (2000, p. 277).

The strategy was successful in contributing, along with other efforts in the country, to the shaping of a greater sense of responsibility towards and awareness of environmental issues.⁹⁸ Where challenges still exist is at the level of implementation, which Bozzoli broke down into twenty-two areas of restrictions and obstacles, such as bureaucratic procedures, “personal orientation in policy,” lack of implementation of legislation and so forth (2000, p. 279). Bozzoli’s observations, consistent with Levi-Strauss’ analysis of nature and culture, and ecology and economics, led her to conclude that in spite of mediating configurations bringing them closer together, (e.g. “ecological economics,” and “economical ecology”), ecology and economics remain diametrically opposed (ibid). The current neoclassical models of global economics impede the resolution of contradictions between the economy and ecology (ibid.).

Sitting opposite Teresa, a Tican anthropologist in the Archaeology Department at the University of San José, I inquire into the anthropological role in supporting a new and sustainable paradigm for thinking about people and plant relationships.

[Me] What do you think are some of the roles anthropologists can play in helping to establish what is a culturally sustainable way

⁹⁸ This observation is based on Maria Bozzoli’s monitoring of national resources since the 1960s (2000, p. 279). This research provides other examples where similar goals have been put in practice (e.g. Enrique and Miss Eliza’s educational projects to get people to think about seeds, plants, food and health in particular conceptual ways, to invigorate or reconfigure a cultural understanding of relationships between people and nature. The need to do this arises from a reality of corporate food regimes.

of factoring culture into the other dimensions of... ["Of development" she finishes my sentence thoughtfully.]

[T] One did it with hope. One sort of senses all the, the problems, and then sustainability was sort of a *way out* of this. But, we're just *hopeful* because all of a sudden, [corrects herself] *bueno*, well not *all of a sudden*, but what I call the industrial paradigm of development, now called *neoliberal*, neoliberal development, that's what we have, and that's what ...it's *against*, it seems to me, it is the contradiction of sustainable development. It doesn't agree with the principles for *sustaining nature*, for *profiting* from nature in a more sensible way, in a more reasonable way, not destroying it, not destroying it. [Big sigh] But, we are just the opposite, capitalism at its *worst*. It's not that I'm leftist, but it's just that these ideas on, on enterprise and making *money* and so on... You know, it's just, it's just another way of, of thinking of this relationship between man and nature. This neoliberal way of thinking is about exploiting nature as much as you can...and that's what we have [helpless laugh].

She leans back in her chair thoughtfully as we sit in her office, my recorder perched on a table near the cluttered desk. A saxophone plays in the distance, amidst the bustle of students beginning classes. Sighing, she continues:

[T] So, sustainability here, it's sort of *hidden*. It's *still here*, because we still have the ecological movement, we have NGOs that work for sustainable... with projects that are sustainable, and there is a *speech*, a way of talking about the country being, for the environment, but *really*, you probably saw that that's not true, that's not true. So really, it's a way of talking, and for some people, a way of behaving also, but they do have to fight all the time. They're constantly, you know, fighting against the government, and the firms and businesses...but we still *try*. We don't give up.

[Me] Part of the challenge for me, has been to write about Indigenous culture and traditions as they relate to nature-society relationships, without exoticizing-without an exotic western perception of what Indigenous culture... *should be*, without exoticizing the relationship between nature and society- and yet I see that there is a *very close* relationship... [she chimes in "it is."]

[T] It is, there is, but remember that at least here, Indigenous people go to our schools, to *national schools* and they have to deal with the people outside *their territories*. They have to sell their products, and, and as you said, the young people, well the mirror they have, it's, this other culture, it's not *theirs*- it's not... our, the western tradition- well I suppose sustainability is also western tradition, but it's much more recent than the capitalist

industrial tradition that...[rephrases] *what we have from the industrial revolution, to now, it's, the global economy is not a sustainable economy, it's not sustainable. Globalization is not the same as the economic ideology or paradigm that is sustaining globalization, but the one that is sustaining globalization is this neoliberal economy, the classical economy, but in its extreme version, not a moderate version of it. So, I don't know, [sigh] we are the ones that go out there and preach to the Indigenous people, and preach and preach, [imitates] "You should try to preserve this," "this is very nice," "this is very good" "this is nice for you," but...it, it... sometimes, it's just us, we're telling them that, and they are listening to other people from the outside that tell them different.*

Various non-governmental agencies, anthropologists, ethnobotanists and entrepreneurs see potential in invigorating Bribri culture by devising economic development initiatives that draw from traditional practices and provide income while allowing Bribri to remain on the reserve. As noted above this unfolding process has its awkward moments, like suggesting cultural products to market, or imagining the marketing of common household plant medicines used to treat common ailments that are known to most families. Commonly held knowledge complicates designations of intellectual property, as does the temporality involved in legitimizing processes. Teresa mentioned that the lengthy period of laboratory investigation at times outlives the healer who shared the knowledge. Such elements need to be considered in negotiations around intellectual property, specifically multi-generation compensation, or community-based compensation designs.

Don Ignaci

Don Ignaci is a remarkable Bribri man, his age difficult to guess as his limber body climbs up the slippery jungle trail to his house. His father is 113 years old. I chaperone a group of "global students" from the United States, an American youth group made up of inner city African American teenagers. I was asked to accompany the group and help with orientation and translation. At the top of the hill Don Ignaci stands beside a felled old-growth tree, *Indio Desnudo*, or, in English "naked Indian" (*Bursera simaruba*). He stops me as I prepare to sit and catch my breath. Ants. He elaborates that his son cut down the tree while he was away. He is upset by the impulsive act, explaining that his son was mistaken in thinking that this tree posed a threat to his home. His son was concerned that the tree might fall in a storm. The giggling group of sixteen-year-olds, incredulous of the mud in the jungle and regretting the inappropriate footwear

they brought to Talamanca, slowly make their way up the hill. One girl faints and is brought down to the house to wait. William, an Afro-Caribbean man who is our driver and a friend of Don Ignaci's looks at the tree. Empathetic with Don Ignaci's expression of grief, he avows, "This is a *very* mystical tree." He remembers out loud his father telling him about this tree when he was a boy. "Maybe one day I'll tell you," he says to me teasingly." The students join us at the top of the hill and Don Ignaci shuts his eyes and begins to sing a song in Bribri. The words are not explained, and the students whisper and giggle in the background. After the song, we continue walking. He brings us to his water source and he and William rehydrate themselves. The students are advised not to try the water. William boasts, "this is the cleanest water you ever taste, but you can't taste it because it too clean for your bodies, it might make you sick." Only William and Don Ignaci drink from the spring. Dusk starts to set in and Don Ignaci urges us along. We make our way down the hill.

Don Ignaci is concerned with the loss of daylight for the performance planned after the walk. There is no electricity in the room where the Bribri youth will perform a re-enactment of colonial incursion in Talamanca for the visiting students. In the shadows of the magic hour the Bribri youths perform. The performance begins with several girls weaving baskets and making traditional crafts. They are suddenly taken by the Spaniards who emerge from behind the curtain and are held captive. The heroic Bribri teenage boys enter representing brave Bribri warriors who respond to the kidnapping and defeat the Spanish soldiers, freeing the women. Together they celebrate with the traditional *sopilote* dance, holding hands in a circle and spinning around and around to simulate the vortex created by the vultures' dance. They have performed this play before several times. During one performance, the actors jokingly grabbed a Spanish family's daughter from the audience, holding her captive with the other women. Her parents were not impressed, commenting dryly in Spanish, "can't we just leave the colonial past behind us?"

3.11. Conclusion: Configurations of biodiversity and conservation

Costa Rica has a long history of employing ecotourism as a tool for conservation, and social as well as economic benefit (Seales & Stein, 2011, p. 1). Since the 1970s and 1980s the national park system has supported a highly successful ecotourism

industry that in 1994 became the country's biggest source of foreign capital, making both education and environment very politicized areas of economic and national life in the country (Blum, 2008, p. 36-7). While these accomplishments appear impressive they also often displace groups of people from their ancestral lands as a result of new environmental laws and to establish payments for environmental services (PES) programs and develop tourism.

Links connecting protected conservation areas and capitalism that have been examined elsewhere in research on "protected areas" that politicize relationships between conservation and capitalism, showing their historical connection (Brockington, Duffy & Igoe, 2008), and demonstrating how Indigenous economic participation is narrowly circumscribed within these articulated "Natures" (Büscher, 2014; West, 2005; West, Igoe & Brockington, 2006). Addressing configurations of nature has led to its further theorization into different *natures*. Büscher, Dressler, and Fletcher (2014, p. 15) discuss the paradoxical way neoliberal conservation "grabs green" locally in the name of environmental sustainability (citing Fairhead, Leach, and Scoones, 2012b, p. 237). The naturalization of *nature inc*, produces the notion that nature must be sold in order to save it (Büscher, 2014).⁹⁹ Neoliberalism here refers to Foucault's (2008, p. 260-71) way of perceiving, thinking and imagining, and a type of governmentality that intervenes on the level of the environment rather than through the more explicit internal subjugation of people (cited in Büscher, Dressler & Fletcher, 2014, p. 8), and a smokescreen of benevolence that actuates with reliance on free market policies that encourage privatization and commoditization (Büscher, Dressler & Fletcher, 2014, p. 6-7, in reference to Harvey, 2005). Büscher (2012) characterizes neoliberal conservation as "the paradoxical idea that capitalist markets are the answer to their own ecological contradictions" (p. 29). These ideas have been examined elsewhere, and the social, political and economic consequences of environmental conservation projects that tend to disregard relationships between social and physical environments and are characterized by displacement and dislocation from senses of place and landscapes (West, Igoe and Brockington, 2006). The more *liquid* nature becomes the more alienated people become from their ancestral landscapes.

⁹⁹ Büscher writes that the expansion techniques of capitalism in liquefying nature to further commodify it reflects an effort to "penetrate deeper into rather than merely across reality" (2014, p. 203).

The conceptual stratification of reality may throw light on how different strata interact, and whose ontologies are supported or undermined in these interactions. “Protection” is productive. The concept of “biodiversity conservation” is interpreted and deployed differently in different contexts. Although Costa Rica boasts a large percentage of land dedicated to parks and reserves, current approaches to conservation also alienate local Indigenous and Afro-Caribbean peoples, who continue to struggle to keep their homesteads and communities. Forced displacements, encroachment, fruit plantations, and the strict regulation of plant medicine (and, in the case of bush medicine, prohibition) all hinder healing practices, which are in continual negotiation. In the next chapter, I present narratives of emplacement that correspond to such displacements and introduce different conceptual spaces for understandings relationships among human and nonhuman beings. I locate a role for applied anthropology in broadening understandings of sustainability and methodological relativism, by bringing to light the ways concepts of nature are embedded in worldviews and become normative and woven into biodiversity governance. Approaches to “protection” configure the *social* in ecologies, and privilege certain ontologies that support neoclassical economic tactics, while undermining others.¹⁰⁰

Langwick also addresses participants’ concerns with the way cultural ideologies are being disregarded in sustainability initiatives.

The contemporary healers I met in Southeastern Tanzania are acutely aware of their relation to a modern notion of traditional medicine that is defined by medical science and health bureaucracies. They grapple with the fact that laboratory investigations into the medicinal value of plant, animal, and mineral substances draw distinctions between the natural and the social, making ahistorical assumptions about the boundaries between the material and immaterial, and invest in the separation of matter and spirit. Even as they become further entangled with modern science, healers remain unsympathetic to and are unconvinced by such clear divisions between the material and metaphysical. Rather through their work they expand, transform, refigure, and offer diverse and sophisticated alternatives to national and international articulations of traditional medicine (2011, p. 10).

¹⁰⁰ Similar notions relating to re-patterning people and plant relationships, and perceptions of sustainability and biodiversity were raised at the “Leaders in Conservation: Botanic Gardens and Biodiversity in the 21st Century” Conference in Montreal, Canada. In Canada, Höft reports that the Global Strategy for plant conservation (GSPC) is not managing to meet its targets in areas of public engagement and education, pointing to the need for greater involvement of social scientists.

The persistence of dualisms that separate nature and society in conservation policies in many ways alienate locals in Talamanca and systematically undermine their worldviews. Chapter four highlights the understandings of nature, food, and medicine that some healers and people working with plants in Talamanca are working to maintain and perpetuate ideologically. Their thoughtful contributions, innovations, and concerns speak to the theme of ideological deconstruction around plant medicine and the precariousness of trying to be a healer in Talamanca in the Anthropocene.

What does the conservation of traditional medicinal practices entail? Many participants suggested a paradigm shift in understandings of people-plant relationships and a more holistic understanding of “medicine”. Participants’ reflections on plant medicine offer insights to answer this complicated question, suggestions that entail a shift in understandings of efficacy and the axioms they might be anchored in. Their concerns and insights reflect efforts to challenge existing meanings and shape new ones. By engaging these questions and performing and propagating the ideological shifts they advocate, they challenge hegemony at its core, penetrating deeper into understandings underpinning epistemological and ontological reasonings around health and medicine.

Chapter 4.

Environmental destruction: urgency and compartmentalization

“The sovereign perspective of abstract reason is a product of the compounding of two dichotomies: between humanity and nature, and between modernity and tradition” (Ingold, 2000, p. 15).

The *Anthropocene* has become a buzzword in anthropology and environmental discourse since Paul Crutzen popularized it over a decade ago on the grounds that the environmental impact of the industrial revolution is having such a substantial global impact on the Earth’s ecosystems and geology that we have entered a new epoch. Plight is common in the Anthropocene as people all over the world struggle with deforestation, mining, offshore drilling and displacement resulting from large corporations trying to tap the remaining resources on Earth. Though the dating of the Anthropocene is debated, it begins somewhere between two centuries ago and the 1950s. The term *Anthropocene* recognizes relationships between physical and social environments and is cognizant of the damage humankind and, more specifically, global capitalism, are causing to the biodiversity of the Earth, linking “sediment with sentiment” to use the words of Latour.¹⁰¹ Whether or not the Anthropocene is a geologically valid term to isolate a new period, it is of significance from a social perspective, as people perceive this massive environmental impact and are increasingly aware of species extinction, climate change and of precarity. It is not surprising that there is a sentiment of desire among some people to deepen their relationship with the physical environment and re-think their relationships with plants. Ethnobotany classes, plant medicine walks, and plant ceremonies (around ayahuasca, cacao, iboga and so on) abound and North Americans are flocking to them, generating encounters around plants across epistemological borderlands.

Alertness to this new geological context also produces an affect of urgency, which Latour identifies as a significant ideological feature of the Anthropocene. Urgency drives many contemporary academic efforts towards sustainability and conservation,

¹⁰¹ Latour (2014) described Anthropocene as a useful term that integrates the historicity of the Earth, linking “sediment and sentiment.”

responding to the speed of extinction, which outpaces the speed of research and cataloguing. This throws light on how valuations are rendered, and whose ontologies are upheld in the way value is assigned. Many academic responses to urgency have tended towards greater summary, for example non-profit organizations, universities and botanical gardens building botanical inventories, and Red Lists struggling to keep track of which species are endangered. From a Western perspective concerned with extinction and endangered species, decontextualizing plant medicines in taxonomical approaches and plant inventories comprise integral and pragmatic responses to the rapid loss of biodiversity. Thus, valuations tend to center on individual actors and not the spaces in between, inevitably isolating their *being* and ignoring dynamic interactions. Don Miguel's visitors want to know what plant *does* what. They want a cure. Documenting plants and uses in this way obscures an understanding of the way medicine is potentiated through ecological relationships. Urgency involves "going fast," and this produces social, ideological and material consequences.

"*Going slow* is being colonized by the *go-fast economy*," to use the words of Michael Taussig.¹⁰² The conservation of *information* about plants is so entrenched in contemporary efforts in biodiversity conservation that it easily comes to stand for knowledge in other types of transmission. Julie Cruikshank points out how the language of traditional ecological knowledge often moves away from expressions of worldview and is increasingly intertwined in bureaucracies or other "tactical appropriations" (1998, p. 65). In this chapter participants share their concerns on how value is being produced and some of the ways this continues to colonize people-plant relationships. I discuss their innovations and educational efforts to bring about conceptual shifts that are needed to support sustainability and ontological inclusiveness. The narratives speak to the theme of emerging relationships between people and plants in the Anthropocene, and the nature and society relationships they actively constitute. The stories evoke the ways different people who work with plant medicines negotiate meaning to advocate on behalf of their relationships with plants and understandings of medicine. They provide different examples of the way people-plant relationships can become colonized through methodological design, generating an optic for understanding the way anthropological

¹⁰² Michael Taussig presented this idea in his conference paper presentation, "The re-enchantment of the sun in an age of global meltdown," presented on March 27th, 2013 in Vancouver, British Columbia.

methodologies can support ontological inclusiveness and the sustainability of traditional ecological knowledge and wisdom (TEKW) conservation. This involves de-centering plants when talking about plant medicines and enlivening the words “plant medicine” which, as nouns, give the impression of being inert. For this reason, I begin this chapter with a discussion of soil and becoming.

4.1. Soil and becoming

Talamanca is the original homeland of the Bribri and each Indigenous clan carries a name that identifies them as the guardian of a particular animal, plant, location, or quality (Palmer, Sánchez & Mayorga, 1991, p. 16).¹⁰³ Five centuries of Hispanic colonization have reduced the Indigenous population through conquest, miscegenation, disease and assimilation to barely 25, 000 individuals (Palmer, Sánchez & Mayorga, 1991, p. 57). The Bribri form the largest Indigenous community in Costa Rica, numbering 18,198 according to the National census in 2011 (INEC, 2012, p. 96), the majority of whom live on the Atlantic watershed in Talamanca, and to a lesser extent on the Pacific side (Bozzoli, 1975, p. 25). Indigenous people of the KéköLdi reserve in Talamanca number only two hundred people.

The Bribri know their history to be the history of all Indigenous people in North America and Latin America; all Indigenous people’s origins are traced to corn seeds brought by Sibö from suLa’kaska, which translates to “The Place of Destiny” (Palmer, Sánchez & Mayorga, 1991, p. 31).¹⁰⁴ The multiple colors of corn he brought, black, purple, yellow and white account for the variety of skin colors and tones (Palmer, Sánchez & Mayorga, 1991, p. 31). The seeds were transported to this world at night, which is why Indigenous people are born at night, and why the awapa chant and conduct curing ceremonies at night (ibid.). The names that Sibö gave to the different seeds are

¹⁰³ According to Maria Bozzoli’s interpretation of Bribri/Cabécar oral history and cosmology, all things found on Earth have supernatural “owners,” or “guardians” referred to as “wak” (Palmer, Sánchez & Mayorga, 1991, p. 15). It is difficult to translate *wak* as there is no English word that really encompasses its meaning.

¹⁰⁴ There are eight Indigenous groups in Costa Rica, the Guaymíes, Borucas, and Térrabas who live in the south of the country; the Bribris and Cabécares in Talamanca, the Maleku in the San Carlos area, the Zapatón and Quitirrisí communities in San José who trace their ancestry to the Huetares, and the descendents of the Chorotegas in Matambú in Guanacaste (Murillo & Segura, 2008, p. 1).

those identifying the different clans (ibid). White people come from a different source: the King of Leaf-cutter Ants, working together clearing the land around their nests and destroying all the vegetation in their path (Palmer, Sánchez & Mayorga, 1991, p. 36).

Where the leaf-cutter ants live, all the vegetation is gone because they cut every last leaf and take them back to their big nests. That's how the white man is. He works very hard, but he destroys Nature. He chops down all the trees to make big cities, and where he lives all the vegetation is gone. (Gloria Mayorga, cited in Palmer, Sánchez & Mayorga, 1991, p. 36).

To create soil and make it fertile Sibö used the flesh and blood of the tapir.¹⁰⁵ During the time period before Indigenous people existed, Sibö had created the sky and earth, but the earth was only comprised of rock. Sibö wanted to plant corn seeds and needed soil to germinate them (Palmer, Sánchez & Mayorga, 1991, p. 33). A portion of the story of the creation of earth goes as follows.¹⁰⁶

In a very distant place, on another planet, there lived a tapir family. They were a grandmother, a son, two daughters and a little granddaughter. Sibö asked a bat to fly to that place and suck the blood of the little girl-tapir, because he wanted to make an experiment. The bat did as he was beckoned, and when he returned to this world he defecated on the rocks. A few days later the first trees, tsinu, kita', klà and kapék, began to sprout from that place. These trees have a red sap that looks like blood, because they grew from the blood of the little girl-tapir.

Sibö realized that his experiment to make soil was working, so he sent the bat a second time to suck the blood of the little girl-tapir. The bat returned and defecated again on the rocks, and more trees grew.

Now Sibö knew how he could make soil. He sent the bat back a third time, but this time someone was waiting for him. It was the King of Pita, who was there to protect the little girl-tapir. Pita is the plant from which we take the fibers to make thread. The King of Pita transformed himself into a fine white thread that stretched across the door of the place where the little girl-tapir was sleeping. [...]

The story continues with the bat getting cut by the thread, and Sibö looking for someone else to continue his work, eventually himself going in person to speak with the girl's mother, to invite them to a party, so that the little girl can be cured and stand on her

¹⁰⁵ The tapir is a very respected animal to the Bribri. The tapir's sacrifice is acknowledged in food taboos, and many Indigenous people today do not consume its flesh, and if they do, it is done with great respect according to protocols established in the laws bestowed upon the people (Palmer, Sánchez & Mayorga, 1991, p. 32-3).

¹⁰⁶ As narrated by Juan Vargas (in Palmer, Sánchez & Mayorga, 1991, p. 33-4).

own (the girl could not walk because she weighed too much). The mother refuses, saying the girl is too heavy to carry, and that only her grandmother can lift her. Sibö promised to return with presents and persuaded the mother, and after much begging, eventually convinced the hesitant grandmother, who suspected trickery.

[...] When they arrived on the earth and got to the party, Sibö called the mother of the little girl-tapir, tátaLa, and he said,

“Cousin, come make chocolaté for us to drink.”

When the dancing started, Sibö invited the grandmother tapir to dance, but the grandmother said,

“No I can’t dance. The little girl weighs too much.”

But Sibö told her that she must dance for the little girl to get well, and he offered her a strap of mastate so she could tie the child on her back.

The dance began, with people forming a great circle. They danced and danced, one, two, three, four rounds, and taz! the mastate straps burst and the little girl-tapir fell to the ground, and hundreds of feet trampled her. The body of the little girl was mashed over the rocky earth. And that is how Sibö made the soil from the flesh and blood of the tapir. Now Sibö could plant his corn seeds. That is how he made the earth fertile for the people.

The celebration of the origin of earth is a feast involving death, whereby reciprocity is an important theme (Bozzoli, 1975, p. 7). Bozzoli advances an interpretation of the story as one of “transition from nature to culture” symbolized through blood: a bat sucked the Tapir’s blood and defecated *Bixa orellana L.*, a plant that represents blood in healing rituals, and the chocolaté served at the event is a beverage that symbolizes blood (ibid.). The story marks a transition from “raw blood (earth),” to “digested blood” (plants emerging from the bat’s feces), to “cooked blood” (the chocolaté shared at the feast) (ibid). Death animates nature; once the tapir was killed, people, plants and animals could sprout (ibid).

All that one sees in this world are images from the other world, thus what one sees as an animal in this world could be a fruit or vegetable in the other world. In the language spoken during rituals certain names of these fruits and vegetables are used to refer to mythical beings and certain animals (Murillo & Segura, 2008, p. 23). Things of this world are like “shadows” of things that originate on another plane of reality, for example venomous snakes are Shula’kma’s arrows, Sérke is the wind and guardian of

the animals, the Caribbean Sea is a woman named MnyLtni whom Sibö transformed into the sea, the tapir is Sibö's cousin, and the stones, *siá*, used by awapa are Sibö's sister (Palmer, Sánchez and Mayorga, 1991, p. 31). During death rites those who bury the dead, *óköm* (pl. *óköpa*), meaning "one who handles *ó*" (translated as axe or as blood), handle axes, a symbol that people are trees and the dead are dead trees (Bozzoli, 1975, p. 5).¹⁰⁷ The complexity of relationships connecting all beings: mythical beings, human beings, animals, insects, birds, plants, trees, rocks, and bodies of water reflect the incommensurability of describing people, plants and animals as discrete categories, or even thinking of them as 'beings' rather than 'becomings.' People are trees and are also characterized as food; clans are seeds.



Figure 4.1 Visting an awá on the Bribri reserve at a traditional u-suré.
Photograph taken by S. Ouellette

¹⁰⁷ For an elaborate explanation see Maria Bozzoli's dissertation (1975). *Óköpa* are also considered as specialists in handling axes because they build structures for placing the dead, and the roofs of the sepulchers (Bozzoli, 1975, p. 5).

The KéköLdi reserve is named after the *KéköL* tree. *Di* means river or water in Bribri.¹⁰⁸ Rosa explains,

[R] "It is a sacred and very mysterious tree. No one can see it. One day it can be there, next day it is gone. Elders say awá cut it and made their cane out of it to cure diseases. Nature revealed things to elders more than now, they could see things, achieved...mysterious things, they could *see things* that we can't see today, unexplainable things." She jokes, "but now there's no need for a staff [KéköL], now they take the bus."

[Me] "Are there still awapa?"

We are sitting at her kitchen table, cats scurrying in and out of the doorway.

[R] Not *real* awá. Awá begin learning at eight years old, they can't be more than fifteen to be able to *see*- because you are younger, the mind is more open. They can't have an intimate relationship, you need to be fully immersed in the tradition. Now the youths are interested in dating, cell phones, they don't want to make those sacrifices. Awá here start learning in their forties, so they aren't *really* awá, they started too late. Older people can't learn all the details. For each illness, there is a different song, and you can't make one mistake with the words or it won't work. The songs are very profound, mysterious. The awapa know, they are maestros, *Bikákla*, they conduct ceremonies (funerals, births) and organize parties. They are like us, they can talk about history, but sometimes they make mistakes with the words of the songs. If they don't know the songs, they can't hear the *pedritas* speak.

An awá cures via special songs, tailored to distinct ailments, each having its own song taught by *Sibö*. The awá's song is envisioned as a bird that travels to converse with the spirit of the illness (Murillo & Segura, 2008, p. 4). Medicinal plants and lianas (*bejucos*), sacred curing stones called *Siã* or *Siö*, balsa wood (*Ochroma Pyramidale*), and animal skins and bones are also used as part of healing (Palmer, Sánchez & Mayorga, 1992, p. 55).¹⁰⁹

¹⁰⁸ Palmer, Sánchez and Mayorga (1991) write that the spring from where the KéköLdi River originates is home to some of these trees, from which great awapa made their ceremonial staffs also called KéköL, which only they are allowed to touch (p. 28.). The tree is *kèikar*, meaning "untouchable" (ibid.).

¹⁰⁹ An awá has an acute knowledge of the manifestations of the *dueños* (owners or guardians) of each illness, and the skills necessary to return them to their places of origin, below where the sun rises (Murillo & Segura, 2008, p. 4). A song can last two, four or eight nights, depending on the

[R] An awá will not touch you, will not examine you. He will go see gods and they will tell him. The songs must be sung with perfection and the awá must be able to hear the *pedritas'* messages. Every illness has an origin in the spiritual realm. Bukulú is a spiritual being that is the origin of accidents, misfortune, or diseases that cause sudden death. *Casa de los pajaritos* [house of birds] sending darts (she gestures blowing a dart).

She points to a bag of corn on the floor.

[R] Some might see this bag and say it's inert, something that has no life. For us it is not. If this bag is here five, six days and a person opens it, well they might receive a dart, and suddenly get sick and even die- have a cardiac problem! Or, if they are sick for two, three days, we say he missed his shot.

She goes on to explain the protocol to avoid this risk, which is to poke a bag that has been sitting around for several days with a stick, not with your hands. If it has been more than twenty days the protocol is not necessary, the spirit would not still be in there after that much time.

[R] The awá know *how* to speak with *Sibö* in the language of the gods, and *Sibö* listens. When *dios* [God] created the world, he transformed a baby stone and then started to think about making changes. It was a world where spiritual beings exist, but do not think. But God is different. God thinks, thinks about changing the planet, using el papa, (awá) to heal beings. It was an experiment within himself, to see how human life should be created, managed. Dios can change forms, can transform into anything, can transform into a little *pedra*, *siã*.

She tries to evoke a sense of the relationship between the stone, *Sibökomo*, *Sibö* and the awá:

[R] *La piedra habla y el lo dice.* [the stone speaks, and he tells it]

La pedrita pensa y el executa [the little stone thinks, he performs/executes the action]

La pedrita piensa, y el papa habla [the little stone thinks, and the papa (awá) speaks]

gravity of the illness, but most often takes place during a period of four nights (ibid.). Any mistakes can have lethal consequences.

Rosa tells me how her uncle had several *pedritas*, fondly referring to the little *pedras*. Several of her family members were awapa.

[R] *Pedritas* are mysterious. Sometimes they disappear and reappear.

She gets a small piece of *Kwa* [*ortiga* in Spanish, stinging nettle in English].

[R] This one really stings. He would put this one in front of his bag in the house, to keep the stones from wandering off. But sometimes they would just be gone, only to reappear some other time.

The *Sĩã'tãmĩ* are responsible for taking care of the curing stones, which are kept in a small cotton bag enclosed in a basket to prevent them from escaping and transforming themselves into entities deadly to humans: a jaguar, a hawk messenger bringing plagues, or a water tiger (Murillo & Segura, 2008, p. 6). The few remaining clan members continue to guard the *pedritas* *siã* in *Káspaspa* (*ibid.*).

Maintaining contexts for traditional apprenticeships is also challenged by pressures to find work off the reserve. To become *awá* takes over a decade and is only available to particular clans. She explained that those who could follow apprenticeships have other needs and desires, such as finding employment, going to school, and dating. Going to school can involve hours of walking and crossing more than one river and after school there is no energy left to apprentice. "*Un mundo vacío*," [an empty world], she holds an empty vase upside down. Her eyes water over.

[R] They don't want to know their roots, such beautiful things that are being lost. If they want, it is possible to get it back. If they see a foreigner interested this will help generate interest. Who in this world wants to be sick? We need *awapa* to help, for life to be tolerable. But if we lose *awapa*, there's no one left to help. God [*Sibö*] won't help us. It is the *awá* who does this work. There is so much inculcation of another way of seeing things that Bribri are turning away from their culture.

She also shared the struggles she faces fighting encroachment and pollution from agrochemicals used on banana plantations contaminating nearby land and water. Rosa identified education and health as key areas that are undermining Bribri ways of knowing the world.

[R] Our knowledge needs to be transmitted how they *are*. *No resumido* [not summarized]. *Si es resumido no va a entender*. [If our knowledge is summarized they won't understand.] It can't be invented things- our knowledge must be taught by a teacher who respects how things *are*.



Figure 4.2. A typical pulperia store front on the Bribri reserve, photographed in 2013.

Photograph taken by N.K. Ferenczi, 2013.

4.2. Emergent medicines, emergent natures



Figure 4.3 An example of an average bus providing transportation on the Bribri Reserve

Photograph taken by N. K. Ferenczi

While journeying in the old school buses transporting mainly Bribri people around the Indigenous reserve, small wooden signs advertising medicinal plant walks and cacao tours stand uncertainly by the roadside. They nuance the existence of a Bribri ecotourism around medicinal plants and the cottage industry production of plant medicines that emerges in pockets but is not very visible. They share a landscape with other signs like the one illustrated on the previous page, “I love Aspirin” [“me” (heart) “Aspirina”] and “I love Alka-Seltzer,” at the entrances of *pulperías* (small convenience-stores), reflecting the ideological landscape, one cloaked in ambiguity and transition in ways of thinking about food and medicine. The signs participate in a broader project to reconstitute what medicine *means*. In other instances, constitutions of “medicine” are more explicit. While sitting at a bank in Puerto Viejo a commercial appears on the television suspended in the corner of the room. It features a “medicine cabinet.” The commercial is not advertising a particular pharmaceutical product, but the structure of a medicine cabinet itself. It explains what a medicine cabinet *is*, and what should be found

inside of it. Bottles of brightly colored pills are shown lining the little shelves, in a literal attempt to promoting a new concept of “medicine” where an earlier one exists.

Medicines are usually prepared by boiling them into teas. Don Miguel and Anna both instruct me to boil the medicine until it reaches a certain color. The healers I spoke with sometimes gave an approximate time frame to know when the medicine is ready, such as ten minutes for *cuculmeca*, but color was often given as a better indicator of readiness. The *cuculmeca* tea is boiled until it takes on a deep red color. Ordinary illnesses like a cold, fever or intestinal worms are treated by plant medicines widely known among the elder generation in most families. A more specialized type of curing is needed for illnesses caused by witchcraft and by the evil eye. For this type of curing an *awá* is needed.



Figure 4.4 Plant medicines produced by Indigenous women and sold in a church in San José

Photograph taken by N. K. Ferenczi

“Adelgazar.” “Tranquilizante.”

The small plastic bottles containing tinctures have their functions neatly printed: “To slim down,” “relaxant.” Old plastic Coca Cola bottles and baby food jars are neatly

arranged on Doña Eugenia's little table at the market, filled with tinctures, shampoos, salves, insect repellents and creams. An Indigenous woman's group located near San José produce the plant medicine products, which are then sold in the capital city. A local Tican ethnobotanist helped to organize the project as part of his efforts to revitalize Indigenous cultural traditions.

Western descriptors for plants and "superfoods," such as "high in antioxidants" or as effective "weight loss" medicine are emerging vocabularies that are used to describe their products. Tinctures, capsules, and tea bags instantiate some of the shifting structures of plant medicines that also shift sensorial experiences involved in preparing and ingesting medicine. The translations and transformations are more in line with Euro-American ideas on how medicine should look, and how it should taste, or rather, how it should not taste.¹¹⁰ Taste is in some instances eliminated through capsule use, avoiding unfavorable bitter flavors and stains left on teeth, removing the tongue's role in signaling to the body how to optimally digest and assimilate the ingested medicine.

Producers of plant medicine in some instances contest the decontextualization of medicine even as they adjust to Western ideas of legitimacy and function.

[DM] Matar. Matar. Matar. [Kill. Kill. Kill.] Kills everything.

Don Miguel fumed as he described current Bribri perceptions of medicine and legitimacy.

[DM] The Indigenous now believe in Western medicine, they get told that in school, that this is "the medicine." Even the Indigenous, now, think it is more valid. Western medicine is killing Indigenous culture.

In spite of his assertion Don Miguel seemed to be actively trying to generate a more profound understanding of what constitutes medicine. His concern that the Bribri are being indoctrinated into new understandings of food and medicine is one that connects more broadly to an acknowledgement of a fundamental shift in understandings of people and plant relationships, expressed in laws restricting traditional practices,

¹¹⁰ Stacy Langwick's research similarly observes the way the African healers she conducted research among recast their medicine owing to biomedical concerns (2011, p.6).

prohibiting bush medicine, home births, and the practice of midwifery.¹¹¹ Maintaining people-plant relationships is increasingly political. Industrial, tourist and urban development over the past couple of decades is causing the disappearance of many species and this is experienced alongside a health discourse that delegitimizes the curative value of traditional medicine.

Don Miguel scoffs at ideologies of so-called “modern medicine,” mainly referring to pharmaceuticals. One day I entered his clinic and instead of his usual boisterous welcoming, he remained seated at his desk, blankly staring at a local newspaper. Performing a mixture of stunned skepticism and sarcasm, he asked me why the Canadian government doesn’t like woman.

[DM] Here in Costa Rica we love our women. We don’t want them to die. “Yasmina birth control pills kill 28 women in Canada,” he reads the headline. He shakes his head sadly continuing, we have herbs for all of that. Why should women do everything? They already carry the baby and give birth, so the man should take responsibility for the contraceptives.

He describes his own chivalry with his wife, his participation in cooking and his behavior when guests visit, inviting his wife to sit and speak with them while he gets the food and drinks. He says that when his wife doesn’t want to get pregnant, he takes herbs as a contraceptive until she tells him that she is ready again.¹¹²

¹¹¹ Participants also pointed out that there is less regulation of Indigenous healers selling plant medicine than Afro-Caribbean bush doctors, as a result of Indigenous rights discourse.

¹¹² His description of gender roles resounded with another Bribri botánico. Juan, whom I interviewed on a long walk to his brother’s u-suré, explained that Bribri boys and girls are encouraged to learn all tasks (e.g. cleaning, cooking, harvesting, hunting, and so on) so that if a wife or husband became ill the other is able to take care of what needs to be done. These values are also challenged by alcoholism and other factors. During the time of this research domestic violence in one village reached such an extreme that some local women chased the male abusers out of town with two-by-four pieces of wood.



Figure 4.5. Participant harvesting cacao.

Photograph taken by N. K. Ferenczi

4.3. What is a seed?

Anna

[A] "This is our supermarket and our pharmacy."

Anna, a Cabécar woman, gestures to the trees and lianas surrounding us.

[A] "In an Indigenous *finca* there is *everything*. Everything you need. It's like when you go to a supermarket, where you can find everything. If you want medicine, you'll find it there."

She explains that they do not only grow cacao, or bananas, and that everything is planted together.

[A] And another thing, we don't cut trees. We follow our heritage of our ancestors, living with nature, loving nature just like you would a person. Everything is seen as equal. We take care of and respect nature because this is our heritage that our grandparents transmitted to us. Take care of nature, take care of the relationship that we can have with nature, and take care of the relationship that I have with you as well. It's like a

mandate we live, to be able to continue enjoying everything that Sibö left us.

I ask her what the word “culture” means to her.

[A] Culture, is something that is *vital*.

She goes on to describe culture as enacted and “full of life,” and as embodied in daily actions.¹¹³ With one swift machete blow, “crack!” the cacao pod’s white fleshy placenta is exposed.

[A] We come from a seed, right?

She points to a separate patch of cacao trees, grafted to cope with the monilia fungus that is attacking them.¹¹⁴

[A] *Estos son injertado*. [These trees are grafted].

She pauses to let the full weight of her statement take effect.

[A] For us, all of life comes from a seed. Not *this* way. (She gestures to the grafted cacao branches). So, we are just trying this technique in this small section to see how it works. But, like everything it’s an experiment, learning every day new things.

Uncertainty washes over her face, but is followed by a shrug, as though to say one must adapt to current circumstances, even when meanings collide. Sometimes survival involves practices that uphold multiple incommensurable ontologies. Grafting trees is an example of this. Cacao is a particularly challenging actor to yield to such ontogenesis.

¹¹³ This definition of culture resonates with Ingold’s description of skills as embodied, and culture as transmitted in embodied movements (2000, p. 5).

¹¹⁴ Participants in this research, in particular Afro-Caribbean people, say monilia was intentionally introduced to cripple the thriving Afro-Caribbean cacao businesses and free up laborers to work on the banana plantations.



Figure 4.6. Cacao branch in traditional basket.
Photograph taken by N. K. Ferenczi

Tsuru' is the Bribri and Cabécar word for cacao and is the only variety of cacao that is cultivated. Tsuru' is given an elevated status because she was the only one out of four sisters (encompassing other varieties of cacao trees-Skuálöm, Wëröm, and Solo') who welcomed Sibö when he was disguised as a homeless man asking for a place to sleep and food to eat. The three other sisters did not extend any hospitality. For this reason, they remain un-remarked in the Talamanca mountains.

[A] Tsuru' gave Sibö a hammock and food for the night. The following morning, she saw a beautiful radiant being who did not look like the person she looked after the night before. Sibö shared his vision of creation with her, to establish and organize everything on earth- trees, rivers, everything that is here. He needed someone to help him, to be his right hand, someone to represent the Indigenous women of the earth. Women are the *protagonists* in our culture.

She continues to explain how descent is matrilineal and that only women prepare the chocolaté for special ceremonies like weddings and funerals.

[A] It is for this reason- the origin of this respect and value that we give to cacao, that we have to take care of our culture. We have to transmit to our children our culture and all that Sibö has given us.

A few weeks earlier I had the opportunity to sit with several members of an Indigenous women's group that Anna works with.¹¹⁵

[I] Sibö, Tierra Madre [Mother Earth]. This is our identity.

Isabella, the Bribri director of the group, emphatically holds up a cup of chocolaté, processed and brewed from their own cacao trees and prepared for us as I sat down to our interview.

[I] We are a matrilineal clan, women maintain the culture, and women are the *dueñas* [guardians] of the land and animals. Only a woman can make chocolaté.

¹¹⁵ The women formed a group after coming together in response to a massive earthquake in the early 1990s that left many isolated villages in need of emergency supplies, orchestrating provisions for many communities on the reserve. Their leadership at this time of crisis was so successful in uniting communities that they continue to go to different villages to help families, encourage cultural practices, and to specifically address climate change concerns. Several Indigenous women's groups have formed associations to support and affirm women's participation economically, socially and politically in their communities, by starting businesses and producing products for sale (Dubois, 2002, p. 11).

She accentuates that cacao is vital to their identity and goes on to express a concern over a future without anyone apprenticing to become a master of cacao ceremonies.

[I] It is a five-year apprenticeship to become *Tsuru'oköm*." [A master of cacao ceremonies.] This formation is only available to certain clans.

Cacao production is one of several projects designed by Bribri and Cabécar women in collaboration with local institutions to develop Indigenous women's economic participation and strengthen cultural identity and traditional practices.



Figure 4.7. A table featuring the products produced by the Indigenous woman's group.

Photograph taken by N.K. Ferenczi, 2013

Félix

[F] The forests in Latin America are disappearing because people don't value them. People and society blames logging, but it's not that. That's a lie. Latin America needs to value everything that is in the forest- timber, medicines, food- and transform these into benefits for the people who live in the forest. Because if people don't perceive its benefits they will eliminate the forest

to have agriculture. My strategy of conservation is such that the forest is a productive system.

Félix, a Tican researcher on forest management, elaborates on the challenges he faces trying to develop economic production around forest products (plant medicines, insecticides, natural coloring) to companies in Europe and North America. He tells me during an interview how he and his collaborators tried to negotiate an agreement to export *Quassia Amara* (commonly known as *hombre grande*), sustainably produced by Indigenous people in Costa Rica, to a German company they work with. The company refused, stating that they were indifferent to the source of the *Quassia* they are commercializing. He proposed supplying it for them by means of a sustainable model for production that involved Indigenous communities, giving the company the opportunity to market *Quassia* that is of a higher quality and sustainably produced by Bribri and Cabécar people on Talamanca soil. The company responded that they were only interested in the raw material. Any increase in price would result in their procurement of the raw material from somewhere else.

[F] In Costa Rica, there is very little business in medicinal plants. Ideas around legitimate medicine have become so inculcated through public health discourse that there is very little marketing of the vast medicinal plants available.

Eugenio

Félix's comments resonated with those of another participant, Eugenio, a Tican ethnobotanist and university professor. He described Talamanca as "a disaster" in terms of knowledge conservation and lamented the loss of culture and TEKW after having lived there for thirty years. Eugenio started a small business in medicinal plants and works with local Indigenous groups teaching about plant medicine and trying to support the cottage industry production of plant medicine in Indigenous communities. His concerns materialized in projects designed to revitalize traditional knowledge about the uses of medicinal plants. He explained that the majority of the Indigenous people in Costa Rica know very little about medicinal plants (referring in particular to younger generations). He described classroom experiences with students wherein most students could recognize a plant, although few could remember its name and even fewer knew what ailment it was used to treat and how to prepare the medicine.

[E] I myself have the capacity to do like the Indigenous now, to teach the tourists about the plants and where did I learn about medicinal plants? From the Indigenous people in the 1960s. (*He answers his own question*).

His experiences learning from Indigenous people in Costa Rica extended to the 1960s, a time where he asserts that people were far more knowledgeable of medicinal plants then among subsequent generations.

[E] The process in Costa Rica starts roughly in the 60s and 70s, what college did, doesn't serve the Indigenous people. Those that it serves are those from the outside. This is anthropological.

He refers to how even his brother will not allow him to give his mother medicinal plants because he sees them as inefficacious.

[E] Imagine this process of acculturation that these people in this country have lived.

He scoffs at how "advantageous" healthcare and education have been, how in the development process culture is not considered, nor supported. He describes the challenges he faces trying to do business with Europe and North America, explaining:

[E] In Central America there is very little business in medicinal plants. Poorer countries have more commerce in medicinal plants. Why doesn't Costa Rica have as much? Because it is a *less poor country*. It is the process of education that we have that is the big problem.

Miss Hilda

[MH] How are we going to talk about bush medicine when it doesn't grow on the roadsides no more? There is nothing to show you, so nothing to talk about.

Miss Hilda, an Afro-Caribbean grandmother and a midwife renown for her knowledge of plant medicine, ended the interview before it began. To discuss plant medicine, one needs the context at hand. She delivered a large portion of the community and is today impeded by public health regulations that make midwifery and bush medicine illegal. The reasoning behind her silence speaks volumes and resonates with Anna's definition of culture as "vital" and carried forward in embodied actions working with plants on the land. There is no point to the theoretical discussion of plant medicine, to have a contextualized discussion one needs the context. Roadsides used

to be common places to see people collecting plant medicine. Several residents point out how much this practice has diminished in recent decades, changes also noted elsewhere.¹¹⁶

Henry

“Slam!” A domino is thrown down on the table with a victorious thrust. Henry rises, takes a small bow and dances a victory dance, boasting to the bantering audience. He returns to his seat, grabbing the chalk to update the score kept on the table. The game is an entertaining performance. Fists pound, dominoes clink and men berate each other jokingly. Henry leans back in his chair and tells me about how it was before, thirty years ago, before the road along the coast and the Star Valley Bridge were built.

[H] I used to catch lobster right here.

He points to his driveway, explaining that he had to pave it because of the stench from the sewage resulting from the growth of the town and the pressures this has put on septic systems.

[H] The ocean is coming in more from there.

He points to the Caribbean Sea across the two-lane street.

[H] And the Indigenous reserve line came lower from there, pointing to the mountains behind us. Ain't nowhere to go except there, he points to the cemetery.¹¹⁷

The expanding sea on one side of his home and the expanded Bribri Reserve on the other side is squeezing out the space in-between. He describes it as a death sentence. Talamanca is a “protected” area, where industrial development (the extraction of minerals, off-shore drilling), corporate tourist development and beachfront laws are shaping the landscape in new ways.

¹¹⁶ See for example Osseo-Asare (2014, p. 33).

¹¹⁷ The KéköLdi reserve boundary line has been retraced a few times in recent decades, and because the reserve was mapped out aerially, it was done without recognition of the well-established cacao farms, mainly belonging to Afro-Caribbean farmers.¹¹⁷

Miss Eliza

When I asked Miss Eliza, an Afro-Caribbean mother and bush medicine doctor, about the plant medicine she makes, she proudly showed me her restaurant menu, featuring a list of medicinal juices and teas. The ingredients are listed alongside the ailments they are used to treat. She learned these recipes from her grandparents, and her restaurant, the first organic, vegetarian restaurant in the area, provides a context for her to share her knowledge through workshops, guest lectures, and through volunteer programs. As I flip through the pages of her guestbook I see that she is visited by people from around the world. I read the appreciative words of a doctor from South Africa. The volunteer work is organized on her website. She tells me her next step is to set up a sanitarium to offer closer therapeutic attention.

Miss Eliza tells me about the workshops and events she organizes to teach people about medicine, a pedagogical approach that involves reconstituting people and plant relationship against a backdrop of industrial food production.

[E] The idea is to let people keep in, in that line, but in a ... it's not like, when you say "medicine" many people say "oh (no) medicine," [implying something that tastes nasty] but medicine is what you put in your food, the sweet pepper and the garlic and the onion, all those *are medicine* to *prevent* you from getting sick. But, if you are sick, then you make a specific syrup from it. But, if you put it in your daily food, you are already preventing from virus, infection, allergies, and other things. Too much refined food is available, and junk food, so we have to stop that now. [...] We have the farm, and we are working on cooking class to *teach how* to prepare...cultural food, we have a farm that is producing, and we do tours on the farm. So, there you get to learn the history and we do workshops and teach about how to make the home remedies and everything. So, we are just open for people who want to support, to keep up the farm, especially because we have to eat from the ground. You know? We don't want to depend on the industries, and there's a lot of things to keep up and don't let the plants lose the strength.

Miss Eliza studied with a herbalist from San José to learn more about dosage, something that was not emphasized in the oral transmission of bush medicine knowledge passed on to her from her parents and grandparents, who were bush medicine doctors.

[E] When I started using them [plant medicines] it worked for me, but it's important to know what amount and that's why I went to school, to get information about how much. I went to herbalist school too, there I learn dosage...how much to put. I follow a line from the past, but with some (she makes a face) new things. They followed their instincts. They studied nature so much. They didn't read and write, but they studied the clouds to know if it will rain, the birds fly one way they know something is coming. Dosage is important to learn, sometimes taking too much and it's toxic, sometimes taking too little does nothing. At herbal school I verified our knowledge, and everything was true. Ancestors knew, but it's good to check with science to know exact amounts. So, once more we prove that the home remedies and the plants, the herbs, they have healing properties in them and basically they are used for prevention and your food also supposed to be for prevention, but also if you are sick it depends on your diet, you can get healed, or you can regenerate your organs also, if your diet is just organic, natural, sustainable, using the skins, and the leaf, and the seeds of many of the, whether nuts or grains or vegetables. So, it's important to know the dosage, and that is where I respect science. Science is supposed to respect the principles and knowledge from the people who didn't go to school, because we have the practical part. They have the theory, so theory and practical can meet together and work together.

I ask her about the Ayurvedic medicine in branded packages on display in her restaurant that stand in contrast to the live medicinal juices advertised on the menu.

[E] We do the combination because lots of people know about the Ayurvedic and they use it, and it's like ah the scientific, and herbs, and we are just the traditional, and so it's a good combination-that is scientific and ours is just practical.

Miss Eliza explained that the humoral approach to the body in Ayurveda made sense to her and that this was knowledge not known to her ancestors, who did not differentiate between different types of body constitutions (hot/cold, wet/dry). She integrated these non-standardizing ways of understanding to the body in her practice.¹¹⁸

Miss Eliza described some of the challenges she faces, such as requiring a permit.

¹¹⁸ Anderson (2016) also notes in his research among the Yucatec Maya Indigenous that theories around healing are influenced by Renaissance Spanish approaches to the body.

[E] Let them come, I'm not hiding. It's true what they said. (That you can go to jail for making bush medicine).

She smacked the table in five places to indicate the various payments she must make to deal with the bureaucracy around plant medicine.

[E] Now it's all about money.

It is not with bitterness or cynicism that she emphasized the way capitalism has emerged, but with an unshakeable faith that "God will provide."

[E] I just am, in the moment, sharing what I know, transmitting knowledge, staying at the family level. Some say I should make tea bags for export...who knows the future? I don't sell at the market. I use my restaurant. And I give away whatever is left over to schools, other families and the senior's residence.

Enrique

The Loroco flower blooms at night, a delicate small bloom embedded in a tangled web of vines. Its fibrous petals give it a soft appearance. The rows of Loroco vines on Enrique's farm honor his mother, who brought the seeds to him after over a decade of their separation during the Salvadoran civil war, a war that brought him to Talamanca. "Plant these seeds and care for them so they produce," she had instructed him. We collect the Loroco blooms as day turns to night, ducking through the dense rows of vines. Darkness quickly sets in and he sends me to the house to get a flashlight. Under the light he marvels, "*mira las fibras*" [look at those fibers]. He handles the Loroco delicately and with great respect.

Earlier that day he showed us Loroco seeds, beaming proudly while holding them out for us to admire. The seeds are surprisingly long for such a tiny bloom. We enter his seed bank after humbly asking "con permiso" [with permission] before stepping over the threshold. The words are uttered as a show of reverence, a protocol that resonates with his emphasis on paradigm, on *the way* we know seeds, the way we regard their livelihood.

A display counter sits near the door showcasing an impressive variety of colorful seeds. Enrique stands behind it as he articulates his project for the video camera and shows us various seeds, expectantly awaiting our nods of approval and impressed

utterances, merited reactions for the astonishing variety of seeds and wide array of colors.

[E] Seeds, to me, are a great mystery. He holds his hand to his chest. We are also a mystery, we just don't realize it.

As he speaks to us in Spanish he lovingly runs his fingers through the seeds in a wooden bowl.

[E] Within them is the mystery of the tree, from the roots to the branches, to the flowers and later the fruits, and then returns to the seed, a process that is in continual movement, *giving life* to human beings. This energy that they receive from the cosmos, they transmit it to us. But, because of this great mystery around seeds, we make mistakes, we do things with seeds that are wrong.

By "wrong" he refers to transgenic seeds and genetic modification.

[E] If we realized the value that seeds hold, we would not do these things because it's like trampling on their magnificence and value. Therefore, I defend them like my daughters-*Por que es un patrimonio del humanidad*" [Because it is a heritage of humanity].

[E] It is life that is in them that passes into human beings. Within them is the mineral kingdom, that later passes to animal kingdom and then to human beings. Seeds draws energy from the soil, nitrogen, oxygen, pollinators move them around. You see? It's a scale that gives, a process of life to mankind. It is not important if I lose my life for them, because I wouldn't be losing it I'd be winning. Someone in the future will understand me. [He repeats the utterance again, looking me in the eye.] Because seeds are *life giving*. It's the same thing as martyrs that die for justice, for a just cause. A just cause is defending native seeds.

A pile of corn sits on the floor, white, black and yellow. He shows me another bowl of seeds, large kernels of multicolored corn.

[E] The beauty of this color is disappearing. The colors of transgenic seeds are monotone, and these are marvelous.

He describes genetically modified food as aesthetically monochrome and as "dead food." He picks up another bowl of seeds, their appearance shiny and smooth.

[E] This bean is the most sacred bean to me. It brings life to the soil and has a lot of healing properties. It is extremely good for

health. In addition to this, it brings richness to the soil, a rich biomass that helps me control plants that compete, eliminating competitive species. Only he dominates: putting nutrients in the soil, specialized for a lot of diseases that this seed prevents. It is just like Loroco.

He puts the bowl down and picks up another bowl holding the precious Loroco seeds.

[E] These beauties are special for health also. Lots of calcium, fiber, they are anti-spasmodic too, and also a condiment for food.

As he introduces different seeds it is clear that his intention is not to *itemize* his collection, nor showcase his seed bank. His preoccupation is conceptual. He is trying to evoke a sensibility around what a seed *is*, the meaning of a seed in a contemporary context of seed ontogenesis, which through genetic modification becomes “dead food.” This concern with epistemology and ontology is particularly emphasized because of a sense of urgency he feels around genetic modification. He is willing to die for this cause because it is so vital to life that self-sacrifice is warranted. He states that many people do not understand his concern and dedication because they can’t quite grasp the consequences of transgenic seeds, of meddling with this life-giving force. He says with conviction that in the future people will understand the importance of what he is doing today.

As we visit his farm he emphasizes relationships between many actors. His farm design combines permaculture and aquaculture. He shows us a pond full of tilapia fish and another full of hydroponic plants that are fed to the pigs. He proudly gives us a tour, one that he has clearly done before. We pause near the calalu and corn, and he explains to us that they are companion species. He crouches down and digs up some soil.

[E] Mira los bichos, estan trabajando para yo! [Look at these insects, they are working for me!]

Like Don Miguel, Enrique dissolves boundaries separating seeds, plants, soil, insects, and bodies. It is in these actions and words that one gets a sense of Enrique’s pedagogical approach, which is one that seeks to evoke the sentience in plants and seeds, their magnificence and the way they engage with other actors, like insects, soil, companion plants, and so forth.

[E] All these plants are aromatique, the insects don't like it.

We continue walking towards a section devoted to the sacred bean he loves so much. Two beans hang in suspension, connected to each other at the base.

[E] They are making love.

He explains with wonder at how a nocturnal insect comes and pollinates the beans, which then separate. He crouches down and pulls a tuber out of the ground.

[E] Jicama. (*Pachyrhizus erosus*.)

He goes on to explain how nutritious tubers are because they feed off all the minerals in the soil.

[E] The oxygen and nitrogen, passes from the plant into us the human body, and then the spiritual body. The moment I stop eating these beans and roots I experience deficiencies, mental slowness. It's not a disease or genetic problem, it's a nutritional deficiency. Eating too much *dead food*.

He carefully peels the hicama.

[E] From a few seeds you can produce like 50 000 plants. [he pauses to let his words sink in]. There is much life in this. Lots of calcium, fiber, and nitrogen. The plants are a part of us and all the kingdoms that they connect to become a part of us too when we ingest them.

Enrique hosted many students on his farm to teach them of the dangers of transgenic seeds and to deepen their understandings of seeds and soil. I later returned to his farm with a group of fifteen American high school students who were visiting Puerto Viejo to learn about global issues and social injustices. We sat in chairs forming a circle in the outdoor classroom. He asked in Spanish if the students knew what *las semillas transgénicas* are. The room was silent. I translated his question, "genetically modified seeds." The group of sixteen-year-old students stared blankly. Enrique, smiling broadly, continued, explaining his goals and approach, which he described as *didactic*, because he is teaching with the goal to awaken a new way of understanding nature and particularly seeds, and as *integral*, signifying the integration of all of nature, and of his family (uniting two Indigenous groups Mayan and Bribri.)



Figure 4.8 A sign stating, “Monsanto seeds-sickness and poverty.”
Photograph taken by N. K. Ferenczi

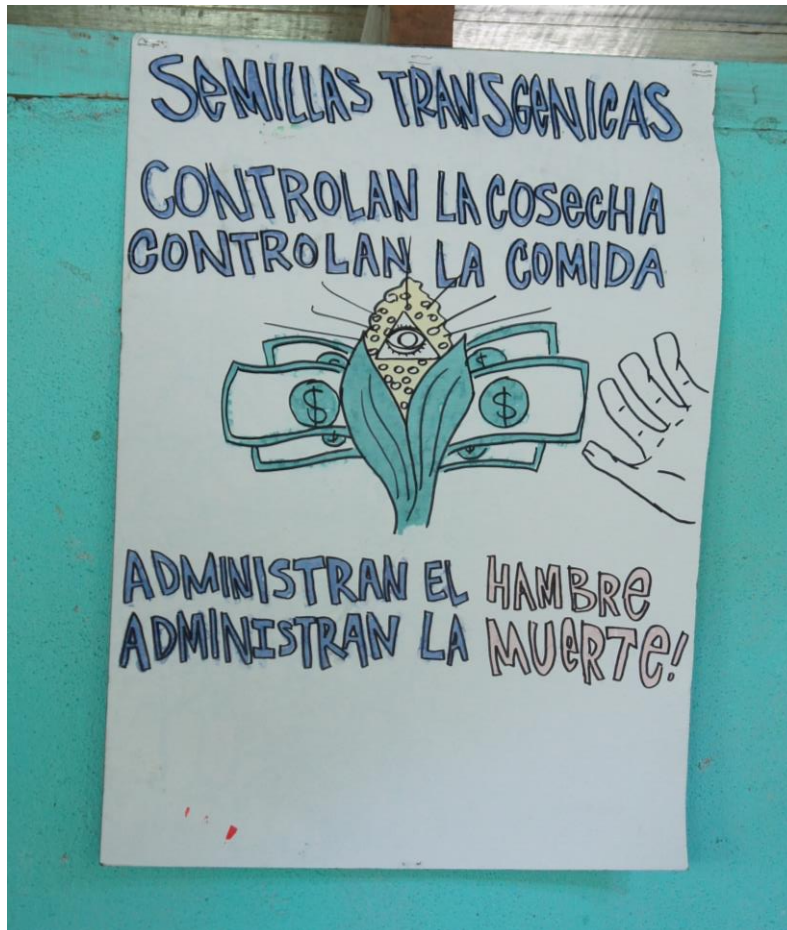


Figure 4.9 A sign stating, “transgenic seeds control the harvest, control the food-administer hunger, administer death.”

Photograph taken by N. K. Ferenczi with permission.

Echoing Don Miguel’s concern with the meaning of plant medicine, Enrique is also concerned with meaning, and establishing a relational model for thinking about insects, soil, seeds, plants, animals, and humans, which he strongly politicizes around the risks introduced by transgenic seeds.

Pedro

[P] Planting a seed means I take sovereignty for myself, my family.

Pedro, a Tican who was raised in the U.S.A., started an organic market in Talamanca that is organized via e-mail. Available produce (including plant medicines and fermented beverages) grown by local farmers, are e-mailed to members who place their orders, which are then collected on Saturdays at a local café. In the Saturday market email, *Uña de Gato* and other “cancer medicines” are advertised with brief

descriptors educating the mostly American expat clientele on the benefits of local medicinal plants. The e-mails also challenge boundaries separating food and medicine.¹¹⁹

[P] Monsanto started with chemicals for warfare. Agent orange. In the 1930's, I think. Ammunition was used in WWII, made by Monsanto-NPK (Nitrogen phosphorous potassium)- now they're saying that's what soil needs, when it needs more. He pauses for a moment. People have a weird relationship with their food. The wealthiest people in the world eat food from their gardens. Why grow your own food?"

He enumerates on his hand,

[P] For health, to not be a slave, to not participate in profits for chemical companies that are destroying the earth. Multinational conglomerates destroying the Amazon, Pharmaceutical companies like Bayer, agro-industries like Monsanto who help people buy toxic food and then they sell medicine to cope with symptoms of it. It's a win situation if you own both the toxic food and the treatment for it. But they're not after your money, but *your time*. More money, more advances, more treatment, more medicine, and more sick people. Raw milk is illegal, but Coca Cola is legal. *It burns shit with acid!* It all seems to wrap around food. Food is everywhere! I feel madly driven to blur that line [between food and medicine]! Why aren't people Googling "what's in my food?" People will make all these choices- thin crust, thick crust, cheese crust-but don't *give a shit what's in it!* You see red no. 5 *and eat it!* Would you drink a glass of poison? If I hand you a glass, and I say this is poison, will you take it and drink it? Relation to the food, grown by you, your community... can you be part of a plan that doesn't put chemicals in your body, that helps your cells repair. Relationship to food determines your sovereignty. Natural disasters, economic crashes- why should you be a *slave* to that? You, your family, community a slave to that?

¹¹⁹ Email for groceries example: "Please check out our attachment on available products this week. We're promoting the consumption of Broccoli this week with a special price. Some info on it's amazing properties- helps to prevent cancer as it's an amazing antioxidant and anti-carcinogenic, specifically blocking the growth of cancer in breast, neck, uterus and prostate. One cup of Broccoli contains more protein than a cup of rice or corn with just half the calories. It contains high quantities of beta-carotene, zinc and selenium that help boost the immune system. It helps combat birth defects as just one cup of Broccoli also contains 94mg of folic acid and vitamin B which are essential for a correct cellular division process. It helps against diabetes because it's rich in fiber and low in sugars, so it helps maintain healthy levels of insulin."

Below is a table that qualitatively summarizes some innovations and knowledge transmission practices of participants from Talamanca.

Table 4.1. Participant practices and innovations, 2013

Healer	Innovative practices
Miss Eliza	Afro-Caribbean mother and owner of a vegetarian restaurant. Her beverage menu features medicinal teas and juices, their ingredients, the ailments they help to cure, and their medicinal functions. She studied herbalism to expand her knowledge of dosage and the quantities of medicine to put in teas, and also verified the knowledge taught through oral transmission to her from her elders, who were bush medicine doctors. She organizes volunteer programs on her farm and educational workshops in her restaurant to enlarge concepts of medicine and dissolve conceptual boundaries separating food and medicine, and also organizes charity and donation programs for needy families and the elderly.
Miss Cici	Afro-Caribbean mother with an extended family network in Talamanca who have lived there for many generations. She conducted research to develop a book about Afro-Caribbean bush medicine and knowledge passed on orally for the community and to help conserve knowledge and make it accessible to the community. She continues to prepare medicinal teas as shown by her grandparents.
Don Enrique	An Indigenous farmer who operates an organic farm with his family and a seed bank. He sells produce and products processed manually on his farm at the local market. His farm is also a place of learning, drawing student volunteers and groups interested in learning more about transgenic seeds, organic farming and seed banking.
Don Miguel	Owner of a small clinic where he treats patients and also teaches visitors about Bribri history. He offers medicinal plant tours in his garden that are organized through a local ecotourism agency. He also provides consultations and treatments with plants medicines and through massage using therapeutic stones.
Doña Rosa	A Bribri farmer who also teaches Bribri history and collaborates on community projects around plant medicine, cacao production, and forest and animal conservation, as well as land title battles. Tours of the farm and its environs are organized through a local ecotourism agency.
Doña Delina	A Bribri mother who sells produce and plant medicine at a local market, which she collects herself and processes, primarily lianas and chocolate. She works for the Bribri community association, and collaborates in cacao tree planting projects.
Don Juan	Bribri father, offers medicinal plants walks around his house, and visits to his brother who is an awá. His children create crafts using plant materials (calabashes), which are sold to visitors. He and his wife process cacao and show tourists how they make chocolaté. Tours are organized through a local tourism agency.
Doña Eugenia	Bribri mother, produces tinctures, salves and other body care products in connection with a women's Indigenous group located just outside of the city, products that are sold at markets mostly in San José.
Doña Anna	Cabécar woman who participates in a women's Indigenous group who produce (grow, process and market) cacao. She is involved in cultural revitalization through outreach projects, as well as cacao production, tree grafting, providing emergency care and supplies (for example, after an earthquake the group delivered aid to numerous local communities in areas difficult to access). The group also collects local information on climate change effects in the area.
Pedro	Tican man, organizes an organic market and networks with local farmers to provide fresh, organically grown local produce that is ordered via e-mail. He also produces noni juice and kombucha. He works to blur distinctions between food and medicine in the way products are advertised. Also organizes ayahuasca ceremonies and workshops on soil that include composting, biocarbon making and organic farming.
Ariana	Mother and curandera who organizes Temazcals in the Mayan and Guatemalan traditions, with some modifications based on feminist sensibilities. She offers individual treatments and consultations.

4.4. Conclusion

For the Bribri, relationships in nature are in dynamic interaction with broader relationships, ones potentiated by actions taken by people, plants, animals, and stones, who can generate, evoke or become a variety of supernatural beings, whereby the so-called inanimate, “worldless” stone, too, exists in ‘lines of becoming’; *sía* have the potential to become jaguars, giant plague bearing hawks, or water tigers.¹²⁰ These relationships shape Bribri identities and understandings of healing and medicine. Recognition of these relationships is incommensurable with documenting plant medicine in a singular way, as independently enacting this or that “cure.”

The narratives presented subvert the generification of plant medicines by decentering plants and contextualizing “function” more broadly, to encompass interactions between actors. They reveal the ways some seekers, healers and academics are trying to foster new ways of thinking about plants, food and medicine. These narratives travel in many directions but they also share a common thread, aggregating around perceptions of food and plant medicine, and sustainability. Miss Eliza, Félix, Enrique, and Don Miguel challenge their clients and visitors to think of medicine as emerging from relationships. Miss Eliza’s menu and the activities she organizes reflect her innovative approach to fostering a broader perception of food and medicine. Through informal education and games, she teaches her community to think about medicine as emergent properties potentiated by relationships, such as cooking sweet pepper, onions and garlic. Miss Eliza, Pedro, and Enrique contextualize medicine in ways that break down distinctions separating food and medicine- and the food cabinet and the medicine cabinet- and trying to generate a more dynamic perception of food as becoming medicine in certain contexts and combinations. Miss Eliza diversifies plant profiles, they can be preventative or curative depending on whether they are ingested when one is healthy or sick, and they can become medicine when combined with other plants. Pedro focuses on blurring the line distinguishing the food cabinet and the medicine cabinet. Enrique is teaching people to really “see” seeds in a different way, as alive and connected to cosmic and earthly realms, to minerals, trees, humans, plants,

¹²⁰ Ingold (2011), in reference to Heidegger’s (1995, p. 263) theses on the differences between an inanimate object, like a stone, an animal, and a human being, paraphrases, “the stone is *worldless*; the animal is *poor in world*; man is *world-forming*” (p. 81). Ingold cites Deleuze and Guattari’s (2004, p. 224-25) ‘lines of becoming,’ alternately termed ‘lines of flight.’

and animals. His perception of seeds is one that he feels will gain currency in a future paradigm. Félix and Eugenio are trying to conceptually connect soil and plant medicine in their herbal exports to develop a culturally and environmentally sustainable model for plant medicine production with Bribri and Cabécar people, a project that would connect interest in forest products with sustainable production and foster a valuation of the forest that recognizes it as a productive system. Like Don Miguel, they emphasize soil as among the actors involved in producing strong quality medicine and are trying to market their *hombre grande* as distinct and containing more alkaloids than that from elsewhere. Rosa questions the future of traditional healing with fewer Bribri apprenticing, meanwhile she, along with the Indigenous women interviewed who are making chocolate and plant medicines, carry on cultural traditions in embodied actions, but sometimes with modifications, like grafting trees or making tinctures.

I have highlighted their innovations and how these innovations relate to their concepts of food and medicine and the broader context of industrial food and pharmaceutical production. The root of their struggle and that of so many other people in the world, is one that has to do with ontology and the meanings that “nature” takes on in the current global economy, marked by unprecedented growth in extraction technologies. Explicit decentering of plants in explaining medicine corresponds to the imposition of perceptions of plants as bounded with isolated functions. Paradoxically, seekers looking for alternative treatments or traditional medicinal knowledge often condition practices and knowledge to fit their biases around medicinal natures. What seems to be in opposition to the authority of allopathic medicine joins other external pressures in imposing ideas of legitimate medicine. Seekers are actively co-creating medicinal meaning with healers in medicinal encounters across these epistemological borderlands.

This chapter and the following chapters five and six bring together a collage of stories reflecting states of emergence in people-plant relationships and the particular ways participants engage meanings connected to plant medicine and try to instill in seekers concepts of plant medicine that characterize them as dynamic and relational, an epistemological shift important in their formulations of sustainability. To connect the growing popularity of ethnobotany with the sustainability of traditional practices and cottage industry production entails critically reflecting on the impacts of assumptions on what constitutes medicine.

What does it do?

Without stories and contexts for knowledge formulations of Indigenous epistemologies, categories seem to signal selective appropriations based on what is convenient and commensurable with modern states (Cruikshank, 1998, p. 51). Within the academic role involved in researching traditional uses of plant medicine, is the challenge of holding a concept in movement to evoke critical reflections of people-plant relationships, and states of emergence in these relationships, and in the social lives of plant medicines. There is a role for anthropology in attending to the ways *actants* are enacted and emergent constructions of people-plant relationships. Foregrounding ontological politics brings out what is at stake in these translations and characterizations. Translations of plants involve translations of socioecological lives. This is here instantiated in the way plant medicines are animated, stilled, and re-animated in a variety of contexts. The regulation of plant medicine, socioecological contexts, climate change and the imposition of Western medicine influence healers' practices and bring plant medicinal production into new directions, into new forms and growth contexts, new vocabularies, and new marketing approaches. They influence healers to actively enlarge concepts of medicine in their practices and teaching, an epistemological constitution that supports the sustainability of physical and social environments by collapsing the categories that separate people, plants and animals. Discussing states of emergence in plant identity is an effort to hold open multiple and shifting meanings, and to de-center plants by emphasizing the biotic relationships that enable medicinal becomings. Plant medicine is never fixed, but always in a process of becoming.

[R] Our knowledge needs to be transmitted how *they are*, not summarized. If our knowledge is summarized, they won't understand. It can't be invented things. Our knowledge must be taught by a teacher who respects how things *are*.

Rosa's words hang in the air. At what point does framing a belief as cultural construction do violence to it? In a political context wherein the a priori status of science continues to be assumed other *cultural constructions* are relegated to the status of belief, implying that they are "invented things." This is especially pronounced where nonhuman bodies and human bodies are concerned. Tuhiwai Smith (1999) points out the mechanisms by which research and theories work toward helping to "determine what counts as real," bolstered by a cultural practice of representation and classification that

enable pieces of traditions, and distinct traditions, to be taken and reformulated in various contexts, as discourses, and later materializing in structures of power and control (p. 44). She highlights that what establishes an idea as “real,” is the knowledge system, cultural formations and power relations in which concepts are positioned (1999, p. 48). When Western reality is juxtaposed to alternative conceptions of reality, it becomes reified as reflecting a superior mode of thinking that is less susceptible to dogma (ibid.). Methodological approaches anchored in well-established theories like cultural relativism, tend to present “belief systems,” asserting belief systems to be equal, yet obscuring the political asymmetries that frame the context in which research is conducted. A belief system is one of several models for understanding the world; what is *really* real is taught as being “how things are,” and not “how Bribri see things.” I think that “no resumido” reflects a sentiment that summarizing a belief system in the current political epistemological context is mythologizing. The narrative account might go, “according to Bribri cosmology...” or “the Bribri believe...” whereby the so-called emic perspective reflects the meanings people imbue the world with, and the etic perspective provides a more “neutral and value-free” account of the world (Ingold, 2000, p. 14). The anthropological account of environmental perception often casts a cultural construction of nature or layers of emic understandings and an independent etic reality (Ingold, 2000, p. 20). This undermines their relevance to the *real world*, reified in the abundant symbols of modern life and “progress” that bombard locals. Asserting the truth or falsity of a claim to reality is not a focal point for anthropology, where concern lies predominantly in form and meaning (Ingold, 2000, p. 14).¹²¹ Yet where relationships with and among nonhuman beings are concerned, making claims about the nature of reality may be warranted. Kohn writes:

This search for a better way to attend to our relations to that which lies beyond the human, especially that part of the world beyond the human that is alive, forces us to make ontological claims- claims, that is, about the nature of reality (2013, p. 9).

The assumption that humans live in discursive, culturally constructed worlds already performs a divisive action separating humans from other creatures who do not participate in this process (Ingold, 2000, p. 14). The anthropological claim of “perceptual

¹²¹ Ingold writes, “Whereas the biologist claims to study organic nature ‘as it really is,’ the anthropologist studies the diverse ways in which the constituents of the natural world figure in the imagined, or so-called cognized worlds of cultural subjects” (2000, p. 14).

relativism” in this sense shares with the claim of natural science an assumption of “how nature really works.” Ingold (2000) argues that these assumptions impose a “double disengagement of the observer from the world,” in that “the first sets up a division between humanity and nature; the second establishes a division within humanity between ‘native’ or ‘Indigenous’ people, who live in cultures, and enlightened westerners, who do not,” and who are “less bound” by conventions of tradition (p. 15).

What is plant medicine?

Unexamined assumptions about plant medicine can easily become foundational to methodological designs and lead to approaches that foreclose other concepts of people-plant relationships and nature-society relationships, particularly when they are not bounded and singular. Policies like the beachfront law in Talamanca are founded on the idea that these parts of nature are static *things*, not beings. Herbal businesses discussed by participants disregard plant medicine marketing that address soil composition and alkaloid production. The quest for information about plant medicine and infrastructural development around plant medicine and knowledge conservation (academic research centered on building plant inventories, Red Lists, herbal industrial production) tend to operate on the idea of a standardized, static valuations of plant medicine. Medicine is a *thing* that *is*, not a process of becoming.¹²² This starkly contrasts perceptions of plant medicine as constituted in relationship with a biotic community, one that includes beings from other realms. The decontextualization of plant medicine participates in a colonizing epistemology that structures people-plant relationships, and medicine in particular ways. Osseo-Asare (2014) speculates that perhaps it will be academics, instead of traditional healers, who will “extend the documentation and use of plant medicines” into the future in Africa (p. 10). Within the academic role involved in researching traditional uses of plant medicine, is the challenge of holding a concept in movement, to evoke critical reflections of reformulations of people and plant relationships, and states of emergence of plant medicines. The apparent expanding role anthropologists and ethnobotanists are playing in carrying knowledge forward bring further importance and relevance to these critical reflections. “*No resumido*” corresponds to the categories imposed on knowledge that distort and decontextualize

¹²² Ingold (2000, p. 19) writes that “context independent specification is an essential condition of Darwinian theory...”

knowledge/known in efforts to carry information forward. “No resumido” implores people who are interested in learning or documenting Bribri knowledge to formulate methodologies and pedagogies that do not divide up socionatures into disconnected parts, but instead hold open space for the fields of relationships connecting all beings in this realm and those beyond. Stacy Pigg (2005) points out the way “relativist principles vanish” in a priori understandings of scientific truth that seem so vital to health that it seems morally warranted to educate people about them (p. 58). This devalues other “action generating knowledges about the body” by relegating them to the category of belief, which if they are to be dealt with, must be integrated into a biomedical reasoning (Pigg, 2005, p. 58). These challenges present a role for anthropologists to explore the “poetics of dwelling” (Ingold, 2000) and what it might mean to practice an anthropology *beyond the human* (Kohn, 2013).¹²³ The admonishments in these narratives offer us guidance in practicing an anthropology that acknowledges sentience in nature, and more porous boundaries between different types of beings.

Continuing with this thread, chapter five focuses on motivations for seeking and the contemporary contexts contributing to new therapeutic imaginings. Chapter six explores the way plant spirit is being constituted in people’s imaginations and in various public talks in Vancouver, (with a particular focus on ayahuasca and iboga). The order of the chapters in this dissertation is not intended to polarize north and south, modern and traditional, Indigenous and non-Indigenous, and seeker and healer. My field locations in Talamanca, Vancouver, and Squamish, B.C., bring together the narratives of seekers and healers both Indigenous and non-Indigenous and reveal the way the traditional and modern interweave. The organization of the chapters is structured to direct attention to some shifting and emerging cultural concepts of plant medicine in various approaches to iterating people-plant relationships at a time that some academics refer to as the Anthropocene, entheogenic paradigm, and what Hanna refers to as “the receding wave of patriarchy.”

¹²³ Kohn (2013) enlarges understandings of representation beyond language to include nonhuman life forms’ representations of the world.

Chapter 5.

Why jungles? Why Costa Rica? What are people seeking?

[Me] Why Costa Rica?

[J] Originally? Being like...addicted. I heard of this iboga stuff, a buddy of mine at the pub told me about it, and uh I said, "Oh my god, that sounds amazing! Plant medicine, and it houses people with addictions and it's fast and it's really and it's really... I don't have to go through this clinical white suited sort of stuff?" I don't believe them anyway. So, I went home and was like [clicks away at an invisible keyboard] Googled it and for me it was easy [choosing to go to Costa Rica]. Once I saw different things come up... I actually tried to call Iboga therapy house [in Canada] but they were very nonresponsive, seemed like, untogether, didn't get back to me, whatever... it was expensive, \$5000 whoa. I was like, *as if I'm not going to go to this guy, it just made total sense, he's a 10th generation shaman from Africa!*

The practices and seeking trajectories that bring together a British Columbian man and a West African shaman in an Iboga House in Costa Rica evoke a hybridity that is at once interesting and nothing particularly *new*. Ethnographers have addressed hybridity in healing practices and new reformulations configured to adapt to contemporary social contexts (Langwick, 2011; Parke, 1995; for transnational shamanism, Pettigrew & Tamu, 2002; for shamanic healing in Canadian prisons, Waldram, 1997). Other theorists have addressed transnational networks around healing and plant medicines, and the proliferation of botánicas (herbal shops) in the United States and various other countries around the globe following migrations of people (e.g., for New York and the Dominican Republic, see Vanderbroek, Balick, Yukes et al, 2007; for Thai immigrant women in Sweden, see Lundberg, 2007; for Surinamese immigrants in Amsterdam, see van An del & van't Klooster, 2007; and for Latino immigrants in London, see Ceuterick, Vandebroek, Torry et al., 2007). A more elusive and less explored theme are the modulations in meaning as subject/object relationships are rearranged in these cross-cultural encounters. Instead of focusing on the ethnobiology (as well as the ethnopharmacy) of migratory movements of ethnobotanical knowledge and specimens from south to north, and the practices and botanical businesses they promulgate in the host country, this dissertation focuses on the movements of seekers

often travelling southward, from Canada to Costa Rica, and those circulating within both Canada and Costa Rica and the productive space of cross-cultural interactions in efforts to heal individual selves. From an ethnobotanical perspective, these trajectories are largely navigated around trees found in the moist and wet tropical jungles of the Caribbean lowlands of Costa Rica. In most instances the seekers and healers whom I encountered worked with specific trees or plant combinations. In the examples that I explore here, I concentrate primarily on the productive interactions emerging from the improvised space of healing encounters. This includes also looking at the pathways taken by North Americans who are following plants and healers and seeking new interactions with certain plants, such as the one instantiated in the opening dialogue. The trajectories these processes take bring healers and seekers together and generate movements of personal testimonies about medicinal plants and big plant actors, such as ayahuasca and iboga, across time and space.

The popularity of ethnobotany is increasing flows of people to places known for their biodiversity.¹²⁴ Joe's trajectory began with a Google search and evolved into an apprenticeship in the iboga tradition and later his own healing practice. His seeking trajectory involved following iboga, a bushy shrub native to Western Central Africa, as a subject and as a teacher. Googling "iboga" led to a decision-making process that included availability and accessibility, reflections on authenticity, (a 10th-generation shaman), as well as cost, reception, and so forth.

Randy, a Canadian male in his forties from B.C., inadvertently encountered iboga by responding to a Craig's list add looking for a "yoga type American" to work as a chef in Costa Rica. Describing himself as a "fan of therapy, but not pharmaceuticals," he started using plant medicine to treat trauma. In B.C. he participated in a few consecutive ayahuasca ceremonies and later in Costa Rica continued to visit ayahuasca places. At the interview for the job the owners told him how they were recovered heroin addicts now running an ibogaine treatment clinic. He began ibogaine treatments receiving four flood doses and continued working there for more than a year.

¹²⁴ In 1994 ecotourism became the country's biggest source of foreign capital, making both education and the environment very politicized areas of economic and national life in the country (Blum, 2008, p. 36-7). The burgeoning ecotourism industry draws attention to the wealth generated by medicinal plants and trees in the country, and advertisements for botanical healers appear on-line, in public media, in medical tourism literature, and at tourist information sites.

[R] My interest in plant medicine has always been for emotional and psychological purposes. This place is exactly in line with the direction I'd like to go. We are working with both ayahuasca and ibogaine.

Seeking not only involves physically travelling to places for healing, the trajectory might be inward-looking, and people are not only seeking medicine or treatment, they are also seeking new ways of relating to plants, embodied change, new notions of selfhood, and new imaginings of health and wellness. What is driving this desire to know the body and nature differently, to challenge common-sense understandings of selfhood, or to bring medical insights to biological research by accessing plant spirit and plant intelligence? (The latter will be elaborated upon in the following chapter.) What can be observed in these indeterminate plant *becomings* and the uncanny ways they can at once challenge and recreate hegemonic ways of understanding the body, medicine and healing?

Exploring motivations and intentions behind *why* people are seeking plant medicines in Costa Rica involves addressing *what* people are seeking. The contexts discussed here broaden optics around *what* people are seeking and are *not* seeking, and the types of medicines and medicinal meanings that emerge from these healing encounters across epistemological borderlands. A study revealed that in 2014 more than 52,000 Canadians travelled overseas for treatment (CTV News, March 2015). Luckow (2012) points out that for such a burgeoning industry there is surprisingly little research on its size and the extent of medical tourism, the ethics and effects on health services in communities in developing countries, and the risks involved (p. 1). She discusses Simon Fraser University (SFU)'s medical tourism research group (MTRG)'s project to develop a "buying guide" for Canadians, offering ethical guidance on for example, the negative impacts of medical tourism on local communities, the cost of a travelling companion, or follow-up procedures and the need for on-going treatment. The MTRG has inquired into motivations, and founder Valerie Crooks suggests a broader scope for analyzing intentionality than waiting lists and treatment prices. "There are issues of procedure availability and procedures not covered under Medicare, while others go because they're concerned about the quality of care in Canada" (Luckow, 2012, citing Crooks, 2012, p. 1). Crooks observes, "We found that many Canadians are relying on informal testimonies and anecdotal information from the Internet to make important decisions for

surgical care.”¹²⁵ The narratives discussed suggest that motivations to travel around plant medicine also include new “structures of feeling” (Williams, 1977) such as dubious feelings about pharmaceuticals, new philosophical ideas about health and longevity, and the questioning of previously accepted worldviews about nature-society relationships. *Thoughts and feelings* in the instances discussed here involve curiosity, doubt, and suspicion regarding conventional Western treatments, new-found hope (at a time when diagnostic *emploiments* have foreclosed hope), desperation, and a willingness to experiment and to imagine...differently. To broaden the scope of how we examine this *weighing of therapeutic options* beyond practical considerations (the cost of treatment, accessibility, legalized procedures, waiting lists and so on) and global movements of materials (pills, organs, plant medicines) transnationally, we also need to look at cultural constructions of efficacy underpinning treatment protocols and the emergence of greater uncertainty and suspicion around some orthodox medical approaches to cancer, “mental illness,” anxiety, depression, and drug addiction.¹²⁶

It is possible that awareness of the way capitalist interests and profit-driven commitments are entangled in pharmaceutical practices and treatment protocols in North America, elsewhere referred to as *bioeconomic exploitation* (Rose, 2007, p. 4), has evoked critical reflections by patients on treatment approaches, particularly where invasive treatments are concerned, and that this awareness also works to bring forth new values and behaviours.¹²⁷ To craft state policy as “the norm” and intervention at the level of the family, children and health as “helpful” requires more than legitimizing discourses; values must be converted. The proverbial “boundary line of the biological and economic domains” (Foucault, 1978, p. 26) is getting progressively more blurred, and this, too, may play a part in spawning uncertainty and diminishing trust in certain

¹²⁵ The home page for Simon Fraser on April 11th (2012, p. 1) featured a link to a story by Diane Luckow on research being conducted by an SFU health geographer, Valerie Crooks. The discussion focused on the booming medical tourism among Canadians and Americans and calls attention in the opening paragraphs to the SFU Medical Tourism Research Group’s (MTRG) observation that many Canadian tourists are depending on informal testimonies and other information on the Internet in making medical decisions.

¹²⁶ Pluralism in healing modalities available, alongside widespread access to information via the Internet and public media, also influence medical tourism, the growth of CAM (complementary and alternative medicine) therapies, and transnational movements of healers, botanical medicines and healing knowledges.

¹²⁷ For example, Proctor (1996) “The Politics of Cancer,” or Deborah Erwin Oates (1992) “The Militarization of Cancer Treatment in American Society.”

healthcare policies and the values that structure them, particularly when “helping strategies” involve intervention, loss of autonomy, and coercion.¹²⁸

In what ways might people also expose and depose regimes of power through defining and enacting *embodiment* differently?¹²⁹ Form is not imposed but emergent, and exposure is generative. The exposure of the so-called “therapeutic state,” has also produced its *malcontents*.¹³⁰ “Imagining is a movement of opening not foreclosure [...] to improvise a passage,” thus shifting positionings of subject and object, are moments that *produce consciousness*.¹³¹ Seeking, and the hope generated by alternative imaginings of disease, of cancers, “mental illness” and addiction, is productive on political, economic, ideological, social, and phenomenological and sensorial levels. Testimonies online arguably could be understood as fissures in dominant medical practices, overtures to imagine disease and treatment differently, and to engage new sense-making processes. They become beacons of hope and also pattern-seeking movements locally and transnationally. They epitomize optimization, as they tell stories of survival, “beating the odds,” and personal transformation and embodied change. Neoliberal discourse in biomedicine has placed the onus of health maintenance on the patient, which is examined as a coercive structure embedded in language and codification and reinforced institutionally (emphasizing “care” and “freedom,” thereby diffusing the impression of commodification). Ironically, alongside the philosophy of *responsibility* for one’s own health is an attendant value around *optimization* that can also be counter hegemonic and at times includes the rejection or avoidance of biomedicine.¹³² In this neoliberal context seeking trajectories at times lead to *ontogenies* with a counter-

¹²⁸ Foucault emphasizes the role of language and codification as a means to subjugate and control discourse (1978, p. 17). In a similar vein, theorists have addressed *bioeconomic exploitation* and how the body is becoming increasingly commodified and controlled through the process of medicalization (e.g. “Indigenous trauma” in Million, 2013 and “zones of social abandonment” Biehl, 2013).

¹²⁹ I addressed this theme in my Master thesis (Ferenczi, 2005), where I looked at ambivalent resistance at the level of the body against the body of the state during the rioting in 2003 in the Republic of the Maldives.

¹³⁰ “The therapeutic state” refers to biopolitics and bioeconomics in advanced neoliberal societies and the emphases on treatment (Miller & Rose, 1994).

¹³¹ Tim Ingold’s keynote address “The growth of knowledge in the landscape of memory at the CASCA conference, Université Laval, May 13, 2015.

¹³² Neoliberal discourse in biomedicine, according to Rose (2007), has placed the onus of health maintenance on the patient and the notion of “responsibility” (also discussed in McNamara, 2016), has shaped a preoccupation around optimizing health.

hegemonic flavor.¹³³ This suggests that it is more fruitful to explore *neoliberal pockets* rather than neoliberalism as one grand narrative of hegemonic control, not a totalizing enclosure but rather a *meshwork* of interactions that can include inversions of meaning that challenge common-sense understandings. Neoliberal values like self-optimization and responsabilization also engender critiques of biomedicine, patriarchy, and people-plant relationships.

Experiences can profoundly reconfigure bodies and the senses, lead to new metaphors for understanding human-nature relationships, and even trigger imaginative leaps. They can also offer hope where “life chances are foreclosed” (Biehl & Locke, 2010, p. 318).

While on a guided herb walk in Vancouver the herbalist, a Canadian woman from B.C., likened a cancerous tumor to global warming, musing about the relationship between both rising temperatures, (heat is emitted from cancerous tumors)- the body being construed as a metaphor for the earth’s rising temperature.

In Kona, I encountered a middle-aged woman in an ethnobotany course on people-plant relationships who averred that initially she did not care what philosophies or disease etiologies underpinned the alternative treatments she explored to treat her son’s Kawasaki disease. She just wanted to know if they *worked*. Her devotion to researching a cure for her son lead her deeper into the plant world where she discovered plant allies, in particular moss. Her story resonated with some other participants, beginning with the search for a magic-bullet cure, and evolving into immersion into a new way of looking at plant medicine and people-plant relationships. Seeking can engage meanings that lie at the core of people-plant relationships.

This chapter presents narratives that elucidate the often inarticulate, in-between spaces of re-imagined bodies and illnesses, of exploratory attitudes towards body-plant relationships, and of doubt and suspicions around medical orthodoxies. Exploring these in-between spaces in people and plant encounters gives shape and texture to *what* people are seeking and *why* people are seeking. This wave of seeking in the jungles of Latin America in the 21st century follows a preceding wave of seeking pioneered by Schultes and his students and the hippies of the 1960s and 1970s. Indeed the “plants of

¹³³ Ingold (2015) also discussed in his keynote address ways of becoming as “not beginning and end points” but rather “the ways of coming by them, not ontologies but ontogenies.”

the Gods” (Schultes, Hofmann, & Ratsch, 2001) have become big plant actors, couched in indeterminacies as they are increasingly integrated into North American healing practices (ayahuasca ceremonies, iboga or ibogaine treatments) and pharmaceutical drugs (e.g. psilocybin in palliative care pain management). Today seekers arguably incorporate a much broader mix of people that includes doctors and patients from all over the world, youths coping with existential crises, an American oncologist, integrative pharmacists, war vets, and people struggling with drug addictions. Participants expressed a range of motivations including wanting to relate to plants differently, curiosity in entheogens, getting off anti-depressants, experiencing oneness with nature, detoxing from narcotics, existential crises, and rejecting terminal diagnoses and conventional treatment protocols. A frequent theme is the rejection of current medical systems and health politics that were seen as embedded in corporate interests, and the acknowledgment of the limitations imposed by the positivism enfolded into the scientific method.¹³⁴ Seekers also continue the academic interests of the previous wave, as they include scientists who are looking to plants for teachings on the human body and its inner working and internal relationships (which will be elaborated on in chapter 6).

[J] There is an identity break [...] People are trying to find themselves; you know in the 70’s you’re told “you can be all that you can be” -almost to the point of telling a girl she could be president of the United States; and in school, you can go to college and bounce around or travel, often not maintaining connectedness to a particular place, so you have this “who am I?” feeling. I think it comes from feeling that there is something out there; for some people it’s a crisis that pushes them and others... some people don’t know what they’re looking for.

Seeking is not new, but I would argue that today’s context for seeking is. While it is impossible to quantitatively measure “structures of feeling” vis-à-vis plants, the rise of interest in ethnobotany has been noted elsewhere. Nolan and Turner (2011) remark that Google hits for ethnobotany were 669,000 in October 2008, 33,000 more than a comparable search done in March 2005 revealed (p. 134). On the day that I write this (June 8th, 2018), the number has climbed to close to three million hits. Botanical gardens are also drawing large numbers of people, comparable to national sporting

¹³⁴ In Talamanca some participants discussed the pervasive pharmaceutical presence, with imposed vaccination programs, regulations prohibiting bush medicine and midwifery, and even regulators who would visit the homes of students who did not receive vaccinations to further impose them.

events. Nolan and Turner conclude that this interest is connected to the impressions left by the exotic research of Schultes and his students (ibid). But how are people imagining “spirit plant medicine”? There is perhaps no precedent for the current decline of faith in Western medicine which derives from an awareness of corruption that emerges at the intersection of the economy and biology. Forty-five years ago, modern health care technologies were budding sources of hope, but they have since become capitalist tools—costly, politicized, and “dictating our health policies unwisely,” and useful technologies are available for too few (Whyte, van der Geest, and Hardon, 2002, p.148). While the physical places that are chosen in seeking trajectories may be arbitrary, there is nothing arbitrary in *the return to jungle medicine*.

5.1. Survival through jungle

Why are people heading to the jungle? What does it represent? What hopes does it offer for survival, for life? Narratives of seekers and healers are framed within a cultural moment of medical pluralism, of the collapse of faith in certain medical orthodoxies (particularly with regards to cancer, mental illness and addiction), and of current scientific research in epigenetics and “bio-social becomings” that reveal the reductionism in earlier views of substances like genes that work and exist in highly complex relationships.¹³⁵ Inquiring into these intersecting social and scientific phenomena helps to explain the growing popularity of plant medicine, and ethnobotany more generally in North American society, and provides greater context for understanding healers’ experiences.

Notions of selfhood are dynamic and interact with experience. They can be stretched in new ways, modulating new subjectivities and ideas about relationships between people and plants. In a presentation at a conference in Vancouver on plants and fungi medicine, Kat Harrison conjured a vision of the body as a *community* involving hundreds of species, a notion of selfhood based on recognizing bodily being as encompassing a variety of other organisms and fungi, and water.¹³⁶ Her opening

¹³⁵ Margaret Lock (2015) expresses the vital importance for anthropological attention to a shift in understandings of nature and nurture, which are no longer seen as dichotomous, and to address “neobiological reductionism” as a result of the molecularization of the environment.

¹³⁶ Spirit Plant Medicine Conference: What the plant kingdom is telling us, UBC, Vancouver Oct 26-28, 2012.

message—Our bodies are not bounded entities. This approach to selfhood parallels that of Ingold (2000), as a “locus of creative growth within a continually unfolding field of relationships” inextricably related to their environment (as are all species) (p. 4). This relational approach to selfhood contrasts with the notion of a “self-contained individual” facing a world that is “out there” (ibid.). It is an approach that recognizes “the permeability *in-between* plants and people,” and unpacks some of these entanglements (LaPlante, 2016, p. 22).

5.2. Seeking and imagining embodiment

There is growing currency in intentionally shaping subjective understandings of the body and healing.¹³⁷ Arthur Kleinman first pointed out, in 1973, the shift from theoretical disinterest and often scorn shown by “entrenched medical empiricism” to something that more closely resembles the “theoretical chaos” that has emerged from the recognition that all healing practices, including biomedicine, are socially constructed (2010, p. 86). Comparative studies of medical systems in different cultural and historical contexts have contributed to a phenomenology of medical practice and enquiry into philosophical underpinnings of medicine (Kleinman, 2010, p. 86). This awareness extends to the constructedness of *all* medicine, revealing the arbitrariness of “therapeutic *employment*” (Mattingly, 2010).¹³⁸

This theoretical chaos provokes social and embodied chaos. The three bodies (phenomenological, social, and political) are implicated. Let us take a concrete example to explore this further. When patients reject conventional treatments for cancerous tumors, the social and political bodies are challenged, as patients are encouraged to undergo chemotherapy and/or radiation therapy and social pressures buttress conventional protocols as “common sense.”¹³⁹ Configurations of cancer treatment are

¹³⁷ Nancy Scheper-Hughes (2000) points out how the technologies and practices of transplant surgery reveal the “power to reconceptualize the human body and the relations of body parts to the whole and to the person, and of people and bodies to each other” (p. 191).

¹³⁸ Mattingly (2010) describes the “clinical plot” dynamically co-constructed by the clinician and patient, which gives meaning to particular therapeutic actions by situating them within a broader therapeutic story.

¹³⁹ Whyte, van der Geest, & Hardon (2002) discuss the way the social and cultural context tends to encourage medication, when, from a biomedical perspective this is not warranted (p. 128). Over-prescription is linked with commercial advantage (ibid.), and I suggest that people are becoming increasingly skeptical of directed protocols as a result. A study on doctors in Lima, Peru, suggested

considered so self-evident and are so entrenched that in some instances the state has imposed chemotherapy for cancer treatment in children—a protocol that the case of Cassandra Callender exemplifies. Cassandra was seventeen years old when she was forced to undergo chemotherapy for her cancer by Connecticut Supreme Court, where the ruling was in favor of imposing the treatment. More recently she posted her CT scan on Facebook, which displayed a mass in her lungs, along with a statement saying, “But this is why I fought so hard going against chemotherapy. I am so sick of being treated like a number and how everything is based off of statistics. I am a patient not a number.”¹⁴⁰ Current regulatory processes also include closing down clinics that are offering cancer treatment alternatives in the United States and Europe, even when they have been shown to be effective and non-harmful, or the intimidation of practitioners who are administering alternative treatment as instantiated in “The truth about cancer” documentary in interviews with doctors such as Dr. Burzynski.¹⁴¹ Many clinics have moved to Mexico in order to bypass this control over bodies and harassment by state officials (for a detailed analysis of the politics around cancer, see Erwin, 1987, or Proctor, 1996).¹⁴² Plant medicines and their derivatives that have been shown to help treat cancer and manage pain, such as cannabis oil, continue to be illegal in several U.S. states. The arbitrariness of regulatory approaches is epitomized with current state attitudes towards Marijuana. These movements also influence seeking trajectories.¹⁴³

that prescriptions written by physicians were often more influenced by patient’s and caretakers’ social expectations than by “biomedical rules” (Whyte, van der Geest, & Hardon, 2002, p. 127-8, in reference to Paredes et al., 1996). Similar findings were documented by Schwartz et al. (1989) who concluded after 141 interviews with physicians in the United States that almost half stated patient demand as the most common reason for particular prescriptions, and 24% indicated that their prescribing practices were often based on creating a placebo effect (ibid.). James Trostle (1996) remarks on the abundance of articles (more than 8,000) published in English between 1986 and 1995 on patients failing to take medication as prescribed (Whyte, van der Geest, & Hardon, 2002, p. 127) and the comparatively little written about faulty prescribing practices by professionals.

¹⁴⁰ NBC News “‘Cassie C’ Says Cancer’s Back After Court Forced Her Into Chemo” (April 18, 2016). www.nbcnews.com/health/cancer/cassie-c-says-cancer-s-back-after-court-forced-her-n557991

¹⁴¹ Clinics such as hope4cancer use therapeutic treatments including virotherapy (Rigvir), IV therapy, full body hypothermia, oxygen therapy, magnetic field therapy and sound therapy, featuring on their website testimonials of recovered patients. The Gerson Institute in California publishes testimonies on their website by cancer survivors who have received treatment there.

¹⁴² Proctor (1996) points out that the vast majority of cancer researchers are males and that men predominate as subjects for clinical trials testing cancer drugs (p. 140, in reference to Rosser, 1994).

¹⁴³ Earlier research by cultural analysts into an emerging therapeutic culture was conducted several decades ago, analyzed in terms of the collapse of collective values and solidarities, individualization, and “the decline of established transcendental authorities on the conduct of life

Testimonials of cancer patients often attest to the inadequacy of chemotherapy and radiation therapy. Once trusted and automatic treatment protocols are today increasingly regarded with uncertainty, insipience, and subjected to intense critical reflection.¹⁴⁴ Testimonies also often address various “superfoods” or “cancer foods,” (e.g. the Solanacea family, which includes green pepper, devil’s apple, and eggplant). In the late 1970s a farmer in Australia noticed his cattle, (bovine that are commonly afflicted by tumors on the eyes) treating themselves by rubbing their eyes against devil’s apple (*Solanum linnaeanum*), and he communicated this observation to scientists. Dr. Cham is shown to have carried out research confirming the cows’ resourcefulness.¹⁴⁵

Theoretical chaos offers both hopefulness and discouragement. Patients are left to navigate a plethora of alternatives, and in some cases, they establish their own certitudes that can also be harmful. People’s configurations of various healing modalities in their self-healing designs are not necessarily well-informed, pragmatic, or ideological and may synthesize different healing approaches that address different dimensions of illness (Langwick, 2011). Combinations may even bring together contradictory modalities.¹⁴⁶ One participant told me of a twenty-year-old living on one of the islands off the coast of Vancouver who died while trying to treat her cancer by herself by only consuming beet juice. *Detoxing* has become a common verb for embodied experience, yet understandings of how detoxing should be conducted safely vary considerably. Hopes projected onto “superfoods” play into the imaginary of detoxing bodies.

(Miller and Rose, 1994, p. 31, in reference to Lasch, 1980, 1984; Rieff, 1966; Sennett, 1976). Anthony Giddens (1991) explained the proliferation of therapies in conjunction with the spread of “rational and technical thought to questions of life-conduct, the exacerbation of uncertainty and risk in contemporary societies, and a general rise of reflexivity, which extends to the emergence of a reflexive project of the self” (Miller and Rose, in reference to Giddens; cf. Lash and Friedman, 1992).

¹⁴⁴ For example, testimonies in the film “The truth about cancer” that reveal that chemotherapy and radiation simply kill cancer cells but not the stem cells, thus after a five-year remission the stem cells tend to grow another tumor. The film critiques misleading absolute statements about tumors like “we got it all.”

¹⁴⁵ Example is described in the documentary film “The truth about cancer” by Ty Bollinger.

¹⁴⁶ For example, some people in Montreal adopt acupuncture as a way to soften the effects of chemotherapy on the body. Acupuncture is grounded in a philosophy of restoring balance, whereas biomedicine is predicated on destroying the invasive pathogen or abnormal cells. While the former is grounded in trust in the body, the latter often uses war metaphors to restore control over a body that is seen as betraying its host. (Personal communication with Chinese acupuncturist in Montreal).

Changing ways of thinking about the body becomes particularly desirable when bodily states are marked as permanent. Therapeutic pluralism broadens imaginative possibilities- alternative subjective understandings of healing that are particularly desirable when allopathic diagnoses foreclose hope in “therapeutic emplotments” (Mattingly, 2010), like “terminal cancer patient,” or “drug addict.” As people seek alternative treatments the meanings of that cancer tumor can change. No longer an external invader to be radiated out of existence, some participants in this research configured their cancers as a coalescence of nutritional deficiency, toxicity in the body, negative emotional patterns, unhealthy lifestyle habits, and so forth.

It is not surprising that this ideological shift has been accompanied by an increase in transnational seeking. After being diagnosed with something, people from all over the world can learn more by “Googling it” and can connect with others online who suffer from the same ailment. Broader pools of knowledge about healing destabilize explanatory certainties and lead to the formation of social communities around shared struggles.¹⁴⁷ Although the intricacies of illness experience and trajectories followed to places of healing are deeply personal, they are also connected via social networks. It is not uncommon for participants to stay in touch after ceremonies, and to return for more, at times wanting to continue the healing by developing their own practices. Those who are part of the networks I encountered held ceremonies in B.C. and organized longer “meditation retreats” in Peru, Hawai’i, Mexico, and Costa Rica. A woman from B.C. who has been conducting ayahuasca ceremonies in different parts of Canada over the past decade tells me how she apprenticed in Peru with a number of other Canadians. “You go where the medicine takes you.” She travels to conduct ceremonies in Vancouver, Montreal, and Halifax.

5.3. Cultivating colonialism in plant quests

The theoretical underpinnings of allopathic medicine are perhaps being called into question by seekers and these alternative healing modalities, but within this

¹⁴⁷ Kincheloe and Steinberg (2008) suggest that “an awareness of the ways epistemological “truth production” operates in the lived world may shake the Western scientific faith in the Cartesian-Newtonian epistemological foundation as well as the certainty and ethnocentrism that often accompany it” (p. 137). The encounter with multiple perspectives in all aspects of life or “multilogicality” is valuable to all humans and crucial to social justice initiatives (Kincheloe and Steinberg, 2008, p.138).

theoretical chaos there is a pattern in approaches to “natural” medicine of upholding a strong nature-society dualism, which is expressed in ideas related to how medicine should look, taste, and to its general discrete character. This concept of plant medicine can be linked with the marketing of “natural medicine” that produces the image of bringing the body into balance with nature, and sometimes with an environmental ethic, obscuring how “unnatural” the processing and marketing of medicinal plants can be. The herbal industry benefits from these “affective attitudes” (Ngai, 2005, p. 4) exploiting the emotional spaces of “natural healing” and preventative health care in a social context in which therapeutic optimization is a preoccupation of many. What appears to be in opposition to the authority of allopathic medicine and the “unnatural” is, from a Foucauldian standpoint, perhaps more of a “superficial reshuffling of terms or allegiances at the level of content” that upholds the “deeper axioms of knowledge” on which subordination is founded (Knauff, 2002, p. 142). The “anthropocentric disconnectedness” from nature (Fox, 1996, p. 43) that the premise of natural healing seeks to challenge often becomes re-instated for those who shop in the world of holistic healing. While seekers construct new understandings of embodiment and illness that challenge orthodox configurations of medicine and bodies, they also, and perhaps sometimes inadvertently, reinforce standardized Western notions of efficacy and medicine.

Yet it would be an oversimplification to construe these consumer trends as simply a different expression of the same underlying axioms of knowledge, because in many ways those axioms are being challenged, (e.g., connecting with plants as subjects and teachers, rejecting mainstream cancer protocols and their attendant renderings of the body as “parts,” changing the legal status of “plant teachers”). It is not simply the state imposing regimes on bodies, but bodies exposing and deposing regimes. This ideological rejection and notions of responsibility for one’s wellness, self-optimization, and taking control over one’s one treatment approach, are at once very “neoliberal,” yet also reflect the fact that people have their own notions of self-optimization (e.g., seeking in the jungle); they are not duped into being active participants in their own control.¹⁴⁸

¹⁴⁸ Michel de Certeau (1984) draws attention to the way people individualize and personalize mainstream culture, be they objects, laws, or ceremonies.

The rise of plant medicine and the “return to nature” in the drug industry interact with the collapse of some more entrenched medical orthodoxies, and a growing ideology of health optimization. Neoliberal ideologies of wellness stress responsibility for one’s health-to really “craft” one’s own wellness-and this implicates herbal medicine in various frameworks (for this context in Bangladesh see McNamara, 2016) and also is a factor influencing seeking. Unfettered access to information and healing testimonials online, “Googling” to find a shaman, ordering cannabis online, bringing a doctor’s prescription to a cannabis dispensary in Vancouver, attending an ayahuasca or an iboga ceremony in Vancouver, all these point to the emergence of new people-plant relationships and new policies that are interacting with them. The ethnobotanical directions implicit in notions of wellness are perhaps nowhere more empirically noticeable than in the drug hype around a “return to nature” and the proliferation of stores selling vitamins and so-called natural plant supplements.¹⁴⁹

Neoliberal ideologies of wellness and illness generate people-plant relationships. These relationships figure prominently not only in the normalization of plant supplements or in trends like green smoothies, “superfoods” like kale and blue berries, or entheogens like ayahuasca, but also in the way that plants like tobacco (*Nicotiana Tobacum*) are vilified or carry strong social stigmas. Contemporary ideologies of selfhood are increasingly patterned around notions of self-optimization, and plant medicines play a role in helping to achieve that optimal wellness. People are actively forging new relationships with plants, and there is a palpable shift in structures of feeling vis-à-vis plant medicine.

5.4. Stories of seeking and plant encounters

The following narratives describing seeking trajectories and plant encounters bring out the transnational contexts encompassed in these new people-plant

¹⁴⁹ Large pharmaceutical companies are buying smaller manufacturers of herbal supplements (e.g., New Chapter purchased by Monsanto-linked Procter and Gamble). Hayden (2003) points out that after roughly half a century of pharmaceutical companies showing relative disinterest in plant remedies due to the prioritizing of synthetic chemistry, the “hype” around the drug industry’s “return to nature” in the late 1980s reflected a renewed interest in nature in the U.S. and Europe, a fast track for finding new medicinal innovations (p. 359). During this period several well-publicized bioprospecting arrangements took place, wherein multinational companies partnered with Indigenous organizations and young research institutes in biodiversity rich areas (ibid.).

relationships, which might elsewhere be described as “lines of becoming” (Deleuze and Guattari, 2000) that emerge in the improvised spaces created by seekers and healers as they forge new relationships with plants. Even though indeterminacies predominate, there is substantial “attunement” in the configuring of plant agency emerging from these in-between spaces connecting people and plants (Laplante, 2016, p. 41).

Hanna

I first met Hanna on a cold winter’s night at a cabin she briefly rented on the banks of the Cheekye River in Squamish, B.C. She tells me she belongs to three of the Great lakes: Lake Superior, (*Gichigamiwininiwag*), Lake Michigan, and Lake Huron, the spirit lake of the Anishinaabe.

I am of land, I am of this geology, I am of this geography, I am of this water[...] My healing requires me to have a direct relationship with land, a direct relationship to the geomorphic resonance of the water, the tides of Batchawana Bay, the life force of Lake Superior.

She introduces herself by naming her ancestors in lineages connecting Anishinaabe and Sami roots, crafted into the story behind her own name, which I refer to by the pseudonym “Hanna.” A shaman, a mentor for youths, a grandmother, and an academic, she describes her role as a bridge connecting young people with shamanic traditions.

After our first encounter, we set up several more interviews, which I video-record. The second of these is a focus-group interview with Hanna and one of her apprentices who had recently returned from apprenticing with a West African shaman in the Bwiti Iboga tradition, in Costa Rica. I also participate in a couple of ceremonies that she organizes.

Hanna draws my awareness to an implicit construction in my research of seeking trajectories as international movements on a physical plain, as the jungle being *out there*. She frames the *return to jungle* as an *internal journey* that conjures a memory of different life stages. People are not seeking something external, but something internal, a consciousness, a *sense-making process*.¹⁵⁰

¹⁵⁰ Julie Laplante (2016) discusses the word *rasa* guiding social practices in Java, Indonesia, elaborating on the embodied rhythms of women mashing, rolling, and pressing rhizomes and herbs

[H] I have a problem with your use of the term trajectory. I'm going to offer you another view, rather than "trajectory" because the intention of it is to survive, at the root chakra. Iboga, my experience of iboga, is that it's *root*. It is the truth of the root. And *that* means that there's no more struggle to survive. Because it's not grounded in money. It's as, as ayahuasca is, it's grounded in *survival through jungle*. It's an evolutionary consciousness that gets recapitulated at the root level. *I remember what it's like*, to be in the jungle, to be in the desert, to be in the mountains. *I remember what it's like*. So, the three-part brain gets triggered, first at the level of reptilian, so there's *no more* manipulation of the sexual energy in order to survive. It's *I know* how to survive. Then at the level of mammalian and the limbic system, I know *the story* of survival, so I'm *no longer limited to my small family* where I was abused, where my mother was an alcoholic, where my father was a predator and victimized us as kids, there's *no* limitation to that story, anymore. *That story is hooaaa!* [gestures with a swoosh of her hand...it's gone].¹⁵¹

Hanna explains trajectory as a process of inner self-inquiry and reflection. The jungle need not be a physical place that one travels to; it is in our consciousness and conjured up by the sacred root of iboga. Returning to the jungle is linked with letting go of limitations and limiting life stories, self-optimization, and shedding the archetype of the victim.

[H] Actually, the healer archetype is initiated in *our world view*, in the shamanistic view, these are initiations, these are rites of passage. I'm not trajectoring myself with the intention to pay it forward, that's not the work. The work is, I'm breaking this bottle [taps bottle] of how I find myself *open* by these shamanic rites of passage. It's a *breaking open* to and exploring the diversification of this genius, and it's in human potential. This going back to the spirit of the medicine plant within the context of ceremony and shamanizing *brings us back* to the remembrance of *why we're here on earth*. What really truly is our purpose? And that's what I've observed with these young ones. When they've *come to me*, either from their ceremonies or prior to their ceremonies, I serve, as Joe [one of her

as they make plant-medicine beverages called *Jamu*. *Rasa* also evokes perception of feelings, "sense-making, not just sensing"; it is coupled with the term *lair-batin*, which refers to the way "experience and perception give form to reality" (Laplante, 2016, p. 25). The natural world becomes culture through the operation of *rasa* (ibid.). *Rasa* is a word with very broad applications and can be described as "sense" or "feeling" and in Sanskrit can include sap, juice, minerals and semen among other things (Laplante, 2016, p. 24).

¹⁵¹ Here she refers to the evolution of mammals and how those knowledges from different evolutionary periods (e.g., reptilian and mammalian) that are part of consciousness and can be triggered, enacted and awaken ancestral wisdoms. Seeking is ultimately an inward journey or trajectory.

apprentices] said, as a gateway, but I really see myself as a bridge; I'm opening the gate to say, "OK, walk the bridge with me, how are you going to now reintegrate," and so I tend to be a touchstone. It's like, OK, I'm just coming back from Costa Rica, when Joe was in Costa Rica last June, he Facebooked me and messaged me saying "Hanna, oh thank you so much for doing your ceremonies." I could just hear him going, like, "OK, you're my bridge" you know, that's it, and Carla (also apprenticing with the iboga plant) has done the same thing.

Hanna elaborated on why she thinks young people are wanting to apprentice, which relates to taking control of their lives and finding their gifts to share. She frames this within a therapeutic paradigm shift away from patriarchy that she refers to as "the receding wave."

[H] That story [of the victim] is over on the planet; that's the shift. It's gone, it's undone. There's no victim here, there's nobody rescuing, those professions that have deliberately structured themselves around the paradigm that people are victimized and have created a paradigm called victim-persecutor-rescuer, those professions are leaving. That political system is collapsing [...] here is this receding wave. This wave is leaving. It's taking the mnemonic of arrogance. It's taking greed, pride, ambition; it's taking guilt, shame, doubt; it's taking lack, the belief in lack. I'm creating a new reality where medicine is really standardized, that, that traditional context for medicine is going to be an integrated model, you know, so we are integrating models that are part of the receding wave. We are walking in the footprints of the sands of time, taking in the particulars that, from the ancestral realm, are exactly crucial to what we need now. Common sense. If we do not have enough trees, we don't have any botanicals. In British Columbia if we continue to support in any way, shape or form the marijuana industry, we lose at least ten native medicinal plants to this province.¹⁵²

Hanna describes how she walked the forest paths she has always walked in the Kootenays and could not find *Ousnea*, [Grandfather's Beard], which used to be easy to find. "It was all marijuana...I mean *everywhere!*" She was collecting *Ousnea* to make medicine for the H1N1 virus, and she stood by vaccination line-ups for inoculation with her medicine in hand sending out a subtle message to pay attention to this plant actor.

¹⁵² An interesting parallel is that concomitant with Hanna's observation of receding patriarchy is the preponderance of women in ethnobotanical courses, workshops and activities pointed out by a few North American herbalists who participated in this research. Ayahuasca is often gendered as well, envisioned as a woman. I revisit this theme in chapter six.

[H] Plants are whole, trees are whole. We are all whole. So, humans have really created, as you said before we turned on the camera, this dialogue between dualities. Subject, object, you know, either or, black white. I mean, we lose the full spectrum of potential, of what it is to truly heal...and to truly heal for me, means: the first step is to honor the ancestral gift. The second step is to get into right relationship with all of nature. The third step is to really understand that this [points to her head] is not just a computer. It's a shaman's cave. There is great medicine in here, there is a crystal skull here, there is an aspect in the pituitary that is a master gland, there is an aspect of the pineal that is a mastery gland [she points to her third eye] so the real healing happens when someone goes in tarot we would call it the hierophant, the law of perfecting oneself, to really craft one's own life is really the task at hand. That's the healing, that's medicine. So, when we look at the Guatemalan elders and the teachers who are coming out of the mountains and moving out of Mohawk, Navaho, out of Anishinaabe traditions and exploring and exchanging the medicine, we're making a whole new way! That's anthropological evolution. We are creating a whole new culture. An evolutionary foundation for the future cultures...which are universally Indigenous. Not specific to territory. Not specific to tribe. Anishinaabe means "of the people."

"That's anthropological evolution." There is an optimism in her words here that the cross fertilization of cultures, aggregated around carving out a new way of relating to Mother Earth, is connected to what she describes as the receding wave of patriarchy. Hanna situates healing in the intention of crafting and perfecting one's life, a process that involves honoring ancestors (the mnemonic resonance of the first shamans of their lineage), living in right relationship with all of nature, and self-awareness and recognition of the power of the mind and spirit in healing dis-ease. Hanna is also skeptical about the medicalization of plant teachers like ayahuasca and iboga, but optimistic about the cross fertilization of healing approaches as they traverse epistemological borderlands and lead to collaborations among Indigenous and non-Indigenous peoples across the Americas. She excitedly tells me about collaborations between Indigenous people from different traditions and her travels all over Canada and more recently Costa Rica and describes these collaborations as an "evolution of teaching." She imparts how Huichol have been activating a mountain in Ontario for eleven years.

[H] For the last year and a half, thanks to my friend, she's funded me to go back up north to climb Batchawana Mountain to work in ceremony with Huichol [...] we are now reclaiming the Anishinaabe teaching. So, it is no longer the Huichol weather

workers who are coming and grounding that on Batchawana Mountain for Gichigami, for Lake Superior. It is now the Huicholes channeling the Anishinaabe original teaching.

Seeking is generating communities and cross-cultural connections. It is connected with rejecting therapeutic *emplotments* (Mattingly, 2010), and with not being a victim. So, on the one hand, while I have discussed self-optimization and self-responsibilization as “neoliberal ideologies,” (as discussed elsewhere, see Miller & Rose, 1994), connecting them with global economies, free-market economies, and capitalist enterprises, these modalities also emerge in unexpected ways that are counter-hegemonic and reflective of an ideological shift.¹⁵³ The phenomena are multidirectional. Hanna speaks of standardizing and integrating traditional contexts for medicine, in ways that are distinct from the medicalizing processes that she critiques, and which are already underway with plant medicines like marijuana and iboga.

Hanna forecasts that part of the current paradigm shift (“receding wave”) involves the fading out of patriarchy and greed, and professions such as psychiatry and psychology that are reliant upon the concept of *victimhood*. She suggests that the intention behind people’s seeking is “survival through jungle,” a context wherein people are emplotting their own treatment protocols. The desire for self-optimization is here discussed as separate from processes of medicalization of plant medicines. However, seekers’ quests are in many ways quite entangled in these medicalizing processes, and at times align with them, as I have shown by focusing on stories of encounter.

Monica

[M] I’ll start with the plants here, then we’ll get into the cancer trees! There are twelve trees here that cure cancers!

Monica has lived in Talamanca for close to a decade and has spent time learning from some Bribri and Cabécar plant specialists, and also an Indigenous healer working in Panama. She is an American herbalist with an impressive knowledge of the local plant medicines and planted a “cancer garden” on land shared by various expats as part of a community agricultural effort. We had been planning a hike for a few weeks, but the rains pounded hard in the mornings making it dangerous to walk in the jungle. This

¹⁵³ Szasz writes, “the state shows intense interest in the concept of disease; and the term *treatment* is often used in lieu of the term *coercion* (2001, p. 487).

morning only a light rain was falling and at 6:00 a.m. I started biking to Playa Chiquita. We leave our bikes locked in front of Botánica Organica, a small coffee shop selling herbal teas, essential oils, Kefir and other products. Next door is a wellness center and yoga retreat, advertising the support provided to clients on their “inward journey towards optimal functioning”; the center is run by an American, and it offers different therapeutic modalities for chronic illness and disease, detox programs, and “wellness therapies” (including infrared sauna treatment programs, kombucha and organic vegetarian food).

Monica appears frail but is impressively strong, making her way effortlessly and fearlessly through the jungle. She shares her fascination with the specialties of many local plants, trees, and vines we encounter, and the hope they represent for cancer treatment, among other illnesses. Wearing gumboots, we make our way along a narrow path leading into the jungle. We climb over a fence into a horse field to get closer to a guava tree. She digs up some soil to show me the composition and its quality.

[M] How does that look to you?

[Me] Like good soil.

[M] Un huh, this would be good land to buy.

I turn to the horse who has been nuzzling my back, and she leads me to a *limón* creole tree.

[M] This tree is good for blood clots, also to ward off bad spirits.

She tells me that I’ll notice most Afro-Caribbean men have a *limón* in their pocket, for protection from many things. The fruit can be rubbed on a suspicious looking insect or snake bite for quick disinfection.

[M] ...excess mucous, general health tonic, flushes your liver-you can chew the flowers for nervousness, *Mulunga* is good for the nerves too.

We move on to look at a guava tree and admire the multi-colored bark. We stand there each munching on a leaf. This is an important one to know about during the rainy season she hints. The intense heat and on and off heavy rains caused a local dengue epidemic making headlines in the news.

[M] Take a few fresh leaves of guava mixed with one good size papaya leaf. It’s also good for dyspepsia, imbalance of stomach

acids, eye infection, or any accident to the eye-you apply the flower to the eye; for the stomach, diarrhea, dysentery, dizziness, HIV, nervousness, malaria, nausea, mouth sores, edema. There's quinine in the leaf. If you chew the green fruit and leaves it strengthens your teeth and gums. It's also a vaginal rinse.

In between discussing the uses of guava leaves, and the apparently dwindling populations of wasps and red dragonflies, she adds:

[M] Here Indigenous people dry the guava leaves, powder them, and use them on skin ulcers.

We make our way along the slippery path, stopping at bushes and trees, and she describes their curative values, and then we move on to the next plant or tree. She reflects that the timing for our harvesting is good. The moon is waxing, soon to be full.

[M] A full moon is the best time to collect. Between now and the full moon is good, but around the full moon the energy is up in the leaf.



Figure 5.1 Traditional u-suré used for ayahuasca ceremonies.
Photograph taken by N. K. Ferenczi

As we make our way deeper into the jungle an Indigenous man passes us with a quick nod. He was beginning preparations for an ayahuasca ceremony in a ceremonial hut built in the *U-suré* style by local expats and tucked away further up the path. The rain is light, so we push on, eventually arriving at the dome structure with a rue bush growing beside the entrance. We walk inside where the lighting is dim and the air cooler. She tells me about some of the ceremonies she has participated in. The space is large and would easily fit twenty people. Ceremonies are officiated by different people, sometimes a visiting *ayahuasquero*, other times a Tican who grew up in New Jersey, or an Italian man who has been living in Costa Rica for decades.

[M] When the shamans take ayahuasca the plants come to them and that's how they know their uses. [...] Ayahuasca is different for everyone," she says, mentioning how her husband had a very traumatic experience.

Several hours later we begin to retrace our steps back to our bicycles. A couple of Tican men start clearing a field, and she asks if we can collect the vetiver growing there first. They accede, and we quickly get out our scissors and fill our bags. We then collect our bicycles and make our way to her house where we spend another couple of hours looking at samples and talking about cancer trees and ayahuasca. She gives me a glass of her freshly made kefir, and after placing the leaves we collected in a herb dryer, we sit at her table to go over the plants and trees that we discussed. She brings a wide variety of specimens to the table, while others grow in pots on her balcony.

[M] This is an amazing tree, Guanábana. Mostly the leaf. Its ten thousand times more effective than chemo. You use the bark, leaf, seed...it's a sedative and food and targets only cancer cells-it doesn't kill anything else. Antibacterial, antiviral, lowers heart rate-a lot of the tree and plant medicines here do. It dilates blood vessels-good for clots; sedates-it has a high level of tryptophan and tanzine, alkaloids like muricin and muricinine. The seeds are toxic, sometimes the leaves too, they are used to get rid of external parasites like head lice-you kill the insects by rubbing the leaves on the skin. The bark and leaves have been used as fish poison. Caribbean people here mix the leaves with other species to calm the nerves, also for depression, spasms, and to stop convulsions.

She scans her detailed notecards checking to see if there is anything that we over-looked.

[M] Targua. We didn't see it. Sadly, that tree is not here anymore. Because of CAFTA [Central American Free-Trade Agreement] you can't get it anymore, you can't even import the sap from Ecuador anymore. It's because it's not a hard wood-hardwoods are prized, and other important medicines get clear-cut when they're clearing land.

[Me] In the seven years that you've lived here has a lot changed?

[M] The declines that I've seen the most are the fuchsia dragonflies. It's because of round-up! Also, the large wasp species, it's like it disappeared overnight. I saw this mass migration of wasps, it was like a sea of wasps. Sorosi is also disappearing. It grows on the roadside-Monsanto puts defoliants down. They spray the area where the Indigenous plant yucca, a super absorbent plant, grows. Don't eat yucca here unless you know where it came from. Del monte is switching all crops to GMO-pineapples-once air-borne this is a disaster. Just put a ban on GMO seeds! All agrochemicals here are from Monsanto.

We find two sorosi pods, which are among the declining species that she mentions. She gives me one and takes the other to plant.

Monica's exclamations reveal her passion for plants and her detailed knowledge of medicinal uses. She does not regularly give herb walks and is more of a practitioner than a guide. She makes her own fermented beverages- Kefir and Kombucha- which she sells at some of the local markets. She makes medicine mostly to treat family members and friends and gives me medicine to treat a stubborn infection in my toe!

Monica discussed medicine in a dynamic way, starting our plant walk by showing me the soil, which resonated with Don Miguel's starting point. She also made temporal distinctions describing the medicine to be strongest in the leaves during a full moon. She addressed the politicization of medicine and spoke with consternation about health regulations and imposed vaccination protocols in her daughter's school, as well as trade agreements that limit access to certain plant medicines, and plantations doused in chemicals that contaminate the soil and become concentrated in root vegetables that absorb a lot of water, like yucca. During plant walks Monica discussed plants medicines holistically- phenomenologically, socially, medicinally, and politically.

Miss Bertha

[MB] I had twenty cancers in my body. Cancer here, cancer here, cancer here.

Standing proudly and seemingly in good health, Miss Berta points to different parts of her body.

[MB] Cut off both breasts. I only use bush medicine. Now I use snake venom too.

I am impressed by her matter-of-fact voice and strong healthy appearance. I reflect on Canadian discourse around cancer and “cancer status”; either you have cancer and it is terminal, or you get to try to be “cancer free,” in “remission” or to “beat cancer.” You have cancer of a *thing*; it is in your breast or your leg, or lungs, it is in a *place*, or it has *metastasized*. That place becomes the focus of treatment, the diseased body *part* that betrayed its owner, and that must be attacked with things like chemicals, radiation, and surgery. I muse at the thought of introducing new catchphrases “getting to know your cancer,” “imagining your cancer,” “nurturing your cancer,” understanding cancer as something that is a part of yourself, intersubjective, something that can be lived with and managed with bush medicine.

[Me] How do you get your medicine?

[MB] I go see Don Isidro. Takes me three days! Through Panama is faster. First, I go to Bocas, then take a boat, then bus. Takes me three days! I take bush medicine too. I been livin’ wit cancer over twenty years now.

Miss Bertha keeps a tidy simple home in Puerto Viejo, but from an economic perspective, she would be described as marginalized and poor. She braves the long journey to the other side of Costa Rica by taking a “short-cut” (three days) through Panama. Her seeking trajectory reveals that it is not just the affluent who are traveling to consult with healers located in far off places.

Don Isidro

In Don Isidro’s clinic, the way people talk about cancer starkly contrasts the whispering and foreboding tone that distinguishes the social context of many Canadian clinics. The energy in his consultation room is jovial and light-hearted. Some people speak about cancer in loud voices. The mood is uplifting and encouraging; patients laugh and vent their frustrations with hospital experiences. He graciously invites me to hang out in his consultation room and one by one, sometimes overlapping, patients

enter the small room and wait at the counter. A client lifts up her leg so that Don Isidro can see it over the counter.

[P] "I have cancer here," she points an area on her leg.

Don Isidro's son sits beside him, and his daughter is adjacent, bagging up the plant medicines into little bundles, and writing instructions in marker on the plastic bags: "for pancreas," "boil with eight liters of water." The patient indifferently glances at me when Don Isidro introduces me, and my reason for being there. I ask him if I should leave, after all these *are* private matters. He repeats my question slightly mockingly to the patient, and the patient shakes her head with confused indifference (as though to say, "Why would I be interested in her? I have cancer, man.").

Don Isidro imitates the doctor and patient interaction that he imagines the patient just experienced. He adopts an authoritative posture and begins a dismal prognosis. Quickly shifting gears, he laughs whole-heartedly and the patient nods knowingly and laughs with him. It does not appear to be their first encounter.

[DI] "Ah doctors," he sighs heavily.

Don Isidro light-heartedly chats as he dances around the small room selecting packets of finely chopped tea from the shelves behind the counter.

[DI] "I'm eighty-years-old and watch me dance!" People die because they get hit by a bus, or they have a heart attack. Not cancer. My medicine cures cancer."

Luke

Luke's relationship with the pao d'arco tree defines his practice. He chose to conduct naturopathic research in Costa Rica because the tree grows there. He focused on this tree during his naturopathic research in the United States and the inner cambium is a key ingredient in the tea tonic he makes. He explains the history of medicinal use of the soft wood tree, too often undervalued, clear cut, and left rotting on the roadside. He explains how the Mayans and Incans used pao d'arco for diseases related to the immune system. He harvests the medicine off living trees, taking small pieces of the inner cambium and patching the wound with sap to prevent damage or attacks from fungus or insects in the tree's scar. I assist him in making tea, scrubbing turmeric and ginger, my stained yellow hands evidence of this constant contact with these roots for

two months. The small bags of tea are sold at a table near the local market and near the hospital, and to visiting neighbors and clients. Several of them are using it as part of their cancer treatments.

Jim

It was while speaking with Jim, an American participant who runs a Bribri soup kitchen in Talamanca, that I first heard testimonies relating to Don Miguel's skills.

[J] We have people who have come who need healing and have tried allopathic medicine and it didn't work. They are very discouraged and say, "okay I'll try this traditional stuff," and why not? The more advanced the disease, the less it works, because it *takes time* to work. If the person *wants* to be healed Don Miguel's treatments *always* work.

Jim was full of praise, telling me of his own and his wife's treatments and their sense of indebtedness to Don Miguel.

[J] Don Miguel doesn't tell this to patients- plants talk to each other and to us. The only people who don't understand are "the people"

He offers to bring me to meet Don Miguel and it is easy to see that this is not the first time that Jim has connected someone to Don Miguel for treatment.

[J] It's a two-way bridge; the bridge is a two-way street. People coming with questions and needs from *both sides*.

I later learn that he has done so for some Americans, among them a friend diagnosed with cancer and six months left to live.

[J] This woman had a six-month life sentence- Leukemia. Almost a year later I bring someone else to Don Miguel and this young woman runs up and hugs him. I knew her through Facebook. After Don Miguel's treatments she went and got a blood test, *all perfect!* She returned and gave the test results to Don Miguel. He enjoys watching the process and if it's going right, or if adjustments to medicine need to be made and so forth.

Excitedly Jim re-counts how, when the woman returned to her doctor in the United States and the test results were normal, her doctor, still dubious, decided to travel to Talamanca to see for himself. The doctor was so astonished, as Jim tells it, that he swore to integrate more "natural medicine" into his own pedagogical approach. Two

classes of student nurses followed in his footsteps, making their way to Don Miguel's farm.

[J] Her doctor was surprised. At first, he came to Costa Rica to negate it. He said, "Jim, what I believed would work didn't, and what I was always taught didn't work, did." So, he came to Costa Rica to find out what went on. Two classes of student nurses came to Don Miguel too. The first year sixteen of them, all professionals in medicine, they all came down and there were some assistants who weren't doctors. The second time twenty people. On his second visit this doctor says to me "I decided to put a lot more natural healing in my teaching."

Jim and his wife were respected by both Bribri people and local expats. They left their relatively affluent life in the United States to live a humble life in Talamanca helping Bribri people and trees. They bought a plot of land across the street to prevent it from being clear-cut and hired a guard for the cherished trees. They find small but significant ways to support local Bribri families and encourage others to do so as well. Doing positive things for the world is also part of living a healthy life.

[J] There's two sides, or ways of seeing. On the one side you get the life sentence, do the research, read testimonials, there's always the other side, looking up what you can do, what you can fix- but the more you focus on the disease the universe says "if you keep doing these positive projects here..., it gives you more. We're trained that this is *bull shit*."

The soup kitchen is a bustling place and nexus of interaction bringing together Indigenous and non-Indigenous people. Jim is a strong networker and his small modest home is crowded on a daily basis, with mostly Bribri customers but also occasionally including other ethnic groups: Cabécar, Afro-Caribbean, and Guaymí and Ngöbe-Buglé (two groups from Panama who were displaced by flooding rivers in Panama) and Canadian, American, and European volunteers. One young female Bribri visitor who works at a nearby fruit stand is visited regularly at Jim's house by a health official who administers an injection to treat her tuberculosis. The soup kitchen is a place where many needs are met.

The stories of encounter are not all positively described. Jim also refers to an instance of intellectual property appropriation and a pharmacist who decided to take on the title of "bush doctor."

[J] This guy came here, a pharmacist from the US and his brother is a doctor. He calls himself “bush doctor,” he scoffs. He found out what worked and what didn’t. He saw the utility in what his brother was doing and came here and learned about the plant medicine and then his brother came to see the value in them. Healing trajectories can go both ways, stimulate Indigenous healing contexts or work against them and lead healers to pull back.

The interview with Jim provides more context for comprehending Don Miguel’s comments in chapter one and for understanding his popularity. Jim is instrumental in connecting Don Miguel with quite a number of people from the US. During my interviews with Don Miguel he continually refers me to his Facebook page where I can follow up on references he’s made to various North American patients, stories that in some cases overlap with those mentioned by Jim. His page is active and dense. The personal testimonies and expressions of gratitude that adorn his Facebook page attest to the fact that although the trajectories followed to places of healing are deeply personal, they are also connected to social networks, testimonies, word of mouth, media, and those like Jim who act as a nexus among these.¹⁵⁴ Encounters around healing bring together a range of actors in transnational networks: Healers and seekers connect easily online and these interactions bring together *cientificos* [scientists], patients, health professionals, academics, shamans, apprentices, and cottage industry producers of plant medicines.

Joe

I set up my tripod on a cold February morning in Squamish, B.C. Joe, Hanna, and I sit in front of my video camera. The following narrative begins with Joe reading a text message off his cell phone requesting that he provides a testimonial. He unpacks his own trepidation around doing so, which instantiates his embodied, critical phenomenological reflections on the iboga plant’s spirit and the way the medicine is being integrated in the West. As he reads the text, he tries to reconcile his mixed emotions; on the one hand he wants to provide a testimonial that speaks to the profound healing of iboga, and on the other hand he feels tentative about doing so because of the way iboga is being integrated into North American healing contexts and the way the

¹⁵⁴ Basso (1996) points out that while the self-conscious experience of place might be fundamentally a private experience, tangible representations of places are often publicly consumed, and places are sensed together (p. 57).

alkaloid ibogaine (extracted from iboga) has come to represent iboga. He also expresses concern over widespread misconceptions that are generated by exaggerated and over simplified claims currently circulating in North America about ibogaine's ability to cure heroin addiction in a single dose. Joe teases out the tensions and reductionisms in reformulations of plant spirit that medicalize people-plant relationships, a launch pad to delve into these broader issues and politicize the way iboga is being constituted in North American healing contexts.

[J] So, it says, [pause] um, "hi Joe."

He pauses to clarify that is a "generic Joe" and the text message has multiple recipients.

[J] "We are contacting you today because we need your help. As you know iboga is a life-changing treatment that can help so *many people* but, so few really even know what iboga is."

He gestures to me.

[J] What you're doing, *he says in a matter-of-fact voice, (referring to my research into medicinal meanings).*

He continues reading the message.

[J] "Our mission is to spread the healing of iboga root to the world. One of the most important tasks..."

He pauses.

[J] It's hard to talk with iboga in my mouth."

We all laugh, the bitter root absorbing into our tongues. Hanna had given us each a very small piece from her medicine bag to keep the spirit of iboga (in effect the subject at hand) present and felt. *A mixture of curiosity and nervousness filled me as I placed the small piece of root on my tongue. This is part of practicing a more sensual anthropology, I think to myself.* Joe inhales deeply to return to his oration.

[J] "...is finding and connecting to people just like you. As you can imagine, there are a few challenges to face along the way." The message goes on to outline these challenges and the plans the group has for iboga. People's fears and inaccurate, or misleading information are identified as key hurdles making testimonial an important tool for reaching more people "who need iboga."

“Our intentions... Let more people know about iboga. Make correct and true information prominent and easily accessible. Urgently debunk any fears or myths that confuse people about iboga and iboga house. Help people to understand why iboga house is such a great place to do iboga because the ...shamanic way is safe, and it works.”

Joe pauses and looks at me. “*This is the different wavelength.*” Not wanting to interrupt his flow I ponder what he means by different wavelength. This is the epistemological point of tension. This becomes clearer as the interview goes on and I focus on the way the “shamanic” adage is used to describe very different contexts for ceremonial use. He continues reading,

[J] “We need to address all the above by using one of the most widely trusted promotional resources in the world: personal video testimonial. One video can make such a huge difference because it can provide an inquiring individual with proof that iboga works. When a testimonial comes from someone the viewer can identify with, a sense of familiarity and security can be established making them feel safer about iboga and the iboga house. If an individual resonates with your story *not only* will you be helping another human being in a similar situation, this is also an important way to spread the word of iboga to the masses.”

[J] Like these guys are on a mission! he says dubiously before he continues reading the rest of the text.

[J] “A person might resonate with you because you are the same age as them, educated, street wise, from a certain city, or of a certain nationality, a mother, a father, tried everything, never done anything, religious, non-religious, spiritual, non-spiritual, truck driver, doctor, gay, straight, black, white or because of *whatever problem* you were struggling with, or whatever makes you, you, or for the reasons you don’t even know.”

[J] Hmmm should cover it all, he jokes.

Joe’s misgivings around giving testimony and North American epistemological constructions of iboga’s medicinal efficacy unfolded in the telling of a series of people’s stories about Iboga: his own story of recovery from addiction and apprenticeship in the iboga tradition, a Canadian friend and former navy seal with severe PTSD who received treatment and is now apprenticing at an Iboga house in Africa, a Canadian nurse who apprenticed briefly with iboga and is providing iboga treatments in Canada, and a friend of Joe’s who was treated by her for drug addiction, and who wandered off on his own during a treatment with insufficient supervision.

[J] There's lots of places out there, [Iboga/ibogaine houses.] I mean I looked and for price it was more expensive, it was just like I said, you want to go to like, if you *really want to have something done* and, you really wanna...you're going to do what's best for what you think. Once you start getting more into this field, you're going to understand... There's a *really big diversity* spread amongst the healing going on right now. At the bottom there's iboga saving people. Within, within the structure of the healing *there's risk*. Within the, construction of the medicine, there's root, like you just took, root bark...that's from like the plant, that's where it, the medicine, *is*, in its full like spectrum. Beyond that is how the plants is being taken care of, the spirit of the plant, like, proper families, is it grown well, being harvested right, similar to marijuana right, where does this smoke come from, what's going on has it been sprayed, has it been given too many chemicals? Has it lost everything? which it probably has a lot along the way.

Joe's narration seeks to broaden understandings of iboga as a nonhuman being in interaction with its surroundings and constituted in essence through those relationships, and thus not subject to standardization. He conceded that he understood why these protocols are there and respected the work people were doing with ibogaine though chose to return to Costa Rica for his apprenticeship with iboga.

[J] They need a way for it to become integrated into the system, so they love, medical world loves, like, you know, how can we measure this? Ibogaine is about 1/3rd extraction, so you extract the total alkaloid, and you get another purer form of just some alkaloids, and then it's called PTA, and you get the one, little, molecule, ibogaine, and that's why it's a white crystal. So, what they feel with that is that you can control it. You can give it to someone, cause they know that ibogaine works really well for interrupting the addiction process, also there's not a lot of other side effects and things like that. But it's also really, they've taken it away from what, how they know how to use it...right? They [ibogaine clinics] don't...it's not treating, like, it's not treating the spirit, as much as the person, like, using the traditional, like these guys [shamans] have been doing it for thousands of years, with the music and stuff, and this is really bringing someone right back. It gives a person a great opportunity to like introduce new, um, sort of rewire yourself the way you're supposed to be. The embodied experience- it's very foolproof. You seem like a little baby, you're reborn. It's very much a rebirth. And so Ibogaine, whether it has the capability to go into with that much like power, it's working, and it works, and you can't take it away from people but... *no one's died on this side of it*, people have died on that side of it. They treat differently, they don't treat by the spirit they treat by the body weight-which is a totally different thing. My training is like a different thing, you look,

you see, you talk, you hear, you listen to what's going on, you get different ideas-where people *are* right, if they need more, if they don't need more medicine, it's watching and seeing-that's the difference. It's just a real different approach we're talking about which is why I went to Babatunde [the African shaman in Costa Rica]. I felt very attracted to the whole spectrum of super deep understanding. As soon as I did it the first time, I was like *this is what I want to do*. Because like, this is amazing, like... *what is this?* This is really serious stuff we don't know about, it's been sealed. This is actually the forefront of opening people up to their eyes. This is an awakening.

As the interview unfolds, I am told about another Canadian man apprenticing with iboga. He is a Canadian war vet, who initially was searching for iboga retreats in Afghanistan and is now going to Africa to start training to become a provider. Before he continues, Hanna interjects.

[H] He had just come through *two funded national department of defense detox programs*, both of which cost between 12 and 20 thousand dollars, between four and twelve weeks long... and he was still not detoxed. Nobody had shamanized him. Nobody had done the soul retrieval. Nobody had seen his soul was displaced. And in two and a half hours at a campsite we went through *5 different deaths that he had witnessed*. [...] And so, the post-traumatic stress was *built up* because there was no downloading, there was no unpacking. There's no psychotherapy that's trained to do this. It's shamanism that's trained to do this. And so *that's* the benefit. And then these guys connected him to a shaman and to Costa Rica, and so he went from that.

Furthering his critique of the way iboga is being integrated into Western medical frameworks, Joe continues to tell me a story about a friend who was addicted to drugs and living on the streets in B.C. As part of a detox intervention, he was brought to a nurse in B.C. for an iboga treatment. Joe critiqued the fact that she had not finished her apprenticeship and did not provide adequate care and supervision during the treatment. The patient left the house alone while under treatment, and the oversight could have been fatal. Hanna interrupts his narration to comment:

[H] The problem is that she was trained as a nurse. She never shifted her view. Never, ever. Even though she attracted one of my apprentices who worked and supported her, for... almost a year...she *never* was willing to let go of the view, and in *that* view, is paranoia. And I'm going to speak it really clearly. The allopathic tradition, and anything related to the allopathic is paranoid of losing a person. Life is a choice death is a choice.

You sign on for the trip. Some initiations take people over the threshold called death. There's a huge illusion in North America saying *death is it*.

Hanna critiqued paranoia in the allopathic tradition that structures healing protocols around avoiding death, a concern with safety that she shows in some instances thwarts plant medicine from *really working*. She told me about how the Essiac medicine that is sold in stores is missing critical ingredients to heal cancer, which are excluded due to their toxicity. If a plant medicine is sold in a store, it must be made safe to take by people who are self-medicating. Hanna explained that medicines for more serious illnesses like cancer often require ingredients that are considered poisonous, which is why treatment must include certain toxic plants and be monitored very carefully by someone who *knows*. At the time of our interview, she was making her own "Essiac blend" and treating a patient with breast cancer.

Joe balanced his critique of the ibogaine clinical approach with an acknowledgment of the political circumstances that force the "medicalization" of iboga, considered a class one illegal drug in North America (at the time of the interview in 2013), which is currently transitioning into new approaches towards regulation. Medical practitioners, a physical, and health forms to be completed in advance distinguish practices and ceremonies around ayahuasca and iboga in North America, adjusted to political, economic, legal, and cultural circumstances. He later shares with me that he hires paramedics to preside over ceremonies to ensure safety, and that participants must undergo a physical and an electroencephalogram (EEG) test to examine electrical activity in the brain. Ceremonies are also modified phenomenologically to make them more philosophically accessible to North Americans, such as by incorporating psychological therapeutic approaches like talk therapy to help contextualize experiences.¹⁵⁵ Joe comments on how Adam (who operates an ibogaine clinic) responded to his concerns with the spiritual integration of iboga by emphasizing that the addict purging can be a deeply spiritual experience. The comment emphasizes the internal experience of the patient. The material, the ibogaine alkaloid, cures addiction in controlled clinical circumstances. From this perspective, the spiritual context is located

¹⁵⁵ Other reformulations include linguistic adaptations to the sacred songs (icaros) of shamans, in multilingual ayahuasca ceremonies.

in what goes on inside the patient's body as they face their deepest pain and start to detox.

Beyond paranoia around death is the issue of wanting control over the body. There are many misconceptions around plant medicines, and Hanna and Joe suggest that this is partly the result of the de-emphasis on the role of established shamans who are trained to mediate people's experiences with them. As will be further discussed in chapter six, the current emphasis in Vancouver and its environs on learning directly from the plants displaces the central role of the shaman or specialist in overseeing treatment and often other aspects of the medicine, like the music played during ceremonies. The plant is the teacher and potentiates the healing. Don Miguel is insulted when patients ask to just buy the medicine and bring it back to their home countries.

[DM] You wouldn't ask a doctor to just give you the medicine without following your progress. Why is this any different?

Where is the spirit of iboga located? Is it inside a single alkaloid, in the plant's full spectrum, or is it in the triggered embodied experience of the addict purging? Providing testimony for Joe is fraught due to the way the plant is being integrated and medicalized in North America, secularized in its ontogenesis in becoming an alkaloid, ibogaine, and the implicit assumptions about the relationship between a human spirit and iboga, as standardized (e.g., in the construction of a static, stilled alkaloid that can produce measurable effects based on dosage units adjusted to weight, not to spiritual maturity), internal (pathologized as a cure for addiction), and over-simplified (people operating iboga houses without finishing their apprenticeships). What is evoked is a neoliberal context in which there is the freedom to try these things "safely" and an epistemological context to frame experiences that configure plant materials in particular ways (in this particular case, a sacred tree in West Africa configured into a medically valuable ibogaine alkaloid). The healing is often emplaced and emplotted as an inner psychological experience triggered by the alkaloid ibogaine. Ironically, the thinking outside the box that occurs with people recognizing the value of these cultural knowledges and spirit plant medicines strives to challenge conventional ideas of medicine, while simultaneously integrating plant medicines into an existing medical framework that prioritizes safety and control and necessarily upholds a strong people-plant dualism.

5.5. Seeking a “magic bullet” cure: the issue of efficacy

Informal storytelling and testimonies of illness experience are potent in igniting interest and hope in plant medicine. Testimonies of illness experience heard about online or in face-to-face interactions are embodied expressions that reveal very personal experiences and struggles (with chronic pain, addiction and family break ups, terminal cancer, and so on). People can relate to these embodied testimonies that invite them to alter their own subjective understanding of medicine and phenomenological understanding of the body.¹⁵⁶ Testimony has become an important part of popularizing ayahuasca, iboga, and other entheogens. At public talks and conferences on the medical uses of these actors (among other plants and fungi), some recovered addicts are prompted to narrate their before and after stories of healing with ayahuasca and ibogaine and attest to their medicinal efficacy. “It really works.” At one event a white male shares his story of hitting rock bottom living on the streets in the United States and taking heroin for nearly a decade, and his recovery process with ibogaine. Beyond being personal stories of recovery, such testimonies are imbued with shifts in perception and ideas about the self.

Testimonies are not only about healing but also relate to knowledge about the body gleaned from plant teachers, such as Narby’s (2007) recounting of microbiologists traveling to the Amazonian jungle with questions for ayahuasca relating to their research, one of whom took ayahuasca as part of a scientific research investigation into the composition of sperm to develop a male contraceptive (which will be elaborated on in chapter six).

The shared concerns of Joe, Hanna, Félix, Eugenio, and Don Miguel over the way plant medicines are being integrated speak to the ways efficacy is determined. What makes a medicine efficacious, and how such claims are made, who makes them, and why, “hinge on the varied social ecologies” within which treatments are developed,

¹⁵⁶ I have adopted the term seeking from a discussion with a botanical healer in B.C. who has given me permission to use it. I am not suggesting an essential seeker identity as somehow more “ontologically open.” I aim to bring out multiple intentions and experiences. Seekers may reject dominant health models and biomedical renderings of the body because they foreclose chances of healing and may look to other therapies because of the hope held open by knowing the body differently. Seekers may be optimizing their health care by complementing biomedical treatment with botanical medicines, and they might just be curious. These choices are not necessarily indicative of new paradigms for thinking about the body.

evaluated and administered to patients and how professionals are trained (Craig, 2012, p. 4). As noted elsewhere, the “issue of efficacy” must be looked at in much broader terms than narrow perspectives notions on “what works” (ibid.).

5.6. Conclusion

We are earthbound in the Anthropocene as we navigate discourses of global environmental crisis and face the “reality check” that comes with living in apocalyptic times wherein the imagined utopia of the Holocene and lofty ideas of unlimited growth of the 20th century, are losing ground (Latour, 2013). There are ethnobotanical phenomena that accompany this awareness, as humans (from the root *humus*, meaning earth) ideologically and phenomenologically experiment with what it means to be “bound to the soil” (Latour, 2013). Media and academic discourse emphasizing the current and really wrong relationship with nature is evidenced in concrete signs: the heating of the planet, climate change, rising ocean temperatures and loss of biodiversity. Latour alarmingly refers to the condition of the Anthropocene as a “state of war,” a war for the definition and control of the world we collectively inhabit (2013, p. 3, 10).¹⁵⁷

The rise in interest in ethnobotany is connected to desires to reconfigure relationships with nature and ways of understanding nature. Climate change and rising cancer rates are contemporaneous and for one participant seen as analogous, reflective of an ethnobotanical relationship “gone wrong.” Diseased bodies might be imagined as expressions of a diseased planet; cancers the embodied version of global warming. Both are heating up bodies. It is not such an imaginative stretch that ideological connections

¹⁵⁷ Latour (2013) describes controversy around climate change as a “quietism” visible in the everyday total inertia of governments and civil societies who should be exerting more directed pressure on governments (ibid). This statement flattens a diversity of responses, embodied and political protests and differences that relate to place and positioning vis-à-vis sea level. While conducting graduate research in the Republic of the Maldives (Ferenczi, 2005) many participants discussed concern with rising sea levels in their country made up of small, sea level islands. The Tsunami of 2004 engulfed a number of these islands. This national concern is so pronounced that former president Nasheed declared the Maldives the first carbon neutral country of the world in an underwater press conference. The need to reconfigure relationships between society and nature is a global conceptual occupation expressed in protests and petitions over land rights, water rights, over offshore drilling and fracking. Not “quietism,” nor a cohesive civil rights movement that targets the veracity of climate change as its primary conceptual goal, critical responses are taking many forms. More particular to this research are the growing interests in ethnobotany and the social, cultural, and embodied aspects of reconfiguring what is considered to be a “right relationship” with nature.

between lifestyle and climate change might have led some people to consider their “inner climates” and the way disease can be connected to relationships with nature, in this case an imbalance with nature. Academics have also proposed that there are intrinsic health benefits to regular interaction with plants through the actions of mashing and grinding in the making of plant medicine (Laplante, 2016).

Plant medicine has come to symbolize for some a return to nature and “right relationship.” Paradoxically, this ethic in many ways does not align with actually generating support for the sustainability of cottage-industry practices making plant medicine and cultural knowledges about them (which is a dynamic unpacked in the upcoming chapter).

The “making and unmaking of the world” in illness and diagnostic experience (Scarry, 1985, cited in Lock & Scheper-Hughes, 1987), and how the “remaking” is undertaken, can traverse paradigms of thinking, cultural constructions of illness and medicine, and configure new objects of therapeutic attention. The trajectories these processes can take bring healers and seekers together and generate movements of personal testimonies, knowledge, meanings, and medicinal plants across time and space. The remaking constitutes as it seeks, thus while testimony and informal storytelling do indeed subvert “official orthodoxies” and “conventional ways of thinking.” (Cruikshank, 1998, p. xiii), they also often and perhaps inadvertently reinforce them by emplotting medicine in orthodox ways that repeat colonizing gestures.

Chapter 6.

Self-optimization and super plant *becomings*

Plant medicines, as the objects and subjects of encounters around healing, are often at the center of seekers' trajectories. The increasing popularity of ethnobotanicals invites greater critical attention to both the meanings and contestations of meanings and ideas on medicinal efficacy, and the productive relations these meanings set in motion. This chapter explores an additional layer of meaning by looking more closely at contemporary characterizations of "big plant actors" and contemporary plant spirit anthropomorphisms as sites of ideological production. I critically attend to the anthropomorphisms and their productive tensions that emerged in the course of discussions around spirit plant medicine in Vancouver in 2012-2013, holding in mind the context of Don Miguel's opening remarks in this thesis ("*the whole world wants that kind of information*") and Rosa's explanation around *no resumido* [no summary], and the ensconced assumptions around subject-object relationships in Western understandings of plant medicine. The anthropomorphisms discussed reflect efforts to change the way we think and to address plant agencies in a *real* way, yet they configure agency in particular individualist ways that are consequential. Based on my exchanges in the course of this research, it appears that Bribri and Cabécar participants tend to conceive of grave illness as being caused by supernatural forces including the evil eye, jealousy, and little spying birds that throw darts. Luna's (2007) research observations among some healers resonate with those of Langwick (2011), wherein the plants teach the medicine by revealing themselves to seekers in their visions or dreams. Luna furthers that ayahuasqueros often maintain strict diets that can last from three months to years while taking the plant medicine to really know the plant (Luna, 2007, p. 161). Agency shifts across these dynamic interactions between entities, embodied experiences, and temporalities. Agency is not fixed in plant matter, and it is the shaman, curandera or awá who mediates the therapeutic experience.

This chapter discusses social contexts in Vancouver, B.C. (public talks, conferences, meetings), where re-enchantment is enacted in particular ways with attending rationales and definitions of cultural belonging. The configuration of ayahuasca as a teacher and global messenger in the contexts discussed here often emphasize

bilateral relationships between humans and a singular plant spirit being, a plant-centric anthropomorphism. These ideologies are analyzed in conjunction with sustainability concerns as they relate to configurations of plant medicinal efficacy. In what ways are anthropomorphisms of big plant actors productive? What occurs at the interface of bilateral understandings of human interactions with plant teachers and local practices around plant medicine?

There is nothing really new about any of this. Human history is replete with examples of plants considered at one time or another as sacred and ritualized (Pendell et. al., 2007, p. 137). Throughout human history and still today, there has been a variety of ways to recognize “plant spirit” in diverse Indigenous and non-Indigenous cultures. What is particular to today’s context, is the rapid growth and medicalization characterizing the current wave of seeking.¹⁵⁸ In the words of Kat Harrison (2007),

A kind of cross-pollination seems to be occurring with our fast-paced global cultures and these plants. Human beings love to move plants around. We’ve been doing it the whole time we’ve been exploring the world and colonizing it, but we’re doing it very, very rapidly now (p. 128).

Around the contours of this utterance, Harrison discusses the well-known case of Maria Sabina, a Mazatec healer who was visited by Gordon Wasson, who then published his “discovery” of the use of psilocybin species as sacraments in the 1950s. This led to thousands of others, in the 1960s, flocking to visit the soon renowned healer, eventually leading to unwanted police attention and to Maria Sabina being ostracized from her community.

This wave of ideological seeking is accompanied by an academic one concerned with meaning and cultural constructions of nonhuman natures, the later seemingly much more concerned with addressing colonial legacies in knowledge projects. On national levels the acknowledgment of nonhumans as beings is gradually gaining political recognition within particular national frameworks, as evidenced, for example, in New Zealand with the Whanganui River case (wherein the river has been ascribed personhood status and rights); in the Bolivian Law of the Rights of Mother Earth; and in Vancouver public talks on spirit plant medicines. The thrust towards increasing

¹⁵⁸ For detailed information on the rapid spread of ayahuasca beyond the Amazon region see Tupper (2008, 2009).

standardization in representations of biodiversity (see Turnhout, Neves, de Lijster, 2014; Turnhout, Waterton, Neves et al., 2013) occurs alongside an opposing thrust towards more diversified representations and emphases on unique human connections with plants, tailoring plant medicinal strains to personality, biology, and desired outcome and their attendant emergent anthropomorphisms and plantcentrisms.¹⁵⁹ North Americans' experiences with ayahuasca and other entheogens, can lead people to configure selfhood in new ways and, inexorably, to configure *planthood* in new ways. "Big plant actors" have risen in popularity in Vancouver and elsewhere in ways that are perhaps unprecedented. There is a renewed medical interest in cannabis, whose status is highly ambivalent and whose characterization is being stretched to the extremes of standardization and differentiation. Websites and dispensaries differentiate particular strains with their own names and embodied and medicinal profiles (feeling it more in the head, feeling it more in the body, increasing appetite, and so forth) amid a discourse of legalization that must standardize and assume the uniformity of cannabis in order to regulate it. A new landscape is emerging that is dedicated to marijuana cultivation in B.C. and Washington, and cannabis dispensaries have become so ubiquitous, they now blend in with other small businesses lining the strip mall.

The ways in which anthropomorphisms can challenge hegemonic understandings makes them interesting to look at and useful "to think with" as shown in Julie Cruikshank's work on glaciers (Cruikshank, 2005, p. 74, paraphrasing Lévi-Strauss, 1982, p. 111). Anthropology has had an uneasy relationship with areas dealing with the supernatural, where there is a continued tendency towards psychological explanations rather than treating narrated experiences as "really real," (an issue that will be elaborated upon further in this chapter and which also ties in with Rosa and Don Miguel's critiques regarding "summarizing approaches" that reflect Western biases).

As sites of ideological production, anthropomorphisms allow us to analyze the interplay between structures of feelings (Williams, 1977) and hegemonic ideologies around human-nature relationships. The theme of animating nature is itself gaining saliency in anthropology, (for instance Cruikshank's (2005) "Do Glaciers Listen?", Kohn's (2013) "How Forests Think?" and Laplant's (2016) "Becoming-Plant" are ethnographies

¹⁵⁹ See, for example, the website leafly.com where cannabis strains are organized by proper name, genus, chemical and medicinal profile, unique effects, dispensary locations, and so on.

that specifically address human relationships with nonhuman beings that unpack configurations of agency and animations of nature in ways that challenge nature-society dualisms. The notion of re-enchantment is also increasingly addressed in academic work on national and international biodiversity governance issues and approaches to governance that continue to *still* nature (see, for example, Cruikshank, 2005; Ferenczi, 2016; Muru-Lanning, 2012; Sullivan, 2014; Turnhout, Neves, de Lijster, 2014).

It is productive to look at these ethnobotanical reformulations from a critical ethnographic perspective, particularly at a cultural moment wherein approaches to “re-countenancing an animate nature” (Sullivan, 2014) occur alongside a governance of biodiversity that is increasingly broken down into measurable units that can be bought and sold in global markets. The idea of re-countenancing plant animacy was nuanced in many discussions of plant medicine throughout this research with participants in Costa Rica and B.C., but the contexts for such visions varied considerably. In general, all participants in this research called for more contextualized understandings of plant medicine. However, in Costa Rica the emphasis tended to be on ecological, supernatural, and social relationships in building a context for discussions about plant medicine, whereas in public talks in Vancouver, B.C., the focus was on contextualizing relationships between individuals and big plant actors, the latter of whom were usually removed from their social, cultural and physical-environmental contexts. Juxtaposing these different social contexts, which all call for ideological shifts in how we relate to and understand medicine, brings a more nuanced understanding to some of the challenges to plant medicines and knowledge conservation discussed in earlier chapters. My intention in looking at these modulations in meaning of healing and structures of feeling (Williams, 1977) is not to evaluate “beliefs” versus “reality” nor the authenticity of these experiences of interacting with plant medicine, but to look at some of the ways in which these ideologies are productive and how they interface with concerns around the sustainability of plant medicines and different Indigenous knowledges about them. I explore these emergent configurations of plant subjectivity and relationships and the types of “plant blindness” and “plantcentrism” that characterize them. Plantcentrism produces blind spots that inevitably accompany processes of decontextualization.¹⁶⁰

¹⁶⁰ “Plant blindness” is a term David Galbraith (2014, October) used to describe current Canadian perceptions of plants. He describes the challenges in shaping perceptions of plants in Canada and the United States. Perceptions of the public drive policy, and overturning “plant blindness” is

“Our culture has a strange relationship with plants,” as Harrison notes (2007, p. 103). Representations of plants are politically charged, perhaps a testimony to their mutagenic skills, their abilities to unsettle nervous systems and social and political systems, and perhaps even to evoke new paradigms for thinking about *being in the world*. The entangled threads of this meshwork (Ingold, 2007, 2011) and its divergent processes of enchantment involve shifting ethnobotanical representations and medicinal compositions across space. These Western constructions are also characterized by imaginative leaps, shifting self-representations, active constructions of life histories and ancestral connections to plants, and ideological productions defining innate and primal Indigenous roots awakened by this cross fertilization of knowledge that is emerging from connecting directly with the plants.

Ayahuasca is *happy* to be spreading to the *West*. Ayahuasca *wants* this.

6.1. Ayahuasca’s agenda?

Emergent configurations of plant agencies reflect a *re-enchantment* of relationships between humans and plants.¹⁶¹ Jane Straight, owner of *Allies*, a small plant and seed business specializing in rare ethnobotanicals, mentions that students from the local herb school visit her garden and nursery and usually one from each group discovers a connection to plant spirit (2007, p. 135). Similarly, ethnobotany-intensive courses offered by the non-profit organization Botanical Dimensions focus specifically on building relationships with plants as well as plant teachers. Wade Davis (Pollan & Davis, 2007, p. 96), agreeing with Michael Pollen, describes the desire to periodically change consciousness as a “ubiquitous instinctive trait” of humans (particularly humans in the

identified as an important step. He compares perceptions of plants to perceptions of animals, stating that funding for endangered plants comprises only 3 percent of the funding for endangered animals.

¹⁶¹ Michael Taussig (March 27, 2013) uses the term re-enchantment in his description of human relationships with the sun and global warming in “Re-enchantment of the Sun in an Age of Global Meltdown,” a talk given at the Goldcorp Centre for the Arts, Vancouver, British Columbia. Today, in an age of global warming, the sun is configured in particular ways and with particular ideologies, which represents a re-enchantment of the sun.

There is a long history of enchantment with the sun, which has been worshipped by humans across the equator from the Maldives to the Andes since antiquity. (For example, in *The Maldivian Mystery*, Thor Heyerdahl, 1986, documents a global pattern of sun worshipping temples along the equator, based on archaeological discoveries revealing the Maldives’ pre-Islamic history.) The notion of re-enchantment introduces a new way for “talking about body and world,” and “a new way of looking at something” (Taussig, 2013).

Americas), a statement contextualized within a narrative of his own conceptual seeking around plants. He further suggests that this very fact should lead us to question the strict regulation of sacred plants in North America (2007, p. 96). The amount of investment involved in such ideological pursuits (in terms of time, travel, course fees, and trust) suggests a desire to evolve one's consciousness, or, at the very least, to try to glimpse the possibilities for people-plant interactions beyond what we have thus far imagined. These ideological shifts occur within a broader framework of change in people-plant relationships that has been instantiated by anti-GMO movements, anti-transgenic-seed movements, support-your-local-farmer movements, and by an increased interest in plant teachers who we hope may provide some insights into how we might extricate ourselves from the messes we've created.

According to some people, this *shift* is no accident; ayahuasca wants this, and plants have a plan for us. Caricatured in this avowal of ayahuasca's *feelings* (I wonder to myself what this means: *happiness? optimizing usage?*) is a satisfaction with the current translocal trend (*spreading to the West*) and a suggestion of diasporic intentions to proliferate transnationally (*ayahuasca wants this*). The notion of enchantment is important here on a number of levels, primarily because it was axiomatic to several public discussions that I attended in Vancouver from 2012 to 2013, which were largely motivated around attestations of the rehabilitative value that could be provided by ayahuasca and ibogaine, should these medicines become integrated into public health practices in B.C.¹⁶² Presenters included a person working with ayahuasca to rehabilitate prison inmates in the United States and two seeker-healers using ibogaine to treat people experiencing drug addiction.¹⁶³ Ayahuasca and ibogaine were being integrated at this time in therapeutic approaches to addiction by individuals recently completing apprenticeships like Joe mentioned in chapter five and people working in medical professions in Vancouver (for ayahuasca-assisted therapy in a First Nation's community in southwestern B.C., see Thomas, Lucas, Capler et al. 2013).¹⁶⁴

¹⁶² Ibogaine's status in Canada is changing, much as it has already done so elsewhere; for example, in 2009 New Zealand legalized ibogaine by prescription from a medical professional.

¹⁶³ Waldram (1997) also describes the integration of First Nations healing rituals in Canadian prisons. Guided by elders, these rituals include people from all different First Nations groups.

¹⁶⁴ It is mentioned at a conference that in Argentina, a man is experimenting with ibogaine to treat youths addicted to coca paste.

The *re-enchantment* of plant medicines in entheogenic contexts in B.C. involves re-imaginings of selfhood, fostered by intimate person-plant interactions that allow for a unique experience of self-examination and purging of toxic behaviors. It involves both looking-inward therapies and outward-directed talk therapy, which resonates with psychotherapeutic approaches. The feeling around ayahuasca's intention is knowable through intersubjective access to the *plants'* spirits.¹⁶⁵ The emergent ethnobotanical constructions observed in public forums on ayahuasca coalesced into four key assumptions around notions of selfhood and planthood.

- We are all, at root, Indigenous.
- The plants are our teachers. We learn directly from the plants through an intersubjective process. We can tap into our collective Indigenous roots and awaken intuitive knowledge about plants.
- This cross fertilization of ethnobotanical knowledge and cultures is sustainable and beneficial for all.
- Ayahuasca has an agenda.

These ideological convictions deploy particular body-plant relationships that are productive in various ways. They have the potential to be economically lucrative and have transnational influences. Phenomenologically, imaginings encompass the entire sensorium and are capable of unsettling sensory regimens, weaving meanings around sensory experiences.¹⁶⁶ At a public talk, Dr. Maté emphasized that psychological traits are not fixed and that psychedelics can allow one to experience selfhood in a different way and to change emotional patterns established early on in life as coping mechanisms.¹⁶⁷

¹⁶⁵ More often spoken about in the singular under the proper noun "ayahuasca," the ayahuasca brew emerges from dynamic interactions between different species, encompassing *Banisteriopsis caapi* and *Psychotria viridis*, the two key ingredients used, among others, in the brewing of ayahuasca.

¹⁶⁶ In reference to Natasha Myers "Sensing Botanical Sensoria: A Kriya for Cultivating Your Inner Plant" CIE Website "Imaginings" series: imaginativeethnography.org/imaginings/affect/sensing-botanical-sensoria/

¹⁶⁷ Lecture presentation "Psychedelic Medicine: A Paradigm Shift with Dr. Donna Dryer, Mark Haden, Dr. Gabor Maté and Dr. Richard Yensen," JIBC School of Community & Social Justice, New Westminster, B.C. (Jan 31, 2013, 6-8pm).

It is in looking at the productive space in between discussing plant sentience and intelligence and discussing plant agendas that we can better understand the tensions between plant popularity and traditional knowledge conservation.

6.2. Plants as teachers

What are the implications embedded in a constructed Western conception of ayahuasca as a plant teacher with a plan for humankind? Plants have been seen as teachers of medicine, even doctors, and “real paths of knowledge” by mestizos, the Shipibo, the Yagua, and by other Indigenous groups in the Amazon (Luna, 2007, p. 161). In the words of McKenna (2007, p. 60-1),

The greatest gift of the vegetable mind to the human order is the psychedelic experience because it allows the dissolution of boundaries, and it is going to be necessary to dissolve those boundaries in order to coordinate the metamorphosis of the human world. We have to have a vision. I don't mean plan or an agenda. I mean a vision that comes from the unconscious-call it the Gaian Mind or the Great Spirit. It doesn't come out of committee meetings and the data gathered by statistical analysis.

McKenna advances the idea that we need to “feel our dilemma” which would expedite moving towards effective solutions. We need to “change the way we think” (ibid.).

If we had five hundred years to debate, I don't think I would be advocating psychedelic intervention. But we're sick. We're terminal. We don't know who we are. We don't know where we want to go (McKenna, 2007, p. 61).

Some Westerners are adopting the notion of big plants actors as teachers; however, emerging constructions of intersubjectivity include seekers learning directly from the plants, (and psychotherapy). There is the idea of a direct line of communication between the plant and the seeker and often desire for psycho-spiritual therapeutic-benefits. This conceptualization of intersubjectivity, (discussed in the narratives in chapter five) de-emphasizes the role of the trained shaman who mediates the experience- the agency of the medicine is imagined to be situated in the bilateral interaction between the person and the particular alkaloids in the brew. A one-on-one understanding of the therapeutic interaction builds off the idea that the plants have personalities, intentions, genders, and that *they have a plan for us*. The common-sense assumptions underpinning notions of efficacy and plant medicines have led to

sometimes reckless treatments by not fully-trained individuals aspiring to become shamans or people who are very enthusiastic about the rapid detox effects of these big plant actors, but who do not have long-term experience working with them.

Ideas about the teaching specialties of big plant actors have a deep history in Latin America. However, the ways these ideas are being assimilated into Western society has a distinctly neoliberal feel to it, particularly in the way these ideas are specifically linked to notions of self-optimization, betterment, or a new performance of the therapeutic encounter.

What would the plants say? What is their agenda? A discussion muses over what themes would structure a plant meeting (or more accurately a planting meeting) and what ayahuasca's "agenda" is for us. The notion of *agenda* is an imaginative step to enliven plants and their agentic interactions with humans, an inversion of *anthropocentrism*, a *plant-centrism*, meant to challenge subject-object dualisms and to introduce new concepts of intersubjective possibility. It is an academic attempt to challenge the parameters of the box in which the political governance of plants is conceptually embedded. Bravely, the participating academics, a group comprised of biologists, ethnobotanists, anthropologists, psychologists, and others, used the opportunity to "come out of the closet" with their plant stories, their own experiences of entheogenic insight, and their understandings of the relationships between people and plants. They described perceptions in their fields of study fostered by entheogenic experiences, merging their life experiences with their academic pursuits. Ayahuasca narratives often describe an entity visiting the speaker of the narrative in a profoundly visceral experience.¹⁶⁸ My interest was piqued by the new uncharted territory of theorizing sentient nature in new ways and attempting to move forward in subverting entrenched dualisms separating the human body and nature.

Agenda.

I rewrote the word a number of times on my sketchpad. I appreciated the candid way in which professors and field scientists described perspectival shifts in their

¹⁶⁸ Entheogen, in contrast to hallucinogen, does not carry the same implications of something illusory. To acknowledge that there is certifiable information in hallucinations is defined as psychosis (Narby, 2007, p. 13).

understandings of how ecosystems function. One biologist versed in taxonomical approaches to nature told of her experience analyzing her field site under the effects of psilocybin. She detailed important insights gleaned through this experience of the nature of relationships within prairie ecosystems that have extended her research.

Narratives of entheogenic insight in the sciences are becoming more common and have generated distinct motivations for plant guidance from big plant actors. Plant teachings take on new levels. Jeremy Narby (2007) describes an unusual experiment in 1999 when he accompanied three molecular biologists to the Peruvian Amazon to visit an Indigenous ayahuasquero (p. 21). Their intention was to try to derive bio-molecular information about DNA from ayahuasca and to see whether this was possible (ibid.). Narby describes how the Swiss biology professor- who wanted to understand the function of “CpG islands” and to know whether they have the same structure- envisioned herself as “a transcription protein flying above a DNA molecule,” learning that the CpG islands had the same basic structure, meant to serve as “landing pads for transcription proteins” (2007, p. 22).¹⁶⁹ She commented that this would not have occurred to her and that it is a testable hypothesis. The French professor who had been conducting research on sperm to develop a male contraceptive wanted to know which of the fifty proteins excreted by the sperm duct is crucial to fertilizing an ovum (Narby, 2007, p. 23). “The answer” received was that it is not a single protein acting, but rather how all fifty proteins work together (ibid). The focus on singularity rendered the spaces in between immaterial, relationships taken for granted, which contributed to scientific blindness.

There is also a gendered aspect to these ethnobotanical movements. A large proportion of people seeking ethnobotanical knowledge are women, some of whom are also healers, broadly speaking (e.g., pharmacists, naturopaths, herbalists). Josey, the ethnobotanist introduced earlier in this thesis who teaches an ethnobotany course in Kona, confirms that participants tend to be women, although this is slowly changing (in our group there were three men and a dozen women). Paradoxically, discussion around big plant actors in Vancouver is largely led by white males (and a few women did express a frustration with the male power dynamics involved). Discussion of ayahuasca

¹⁶⁹ “CpG islands” are DNA sequences rich in C and G (A, G, C, and T represent the molecules that comprise DNA) (Narby, 2007, p. 22).

often refers to *her* in the feminine, along with Mother Earth or *Pachamama*. One participant specified a more androgynous perspective of ayahuasca.

Essentialisms linking women to nature continue to be used to suppress women's voices and concerns, as shown elsewhere in contemporary examples (see, for example, Kimera and Katano, 2014). Alternately, essentialisms might be embraced and a politically symbolic way of expressing agency, such as in this context of women seeking ethnobotanical connections and embracing the idea of being "closer to nature" (and also reflected in Bribri participants' characterizations of Indigenous practices and medicines, which uphold essentialisms that correspond to the imposition of mainstream biomedicine and preventing the co-optation of Indigenous knowledge).¹⁷⁰

Ceremonial contexts are also being modified in response to gendered protocols, such as menstrual taboos surrounding ceremony and the idea of a menstruating body as polluting. During a *temazcal* in Puerto Viejo, the young Tican *curandera*, Ariana, challenged what she referred to as outdated patriarchal ideas and asked me to fetch some flowers to have the menstruating women sit upon during the ceremony.¹⁷¹

The changing social lives of big plant actors are generating curiosity and interest. Plant teachings are opening up imaginative possibilities and shifts in mainstream understandings about "drugs," which also correspond to various processes of legalization or controlled administration. Recent decades have revealed more structured interest in what big plant actors can *specifically* teach us about biology. This ever-growing interest in ethnobotany is particularly visible among women.

¹⁷⁰ One must be male to become a *Mestre* in the União do Vegetal (a religious group that includes elements of Christianity and a belief in reincarnation that began in Brazil and uses ayahuasca tea in its rituals), which is to achieve the highest rank in a four-leveled hierarchy (Luna, 2007, p. 165). Beyer points out that there are very few female shamans in the Amazon (2009, p. 10).

¹⁷¹ A *temazcal* can be likened to a sweat lodge and is a practice with a long history among Indigenous people in Mexico and across Central America dating back to ancient Mesoamerica. The purpose is to be born again and participants crawl in on all fours to symbolically represent the infant child to be reborn. Stones are heated in a sacred fire and carried to the fire pit, located in the center of a low dome structure, by the *hombre de fuego* [fire man]. Deer antlers are used to transfer the rocks to the pit, and copal and sage are burned. The stones are introduced in four stages. The structure is built out of reeds and covered by woolen blankets, allowing no light in.

6.3. Plant communities

This re-enchantment involves cultural constructions that reference notions of genealogy and tapping into deep ancestral connections with plants, which corresponds to the idea that these relationships are part of our collective human history, and that we are gradually returning to these ancient traditions (Harrison, 2007, p. 102). At a conference in Vancouver a comment is made:

In our quest to make meaning of life perhaps and our existence on this planet it makes sense that we would turn to plants, because life as we know it would not be possible without them. We use plants to explain our own experience. Our ability to learn directly from plants is not the domain of shamans, but in us all, if we move beyond cultural constructs and boundaries, if we see ourselves as integrated in the whole world...It's a question of us dialing into the language plants are speaking, we can all be receptacles.

Turning to plants to construct meaning and cultivate a sense of being and “re-worlding” was rationalized around an acknowledgment of human reliance on plants and the desire to expand our levels of interaction with plants. *We are creating a new culture. We are universally Indigenous*-these were utterances repeated throughout the conference. In this context, the assertions hold a space for Euro-American individuals who are actively formulating ontological connections to plant teachers based on ceremonial frameworks derived from Shipibo and other Indigenous contexts. A shared belief in the efficacy of big plant actors (and often a shared belief in the inefficacy of mainstream public health approaches and drug intervention approaches) works to establish a community. The borrowing from other cultural traditions is positively addressed. *Not appropriation, but cross pollination. Finding your gift. Feeling whole enough to share, to give.* The self-identification is based on constructed ethnobotanical relationships in what is democratically referred to, at one conference, as the *cross fertilization of Indigenous knowledge*.

“The plants are our ancestors. The plants are who we honor. Ayahuasca is happy to be spreading to the West. Ayahuasca wants this.” The statements shape an ancestral connection linking human and plant kingdoms, an innate, native, and instinctive inner “noble savage.” In addition to “Northern conservationists” and “Northern cultural preservationists” (Berkes, 2008, p. 233) are Northern seekers of plant relationships. Ayahuasca communicates directly with individuals and the capacity to

engage in communication with these big plant actors is in our universally Indigenous genes. One panelist addresses plant popularity and understandings of “plant status” from a plant perspective, in terms of success stories, ironically a hierarchical perspective where, for example, ayahuasca and cannabis represent “total wins.”

There is a veritable individualism and capitalism in these valuations centered on growth, distribution, and success or “winning.” I point this out to bring into focus how these ethnobotanical assessments carry an implicit understanding of interaction and medicinal efficacy as bilateral interactions between humans and singular nonhuman species (Lien, 2015, p. 9). There is an inherent decontextualization underpinning this constituted relationship that contributes to concerns discussed in previous chapters around fostering culturally and environmentally sustainable practices, and the importance of a holistic understanding of plant medicinal *function*.¹⁷² Decontextualization occurs by separating plant medicine from multispecies entanglements that co-produce medicinal becomings, and through the idea of independent access to plant teachings through innate senses and perceptions.¹⁷³ The idea that people-plant relationships allow for direct access to plant wisdom (“*through our collective Indigenous roots*”) diminishes the need for fully trained shamans or ayahuasqueros/as to carry out the healing work. Needless to say, the transnational popularity of these plants allows them to move through spaces much more fluidly than the practitioners who specialize in conducting ceremonies and playing music. One is left to wonder about the effects this has on practitioners with ancestral connections that are no longer perceived as an implicit part of the plants’ healing efficacy. *Fast-track shamanic initiations* (e.g., “become a shaman in just three weeks”) instantiate a *neoliberal pocket* aggregated around ethnobotanical desires entangled in becoming one’s best self, optimizing health, healing, letting go of addictions and detoxing invigorated by the personal testimonies of recovered or rehabilitating individuals. The testimonies are compelling; they create a sense of hope and possibility for better approaches to coping with drug addiction in Vancouver, B.C. However, the cultural frameworks for understanding how these medicines work are often

¹⁷² A participant comments that iboga’s popularity has put a strain on supply and that it is hard to find for ceremony.

¹⁷³ It is mentioned that one *shaman* just plays a CD, instead of the traditional *icaros* [sacred songs that are sung and are a vital part of the medicine.] The cost is two hundred dollars.

underrepresented and there is some over-simplification of ibogaine as a single-dose remedy.

Hanna discussed incomplete apprenticeships as something of concern, a feeling she exemplified with a story about a nurse in Canada who was working with iboga despite not having completed her training and who was, according to Hanna, functioning on a more superficial understanding of healing. The misadventure, already discussed in the preceding chapter in the narratives of Joe and Hanna, (which she refers to below), was that while overseeing an iboga treatment, the nurse lost track of her patient, a man severely addicted to drugs, who had wandered off while under the influence of iboga.

[H] Let me say something about the cultural context. OK. So, my training is in both ayahuasca and iboga. The context of ceremony is channeled by the shaman. The shaman who is rooted in ancestors, the shaman who is capable of seeing ancestors, the shaman who knows the environmental geophysical vibration, as context for the medicine... *is the transition... and the transmission. That shaman* is the transition for the person receiving the medicine and *that shaman* is also the transmission of the ancestry. And so, it is *absolutely crucial* to understand that people can be in a *training*, but if they're not fully remembered, and in the mnemonic or the echo of the first shamans of their lineages, then they're still in training. It's not a clinical context where you're experimenting and discovering natural or spiritual laws, that's what ibogaine does, that was the challenge with iboga therapy house.

Hanna critiqued this ideological diminishment of the importance of having a fully trained shaman in healing ceremonies. Her concerns were echoed by another participant in this research, Josey, an ethnobotanist from the United States, who remarked on the arbitrariness of ibogaine becoming "*the* addiction remedy." Describing the social context around iboga she commented:

[J] Howard Lotsof pioneered ibogaine getting recognized as addiction treatment and treatment centers have since sprung up in Mexico, in the Caribbean and in Baja California-rich Republican kids getting sent to Mexico for addiction to pills. The irony in being sent for psychedelic treatment. One question is, if Mr. Lotsof had tried something else would we still be calling it "the anti-addiction" remedy?

Josey commented that *Voacanga Africana* is, like iboga is, an African plant with psychedelic properties, cautioning that most initiation drugs in Africa tend to be "true poison" and far more studies have been done on psychedelics from Latin America. She

questions the “hype” around iboga as *the addiction remedy*. Her comments speak to the arbitrariness in the ways that healing approaches become co-opted or otherwise “picked-up.”

The contexts in which healing occurs and the objects of therapeutic attention are changing- where the intention of getting closer to plants is an inward-looking process that often stills plants.¹⁷⁴ Traditional culture is dynamic, and these are living traditions. Yet we would be amiss to not discern within this apperception neoliberal reformulations of traditional medicine that influence this hybridity of innovative new practices of working with plant medicines. The examples narrated throughout this thesis showcase a reality of constrained agency that calls for a more discerning and robust examination of ideologies shaping hybrid practices involving traditional plant medicines.

At a talk on plant medicine, one speaker described the current moment as a “psychedelic renaissance” in medicine and treatment for addiction.¹⁷⁵ These presentations typically include oral testimony of embodied experience given by a person who has recovered from drug addiction. Individuals elaborate upon the circumstances of their lives preceding their experience with ayahuasca or ibogaine and relate how their experiences with these plant medicines have now improved their lives. At a conference, a young white male from the United States described living on the streets for a decade, addicted to heroin. He now works at an ibogaine clinic in Mexico.

I was a heroin addict living under a bridge in Massachusetts. My sister found me. She was having bad dreams about me. She told me she found iboga and I got on a plane to Florida and was guided through ceremony. I was having my first withdrawal when I took it. It stopped it. Ibogaine resembles content of dreams, very malleable, a waking dream. I felt I got my soul back; I could feel again... I always felt like an outsider. With ibogaine, it creates community; suddenly I felt belonging and a sense of purpose. Ibogaine will bust you free, but afterwards there's lots of work to heal emotions.

At one community event, a First Nations woman describes her experience with addiction and prostitution in Vancouver's downtown east side, culminating in having her children taken away from her. The moderator urges her on in her story. (*I reflect on the*

¹⁷⁴ What Terrence McKenna (2007) describes as an “introspective cultural style” whereby the experiencing of one's “true self” somehow stills the biological world (p. 65).

¹⁷⁵ Psychedelic Medicine: A Paradigm Shift” Dr. Donna Dryer, Mark Haden, Dr. Gabor Maté, and Dr. Richard Yensen, JIBC New Westminster Theatre (Jan 31, 2013, 6-8 pm).

gestures and coaxing: Go on, tell them about how downtrodden you were, tell them your story of renewal.) She continues uneasily, her eyes tearing, then she gets to the punchline: “Yes, *ayahuasca* has changed my life, yes, I am now straight and can see my children.”

6.4. Ayahuasca and creating village culture

The clandestine meeting is at the back of a sports café in Vancouver. Mounted TVs air a soccer game. I wonder if I’m at the right place and what sort of visual cue will signal to me those who are here seeking ayahuasca. After a short amount of time individuals start to filter in, eyes darting around the room revealing their like-minded wonderings on whether the ayahuasca “first-timers” meeting will take place here. We soon recognize in each other a common uncertainty and begin to chat. “Does anyone know what’s going on?” Slightly late, an older man eventually walks in. His gait, Guatemalan type clothing, and deliberate way of entering the space all signal to us that he is leading this meeting. A few younger acolytes act as ushers, urging us all to get chairs and move to the back of the room where there is more privacy. The older man sits slumped, cool, and nonchalantly addresses us. He immediately asks for our discretion and confidentiality, emphasizing that we can ask questions, express any concerns that we might have, but that we are not to invite any friends to join us in the ayahuasca ceremony, and that if we do have interested friends to give their information to one of the organizers and they will be e-mailed directly with the location and time for the ceremony. He describes the fasting that must be done before a ceremony (including no alcohol, sex, drugs, sugar etc.) and the importance of setting an intention, and he discusses his own experience. The meeting is somewhat awkward, on the one hand it is necessary because people have questions and face-to-face interactions are more secure and reassuring than e-mail interactions. On the other hand, ayahuasca is still considered “a drug” so there is a need for discreteness.

A key emphasis in public talks is the careful management of “set and setting” to recreate “village culture,” described as a social space where people can open up. This imagined community is held together by shared testimonies of experience, and testimonials are an integral part of transmission and propagation.

The roles of subjects within ceremonies have changed. Traditionally an *ayahuasquero* would take the ayahuasca and penetrate the souls and bodies of people needing healing. In this cultural context, the *ayahuasquero* takes on a different role. The intersubjective relationship is reconstituted, ayahuasca speaks directly to the participant and talk therapy is facilitated afterwards. The *icaros* that are sung during ceremonies in Maple Ridge or on Vancouver Island might easily slip in and out of English and Spanish.

It is explained in public talks that creating new contexts for use is part of establishing relevance and understanding for a Western clientele. Participants are described by advocates as often having significant psychological issues and needing a form of “talk therapy” to establish a context to process what they are experiencing, allowing for contemplation and integration. A psychological aspect is introduced.

Julie, a naturopath from Vancouver and a participant in the ethnobotany intensive class in Kona, Hawai'i, described her experience with ayahuasca and her intention to feel a *oneness with nature*.

The ayahuasca ceremony was held in the Kootenays. The room is octagonal with a skylight, bedding, and pillows. A Tibetan thangka is suspended from one of the walls, and on another wall a Shipibo patterned material. You are supposed to come with an intention, physical or emotional. Shamanic tools are present- rattles, drums, feathers. There is an altar at the front of the room and people can bring something to place on it. I gave old sacred tobacco from a First Nations chief and good friend. The shaman had sage and tobacco. Everyone sat in silence in a circle and we were called to the front of the room one at a time to kneel. It is dark, there isn't any lighting. Nobody talks much, but sometimes there is joking and laughing. The dose varies, each batch is different. I held the cup for a minute and said a little prayer before drinking. About forty minutes later he does the chant (I think it always starts with the same chant). You know when someone is starting to feel it because you hear rustling around and purge sounds. The chanting starts in English, the Shipibo language (I guess), and Spanish, singing songs taught by the spirits of plants, the icaros. The icaros are used to shape experience and energy. Later the shaman calls people up for qigong healing. Standing with your back to the shaman, he blows tobacco on you, then you sit in front of his wife and she does a chant-song for you. When they sing they play instruments and when people are going through stuff they go to them with particular appropriate icaros for that space at that time. It's important to ask for help when you need it- if you're stuck. It's a living tradition. In Peru, a shaman would drink to find out why someone's love strayed, or a cow died. There is a shaman who comes from Peru who plays icaros on a tape recorder.

Julie's comments reflect the hybridity characterizing ayahuasca ceremonies in the West, such as the integration of qigong and multilingual icaros. She also points out the varying strengths of an ayahuasca brew. Traditional practices are always dynamic and changing, as are medicines- an ayahuasca brew may be made strong or weak, or a plant might be added to the brew for the shaman to get to know it better, (Julie mentions that a shaman once added an aspirin to the ayahuasca mixture). The increasing North American and European interest in ayahuasca is a stimulus for social and economic

change, and the burgeoning of a wide variety of new therapeutic contexts. One discussant at a conference in 2013 mentioned that it used to cost fifty dollars for a liter of ayahuasca; now it is ten times that amount, averaging five hundred dollars a liter. One can imagine the effects this has had on local culture. There have also been numerous abuses and deaths, in some cases resulting from charlatans taking advantage of naïve tourists with the erroneous idea that ayahuasca is a standardized “thing,” an ordered experience regardless of who is pouring.

6.5. New plant optics: plant blindness, plant visualization, and plant prophecy

Ayahuasca’s growing popularity produces social, economic, political, religious, ideological, and environmental consequences.¹⁷⁶ Ayahuasca has been featured in Hollywood films and popular magazines, and the question *How many times have you drunk?* can find its way into a conversation with surprising ease. During a casual conversation at a barbeque, a person tells me how he decided to take DMT instead of ayahuasca, opting for a “cleaner” experience: “It’s like ayahuasca without the puking and the shitting.” In countries in Latin America, ayahuasca’s increasing popularity leads to increased production and creates economic incentives to become a shaman, to feign expertise, to unsustainable harvesting, and to change ceremonial and social contexts. In North America, the popularity of entheogens like ayahuasca involves their representation as an alternative to Western biomedical contexts for curing disease, which in turn plays into notions of taking charge of one’s own healing and self-optimization and learning how to be happy.¹⁷⁷ This ideological shift is also leading to more research in order to accumulate “baseline data” to better understand how ayahuasca acts on human cognition and physiology (McKenna, 2007, p. 114), as exemplified in various research (Grob et al. on “the Hoasca project” 2007; McKenna, Callaway & Grob, 1998; Thomas et

¹⁷⁶ The rise in the use of ayahuasca in North America and Europe has led to its sustained suppression, which includes targeted arrests and legal battles in various countries (Kaplan, 2011, p. 15).

¹⁷⁷ Ethical questions are raised with Canada’s Bill C-51 in the Food and Drugs Act, and the linguistic engineering that in 2008 translated “drug” into “therapeutic product,” allowing for more widespread control and regulation of the sale of vitamins, supplements, and all plant-derived or tree-derived substances and a stronger pharmaceutical monopoly over herbal remedies (Novella, 2008, p. 1). “Sell” has also been broadened to include any type of distribution including giving plant medicine to another person (ibid.).

al., 2013). The fact that understandings of efficacy are structured concurrently with mainstream biomedical approaches influences expectations around safety and predictable controlled outcomes, expectations that necessitate health forms, information sessions, weight/dosage calculations, physical examinations, medicinal materialities (e.g. pills, suppositories), and so forth.¹⁷⁸ Andrew Weil (Weil et al., 2007) comments on the difficulty of creating more contextualized understandings of healing for physicians and psychiatrists who think that the magic is all in the substance (p. 112).¹⁷⁹ Big plant actors configured in concurrence with mainstream medicine in some instances reaffirm axioms underpinning colonialist scientific ideologies grounded in measurement, constructions of efficacy based on binary human and singular nonhuman interactions and dualistic understandings. This instantiates an epistemological shift in characterizations of medicine, yet while the plant-human dualism is perhaps challenged through intersubjective experience, the decontextualized practice and use of medicine and the more clinical approach uphold multiple relationships, some of which have long colonial legacies (raw materials traveling from the south to the north, *icaros* shifting into imperial languages, expensive treatments that are not accessible to many).

Tied up in the hope and self-optimization rendered in neoliberal therapeutic perceptions and the supposed *return to nature* that has become part of this discourse (evidenced in the growing ethnobotanical-type of tourism illustrated in chapter five) are the paradox of plantcentrisms that narrowly circumscribe efficacy and agency among nonhuman beings. In doing so, a binary relationship is established between people and plants, which separates plants from their growth contexts (cultural and environmental) and multispecies entanglements. Increased use of big plant actors is not necessarily changing the way we think in the context set out by McKenna (2007), wherein the altered states of consciousness conjured up are assumed to create a greater environmental ethic and environmental stewardship. Plant medicine popularity, thus, often undermines rather than supports sustainable practices, and anthropomorphisms can support unsustainable practices.

¹⁷⁸ In the documentary film *Dangerous with Love* director Michael Negroponte follows an ibogaine provider and various North American people who receive ibogaine treatments. In instances where the medicine cannot be absorbed orally, it is administered rectally as a suppository.

¹⁷⁹ His comments are part of a discussion on visionary plants across cultures, in dialogue with Charles Grob, Edison Saraiva, Kathleen Harrison, Dennis McKenna, Marcellus Bear Heart Williams, and Florencio Siquera de Carvalho.

Chapter 7.

Conclusion

7.1. The body and selfhood in Anthropology

A person enters a waiting room in a hospital. They are now constituted as a patient. When their number is called, they walk to a room where the ritual of examination, diagnosis or prescription occurs. The bad news is delivered with a practiced empathy and formality.

Experiences involve *sense making* and can profoundly reconfigure bodies, subjectivities, and sensual experiences. Making sense of illness patterns new ways of envisioning the body. As people reason through alternative modalities for thinking about what their body is experiencing and as they read testimonials about other people's illness and treatment experiences, they are provided with broader contexts for critical reflection and imagined treatment possibilities.¹⁸⁰ They can make sense of dis-ease in new ways.

The “three bodies” (Scheper-Hughes & Lock, 1987) are implicated in the Western biomedical encounter. The body becomes reconstituted; now a “patient” with a “diseased body” and a new “life script” (Garcia, 2010, p. 8). Phenomenologically, the patient reflects upon their body, an interior and very private experience. Biehl (2013) shows this exceptionally well with Catarina as she reasons through her treatment through a dictionary of embodied experience. The body is both the object and subject of thought and experience. A participant in this research *made sense* of a malignant tumor in their body by imagining its contours, its color, its origins, its “status” (connected to selfhood and embodied emotions).¹⁸¹ Their sense-making process unfolded in dialogue with medical terms like palliative care, pain control, and a life sentence decree, and the attending protocols around such *therapeutic emplotments*.

¹⁸⁰ It is noteworthy to mention here that it is not only experiences of illness that can lead people to think through their bodily being. Other such events could be pregnancy, preparation for surgery, rehabilitating the body from an accident, changing gender, a near death experience, or an epiphany.

¹⁸¹ *Rasa*, a concept in Java referred to earlier in this dissertation (see Julie Laplante, 2016) captures this dynamic interactive process of sense-making that is embodied and interacts with experience.

The social body confers a representational reality that restrains the manner in which the physical body is perceived (Van Wolputte, 2004, p. 253; Douglas, 1978, p. 70). “Therapeutic emplotment” (Mattingly, 2010) tailors the physicality of the experience to be experienced in particular social terms (Van Wolputte, 2004) and yet there is often an imaginative interaction between these social terms and phenomenological experiences. Biehl’s (2013) analysis of citizenship and *social death* at the nexus of the family and the state provides insight into such “regimes of personhood” in neoliberal biomedical contexts, wherein psycho-pharmaceuticals are widely reasoned to be moral treatment protocols supported by the family and the state. Yet throughout Biehl’s (2013) analysis of Catarina and Vita, the institution where she lives out her life sentence, he also highlights her agency. Similarly, in this dissertation I have shown that alongside foreclosures and productions of *social death* is an intensification of seeking and exploration into re-imaginings of the body, illness, and addiction that reflect agency; wherein new worlds of possibility are produced, where conventional treatment protocols are rejected, and where new ideas about “jungle medicine” emerge.

The political body is reflected in the way diseased bodies are socially produced (Scheper-Hughes & Lock, 1987, p. 8), reconstituted as “patient,” “at risk,” “terminally ill,” “drug addict,” or “palliative care patient.” Anthropological studies of the body in the postcolonial state have analyzed the body as a site of both oppression and resistance (Mbembe, 1992; Ong, 1988). In Aiwa Ong’s (1988) analysis of female Malaysian factory workers and spirit possession, spirit possession is an expression of resistance to their exploitative work environments, a structurally determined resistance to their experiences of abuse in the factory. The Malaysian factory workers “believe” they are possessed, they do not “know” it. The local cultural construction of possession provides a space for expression, a means to an end, but it is not *real*. Skin defines borders of bodies, bodies do not interact with, nor do they become possessed or manipulated by outside forces. Embodied experiences are reduced to resistance and as a consequence are treated seriously only as a resistance strategy and not as real embodied experiences.

In other anthropological work the epistemological assumption of a bounded body is also identified as problematic for healers who must register with political regulatory bodies. Stacy Langwick (2011) illustrates the supernatural contexts involved in diagnostic processes of some healers in Tanzania and discusses the difficulty they have registering as healers when insights into diagnosis and medicine lie outside designated

categories-categories that constrain understandings of phenomenological embodied experiences and of how knowledge is produced. She demonstrates the way subject/object distinctions in discourse on healing uphold dualisms that create this tension. Healers are subjects-medicines are objects.¹⁸² One healer explained that the healing power resides not in the actual medicine, but the way God worked through him. Intersubjectivity was imagined differently. This healer's evaluation of himself was that *he* was not a healer, though he did, she mentions, decide to register as one. Langwick describes another participant who explained that the cures for some diseases came to him in a dream, traversing realms of reality, also illegible to the state registration process.¹⁸³

The subject of much anthropological attention involves understanding the body as an object of sociocultural processes, and the physical body as an expression of, and metaphor for, the body social (Mitchell, 2006, p. 385, in reference to Lock, 1993, p. 135). The body emerges as a *tabula rasa* upon which society identifies the social person (e.g. coming of age ceremonies and body modification) (Mitchell, 2006, p. 386). Each of these approaches to the body communicates important insights about people's embodied experiences. However, the choice of one approach to the body often results in either "a disembodied self" or a "*de-selfed* body," neither of which evokes the full complexity of people's embodied experiences (Lester, 2005, p. 44). The way illness is embodied is highly subjective yet interacts with all these dimensions. Bodily being in society is not a passive process and important work in anthropology moves away from a view of the body as object (of the self, of social conventions and political regimes) to an emphasis on the body's own 'subjectivity' (Biehl, 2013; Csordas, 1990; Mitchell, 2006). Any exploration of bodily experience must find a way to speak about both the subjective body and the objectified body. Analyses must dwell in the gap of subject-object distinctions. This also involves upholding multiple subjectivities.

Attending to all these bodies in anthropology has been an uneasy terrain. On the one hand critics of phenomenological approaches argue that such approaches miss "the

¹⁸² Stacey Langwick gave this presentation "Imagining the Natural" at the AAA conference in Washington D.C. on December 6th, 2014 as part of the panel entitled "Magicality: A Riot of Anthropological Production."

¹⁸³ Langwick conjures an image of traffic backed up for miles for a consultation with one of these healers, some of the extreme wealthy coming by helicopter.

big picture” and ignore political and socioeconomic determinants of people’s lived experiences by focusing on the epiphenomenal- subjective, experiential, and sensorial experiences (Desjarlais & Throop, 2011, p. 95). On the other hand, top-down approaches that emphasize structural constraints often downplay or marginalize peoples’ own understandings of embodied experiences and their agency in reframing their own subjective bodily experiences (Lester, 2005). While noncritical phenomenology runs the risk of missing the big picture, critical phenomenology also runs the risk of delegitimizing peoples’ own understandings by framing them within broader political frameworks (Good, 1994). However, not contextualizing the body as connected to history, politics, economics, social relations, and biodiversity depoliticizes the body and obscures the colonial relations that penetrate bodies every day.

Spirit possession, altered states of consciousness, religious or spiritual awakenings, and beliefs in magic have been understood in anthropology’s distant and not so distant past as points of anxiety and control (Malinowski, 1922; Kendall, 1996) or theorized as resistance (Ong, 1988). A noticeable pattern in these ethnographies is the assumption that the types of intersubjective experiences described are illusory and are shaped by interactions with broader structures of control and identity politics emerging from these social, economic and political contexts. Scheper-Hughes and Lock (1987) pointed out thirty years ago the tendency in psychological anthropology to “pathologize” altered states of consciousness as expressions of “unstable or psychotic personalities” (p. 16). For example, Lester (2005) juxtaposes the body as a “seat of being” against the “illusion of interiority” in her research on Mexican women who hear the call from God and choose to become postulants in a Mexican convent. Lester’s ethnographic approach explores subjective altering of phenomenology through a reframing of bodily experience (2005, p. 229). She looks at body discipline in the convent and the various stages of the postulants’ formation as cultivating “new ways of experiencing physicality” and “new relationships to one’s own physicality” (2005, p. 36). The theoretical analysis of the postulants’ existential experiences focuses on psychoanalysis, and the cultural, national and institutional structuring of their experiences. Lester suggests that a better understanding of the postulants’ experiences entails the integration of both the cultural and institutional structuring of experience and the subjective individual aspects, and treating them as a continuous, dynamic interaction. Her approach shows how the global exists inside the local. However, the subjective aspects are attributed to psychological

needs. These theoretical frameworks secularize the postulants' intentions and motivations, their "*illusion of interiority*" stems from their inner psychological needs and the macro context of etching out a new femininity in modern Mexico. The convent offers a "program of self-discovery" that allows them to work through personal conflicts (Lester, 2005, p. 231). The interior experience is real, and the *illusion of interiority* is deflected to an *illusion of causality*. While narratives throughout this ethnography elucidate the agency and *knowledge*, not *belief* of these women, her psychoanalytic approach *pathologizes* their chosen life paths as choices that reflect psychological needs. Could the process of becoming a postulant engage something beyond *psychological need*? Whose values are reflected in the notion of *psychological need* framing the postulants' intentions and given precedence over the women's conviction that selfless dedication can restore good in the world? The assumption that their experience can't be *real* underpins this functionalist understanding. Functional and quasi-functional theoretical tendencies indicate the secular and material assumptions that continue to underpin research. Dualisms continue to enter rigorous contemporary anthropological analyses.¹⁸⁴

The experience of illness separates one from everyday routines and social practices, altering *habitus* (Bourdieu, 1977) in body rituals and social interactions. The pivotal experience of "unmaking and remaking the world" (Scarry, 1985) can become "the catalyst that transforms knowledge into human understanding and that brings intensity and commitment to human action" (Scheper-Hughes and Lock, 1987, p. 29, citing Blacking, 1977, p. 5). Diagnostic foreclosures perhaps in particular invigorate dialogue between phenomenological, social, and political experiences, where there is something to be gained from rejecting such social productions of illness, such as in cases wherein Western understandings and approaches to conceptualizing illness or addiction appear hopeless or commit patients to "zones of social abandonment" (Biehl, 2013).

¹⁸⁴ For example, Anderson (2011, p. 306) describes tobacco use as either Indigenous ritual use or indulgent Western use, narrowly circumscribing what counts as ritual and intentionality as culturally determined.

Liminal experiences are generative and often revelatory. The journey to restoring wellbeing can often lead to a desire to share insights.¹⁸⁵ Turning points can result in ideological “meeting points,” moments of temporary identification where a subject can be re-formed and enabled to act, opening possibilities for creativity and agency.¹⁸⁶ Many of the seekers I spoke with went on to become healers and share the gifts that they have learned. Elisabeth Olson (2016), in discussing medical pluralism in Mexico, shares that many of her interviewees had a personal transformative experience that led them to become alternative practitioners, suggesting that we contemplate whether using non-biomedical treatment” is a reaction to (or action against) biomedicine, rather than cooptation (p. 129).

More than “durable dispositions” (Bourdieu, 1977) these are embodied experiences connected to contexts that generate new perceptions and embodied practices. Bourdieu’s (1977) theory of *habitus* aims towards accounting for the mediation between individual agency and social structure by positioning embodiment in practice (Mitchell, 2006, p. 386). “Durable dispositions,” though more organic than social determinations, do not leave much room for people’s creative and dynamic engagements with lived experiences.¹⁸⁷ Theorists have critiqued Bourdieu’s model for being “curiously inert” (Anderson & Harrison, 2010, p. 10, in reference to Butler 1997; de Certeau, 1984; Latour, 1999), pointing out that habitus is dynamic and structured and that people creatively construct identities through their connections with structures.¹⁸⁸ Catarina’s active redefinition of herself through *pharmakons* (Biehl, 2010) shows how she engages with her constitution as a patient and has developed her own vocabulary for this identity, expressing her inner experience of structures shaping treatment

¹⁸⁵ While I am referring specifically to healers here, the same holds true in other walks of life, for example recovered alcoholics often move on to help others struggling with alcoholism, athletes and dancers recovered from injuries often move to rehabilitative work areas such as Pilates, physiotherapy or kinesiology.

¹⁸⁶ Gupta & Ferguson (1997, p. 13), in reference to Hall, as cited in Watts (1992).

¹⁸⁷ Habitus is dynamic and structured. People undergo metamorphoses, they become enlightened, and they change genders, embrace LGBTQIA identities, convert religions and much more. People construct identities through their connections with structures, and in therapeutic contexts that foreclose hope, they can be very creative and express the inner experiences of their constitution as patients.

¹⁸⁸ Notions of selfhood change as they interact with experiences, instantiated here with people like Joe struggling with addiction, becoming “clean” and then helping others facing similar struggles.

protocols. Csordas' (1990) paradigm of "embodiment" combines Bourdieu's habitus and Merlot Ponty's phenomenology to further emphasize the body's own subjectivity.

Turning points and life experiences can influence ways of sensing and understanding the relationships between physical environments and social environments. Perception is an on-going process in the experience of living. It is "*constitutive* as it is constituted" (Casey, 1996, p. 19). We are never without "emplaced experiences" (ibid.). There is compelling substantiation of sensory bias within cultures (Howes, 1991; Classen, 1991, 1994; Kuriyama, 1999; Synnott, 1991). Several theorists (Classen, 1991; Classen, Howes & Synnott, 1994; Howes, 1991; Kuriyama, 1999; Synnott, 1991) sketch dynamic and historically contingent sensory worlds, and show cultures and paradigms to exert strong influences on sensory constellations. For example, Classen, Howes and Synnott (1994) make a strong case that smell became marginalized post-enlightenment, as does Kuriyama (1999) on therapeutic touch. However, an overemphasis on culturally determined hierarchies of the senses can inadvertently underestimate individual agency, the dynamic dimensions to "ways of knowing," and the power of experience in reconfiguring the senses. For instance, Howes proposes that the notion of "touch as a medium of intelligence" appears "foreign to us because of long established Western sensory biases in favor of sight as 'the most informative' and 'intellectual' of the senses" (1991, p. 10).¹⁸⁹ Classen (1991) discusses sensorial anomalies in a study on interactions between perceptions and sensory experiences in "Wild Children."¹⁹⁰ It is important to elucidate the effect hegemonic structures have on perceptions, yet also important to not flatten the varied experiences and sensory worlds of "the West," and avoid collapsing "us" into a culturally determined, unified and hierarchical sensorial structure and "them" a nostalgic, ethnographically constructed "other". Individual sensory experiences also model sensory worlds.

The cultural and experiential interact in the structuring of sensory consciousness and animate different sensory practices and uses. The experiential need not be some

¹⁸⁹ He does mention that this would vary in the case of a disability such as blindness, referring here to Helen Keller, but there is a nuance of lumping the Western "us" into a somewhat static sensory hierarchy.

¹⁹⁰ For example, Classen describes two Indian girls raised by wolves, who developed acute senses of smell for raw meat and night vision skills, or the extreme sensory deprivation of Kaspar, who spent his early life confined in a dark room, and possessed an acute sense of touch, able to distinguish metals by their feel (1991, p. 49-54).

mind-altering event in one's life and can emerge from everyday practices, and occupations.¹⁹¹ Botanical healers may gain awareness of a plant or tree's healing properties through a dream, or a feeling emitted by a particular tree (Langwick 2001, 2011). Getting to know a plant teacher and finding a plant ally is described in one ayahuasca information meeting as involving sitting with the plant, fasting with it, and sketching it, and through altered states of consciousness conjured through music, embodied interaction, and consumption. In the ethnobotany course I participated in in Kona, Hawai'i, putting a plant under your pillow and dreaming about it, using a plant to sweep the body, and paying attention to intuition were suggested as ways to get to know plant allies.

Our sensorial experience of the world is shaped by our experiences and influenced by our culture. *Habitus* is dynamic and structured (Anderson & Harrison, 2010, p. 10, in reference to Butler, 1997; de Certeau, 1984, and Latour, 1999). Ben Anderson and Paul Harrison (2010) discuss non-representational theories, whereby embodied gestures and actions do not represent particular cultural meanings and values but are 'enactments' corresponding to 'movements of concern.' In illness experience worlds come undone and are rebuilt, whereby the meaning of 'world' refers to:

[N]ot simply an experience of our perceived environment' but, rather, the contexts and fields which are illuminated by our 'movements of concern' and which make 'the multiplicity of beings about us an order, a cosmos' [...] In this sense 'worlds' are not formed in the mind before they are lived in, rather we come to know and enact a world from inhabiting it, from being attuned to its differences, positions and juxtapositions, from a training of our senses, dispositions and expectations and from being able to initiate, imitate and elaborate skilled lines of action. (Anderson & Harrison, 2010, p. 9, citing Lingis, 1996, p. 13).

Enactment (Anderson & Harrison, 2010) opens a space for creativity, emerging from engagement with "movements of concern" in lived experiences. Experiences be they occupational, day-to-day practices, or life cycle transitions, can reconfigure the senses. Casey (1996), Basso (1996), and Feld (1996) evoke sensory worlds that are

¹⁹¹ Craniosacral therapists, massage therapists and osteopaths (and well-experienced physicians, though in light of how medicine has become technologized there is likely less training regarding touch), cultivate a strong sense of touch, and can sense holding patterns in embodied emotions. An automotive mechanic refines his/her sense of sound to recognize particular sounds and vibrations, smell to identify leaking fluids, and touch to sense the tension of a cable, or fix areas that cannot be seen. *Flavorists*, as described by Classen, Howes and Synnott (1994), are versed in the art of creating artificial flavors, and thus must have incredibly sensitive palates.

actively constructed, not passively received and determined by hierarchical structures.¹⁹² Sensory worlds interface with the political moment, with neoliberal ideologies of self-optimization, and with the ethos and politics of a *therapeutic state* (Szasz, 2001). Foucault argues that consciousness and perceptions of illness are “linked with specific social institutions (2008 [1962], p. 62), and refers to the annexation of “religious or parareligious phenomena” in mental illness (2008 [1962], p. 65). Million (2013) discusses the problems inherent in pathologizing discourse instantiated by the theorization of *Indigenous trauma* as a strategy to deflect attention away from land rights issues and self-determination. Such structuring discourses are challenged in a wide variety of ways and among them we can situate the re-enchantment of plant medicines at conferences in B.C., and the de-centering of plant medicines by healers in Talamanca.

Re-enchanting plant medicines is political and corresponds to increasing concerns with pharmaceuticals and the ethics of the bioeconomy.¹⁹³ Biehl (2011, p. 218) reaffirms Deleuze’s (2006, p. 151) critique that no one knows how to talk about drugs, either speaking elusively of the “pleasure” of drug use (often understood in chemical terms) or reverting to extrinsic factors (e.g. Socio-economic circumstances). Biehl (2013) writes that Catarina claimed she had become “equivalent to a failed drug regimen” (p. 366). The seeking beyond the proverbial *doors of perception* are in this research context also about getting off Ativan or Xanax, knowing how to feel happy, taking control of one’s life, letting go of the past, and connecting with communities. Illness and suffering in many ways “unmake one’s world” (Scarry, 1985, Good, 1994, p. 131). Ways of feeling are connected to ways of knowing the body (Kuriyama, 1999), and the embodied experience of serious illness can generate new understandings of

¹⁹² Our immersion in places is fundamentally interactive and generative. Places conjure affect, and the emplaced actor can modify their experiences of place (Casey, 1996, p. 19). “Not only is the sensuous senseful, it is also placeful” (ibid). Bodies and places interanimate each other (Basso, 1996). The work of Irving (2007, 2010), Good (1994), Feld (1996) and Basso (1996) move sensory ethnography forward by exploring the way places “naturalize different worlds of sense” (Feld & Basso, 1996, p.8), challenging generalizations of places as culturally constructed. They suggest an ethnographic focus on “local theories of dwelling” that encompass “ways of fusing setting to situation, locality to life-world” (1996, p. 8). Perception is an on-going process in the experience of living. It is “constitutive as it is constituted” (Casey, 1996, p. 19).

¹⁹³ Szasz (2001) writes that “electing a national leader by a majority of the people’s votes may protect us from being ruled by an aristocracy, but it does not protect us from being ruled by a pharmacy” (p. 501).

illness and wellbeing, new configurations of intersubjectivity and people-plant relationships, and alter ways of sensing the world.

7.2. Healing encounters

Seekers and healers connect in many ways stretching well beyond the examples I have looked at in this thesis. While it would be impossible to write a thesis that is comprehensive of the divergent experiences of diagnosis and treatment trajectories, I have provided in this dissertation some “close-ups” and “wide angles” (Narayan, 2012) of seeking trajectories, by, on the one hand, sharing healers’ and seekers’ reflections on healing encounters and their observations of patterns in conceptual constructions of efficacy and, on the other hand, discussing some of the broader dynamics at work that frame these encounters and the worlds of possibility that they work within. The portrait painted is very fragmented and indeterminate, reflecting an ongoing reality difficult to synthesize and yet palpably present. Anthropology is well-suited to provide a sense of this tension between foreclosures and seeking and dynamics of interaction among regimes imposed on bodies, regimes exposed and deposed by bodies, and new bodily regimes, (the latter of which can be simultaneously counterhegemonic and uphold understandings of efficacy that are narrowly delimited by Western scientific frameworks).

[DM] It’s not teaching this plant for this, that plant for that-everyone wants *that* type of information.

Don Miguel’s critique of Western medical understandings of efficacy corresponds to the tendency to focus on plant medicines outside of their social and environmental contexts within efforts to better synthesize traditional knowledge and lab-based scientific knowledge. The field of ethnopharmacology is often predicated on such goals of assessing traditional medicine for biomedical value.¹⁹⁴ The assumption of standardized quality that is implicit in many of these approaches has proven to be, in these cultural contexts, problematic on a number of levels. This approach often underestimates the

¹⁹⁴ Anderson (2016) argues that almost all medical anthropology and ethnomedicine either describe traditional practices without evaluating them biomedically or assess traditional medicine for biomedical value. (p. 11). “Whether it [medicine] does this because of complex tannin molecules, powerful tree spirits, goods winds, or saintly blessings, the point is that it works” (Anderson, 2016, p. 14). Understandings of efficacy are not the point, it is the outcome that matters. He defines his own approach as “biocultural,” which he defines as looking at the traditional system in its dynamic form as a whole and also addressing the “biomedical effectiveness of traditional healing” (ibid.).

expertise of practitioners' knowledge of plant medicines (e.g. Don Miguel: "They said they had four days. Four days!"). This assumption also hinders sustainable cottage industry production initiatives because cheaper alternative raw plant materials are assumed to be of equivalent medicinal strength. This assumption of standardization is also reflected by seekers assuming ayahuasca is ayahuasca, a *thing*, and underestimating the wide variety of ways an ayahuasca brew is prepared, and the need for a skilled, fully-trained shaman. Standardized perspectives have in some cases led to fatalities and other types of harm, because seekers aren't exercising discernment in their choice of the specialist who pours the ayahuasca brew or administers the iboga treatment.

In this thesis I bring out a different optic by decentering plants in understandings of medicinal becoming and efficacy and by including narratives that introduce more contextualized approaches to understanding the ways that plant medicines become efficacious. These narratives reflect agency, as participants challenge dominant biomedical ideas about efficacy, and about plant life, and introduce concepts of medicine that would help to support the sustainability of traditional medicine. It is not just about whether it "works," *how* working is understood is also of value in expanding biomedical understandings. Not looking at *how* might also undermine scientific folk knowledge by implying that tactical appropriations are the only way in which traditional knowledge of plant medicine can contribute to Western science, which resonates with a long tradition of appropriating supposedly *relevant* information that narrowly delimit the parts of Indigenous knowledge that are deemed valuable. Isolating the most active alkaloids might contribute valuable biomedical knowledge, but the experiences shared by participants in this research reflect a faltering confidence that local populations will share in the benefits of bioprospecting for reasons already discussed in this thesis (see chapters three and four). For benefits to be shared more equitably, we may need to focus more attention on *how* efficacy is understood.

Intellectual property is embedded in landscapes and the contestations to meaning deployed by participants in this research contest the decontextualizing processes that separate parts of nature, food and medicine, plant medicine and soil, healer and medicinal efficacy. Miss Eliza teaches her community that food is medicine

and Hanna explains why the shaman is integral to the healing process. Don Miguel, Félix and Enrique all work to connect medicinal efficacy with soil.¹⁹⁵

Many theorists conducting research on relationships between Indigenous people and landscapes emphasize the impressive scientific knowledge conveyed in the precision of ethnophysiological terms and are mindful of geographic ontology (Anderson, 2005; Berkes, 2008; Davidson-Hunt & Berkes, 2010; Hunn & Meilleur, 2010; Krohmer, 2010; Mark, Turk & Stea, 2010). There exists noteworthy research that relies on taxonomy and categorizations with goals to establish more inclusive terminologies for “cartographic and geographic data standards, automated reasoning systems, and geographic software interoperability” (Mark, Turk, & Stea, 2010, p. 41), or for Indigenous knowledge to be used as an alternative for botanical inventories and incorporated into landscape management and conservation projects (Abraao et al., 2010). Ironically, even the development of bureaucracies around protecting Indigenous intellectual property, also tend to wear away local knowledge, and force Indigenous people to speak in uncharacteristic ways (Cruikshank, 1998, p. xv-xvi). A pattern in the adoption, application or appropriation of Indigenous knowledge from the days of “hit and run” ethnobiology (Ford 2011, p. 21) to more recent environmental management projects and ecological studies of Indigenous science, has been its decontextualization. This pattern continues to mitigate against land rights claims in a legal system whereby uses of evidence continue to be deeply embedded in Western worldviews (Ignace & Ignace, 2017, p. 14).¹⁹⁶ Ignace and Ignace (2017) maintain that even if richly contextualized, oral histories cannot “stand alone” removed from the way they are told, the language they are told in and the background of experience- “they are about relationships” (p. 23).

Roy Ellen (2010) points out that knowledge is unevenly “lexicalized” (p. 117, 137). Variation in ecologies and subsistence affect the degree to which people categorize and lexicalize, thus models derived from the structure of folk taxonomies bias methodological approaches are not suitable to the ecological variation of landscape

¹⁹⁵ Ethnopedology research has not been developed academically as much as ethnobotany and ethnozoology (Barrera-Bassols and Zinck, 2003, p. 172).

¹⁹⁶ The well-known Delgamuukw case reflect a shift in what gets to “count” as knowledge and evidence. Following the Delgamuukw case, Beverley McLachlin the chief justice of the Supreme Court of Canada addressed the need for the courts to put Indigenous knowledge on equal footing with Western epistemological frameworks (Ignace & Ignace., 2017, p. 14).

categories that are continuous, complex and multidimensional (ibid.). Ellen (2010) furthers that his research among the Nuauulu reflects much more flexibility and variability in classifications, and a relatively small fixed lexical repertoire of forest varieties (p. 119). Nuauulu extensive knowledge is inevitably reduced by interpretive approaches that assume “a single static classification” (ibid.). The consequences of partitioning “being-in-the-world” into “plants,” “people” and “animals” signals a need for vigorous attention to meaning and inter-relationships between beings of this world, and with those beyond it in ethnography (West, 2005, p. 639).

I think it is interesting to look at the in-between spaces where Western medical certainties start to come undone, and like a fraying wool sweater, pulling loose threads reveals a complexity of entangled interconnections and pathways. The medicines and meanings co-created at this nexus are best portrayed, I decided, through the juxtaposition of multiple utterances, concerns, and critiques, to bring out the types of hegemonies at work, which often lie in what is not subject to explication (Bourdieu, 1977, p. 94), but come to the fore in subaltern therapeutic narratives that challenge everyday knowledge politics.¹⁹⁷ These optics are deployed in this thesis by exploring and explaining the explicit connections made by actors in the field between soil and plant medicine, between assumptions about medicine and innovative practices, between ethnobotanical ideological movements and cultural and environmental sustainability, and between knowledge transmission approaches and the political contestation of dualistic understandings (e.g. nature-society and food-medicine). My explorations into what “it” is, and what we are talking about when we say “plant medicine” reveal a contested terrain of meanings and avowed expressions of concern with legal regulatory approaches to plant import, production, and consumption, and the assumptions of efficacy that underpin them.

This thesis attempts to uphold multiple renderings of medicine and ethnobotanical worlds, both Pre-Columbian and Millennial and examines some of the ways in which these renderings are generative. In doing so, I bring out how the way people talk about plant-use reflects their resistance to everyday forms of violence and oppression. My discussion of hegemonic meanings is in many ways a Foucauldian

¹⁹⁷ Contestations around dominant understandings of medicinal efficacy, interspecies relationships, cultural appropriations, and so forth.

critique: whilst cultural ideological structures are challenged (recognition of the cultural construction of Western medicine) underlying axioms of meaning are often held in tact (“*What does it do?*” / “*Does it work?*”). I have discussed seekers’ experiences of therapeutic emplotment (Mattingly, 2010), and I have tried to elucidate structures of feeling that involve disenchantment with the modern medical paradigm and diagnostic foreclosures, epistemological rejections, cultural appropriations, and hopes for a cure (a longing reflected in the title: “*what if there is a cure somewhere in the jungle?*”)

The popularity of plant medicines, ethnobotany, and big plant actors make it interesting and relevant to look at meaning-making processes and how they interact on the various cultural sides of the healing encounter. It is important to also mention that biomedicine and Indigenous medicine were seen by several participants as not necessarily opposed. A participant in Costa Rica told me of a Tican doctor and an Indigenous healer who together consult with a patient and work to synchronize their treatments and medicines, thus ensuring their compatibility and that the medicines are not contraindicated. Don Miguel is always eager to hear about people’s follow-up consultations with their doctors once they return home and he is proud when his treatments are validated by Western science. There is ethnographic work whereby co-optation is discussed as empowering and a form agency (for instance Olson (2016) on practitioners in Mexico adapting homeopathy). This dissertation shows the way agency emerges in meaning production in distinct contexts where people reject therapeutic foreclosures or try to shape new plant understandings and integrate them into informal or formal clinical healthcare applications. There are multiple emergent pathways in this meshwork (Ingold, 2007).

The plant discussions addressed in the previous chapter center on new meanings being created at the human-plant nexus showing active cultural ethnobotanical constructions that challenge Western biases, along with a broader context of seeking, therapeutic uncertainty and cultivating encounters with plant teachers. I have also shown the *culturally specific ways* these anthropomorphisms endorse, and how these might also uphold colonial approaches to landscapes and justify plant medicinal efficacy in Western medicocentric and plantcentric terms. Beyer (2009, p. 337) writes,

Ayahuasca shamanism is up for sale on the global market [...] international ayahuasca tourists exert a profound economic and cultural pull on previously isolated local practitioners; ayahuasca shamanism, once the terrain of anthropologists, is now promoted in the New Age marketplace. Ayahuasca shamans, previously local and largely individual practitioners, have themselves adopted the rationalizing devices of modernity, primarily those of collective organization and professionalization.

Ethnobotanical knowledge is leveraged to cope with local and global interconnected processes that make it difficult for many practitioners in B.C. and Costa Rica to continue their work. These are struggles around meaning and efficacy, safety and control, and also speak to global tendencies to reduce nature into disconnected units that better serve global markets and the acquisition and documentation of information. Critical ethnographic analyses of such neoliberal dynamics can reveal less visible workings of power. They can provide insight into TEKW conservation and help us to unpack ideas around sustainability and assumptions underlying methodological practices. Continuous critical interpretations of concepts and translations are needed. In writing this thesis, I attempt to enlarge our understandings of cross-cultural encounters around healing and to see them as productive encounters that co-create medicine and influence the sustainability of healing practices and the cottage industry production of plant medicines. I hope that this anthropological analysis of multiple ways of becoming medicine will open new optics for thinking about the relationship between concepts of efficacy and sustainability, by asking “what is plant medicine?”

References

- Abraao, M. B., Shepard H., Jr. Nelson, B. W. Baniwa, J., C., Andrello, G., Yu, D. W. (2010). Baniwa Vegetation Classification in the White-Sand Campinarana Habitat of Northwest Amazon, Brazil. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (83-115). New York & Oxford: Berghahn Books.
- Adams, V. (2001). The Sacred in the Scientific: Ambiguous Practices of Science in Tibetan Medicine. *Cultural Anthropology*, 16(4), 542-575.
- Aguirre, A. (2014, February). The New Power Trip: Inside the World of Ayahuasca. *Marie Claire*. Retrieved from <http://www.marieclaire.com/politics/news/a8965/ayahuasca-new-power-trip/>
- Ahearn, L. M. (2001). *Invitations to Love: Literacy, Love Letters, and Social Change in Nepal*. Ann Arbor: The university of Michigan Press.
- Amit, V. (2007). Structures and dispositions of travel and movement. In V. Amit (Ed.). *Going first class? New approaches to privileged travel and movement* (pp. 1-14). N.Y.: Berghahn Books.
- _____. Globalization through “weak ties”: A study of transnational networks among mobile professionals. In V. Amit (Ed.). *Going first class? New approaches to privileged travel and movement* (pp. 53-71). N.Y.: Berghahn Books.
- Anderson, E. N. (2016). Traditional and Nontraditional Medicine in a Yucatec Maya Community. In E. Olson & J. R. Stepp (Eds.), *Plants and Health: New perspectives on the Health-Environment-Plant Nexus* (pp. 1-16) Cham Switzerland: Springer International publishing.
- _____. (2011). Ethnobiology: Overview of a Growing Field. In E.N. Anderson, D. M. Pearsall, E. S. Hunn, & N. J. Turner (Eds.), *Ethnobiology* (pp. 1-14). Hoboken, N.J.: John Wiley & Sons, Inc.
- Anderson, M. K. (2005). *Tending the wild: Native American knowledge and the management of California’s natural resources*. Ewing, N.J.: University of California Press.
<http://site.ebrary.com.proxy.lib.sfu.ca/lib/sfu/docDetail.action?docID=10090688>
- Anderson, B & Harrison, P. (2010). The Promise of Non-Representation Theories. In B. Anderson & P. Harrison (Eds.), *Taking-place: Non-representational theories and geography* (pp. 1-34). Farnham, Surrey, England, Burlington, VT: Ashgate.
- Balick, M. (1996). Ethnobotany: Linking Health and Environmental Conservation. In J. Chesworth (Ed.), *The Ecology of Health* (pp. 201-209). Thousand Oaks: Sage Publications.

- Barrera-Bassols N. (2016). Linking Ethnopedology and Geopedology: A Synergistic Approach to Soil Mapping. Case Study in an Indigenous Community of Central Mexico. In J.A. Zinck, G. Metternicht, G. Bocco, H.F. Del Valle (Eds.) *Geopedology: An Integration of Geomorphology and Pedology for Soil and Landscape Studies* (pp. 167-181). Cham, Switzerland: Springer International Publishing.
- Basso, K. H. (1996). Wisdom sits in places: Notes on a Western Apache landscape. In S. Feld & K. H. Basso (Eds.), *Senses of Place* (pp. 53-90). Santa Fe, New Mexico: School of America Research Press.
- Berkes, F. (2008). *Sacred Ecologies*. New York: Routledge.
- Beyer, S. V. (2009). Singing to the Plants: A Guide to Mestizo Shamanism In The Upper Amazon. Albuquerque: University of New Mexico Press.
- Beyer, S., Flores, A., Sitaramaya, Tupper, K. (2012, October). *Ethics, Legalities, and Multicultural Considerations*. Symposium conducted at the Spirit plant Medicine Conference.
- Biehl, J. (2013). *Vita: Life in a Zone of Social Abandonment*. Berkeley and Los Angeles: University of California Press.
- _____. (2011). Catkine...Asylum, Laboratory, Pharmacy, Pharmacist, I and the Cure: Pharmaceutical Subjectivity in the Global South. In Janice Jenkins (Ed.) *Pharmaceutical Self: The Global shaping of Experience in an Age of Psychopharmacology* (pp. 67-96). Santa Fe, NM: SAR Press
- _____. (2010). Human Pharmakon: Symptoms, Technologies, Subjectivities." In B. Good, M. Fischer, S. Willen, M.J. Delvecchio Good (Eds.), *A Reader in Medical Anthropology: Theoretical Trajectories, Emergent realities* (pp.213-231). Malden, MA: Wiley-Blackwell.
- Biehl, J. & P. Locke (2010). Deleuze and the Anthropology of Becoming. *Current Anthropology*, 51(3), 317-337.
- Blacking, J. (1977). Towards an Anthropology of the Body. In John Blacking, (Ed.), *The Anthropology of the Body* (Pp. 1-27). New York: Academic Press.
- Blasiak, R. (2011). Ethics and environmentalism: Costa Rica's lesson. Tokyo: United Nations University. Retrieved from <https://unu.edu/publications/articles/ethics-and-environmentalism-costa-ricas-lesson.html>
- Blum, N. (2008). Ethnography and Environmental Education: Understanding the Relationships Between Schools and Communities in Costa Rica. *Ethnography and Education*, 3(1), 33-48.
<http://www.informaworld.com/10.1080/17457820801899058>

- Bollinger, Ty. (2015, March). The Truth About Cancer: A Global Quest. [Internet broadcast].
- Borofsky (1989). *Making History: Pukapukan and Anthropological Constructions of Knowledge*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, UK: Cambridge University Press.
- Bozzoli, M. E. (2000). A Role for Anthropology in Sustainable Development in Costa Rica. *Human Organization*, 59(3): 275-279.
- _____. (1975). Birth and death in the belief system of the Bribri Indians of Costa Rica. University of Georgia. (Doctoral dissertation) Anthropology.
- Brockington, D., Duffy, R., & Igoe, J. (2008). *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas*. London: Earthscan.
- Büscher, B. (2014). The Value and Circulation of Liquid Nature and the Emergence of Fictive Conservation. In B. Büscher, W. Dressler & R. Fletcher (Eds.), *Nature Inc.* (pp. 183-204). Tucson: University of Arizona Press. Retrieved from <http://www.mylibrary.com.proxy.lib.sfu.ca?ID=595239>. Accessed 21 April 2015.
- _____. (2012). "Payments for Ecosystem Services as Neoliberal Conservation: (Re)interpreting Evidence from the Maloti-Drakensberg, South Africa." *Conservation and Society* 10(1), 29-41.
- Büscher, B. & Dressler, W. & Fletcher, R. (2014). Introduction. The New Frontiers of Environmental Conservation. In B. Büscher, W. Dressler & R. Fletcher (Eds.), *Nature™ Inc. Environmental Conservation in the Neoliberal Age* (3-21). Tucson: University of Arizona Press. <http://www.mylibrary.com.proxy.lib.sfu.ca?ID=595239>. Accessed 21 April 2015.
- Butler, J. (1997). *Excitable Speech*. London: Routledge.
- Casey, E. S. (1996). How to Get from Space to Place in a Fairly Short Stretch of Time: Phenomenological Prolegomena. In S. Feld and K. Basso (Eds.), *Senses of Place* (pp. 13-52). Santa Fe, NM.: School of America Research Press.
- Cerwonka, A. and L. H. Malkki. (2007). *Improvising Theory: Process and Temporality in Ethnographic Fieldwork*. Chicago & London: The University of Chicago Press.
- Ceuterick, M., Vandebroek, I., Bren, T. & Pieroni, A. (2007). The use of home remedies for health care and well-being by Spanish-speaking Latino immigrants in London: A reflection on acculturation. In A. Pieroni & I. Vandebroek (Eds.), *Traveling Cultures and plants: The ethnobiology and ethnopharmacy of human migrations* (pp. 145-165). New York & Oxford: Berghahn Books.

- Chesworth, J. (ed.) (1996). Introduction. In *The Ecology of Health* (pp. x-x1v). Thousand Oaks: Sage Publications.
- Chodorow, N. (1999). *The Power of Feelings: Personal Meaning in Psychoanalysis, Gender, and Culture*. New Haven, CT: Yale University Press.
- Clark, A. (2008). *Supersizing the Mind: Embodiment, Action and Cognitive Extension*. Oxford: Oxford University Press. Irving 2011
- Classen, C., Howes, D., and Synnott, A. (1994). *Aroma: The cultural history of smell*. New York: Routledge.
- Classen, C. (1991). The sensory orders of 'wild children.' In D. Howes (Ed.). *The varieties of sensory experience: A sourcebook in the anthropology of the senses* (pp. 47-60). Toronto: University of Toronto Press.
- Comaroff, J. & Comaroff J. (1992). *Ethnography and the Historical Imagination*. Boulder, Colo.: Westview Press.
- Craig, S. (2012). *Healing Elements: Efficacy and the Social Ecologies of Tibetan Medicine*. Berkeley: University of California Press.
- Crosby, A. W. (2003) [1972]. *The Columbian exchange: biological and cultural consequences of 1492*. Westport, Conn.: Praeger.
- Cruikshank, J. (2005). *Do Glaciers Listen? Local Knowledge, Colonial Encounters and Social Imagination*. Vancouver: UBC Press.
- _____. (1998). *The social lives of stories: Narrative and knowledge in the Yukon Territory*. Lincoln: University of Nebraska Press.
- Csordas, T.J. (1990). Embodiment as a paradigm for anthropology, *Ethos*, 18(5), 5-47.
- _____. (1988). Elements of Charismatic Persuasion and Healing. *Medical Anthropology Quarterly* 2/2: 121-42. Reproduced in B. Good, M. Fischer, S. Willen and M. Good (Eds.), *A Reader in Medical Anthropology* (91-107). MA, Oxford: Wiley-Blackwell Ltd.
- Davidson-Hunt, I. & F. Berkes (2010). Journeying and remembering: Anishinaabe landscape ethnoecology from Northwestern Ontario. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (222-240). New York & Oxford: Berghahn Books.
- De Burgos, H. (2014). Contemporary Transformations of Indigenous Medicine and Ethnic Identity. *Anthropologica*, 56(2), 399-413.
- De Certeau, M. (1984). *The Practice of Everyday Life*. Trans. S. Rendall. Berkeley, CA: University of California Press.

- Descola, P. (2013). *Beyond Nature and Culture*. Trans. J. Lloyd. Chicago and London: University of Chicago Press.
- Desjarlais, R. & C. J. Throop (2011). Phenomenological approaches in anthropology, *The Annual Review of Anthropology*, 40, 87-102.
- Deleuze, G & Guattari, F. (2000). *Thousand Plateaus, A: Capitalism and Schizophrenia*. Methuen Drama. <http://www.mylibrary.com?ID=319553> Accessed 20 June 2015.
- Deleuze, G. & Guattari, F. (2004) *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. B. Massumi. London: Continuum.
- Dryer, D., Haden, M., Maté, G., Yensen, R. (2013, January 31). Psychedelic Medicine: A Paradigm Shift. Symposium conducted at the JIBC, New Westminster.
- Dubois, M. (2002). *El Cultivo de plantas medicinales: una alternativa productiva desarrollada por el Grupo de Mujeres Unidas de Chirripó*. Baltimore, Provincia de Limón: Universidad Lyon III Escuela Superior Europea: Ingeniería del Espacio Rural.
- Ellen, R. (2010). Why aren't the Nuaulu like the Matsigenka? Knowledge and categorization of forest diversity on Seram, Eastern Indonesia. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (116-140). New York & Oxford: Berghahn Books.
- Erwin, D. O. (1992). "The Militarization of Cancer Treatment in American Society." In H. A. Baer (Ed.). *Encounters with Biomedicine: Case Studies in Medical Anthropology*, (pp. 201-227). Pennsylvania: Gordon and Breach Science Publishers.
- Ezzy, D. (2010). Qualitative Interviewing as an Embodied Emotional Performance. *Qualitative Inquiry*, 16(3): 163-170.
- Fadiman, J. (2012, October). *New Applications for Visionary Plants*. Paper presented at the meeting of the Spirit Plant Medicine Conference, Vancouver, B.C.
- Fechter, M. (2007). Living in a bubble: Expatriates' transnational spaces. In V. Amit (Ed.). *Going first class? New approaches to privileged travel and movement* (pp. 33-52). N.Y.: Berghahn Books.
- Feld, S. (1996). Waterfalls of song: An acoustemology of place resounding in Bosavi, Papua New Guinea. In S. Feld, and K. H. Basso (Eds.). *Senses of Place* (pp. 91-135). New Mexico: School of America Research Press.
- _____. (1991). "Sound as a symbolic system: The Kaluli drum." In D. Howes (Ed.). *The varieties of sensory experience: A sourcebook in the anthropology of the senses* (pp. 80-99). Toronto: University of Toronto Press.

- Feld, S. & Basso, K. (1996). Introduction. In S. Feld, and K. H. Basso (Eds.). *Senses of Place* (pp. 3-12). Santa Fe, New Mexico: School of America Research Press.
- Ferenczi, N.K. (2016). *What if There Is a Cure Somewhere in the Jungle? States of Emergence in Medicinal Plant Becomings*. In Elizabeth Olson, J.R. Stepp (Eds.) *Plants and Health: New Perspectives on the Health-Plant-Environment Nexus*, (pp. 133-162). Cham, Switzerland: Springer International Publishing.
- _____. (2005). *Ambivalent resistance and Public Secrets: Contesting "The Truth"* Concordia University (MA dissertation) Anthropology.
- Ferzacca, S. (2001). *Healing the Modern in a Central Javanese City*. Durham: Carolina Academic Press.
- Flores, A, Sitaramaya (2012, October). *Meeting of Mind and Spirit: Learning from Sacred Plants*, paper presented at the meeting of the Spirit Plant Medicine Conference, Vancouver, B.C.
- Ford, R. I. (2011). History of ethnobiology. In E.N. Anderson, D. M. Pearsall, E. S. Hunn, & N. J. Turner (Eds.). *Ethnobiology* (pp. 15-26). Hoboken, N.J.: John Wiley & Sons, Inc.
- Foucault, M. (2008). *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*. Trans. G. Burchell. Basingstoke: Palgrave Macmillan.
- _____. (1977). *Discipline and punish*. N.Y.: Vintage.
- _____. (1978). *The History of Sexuality*. Trans. Robert Hurley. New York: Pantheon Books.
- Fox, M. W. (1996). *Beastly Questions*. In J. Chesworth (Ed.), *The Ecology of Health* (pp. 42-46). Thousand Oaks: Sage Publications.
- Galbraith, D. (2014). "Botanic Gardens as Conservation Leaders: Challenges and Opportunities in Uncharted Territory." Paper presented at the Leaders in Conservation: Botanic Gardens and Biodiversity in the 21st Century, Concordia University, Montreal, Quebec, October 23rd.
- Garcia, A. (2010). *The Pastoral Clinic: Addiction and dispossession along the Rio Grande*. The University of California Press. Retrieved 29 March 2012, from <<http://lib.myilibrary.com.proxy.lib.sfu.ca?ID=266086>>
- Gaur, M. & S. M. Patnaik (2011). "Who is Healthy among the Korwa?" Liminality in the Experiential Health of the Displaced Korwa of Central India. *Medical Anthropology Quarterly*, 25(1), 85-102.
- Giddens, A. (1991). *Modernity and Self-Identity*. Cambridge: Polity Press.

- Goldstein, D. (2013). *Laughter out of Place*. Berkeley: University of California Press.
- González Chaves, A. & González Vásquez, F. (2012). *La Casa Cósmica Talamanca y sus simbolismos*. San José: Universidad De Costa Rica.
- Good, B. (2010; 1994). Medical Anthropology and the Problem of Belief in B. Good, M. Fischer, S. Willen and M. Good (Eds.). *A Reader in Medical Anthropology*. MA, Oxford: Wiley-Blackwell Ltd.
- Goulet, J.G. & Miller, B. G. (2007). Embodied knowledge: Steps toward a radical anthropology of cross-cultural encounters. In J. G. Goulet & B. G. Miller (Eds.), *Extraordinary Anthropology: Transformations in the field*. Lincoln: University of Nebraska Press.
- Grob, C, Saraiva, E., Harrison , K., McKenna, D., Weil, A., Williams, M., Carvalho, F. (2007). Visionary Plants Across Cultures. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 56-62). Rochester: Park Street Press.
- Gupta, A. & J. Ferguson (Eds.). (1997). Culture, power, place: Ethnography at the end of an era. In *Culture, power, place: Explorations in critical anthropology* (pp. 1-29). Durham & London: Duke University Press.
- _____. (1997). Beyond "Culture": Space, identity, and the politics of difference. In A. Gupta & J. Ferguson (Eds.), *Culture, power, place: Explorations in critical anthropology* (pp. 33-51). Durham & London: Duke University Press.
- Halliburton, M. (2002). Rethinking Anthropological Studies of the Body: Manas and Bōdham in Kerala. *American Anthropologist*, 104(4), 1123-1134.
<http://www.jstor.org.proxy.lib.sfu.ca/stable/356710>
- Hardison, P. & Bannister, K. (2011). Ethics in Ethnobiology: History, international Law and Policy, and Contemporary Issues. In E.N. Anderson, D. M. Pearsall, E. S. Hunn, & N. J. Turner (Eds.), *Ethnobiology* (pp. 27-49). Hoboken, N.J.: John Wiley & Sons, Inc.
- Harpignies, J. P. (2007) (Ed). Introduction. In *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 1-10). Rochester VT: Park Street Press.
- Harrison, K. (2012, October). *Psilocybin: Consciousness and Reciprocity*. Paper presented at the meeting of the Spirit Plant medicine Conference
- _____. (2007). Women, Plants, and Culture. In J. P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 99-104). Rochester VT: Park Street Press.

- Harrison P. & B. Anderson (2010). *Taking-place: Non-representational Theories and Geography* Farham, Surrey: Ashgate Gower.
- Harvey, T.S. (2011). Maya Mobile Medicine in Guatemala: The “Other” Public Health. *Medical Anthropology Quarterly*, 25(1), 47-69.
- Hastrup, K. (1994). Anthropological knowledge incorporated: Discussion. In K. Hastrup and P. Hervik (Eds.), *Social experience and anthropological knowledge* (pp. 224-240). London & New York: Routledge.
- Hastrup, K. & P. Hervik. (Eds.) (1994). Introduction. In *Social experiences and anthropological knowledge* (pp. 1-12). London & New York: Routledge.
- Hayden, Cori (2007). Taking as giving: Bioscience, Exchange, and the Politics of Benefit-sharing. *Social Studies of Science and SAGE Publications*, 37(5), 729-758.
- _____. (2005). Bioprospecting’s Representational Dilemma. *Science as Culture*, 14(2), 185-200.
- _____. (2003). From market to market: Bioprospecting’s idioms of inclusion. *American Ethnologist* 30(3), 359-371.
- Heidegger, M. (1995). *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*. Trans. W. McNeil and N. Walker. Bloomington, IN: Indiana University Press.
- Hernandez-Wolfe, P. (2011). Decolonization and “mental” health: A Mestiza’s journey in the Borderlands. *Women & Therapy*, 34, 293-306.
doi:10.1080/02703149.2011.580687
- Heyerdahl, T. (1986). *The Maldive Mystery*. London: Allen & Unwin.
- Ho, Wing-Chung (2008). Writing experience: Does ethnography convey a crisis of representation, or an ontological break with the everyday world? *Canadian Sociological Association*, 45.4, 343-365.
- Hopwood, N. (2010). Inter-corporeal ethnography for practice. Paper presented at the 1st Contemporary Ethnography Across the Disciplines conference, University of Waikato, Hamilton, New Zealand
- Howes, D. & C. Classen. (1991). Sounding sensory profiles. In D. Howes (Ed.). *The varieties of sensory experience: A sourcebook in the anthropology of the senses* (pp. 3-21). Toronto: University of Toronto Press.
- Howes, D. (1991). Introduction: ‘To summon all the senses.’ In D. Howes (Ed.). *The varieties of sensory experience: A sourcebook in the anthropology of the senses* (pp. 3-21). Toronto: University of Toronto Press.

- Hufford, D. J. & M. Chilton. (1996). "Politics, Spirituality, and Environmental Healing." in J. Chesworth (Ed.). *The Ecology of Health*, (pp. 59-71). Thousand Oaks: Sage Publications.
- Hunn, E. S. & Meilleur, B. A. (2010). Toward a theory of landscape ethnoecological classification. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (15-26). N.Y. & Oxford: Berghahn Books.
- Ibarra Rojas, E. (2010). *Las Manchas Del Jaguar: huellas indígenas en la historia de Costa Rica*. San José: Universidad de Costa Rica.
- Ignace, M., Ignace, R. E. (2017). *Secwépemc People, Land, and Laws= Yeri7 re Sts'q eý s-kucw*. Montreal; Kingston; London; Chicago: McGill- Queen's University Press.
- Ignace, M. B. & N. Turner (2011). Coyote, Grouse and Trees: Secwepemc Lessons about Ethnobiological Knowledge. In M. Ignace, N. Turner and S. Peacock, (Eds.), *Secwepemc People and Plants: Research Papers in Shuswap Ethnobotany*. Contributions in Ethnobiology Series of the International Journal of Ethnobiology. <http://ethnobiology.org/contributions>
- Igoe, J. (2014). Contemplation becomes Speculation. In B. Büscher, W. Dressler & Fletcher, R. (Eds.), *Nature Inc. Environmental Conservation in the Neoliberal Age* (pp. 205-21). Tucson: University of Arizona Press. <http://www.mylibrary.com.proxy.lib.sfu.ca?ID=595239>. Accessed 21 April 2015.
- Illich, I. (1996). "Brave New Biocracy: A Critique of Healthcare From Womb to Tomb." In J. Chesworth (Ed.). *The Ecology of Health* (pp. 17-29). Thousand Oaks: Sage Publications.
- Instituto Nacional de Estadística y Censos (INEC), National census Costa Rica 2011, www.inec.go.cr/censos-2011
- Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. New York: Routledge.
- _____. (2011). *Being Alive: Essays on movement, Knowledge and Description*. London & New York: Routledge.
- _____. (2007). *Lines: A Brief History*. London & New York: Routledge.
- _____. (2000). *The Perception of the Environment*. New York: Routledge.
- Irving, A. (2011). Strange Distance; Towards an Anthropology of Interior Dialogue. *Medical Anthropology Quarterly*, 25(1), 22-44. Doi: 10.1111/j.1548-1387.2010.01133.x

- _____. (2010). Dangerous substances and viöle evidence: Tears, blood, alcohol, pills. *Visual Studies*, 25(1), 24-35. Doi:10.1080/14725861003606753
- _____. (2007). Ethnography, art, and death. *Journal of the Royal Anthropological Institute* (N.S.), 13, 185-208.
- Islam, N. (2010). Indigenous Medicine as Commodity: Local Reach of Ayurveda in Modern India. *Current Sociology*, 58(5), 777-798.
- Jackson, M. (1989). *Paths toward a clearing: Radical Empiricism and Ethnographic Inquiry*. Bloomington: Indiana University Press.
- Janzen, D. H. (1983). *Costa Rican natural history*. Chicago: University of Chicago Press.
- Johnson, M. & S. Clisby (2008). Both 'One' and 'Other': Environmental Cosmopolitanism and the Politics of Hybridity in Costa Rica. *Nature and Culture* 3(1), 63-81.
- Kaplan, C. (2011). Foreward: Ayahuasca and the Coming Transformation of the International Drug Control System. In B. Caiuby Labate & H. Jungaberle (Eds.), *The Internationalization of Ayahuasca*. Berlin: LIT.
- Kempny, M. & W. J. Burszta (1994). On the relevance of common sense for anthropological knowledge. In K. Hastrup and P. Hervik (Eds.), *Social experience and anthropological knowledge* (pp. 121-138). London & New York: Routledge.
- Kendall, L. (1996). "Korean Shamans and the Spirits of Capitalism." *American Anthropologist* 98(3), 512-27.
- Kenny, M. (2004). "A darker shade of green: Medical botany, homeopathy, and cultural politics in interwar Germany," *Social History of Medicine*, 15(3), 481-504.
- Kimura, A. H. & Katano, Y. (2014). "Farming after the Fukushima accident: A feminist political ecology analysis of organic agriculture." *Journal of Rural Studies*, 34, 108-116.
- Kincheloe, J. I. & Steinberg, S. R. (2008). Indigenous knowledges in education: Complexities, dangers, and profound benefits. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of critical and Indigenous methodologies* (pp. 135-156). Thousand Oaks: SAGE.
- Kleinman, A. (2010). Medicine's Symbolic Reality: On a Central Problem in the Philosophy of Medicine. In B. Good, M. Fischer, S. Willen and M. Good (Eds.), *A Reader in Medical Anthropology* (85-90). MA, Oxford: Wiley-Blackwell Ltd.

- Knauff, B. E. (2002). *Geneologies for the present in Cultural Anthropology*. New York & London: Routledge.
- Kohn, E. (2013). *How forests think: toward an anthropology beyond the human*. Berkeley: University of California Press.
- Krohmer, J. (2010). Landscape perception, classification, and use among Sahelian Fulani in Burkina Faso. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (49-82). New York & Oxford: Berghahn Books.
- Kuriyama, S. (1999). *The expressiveness of the body and the divergence of Greek and Chinese medicine*. New York: Zone Books.
- Lambek, M. (2005). Our Subjects/Ourselves: A View From The Back Seat. Meneley, A. & D. Young. (Eds.). In *Auto-Ethnographies: The Anthropology of Academic Practices*. Peterborough, Ontario: Broadview Press.
- Langwick, S. A. (2011). *Bodies, Politics and African Healing: The Matter of Maladies in Tanzania*. Bloomington and Indianapolis: Indiana University Press.
- _____. (2001). *Devils and Development*. Ph.D. dissertation, University of North Carolina.
- Laplante (2016). Becoming-plant: Jamu in Java, Indonesia. In E. Olson & J. R. Stepp (Eds.), *Plants and Health: New perspectives on the Health-Environment-Plant Nexus* (pp. 17-65) Cham Switzerland: Springer International publishing.
- Lasch, C. (1984). *The Minimal Self: Psychic Survival in Troubled Times*. New York: Norton.
- _____. (1980). *The culture of Narcissism*. London: Abacus.
- Latour, B. (2014). Anthropology at the Time of the Anthropocene: A Personal View on What is to Be Studied. Paper presented at the 113th annual meeting for the American Anthropological Association, Washington DC, December 3-7.
- _____. (2013). Telling Friends from Foes in the time of the Anthropocene. In C. Hamilton, C. Bonneuil & F. Geyenne (Eds.), *The Anthropocene & the Global Environment Crisis-Rethinking Modernity in a New Epoch* (pp.145-155) London: Routledge. Accessed 25 April 2016 <http://www.bruno-latour.fr/sites/default/files/131-friends-foes.pdf>.
- _____. (1999). *Pandora's Hope: An Essay on the Reality of Science Studies*. Trans. Sheridan, A. Cambridge, Ma: Harvard University Press.

- Lavecchia, O. (2013, November). Ayahuasca Can Change Your Life-As Long as You're Willing to Puke Your Guts Out. *LA Weekly*. Retrieved from www.laweekly.com/news/ayahuasca-can-change-your-life-as-long-as-youre-willing-to-puke-your-guts-out-4137305.
- Leslie, C. (2010; 1976) Introduction to Asian Medical Systems in B. Good, M. Fischer, S. Willen and M. Good (Eds.), *A Reader in Medical Anthropology* (pp. 55-63). MA, Oxford: Wiley-Blackwell Ltd.
- Lester, R. J. (2005). *Jesus in our wombs: Embodying modernity in a Mexican convent*. Ewing, N.J.: University of California Press. Available from: ProQuest ebrary. Accessed 30 June 2015.
- Levi-Strauss, C. (1982). *The Way of the Masks*. Trans. Sylvia Modelski. Seattle, Vancouver: University of Washington Press/Douglas and McIntyre.
- Lien, M. E. (2015). *Becoming Salmon: Aquaculture and the Domestication of a Fish*. Berkeley: University of California Press.
- Lingis, A. (1996). *Sensation: Intelligibility in Sensibility*. Atlantic Highlands, NJ: Humanities Press.
- Lock, M. (2015). "Comprehending the Body in the Era of the Epigenome." *Current Anthropology*, 56(2), 151-177.
- _____. (1993). "Cultivating the body: anthropology and epistemologies of bodily practice and knowledge," *Annual Review of Anthropology*, 22: 133-55.
- Luckow, D. Stories by Diane Luckow, retrieved from the SFU homepage April 11th, 2012.
- Luna, L. E. (2007). The New, Syncretic, Ayahuasca-based Religions. In J. P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 160-169). Rochester VT: Park Street Press.
- Madison, D. S. (2012). *Critical Ethnography: Methods, Ethics, and Performance*. 2nd ed. Thousand Oaks: Sage Publications. [double check ref for 1st ed?]
- Malinowski, B. (1922) *Argonauts of Western Pacific*. London: George Routledge and Sons.
- Mardiros, M. (1996). "Primary Health Care: Commitment to the Health of All." In J. Chesworth (Ed.). *The Ecology of Health* (pp. 30-40). Thousand Oaks: Sage Publications.
- Mark, D. M., Turk, A. G. & Stea, D. (2010). Ethnophysiology of arid lands: Categories for landscape features. In L. M. Johnson & E. S. Hunn (Eds.), *Landscape ethnoecology: Concepts of biotic and physical space* (27-45). New York & Oxford: Berghahn Books.

- Massey, D. (1993). "Questions of locality." *Geography* 78(2), 142-149.
- Mattingly, C. (1994; 2010). The concept of Therapeutic 'Emplotment' social science and Medicine. In B. Good, M. Fischer, S. Willen and M.J. Good (Eds.), *A Reader in Medical Anthropology* (pp. 121-136). MA, Oxford: Wiley-Blackwell Ltd.
- Mbembe, A. (1992). Provisional notes on the post-colony. *Africa*, 62(1), 3-37.
- McKenna, T. (2007). Psychedelic Empowerment and the Environmental Crisis: Re-awakening Our Connection to the Gaian Mind. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 56-62). Rochester: Park Street Press.
- McKenna, DJ., Callaway, JC, & Grob CS (1998). The scientific investigation of ayahuasca: a review of past and current research. *The Heffter Review of Psychedelic Research*, 1, 65-77.
- McNamara, K. (2016). Medicinal plants in Bangladesh: Planting Seeds of Care in the Weeds of Neoliberalism. In E. Olson & J. R. Stepp (Eds.), *Plants and Health: New perspectives on the Health-Environment-Plant Nexus* (pp. 67-91). Cham Switzerland: Springer International publishing.
- Meintel, D. (2007). When the extraordinary hits home: Experiencing spiritualism. In J.G. Goulet & B. G. Miller (Eds.), *Extraordinary Anthropology: Transformations in the field* (pp. 124-157). Lincoln & London: University of Nebraska Press.
- Meneley, A. & D. Young. (Eds.) (2005). Introduction: *Auto-ethnographies of Academic Practices in Auto-Ethnographies: The Anthropology of Academic Practices*. Peterborough, Ontario: Broadview Press.
- Miller, P. and Rose, N. (1994). "On Therapeutic Authority: Psychoanalytic expertise under Advanced Liberalism." *History of Human Sciences* 7 (30): 29-64.
- Million, D. (2013). *Therapeutic nations: healing in an age of Indigenous human rights*. Tucson: University of Arizona Press.
- Mitcham, C. (1996). "Biomedical Technologies and the Environment: Rejecting the Ethics of Rejecting Nature." In J. Chesworth (Ed.). *The Ecology of Health* (pp. 3-16). Thousand Oaks: Sage Publications.
- Mitchell, J. P. (2006). Performance. In C. Tilley, W. Keane, S. Küchler, M. Rowlands, & P. Spyer (Eds.), *handbook of material culture* (pp. 384-401). London, Thousand Oaks: Sage Publications.
- Murillo, C. V. J & Segura, A. G. (2011). *Diccionario de mitología bribri*. San José: Universidad De Costa Rica.

- _____. (2008). *Cargos Tradicionales del Pueblo Bribri: S̄ōtāmī-Ókōm-Awá*. San José: Instituto Costarricense de Electricidad.
- Muru-Lanning, M. (2012). Māori Research Collaborations, Mātauranga Māori Science and the Appropriation of Water in New Zealand. *Anthropological Forum* 22(2), 151-164.
- Myers, N. (2015, May 23) Sensing Botanical Sensoria: A Kriya for Cultivating Your Inner Plant. [blog post] The Centre for Imaginative Ethnography website. Retrieved from <http://imaginativeethnography.org/imaginings/affect/sensing-botanical-sensoria/>
- Narayan, K. (2012). *Alive in the Writing: Crafting Ethnography In The Company of Chekhov*. Chicago: university of Chicago Press.
- Narby, J. (2007). A Young Anthropologist Finds Far More than He Bargained for in the Peruvian Amazon. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (xi-xiii). Rochester: Park Street Press.
- NBC News (Ap. 18, 2016) "Cassie C' says Cancer's Back After Court Forced Her into Chemo" www.nbcnews.com/health/cancer/cassie-c-says-cancer-s-back-after-court-forced-her-n557991
- Ngai, S. (2005). *Ugly Feelings*. Cambridge and London: Harvard University Press.
- Nolan, J. M. & Turner, N. J. (2011). Ethnobotany: The study of people-plant relationships. In E.N. Anderson, D. M. Pearsall, E. S. Hunn, & N. J. Turner (Eds.), *Ethnobiology* (pp. 133-147). Hoboken, N.J.: John Wiley & Sons, Inc.
- Novella, S. (May 14, 2008). "Canada Bill C-51-Regulating Natural Health Products." <https://sciencebasedmedicine.org/canada-bill-c-51-regulating-natural-health-products/>
- Ocampo Sánchez, R. A. & Rojas, R. D. (2006). *Cultivo, conservación e industrialización del Hombre Grande (Quassia amara)*. San José: Bougainvillea S.A.
- Okely, J. (1994). Vicarious and sensory knowledge of chronology and change: Aging in rural France. In K. Hastrup and P. Hervik (Eds.), *Social experience and anthropological knowledge* (pp. 45-64). London & New York: Routledge.
- Olson, E. (2016). Using Plants as Medicines and Health Foods in Southern Jalisco. In E. Olson & J. R. Stepp (Eds.), *Plants and Health: New perspectives on the Health-Environment-Plant Nexus* (pp. 117-131). Cham Switzerland: Springer International publishing.
- Ong, A. (1988). The Production of Possession: Spirits and the Multinational Corporation in Malaysia. *American Ethnologist*, 15(1), 28-42.

- Ortner, S. (2006). *Anthropology and Social Theory: Culture, Power and the Acting Subject*. Durham and London: Duke University Press.
- Ososki, A. L., Balick, M. & Daly, D. (2007). Medicinal plants and cultural variation across Dominican rural, urban, and transnational landscapes. In A. Pieroni & I. Vandebroek (Eds.), *Traveling Cultures and plants: The ethnobiology and ethnopharmacy of human migrations* (pp. 14-38). New York & Oxford: Berghahn Books.
- Osseo-Asare, A. D. (2014). *Bitter Roots: The Search for Healing Plants in Africa*. Chicago & London: University of Chicago Press.
- Palmer, P. (2005). "What Happen" *A folk History of Costa Rica's Talamanca Coast*. Miami: Zona Tropical, S.A.
- Palmer, P., Sánchez, J. & Mayorga, G. (1991). *Taking Care of 's Gifts: An Environmental Treatise from Costa Rica's KéköLdi Indigenous Reserve*. San José: Editorama, S.A.
- Palmer, S. P. (2003). *From Popular Medicine to Medical Populism: Doctors, Healers, and Public Power in Costa Rica, 1800-1940*. Durham: Duke university Press.
- Parke, A. L. (1995). The Qawa Incident in 1968 and Other Cases of 'Spirit Possession': Religious Syncretism in Fiji. *The Journal of Pacific History*, 30 (2), 210-226.
- Peña, E. A. (2011). *Performing piety*. University of California Press.
<http://www.myilibrary.com?ID=327791>. Accessed 30 June 2015.
- Pendell, D., Harrison, K., Straight, J. Stamets, P. (2007). Plant Spirit. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (133-145). Rochester: Park Street Press.
- Pettigrew, J. & Y. Tamu (2002). Healing here, there and in-between: a Tamu shaman's experience of international landscapes. In P. A. Baker & G. Carr (Eds.), *Practitioners, practices and patients: New approaches to medical archaeology and anthropology* (pp. 109-124). Oxford: Oxbow Books.
- Pigg, S. L. (2005). Globalizing the facts of life. In V. Adams & S. Pigg (Eds.), *Sex in Development*.(pp. 39-65). Durham and London: Duke University Press.
- _____. (1995). The Social Symbolism of Healing in Nepal. *Ethnology*, 34(1), 17-36.
- _____. (1992). Inventing social categories through place: Social representations and development in Nepal. *Comparative Studies in Society and History*, 34(3), 491-513. <http://www.jstor.org/stable/178849>. Accessed 15 March 2012.
- Polanyi, M. (1969). *Knowing and being*. Chicago: university of Chicago Press.

- Pollan, M. & Davis, W. (2007). The Garden and the Wild-Plants and Humans: Who's Domesticating Whom? In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (pp. 88-98). Rochester: Park Street Press.
- Porcello, T, L. Meintjes, A. M. Ochoa, & D. W. Samuels (2010). The reorganization of the sensory world. *Annual Reviews of Anthropology*, 39: 51-66. Doi: 10.1146/annurev.anthro.012809. 105042
- Posey, D. A. (2002). Commodification of the sacred through intellectual property rights. *Journal of Ethnopharmacology*, 83, 3-12.
- _____. (1996). Protecting peoples' Bio. *Environment*, 38(8), 6-45. Environment Complete, EBSCOhost. Accessed 30 June 2015.
- Proctor, R. N. 1996. "The Politics of Cancer." In J. Chesworth (Ed.). *The Ecology of Health*, (pp. 134-146). Thousand Oaks: Sage Publications.
- Rieff, P. (1966). *The Triumph of the Therapeutic: uses of faith after Freud*. Chicago, Il.: University of Chicago Press.
- Rocheleau, D. (2005). Maps as Power Tools: Locating Communities in Space or Situating People and Ecologies in Place? In J. P. Brosius, A. L. Tsing, C. Zerner (Eds.), *Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management* (pp. 327-362). Lanham, MD: Altamira Press.
- Rose, D. B. (2007). Recursive epistemologies and an ethics of attention. In J.G. Goulet & B. G. Miller (Eds.), *Extraordinary Anthropology: Transformations in the field* (pp. 88-102). Lincoln & London: University of Nebraska Press.
- Rose, N. S. (2007). *Politics of life itself: biomedicine, power, and subjectivity in the twenty-first century*. Princeton: Princeton University Press.
- Rosser 1994 in proctor (request for book ecology of health placed)
- Salmond, A. (2013, April 26). *Tears of Ranji: Water, Power and People in New Zealand* [Video file]. British Columbia: UBC. Retrieved from <https://www.youtube.com/watch?v=f2-8Ha7pH34>
- Scarry, E. (1985). *The body in pain: the making and unmaking of the world*. New York: Oxford University Press.
- Scheper-Hughes, N. & M. Lock (1987). The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology. *Medical Anthropology Quarterly*, 1(1), 6-41.
- Scheper-Hughes, N. (2000). The global traffic in human organs. In *Current Anthropology*, 41(2), 191-224.

- Schwartz et al. (1989) in Whyte: social lives of medicines
- Seales, L. & T. Stein (2011). Linking Commercial success of tour operators and agencies to conservation and community benefits in Costa Rica. *Environmental Conservation*, 1-10.
- Sennett, R. (1976). *The Fall of Public Man*. New York: Knopf.
- Schultes, R. E., Hofmann, A., Ratsch, C. (2001). *Plants of the Gods: Their Sacred, Healing, and Hallucinogenic Powers*. 2ed. Rochester, VT. Healing Arts Press.
- Spirn, A. W. (1998). *The language of landscape*. New Haven & London: Yale University Press.
- Stewart, K. (2005). Cultural Poesis: The Generativity of Emergent Things. In N. Denzin & Y. Lincoln (Eds.), *The SAGE handbook of Qualitative Research* 3rd edition. (pp. 1027-1042). Thousand Oaks: Sage.
- Stoller, P. (1997). *Sensuous scholarship*. Philadelphia: University of Pennsylvania Press.
- Straight, J., Pendell, D., Harrison, K., Stamets, P. (2007). Plant Spirit. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (133-145). Rochester: Park Street Press.
- Sullivan, S. (2014). (Re)countenancing an Animate Nature. In B. Büscher, W. Dressler & R. Fletcher (Eds.), *Nature Inc.* (pp. 222- 245). Tucson: University of Arizona Press. <http://www.mylibrary.com.proxy.lib.sfu.ca?ID=595239>. Accessed 21 April 2015.
- Szasz, T. (2001). "The Therapeutic State: The Tyranny of Pharmacy." *The Independent Review* 4 (spring): 485-521.
- Taussig, M. (2013). "The re-enchantment of the Sun in an age of global meltdown." Paper presented at Simon Fraser University, Burnaby, British Columbia, March 27.
- _____. (2011). *I swear I saw this: drawings in fieldwork notebooks, namely my own*. Chicago; London: University of Chicago Press.
- Tedlock, B. (1991). From participant observation to the observation of participation: The emergence of narrative ethnography. *Journal of Anthropological Research* 47(1), 69-94.
- Thomas, G., Lucas, P., Capler, N.R., Tupper, K. W., Martin, G. (2013). Ayahuasca-Assisted Therapy for Addiction: Results from a Preliminary Observational Study in Canada. *Current Drug Abuse Reviews*, 6, Bentham Science Publishers.

- Three, C., Goldman, J., Stevens, C. & Negroponte, M. (2010). *I'm Dangerous with Love* [Motion Picture]. U.S.A. Blackbridge Productions & Cactus Three.
- Tsing, A. L. (2015). *The Mushroom at the End of the World: On the possibility of life in capitalist ruins*. Princeton & Oxford: Princeton University Press.
- _____. (1993). *In the realm of the diamond queen: Marginality in an out-of-the-way place*. Princeton: Princeton University Press.
- Tuhiwai Smith, L. (1999). *Decolonizing Methodologies*. UK: Zed Books.
- Tupper, K. (2008). The Globalization of Ayahuasca: Harm Reduction of Benefit Maximization? *Journal of Drug Policy* 19(4): 297-303.
- _____. (2009). Ayahuasca healing beyond the Amazon: The Globalization of a Traditional Indigenous Entheogenic practice. *Global Networks* 9(1), 117-36.
- Turnhout, E., Neves, K., de Lijster, E. (2014). 'Measurability' in biodiversity governance: knowledge, transparency, and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Environment and Planning A 46(3): 581-597.
- Turnhout, E., Waterton, C., Neves, K., Buizer, M. (2013). Rethinking biodiversity: from goods and services to "living with." *Conservation Letters*, 6(3): 154- 161. doi: 10.1111/j.1755-263X.2012.00307.x
- van Aniel, T. and van't Klooster, C. (2007). Medicinal Plant Use by Surinamese Immigrants in Amsterdam, the Netherlands: Results of a Pilot Market Survey. In A. Pieroni & I. Vandebroek (Eds.), *Traveling Cultures and plants: The ethnobiology and ethnopharmacy of human migrations* (pp. 64-85). New York & Oxford: Berghahn Books.
- Vandebroek, I., Balick, M., Yukes, J., Durán, L., Kronenberg, F., Wade, C. et al. (2007). Use of medicinal plants in New York City for the treatment of common health conditions: A comparative analysis with literature data from the Dominican Republic. In A. Pieroni & I. Vandebroek (Eds.), *Traveling Cultures and plants: The ethnobiology and ethnopharmacy of human migrations* (pp. 39-63). New York & Oxford: Berghahn Books.
- VanEde, Y. (2009). Sensuous Anthropology: Sense and Sensibility and the Rehabilitation of Skill, *Anthropological Notebooks*, 15(2): 61-75.
- Van Wolputte, S. V. (2004). Hang on to your self: Of bodies, embodiment, and selves, *The Annual Review of Anthropology*, 33, 251-269.

- Viladrich, A. (2007). Between bellyaches and lucky charms: Revealing Latinos' plant-healing knowledge and practices in New York City. In A. Pieroni & I. Vandebroek (Eds.), *Traveling Cultures and plants: The ethnobiology and ethnopharmacy of human migrations* (pp. 64-85). New York & Oxford: Berghahn Books.
- Waldram, J. B. (1997). *The way of the Pipe: Aboriginal spirituality and symbolic healing in Canadian Prisons*. Peterborough: broadview press.
- Weil, A., Saraiva, E., Harrison, K., McKenna, D., Grob, C., Williams, M. B. H., & Siquera de Carvalho (2007). Visionary Plants Across Cultures. In J.P. Harpignies (Ed.), *Visionary Plant Consciousness: The Shamanic Teachings of the Plant World* (105-120). Rochester: Park Street Press.
- Werry, M and O'Gorman, R. (2007). Shamefaced: Performing Pedagogy, Outing Affect. *Text & Performance Quarterly*, 27(3), 213-30.
- West, P. (2005). Translation, Value, and Space: Theorizing an Ethnographic and Engaged Environmental Anthropology. *American Anthropologist*, 107(4), 632-42.
- West, P., Igoe, J. & Brockington, D. (2006). Parks and Peoples: The Social Impact of Protected Areas. *Annual Review of Anthropology*, 35, 251-277.
- Whyte, S. R., van der Geest, S., Hardon, A. (2002). *Social Lives of Medicines*. Cambridge: Cambridge University Press.
- Widlok, T. (1994). Space and the 'other': Social experience and ethnography in the Kalahari debate. In K. Hastrup and P. Hervik (Eds.), *Social experience and anthropological knowledge* (pp. 180-199). London & New York: Routledge.
- Wilkes, B. (2007). Reveal or conceal? In J.G. Goulet & B. G. Miller (Eds.), *Extraordinary Anthropology: Transformations in the field* (pp. 53-84). Lincoln & London: University of Nebraska Press.
- Williams, R. (1977) *Marxism and Literature*. Oxford and New York: Oxford University Press.
- Yamin, F. & Posey, D. (1993). Indigenous Peoples, biotechnology and intellectual property rights *Indigenous Peoples*, 2(2), 141-148.
- Zhang, E. Y. (2007). The birth of *nanke* (men's medicine) in China, *American Ethnologist*, 34(3), 491-508.

Appendix.

Interview Contexts and Approaches

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Miss Eliza: mother, Afro-Caribbean bush medicine doctor and herbalist, vegetarian restaurant owner, active community member, educator, volunteer for the elderly, operates a farm volunteer program at her family's farm in Talamanca.	1 st interview: Note-taking 2 nd : Audio-recording 3 rd : Video recording All: Journaling	Her kitchen, front porch, Puerto Viejo (PV).	Aug 3, 8
Henry: Afro-Caribbean father, landowner in Puerto Viejo facing eviction with the new beachfront law, long family history on the homestead in downtown Puerto Viejo. His mother is a healer, specialized in bush medicine and is now suffering from Alzheimer's Disease. He learned a great deal about bush medicine from her.	Note-taking, journaling.	Outdoor: In front of his house during a game of dominoes, PV.	July 31st
George: Afro-Caribbean politician, restaurant owner, long term resident of Puerto Viejo and political rights advocate.	Note-taking	Kitchen, PV.	Aug 5 th
Cici: Afro-Caribbean mother, hair stylist and documenter of healers and knowledge. Many of her ancestors and grand-parents have extensive knowledge about bush medicine. Her children are both pursuing education in forest-study related fields.	Note-taking	Outdoor: deck, Talamanca.	Aug 14 th
Anton: Afro-Caribbean man, makes plant medicine for himself and his family.	Journaling	Pipa Stand, PV	June 15 th
Miss Matilda: Afro-Caribbean restaurant (<i>soda</i>) owner	journaling	Restaurant, PV	July 15 th
Joaquine and Amy: a Tican and an American journalist living in PV.	Audio-recording: group discussion	Kitchen, PV	Aug 6 th
Enrique: father, Indigenous, organic farmer, keeper of a small seed bank, educator on sustainable farming and the consequences of transgenic seeds.	All video-recordings All journaling	Mainly outdoor and Indoor: Finca in Talamanca, Market in PV	July 24 th –26 th , August 7 th , Saturday Markets June-Aug

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Delina (and on July 21 st with her sister, and son): Bribri mother, farmer, active community member, sells her produce (plantain, <i>Cuculmecca</i>) at a market in Talamanca.	All journaling Walking interview and observant participation (8 hours); Photography	Outdoor: Finca in Talamanca; Jungle trail behind her house in Talamanca. Saturday mornings at the market, PV.	June 8 th , July 21 st , Aug. 10 th
Rosa: Bribri woman living with her extended family in a wooden ranch house on a small <i>finca</i> (farm), where they raise chickens, turkeys, and pigs, have a food forest, cultivate cacao plants, and teach Bribri history, as well as provide guided jungle walks.	All journaling, note-taking	Indoor: In her kitchen In Bribri community ranch house, Talamanca.	June 13; Aug 8
Manuelo: Bribri, young male, works in an ecotourism office, enjoys videogames.	Note-taking, Journaling	In Bribri community ranch house.	June 13
Rodrigo: Bribri young male, enthusiastically maintaining cultural traditions. Carries out jungle walks for ecotourists.	Note-taking	Jungle Walk Later his kitchen table, Talamanca.	Aug 8, 9
Anna: Cabécar female, member of a Bribri woman's group dedicated to supporting their community and cultural traditions. Grows and processes cacao for sale in local markets and in San José	Video-recording, Journaling	Outdoor: walking around her organizations Finca, stopping to talk near an area where they have and are planting cacao, as well as grafting cacao trees, Bribri Reserve.	July 3 rd
Don Miguel: part Bribri, part Tican father and healer in Talamanca, working from his home where he also raises chickens and has a garden.	Video-recording, note-taking, journaling.	In-door His small consultation and treatment hut.	June 10 th , 11 th , 13, July 4 th , Aug 6 th
Eduardo: young Bribri man from Amubri.	Note-taking	Bar in Puerto Viejo	Aug 1 st
Luís: young Bribri community leader.	Note-taking	In Bribri community ranch house.	July 29 th
Ariana: young mother and Tican <i>curandera</i> , organizes <i>temazcals</i> in San José and Talamanca	All journaling	Temascal (sweat lodge), and backyard. Small consultation room in house where I was house-sitting, PV.	May 30 th - June 1 st

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Jen: an American mother and herbalist now living in Talamanca for a number of years and operating a small healing center with regular workshops involving plant medicine, <i>curanderismo</i> , and including specialists from Bribri and Afro-Caribbean communities.	Note-taking	Outdoor restaurant, PV., and at her house, office, and the deck outside the guest house. The location where I housesat and also held a number of interviews	Daily during the first week of June, June 11, July 31, and August 2 nd .
Jim: American expat, runs soup kitchen for the Bribri with his wife.	Note-taking, journaling	Café in PV	July 30 th
Thomas: an American naturopath who manages a healing center in Talamanca.	Note-taking	Out-door reception area in front of healing center & during a tour of the facilities, Talamanca.	July 30 th
Claire: cacao farmer, knowledgeable about plant medicine, spent considerable time with a bush medicine doctor well known in the area who had recently passed away.	Note-taking, journaling	Behind her house cracking cacao pods open with machetes, and later at her kitchen table, Talamanca.	July 30 th
Harrison: Afro-Caribbean father, care-taker where I was house-sitting, and some knowledge of bush medicine learned from his grandmother.	Note-taking, journaling	At the house, on the front deck or in the backyard where I was house-sitting.	Almost daily, May-Aug.
Pedro: Tican, runs organic market of locally farmed produce.	Note-taking	At a bar, PV.	Early afternoon, July 22 nd
Paco: Italian long-term resident, grows aloe vera, which he sells at the local market.	Note-taking	At his kitchen table, PV.	Morning, July 6 th
Nico: Argentinian graduate student organizing sporting activities on the Bribri reserve.	Note-taking	Where I was house-sitting, front deck, PV.	June 20 st
Santiago: chef in a restaurant, very knowledgeable on bush medicine, which he learned from his grandparents.	journaling	At the restaurant where he works as a chef, on a very slow day.	July 20 st
Graham: American farmer, volunteer with a community collective growing food on his land and sharing the harvest (in proportion to volunteered time).	Audio-recording	His out-door living room, Talamanca.	July 13 th

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Las Mujeres Indigenas, Isabella, Anna, and Camila: grow and process cacao, organize outreach programs, collect data on climate change.	Note-taking	Group interview, Tican NGO representative and two graduate students, and three Bribri women at their Indigenous Women's Center, Bribri Reserve.	June 18 th , July 3 rd
Maya: works for an ecotourism agency that connects tourists with Bribri plant medicine guides, jungle walk guides, and tours of cacao farms. She has a Bribri father and Tican mother, therefore does not have rights to land on the Indigenous reserve (descent is matrilineal). She is knowledgeable of plant medicines through her Bribri relatives and her Afro-Caribbean friends.	Note-taking	Her office, ecotourism office, PV.	July 31 st
Eugenio: Tican botanist, researcher and curator of a herbarium, long history of research among Bribri and Cabécar, widely published on medicinal plants, technical advisor on medicinal plants.	Audio recording	Apartment, San José	Aug 17 th
Félix: Tican, male researcher at the Forests, Tropical Agricultural Research and Higher Education Center. Widely published on forests and canopy research in environmental science.	Audio recording	CATIE, Turrialba	Aug 20 th
Teresa: local, Tican anthropologist who worked with the Bribri.	Audio recording	University, San José	Aug 19 th
Raphael: Indigenous Social Justice Organization President.	Skype-interview recording	Hotel Aranjuez, San José	Aug 20 th
Diego: InBio researcher.	Video-recording, Note-taking,	InBio Office, San José	Aug 21 st
Doña Eugenia	Bribri mother, produces tinctures, salves and other body care products in connection with a women's Indigenous group located just outside of the city, products that are sold at markets mostly in San José.	Café and church in San José.	Aug 22 nd
Costa Rica: Observant participation			

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Marcos: Bribri plant medicine walk guide, makes plant medicine when needed and clarifies that he can treat common illnesses, but not supernatural ones.	Video-recording, Note-taking, journaling.	Jungle path off of his back- yard, Bribri Reserve.	July 26 th
Sergio: Yorkin Bribri plant medicine walk guide	Note-taking	Jungle path Yorkín, Bribri Reserve	June 20 th
Sebastián: Bribri awá, capable of treating all kinds of illness both common and of supernatural origin, such as <i>mala ojo</i> [the evil eye.]	Note-taking ¹⁹⁸	<i>U-suré</i> ¹⁹⁹ on the Bribri Reserve	July 26 th
Awá Daniel: healer.	Journaling	<i>U-suré</i> on the Bribri Reserve	July 28 th
Don Miguel: healer.	Journaling	His clinic	Weekly basis June-Aug
Graham: operates a chicken farm and farming co-op.	Journaling	His farm	Volunteer work July 6 th , 20 th
Monica: American herbalist with a lot of experience with local plant medicines learned from different Indigenous people in the area and in Panama.	Note-taking, journaling	Jungle walk, Near Playa Chiquita, Talamanca	Several plant walks in June-July
Katie: American young female, on long-term travel, seeking a consultation with local healers for general health reasons.	journaling	Don Miguel's clinic, Talamanca	June 20 th
Lucy: middle-aged British woman, on holidays in Talamanca.	Note-taking	Don Miguel's clinic, Talamanca	July 19 st
Annie: young British woman and long-term resident of PV.	Note-taking	Bar, house where I was house-sitting	Regular interactions June-Aug
Don Ignaci: Bribri father to many and active community member, offers guided walks and organizes cultural performances.	Short video recordings, journaling	Jungle walk, Talamanca, in a school room, and his house.	Aug 7 th

¹⁹⁸ In the U-suré there is a feeling of sacredness to the space and device use seemed inappropriate, only journaling afterwards.

¹⁹⁹ Spelt U-suré in González Chaves and González Vásquez (2012), and ù sule in Murillo and Segura (2011), the conical structure is a sacred space that models the structure of the universe.

Costa Rica Interviews: Informal, semi-structured	Medium of documentation	Location(s)	Day/time
Alejandro, Bobby and Santiago: Organized and cooked the 'Rundown.'	journaling	A rundown, (get together and making a big soup, filled with Red Snapper, yam and freshly grated coconut.) In a kitchen and backyard in Puerto Viejo	June 9 th
Carla: Tican, ecotourism guide.	Note-taking	During a long bus ride to Siquierras and a guided walk in Tortuguero.	Aug 15 th
Adam: Christian male, missionary organizer of the skate park night	Journaling	Skate Park	July 12 th
Skate park	Journaling	Talamanca	Friday nights, June-Aug
Soup kitchen	Journaling	Talamanca	2-3 mornings weekly, May-Aug, 9:00-14:00
Iguana Farm	Note-taking, journaling	Talamanca	Several visits June-Aug
The Foro del Caribe del sur meeting	Note-taking, journaling	Community center, PV	Evening, July 25 th , Aug 3 rd

British Columbia: Interviews, informal and semi-structured.			
Hanna: Anishinaabe and Sami elder of Lake Superior.	Video-recording, journaling	Several interviews that took place in an apartment, a cabin and outdoors in ceremony in Squamish, B.C.	Several visits Jan-Feb 2013.
Joe and Hanna: Joe is a young, non-Indigenous Canadian man from B.C. apprenticing in the iboga tradition and has begun to organize ceremonies in B.C.	Video-recording	Focus group interview, apartment in Squamish, B.C.	Jan 2013
Josey: an ethnobotanist from California and runs an organization dedicated to conserving folk knowledge of plant medicines, fungi, and teaching ethnobotany. She has a few decades of experience working among the Mazatec of Mexico.	Note-taking	Bed and Breakfast private room, Kona, Hawai'i.	Feb 2013
Aina: An Indigenous Hawaiian ethnobotanist teaching local ethnobotany to local students and visiting groups.			
Lorna: Canadian homeopath. Her father is Mohawk and this background is also expressed in her practice. She also has worked with a Shaman in Peru and her practice incorporates acknowledgments to Pachamama.		Her home, Squamish, B.C.	March 2013
Julie: a naturopath from B.C. She participated in the ethnobotany course in Hawai'i and also has attended numerous ayahuasca ceremonies.	Note-taking	Her kitchen, Kitsilano, Vancouver.	April 2013
Andrew: Canadian herbalist, manages an apothecary in Vancouver.	Note-taking.	Vancouver, B.C.	April 2013
Marla: Canadian woman who experienced ayahuasca when she became ill in Peru. Continued to participate and later began organizing ayahuasca ceremonies in B.C., Montreal, and Halifax.	Phone interview, note-taking.		April 2013
Dominic, Canadian woman, herbalist (self-taught). Makes creams, salves and other products that she sells at local markets.	Note-taking.	Gulf Island, B.C.	April 2013

Randy, Canadian male, middle-aged, worked as a chef at an iboga house in Costa Rica and consistently participates in ayahuasca ceremonies.	E-mail correspondence.		Oct 2013
British Columbia: Observant participation (Conferences, public talks, performances, ceremonies, herb walks, seminars, focused discussions, secret meetings).			
Healing ceremony organized by Hanna	Journaling	Cabin, Squamish	Jan 20, 2013
Ethnobotany course Hawaii	Note-taking and journaling	Kona, Hawai'i	Feb 2013 two weeks
Apothecary	Journaling	Vancouver	March-April, 2013
Herb walks	Note-taking	Vancouver and Squamish	March-April, 2013