ANTHOLOGY OF AN EMPATH

By

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ABSTRACT

ANTHOLOGY OF AN EMPATH

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How can we live here together? How can we, human beings (especially those of us not considered as such, historically, presently, or in the future) and more-than-human-beings live here together and care for each other? I set out to learn how a pair of permaculture farmers in Southern Humboldt lived and worked with these questions: I attempted a qualitative and quantitative analysis of twenty years of natural history journals that one of them recorded. I was particularly interested in the aesthetics of land tending, affective relationships with more-than-human beings, and disrupting settler colonialism through epistemic reparations to the Sinkyone Peoples. I was also living with the same questions myself on campus, in academia, in Wiyot Territory. As I studied critical theory and turned it into relational praxis in my life, this praxis superseded my work with the journals. I ultimately chose to not publish the note-taker's personal story on their behalf. Instead I offer a multi-genre anthology. I present the research project as I designed it, with a critical genealogy of permaculture and natural history with respect to colonialism. I reflect on my experiences and positionality—particularly as an empath—while participating in student coalitions against systemic racism. Finally, I present theoretical insights that I developed: I call for a spiritual conception of more-than-human-

beings as part of political ecology, note convergences between systems theorists and

Indigenous ethics, and present a framework for considering beauty and aesthetics.

ACKNOWLEDGEMENTS

Land Acknowledgement

I lived and attended school in Goudi'ni, which means "among the trees" in Wiyot, otherwise called Arcata. Humboldt State University (HSU) is on lands of the Wiyot Peoples, which includes the Wiyot Tribe, Blue Lake Rancheria, and Bear River Rancheria. During my time at HSU, the Wiyot Peoples regained legal title to Duluwat (sometimes called Indian Island), the center of their world where they are cleaning up industrial toxins left by colonization and restoring their ceremonial dances on the island. They have similar political, cultural, and ecological relationships with the land throughout the thousand square miles of their territory. As a settler on their land, I committed myself to reminding other settlers of these facts and of being responsive to the projects that the Wiyot are leading, such as action around the Potter Dam Project and preventing the wind farm installation at Tsakiyuwit.

Stylistic Note

I capitalize "Indigenous" and not "western" (as in western civilization or western medicine) as an act of epistemic equity to show respect to and solidarity with Indigenous Peoples. I recognize that there are complex and nuanced debates about the status, "authenticity," and essentializing of Indigenous Peoples and knowledges. I refer to Tribes by specific name wherever possible, and also refer to the global diversity of Indigenous Peoples as such.

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INTRODUCTION

El mundo es mi oficina. Yo trabajo en la cama, en la cocina, en la bañera, en el jardín, en el bosque, y en la playa (de vez en cuando yo trabajo en un escritorio, también).

Mi trabajo? Amor de vida, y vida de amor.

Figure 1: Mi trabajo

"We would like to thank all faculty that showed up to the student-led meeting this past

Friday. We hope to continue cultivating a program in which BIPOC [Black, Indigenous,

People of Color] students are able to succeed, as addressed in the meeting. We have

attached the list of demands. The E&C Graduate Student Collective believes the

application of the demands to be imperative to beginning the process of cultivating such

space within the institution."

Emailed from the Student Collective on November 23rd, 2020
Acknowledge as received by the program coordinator on November 30th, 2020

"We recognize the harms that graduate students of color regularly experience because of white supremacy and racism. These harms occur within our broader society, at Humboldt State, and within the E&C Program. We apologize for the harms and pain we have caused and for not ensuring that all our students have a safe environment in which to pursue their educational dreams and aspirations. We apologize for not moving faster and more effectively to eliminate white supremacy and structural racism, and to create a more truly antiracist program.

We join you in the work of dismantling racism in all the spaces we inhabit together including E&C, HSU, and the wider communities we are a part of. It is our responsibility as a graduate program committed to sustainability and justice to work against white supremacy culture. We recognize the need for real, substantive change in order that students, especially BIPoC students, can feel safe, valued, and heard. This topic, along with strengthening antiracist pedagogy and program curriculum, are central elements of our current program development work."

Faculty Response, December 22nd 2020

I have come to understand consciousness no longer in the binary of sleeping and awake,

but in a richly variegated, textured, and nigh ecological sense. Like spacetime, it has

folds and mysterious curves. Strange traps to avoid, and marvelous vistas.

What are the stakes of research at a time when human-caused climate change is causing everything to change? More specifically, what is the responsibility and purpose of research at a time when global movements of heteropatriarchal, colonial, capitalist modernity caused climatic warming that now endangers all life on the planet, especially when the practice of research was instrumental to the development and spread of those movements (Smith 2012)? At this juncture in time, the benefits of exploitation and extraction are immensely accumulated among a tiny fractional elite while the burdens and hazards are concentrated on the most vulnerable and marginalized human and more-than-human words. And who is even considered human? Marginalized peoples have long been classified as less-than-human or non-human according to categorizations of race, gender, sexuality, ability, place, class, and nationality. More-than-human beings, by which I mean plants, animals, landforms, and weather systems, have been conceptualized in research as inert and with limited agency. Both marginalized humans and more-than-human beings have been legally and financially conceptualized as non-persons, as property to be owned or as threats from which to to defend property. Socio-ecological unravelling reveals the deep un-sustainability of this way of thinking and being. I, as an author, and you, as a reader, are certainly enmeshed in these processes (Perry 2018). Recent research provides evidence for both despair and hope—both of which are uncertain. Runaway processes of gas emissions from the ocean and tundra, triggered by global warming, may possibly push the climate quickly and far beyond the threshold of mitigation and adaptation (Bendell 2018). At the same

time, novel social, political, technological, economic, and ecological relational movements are emerging all over the world, sharing goals of relocalizing, degrowth, conviviality, and commoning (Escobar 2018). They also include militant defense of communal life-ways and resistance to logics and methods of destruction (bergman & Montgomery 2017, Morton 2016). I came to the Environment & Community program to change what kind of human I can be in service of the wellbeing of the world. I arrived with undergraduate academic training in a-political and a-spiritual biology and work experience as a gardener and community organizer. I wanted to deepen my relationships with plants and land at the same time as learn how to resist the logics of settler colonialism that preclude Indigenous Peoples from practicing theirs (Wolfe 2006). I wanted to deepen my critical awareness of how be anti-racist, anti-colonial, anti-heteropatriarchal, anti-extractive-capitalist and form more effective political coalitions. Ultimately, I wanted the research that I undertook to transform me (Fernandes 2003). I had a strong intuition that beauty and aesthetics were a critical component to all of this.

I situated my knowledge production within an epistemology and ontology of strong relationality—what cellular biologist and philosopher Kriti Sharma calls radical contingentism—in which subjects, objects, and processes have no inherent properties outside of their co-constituted relationships to one another (2015). I followed a methodology of participatory action research grounded in feminist and decolonial theory, aiming for mutually beneficial, horizontal research connections and a strong focus on turning theory into lived praxis (Fals Borda 2001, Smith 2012, Ahmed 2016).

While keeping a global perspective, I researched locally in the Pacific Northwest, selecting a project from among the myriad interactions between the university, extractive industries, Indigenous resurgence, generations of "back to the land-ers," and the tectonic language of the Earth. I actively refused one promising project with United Indian Health Services (UIHS) that matched my research interests: I was aware of the challenges of forming meaningful community connections in a two-year time frame, the destructive colonial legacy of research among Indigenous communities, the complexities of representation and authority, and my own limited knowledge and understanding of decolonial literature at that time (Grandia 2015, Smith 2012, Tuck and Yang 2014b). Instead, I opted to work on digitizing, archiving, and analyzing twenty years of natural history notes of a permaculture farmer in Southern Humboldt, and offering the information to the Indigenous Peoples of that land, the Sinkyone, as an act of epistemic reparations. I worked on that project for four semesters but it was ultimately disrupted by my praxis. I remained politically responsible to the Indigenous Peoples of the land where I was, the Wiyot. I invested time in forming coalitions with my fellow students as we responded to systemic racism in the university. I cared for my relationship with my husband, which sadly ended in divorce during my studies. I tended to my relationship to myself, on a pathway of deepening spiritual awareness. This resulted in a Kundalini awakening in my fourth semester—a powerful, transformation, and at times debilitating life-milestone. Amid all of this, I practiced self reflexivity of my positionality and learned to work with my liminality and contradictions, in what feminist AnaLouise Keating calls transformational identity politics (2013). In particular,

I discovered that I am an empath, powerfully attuned to the emotions and energies of humans and more-than-humans around me. The Kundalini awakening heightened this attribute in me even more. I ultimately chose to return the natural history journals to the note-taker without publishing their name or any of their data because I felt that I had not formed a sufficient connection of trust with him and his family in order to feel ethical about handling their personal stories, particularly within their lifetimes. Instead, I offer the process of research and the theoretical frameworks that I developed along the way in a multigenre anthology.

In a way, my research praxis and project resemble the Japanese practice of kintsugi, in which a broken piece of pottery is mended with lacquer and gold dust. Kintsugi is a sustainable act of salvaging and an aesthetic act of celebrating what is broken and mended. My original project is still visible—but mended, transformed, and breaking some conventional research norms (Lee 2018). In the first chapter, I present my original project as I intended it: the rationale, epistemology, methodology, and methods. I explain epistemic reparations and examine the colonial roots of natural history and permaculture. In the second chapter, I unfold what emerged simultaneously in my personal and academic life that eclipsed that research. I reflect on my positionality and experiences resisting racism and colonialism in academia while forming coalitions with my fellow students. I offer insights about pain and humor, and recommendations for the program. I expand on the metaphor of kintsugi and the feminist tradition of multi-genre writing. In the final three chapters, I offer the theoretical insights that I generated during the course of my research, exploring

epistemic tensions and opportunities for improved political cooperation between western and Indigenous ways of knowing and being. In chapter three, I argue for a pragmatically spiritual viewpoint in considering the agency of more-than-human beings in political ecology, moving beyond the more conventional frameworks of actor network theory and political objects and actors found in the field (Robbins 2011). In chapter four, I explore convergences between western systems, game, and resilience theory and what Mohawk scholar Gerald Taiaiake Alfred calls "perhaps the only pan-[Indigenous] commonality" (2009 p. 14; the original word was "Indian" but as a settler I use the term Indigenous): a simultaneous valuing of autonomy and interdependence. I reflect on how those convergences might be utilized locally for forming more effective relationships between Tribes and the U.S. Forest Service. Finally, in chapter five I offer a critical, transformational framework for considering the power dynamics of beauty in both the contexts of human personal beauty and the co-created beauty of landscapes. I conclude with reflections on my journey, illustrated by a few vignettes of my work on campus. These are metaphorical potsherds, fragments of my experience, similar to the poems, photograph, and email quotations with which I opened this introduction. Bound together, they form a whole. While this is far from the thesis that I expected to turn in, it did accomplish my rationale and goals for myself. I have deeply changed the ways that I consider relationships, praxis, and meaningful work. This narrative sheds light on the context in which research occurs, on the relationships inside and outside the academy.

I NOTES ON RECIPROCITY: NATURAL HISTORY, PERMACULTURE, AND

EPISTEMIC REPARATIONS

"We are struck by the pervasive silence on questions regarding the

contemporary rationale(s) for social science research. Though a variety of

ethical and procedural protocols require researchers to compose statements

regarding the objectives or purposes of a particular project, such protocols do

not prompt reflection upon the underlying beliefs about knowledge and change

that too often go unexplored or unacknowledged."

Eve Tuck & K. Wayne Yang "Refusing Research" (2014, p. 229)

The rationale for this project was a major driver of its development and

outcome. As a gardener before this program—someone who tends plants, land, and

people—I both wanted to deepen my connection with plants and disrupt settler

colonialism. I would find myself putting clippings from plants in the compost and

lamenting that they were not put to their most cherished purpose as food, material, or

medicine. In urban gardens this often meant knowing plants from all over the world. I

would look up online how Maori Peoples weave with Harakeke, *Phormium tenax*, New

Zealand Flax, which is now a commonly seen plant in low-water use gardens in

California (Smith 2012). I felt troubled composting the strong, multi-hued leaves

instead of making something beautiful and useful out of them. I also felt troubled

enjoying the pleasure and privilege of working with plants while not having a clear,

critical understanding of colonialism, a system that disconnects Indigenous Peoples from their relationships to plants and place. I also had a strong instinct that beauty in many dimensions was an important component. So I went to school, aware of the global high stakes of finding new ways to think, work, and be in the era of climate change (Escobar 2018).

Epistemology and methodology

I operated within an epistemology and ontology of strong relationality, or what Kriti Sharma, a cell biologist and philosopher, calls radical contingentism. Radical contingentism makes explicit that subjects, objects, and processes have no inherent properties within themselves but rather are mutually constitutive and co-creative. In *Interdependence: Biology and Beyond*, Sharma organizes her discussion of the co-arising of objects and subjects around the biological concept of signal transduction: "the organism senses and responds to its environment" (2015, p. 19). Whether for amoeba or humans, Sharma shows how organisms, sensing, and environments bring each other into being. She demonstrates that objects depend upon organisms sensing them as bounded and continuous, distinct from the background environment. They do not have inherent qualities in themselves outside of such relationships. The organism doing the sensing is the subject. In their turn, subjects depend upon objects and environments in order to exist. Subjects relate to themselves as objects, sensing themselves as bounded, continuous, and distinct from the background environment, bringing themselves into being. Subjects do the same with other subjects, sensing them as continuous and

bounded like objects. These processes of sensing and correlating lead to what Sharma, quoting mathematician Douglas Hofstadter, calls a "strange loop" of existence, the interdependence of organisms and their environments bringing each other into existence anew moment to moment (p. 82). As for the subject of spirit, Sharma contrasts a radical contingentism approach to a dualism or monism approach. In dualism, matter follows physical rules and spirit is either inexplicable or follows non-empirical (metaphysical, un-testable) rules. Radical contingentism rejects that divide, and at the same time does not side with any kind of monism. Sharma distinguishes between physical monism that argues that all phenomena are physical (i.e. thoughts arising from physical brains, including thoughts about spirit) and idealist monism that holds that all phenomena are mental (i.e matter arising in consciousness). Radical contingentists hold that phenomena are not physical or mental, but rather arise in the strange loop sense: matter exists as experienced by experiencers, and experiencers depend upon matter to arise. In this epistemology, the question of spirit is not outside the realms of inquiry as a dualist would hold. Nor can spirit be assumed to be able to be conquered by future physicalist laws, as in science some day explaining all phenomena in a physicalist monism. Nor is it some aspect solely arising of consciousness, as in idealist monism. In radical contingentism, no assumptions can be defended because it recognizes that reality itself depends upon the coordinated agreement of social actors to determine what aspects of experience are labeled as "real." Diverse social groups coordinate what they accept as reality with varying norms. Dreams make an excellent example: these aspects of reality might be socially dismissed as "just a dream" (Sharma p. 35), valued for personal

psychological information as in Jungian psychology (Woodman 1993), or accepted as part of ecological knowledge (Deloria 2006). Sharma contends that in a radical contingentist ontology, the material and the mystical all fit within the same world. Contingentism holds a pragmatic relationship to theory, stating that a theory is good and useful if it is predictive, if there is a fit between theory and measurement. This does not imply some sort of greater connection to an intrinsic reality, because all reality is contingent.

Sharma gathers the overlapping fields of skepticism, pragmatism, dialectics, genealogy, constructivism, ontogenesis, autopoiesis, developmental systems theory, non-dualism, and deconstruction in her articulation of radical contingentism . This is a long list of epistemologies to bridge, but Sharma did so succinctly and humorously. She calls bringing them together finding their family resemblances (2015, p. 102). Her work resolved a number of what Sharma would call "anxieties" that I felt within myself given my training in a-political and a-spiritual biology, noticed in the larger social sciences between post-positivism and constructivism (Dixon & Jones 1998) and between western and Indigenous epistemologies (Gegeo & Gegeo 2001, Matsui 2015). Radical contingentism is a practice of open-mindedness and attention to how the world is constructed and arising. This helped me to think about how definitions such as white/Black, settler/Indigenous co-arise through dialectics. I found it to be harmonious with Keating's strong relational framework for transformational identity politics (2013). It helped me to let go of habits of speech and thinking from my physicalist monism training, orient myself toward Indigenous epistemologies, and to accept my own lived

spiritual connection to more-than-human beings. Ultimately, Sharma insists that all people are biologists—whether lay or professional—because all people hold deep observations and experiences of life.

I grounded my methodology in participatory action research, not so much about the numbers of the participants, but rather about the interplay between logos and mythos, the forming of horizontal and mutually beneficial research relationships, and a commitment to praxis (Fals-Borda 2001). I also strove towards decolonizing methodologies as Linda Tuhiwai Smith outlines, with a practice of examining how knowledge production is part of colonization. I tried to orient myself to some of Smith's projects of Indigenous methodologies, including finding creative ways of restoring Indigenous connections to land and celebrating Indigenous survivance (2012). I also pursued what Imani Perry calls liberatory feminism as a praxis of reading, rendering all the layers of patriarchy in their intersections (2018). Between the rationale, epistemology, and methodology that I employed, I went on a research journey that I did not anticipate, but met my goals as a researcher.

<center>Potawat</center>

I got lost trying to find the Potawot Community Garden at United Indian Health Services (UIHS). I first wandered on meandering trails between spruce and alder trees, rushes and bunchgrasses. I finally arrived at the well tended and organized rows of cabbages, strawberries, and fruit trees. UIHS serves several of the Tribes of the area, and the garden grows food for a community farmer's market for the members. The

surrounding land has been restored for basketry materials and fire ecology, where I got

pleasantly lost. During a tour, I learned that traditional aesthetics and beauty guided

many of the decisions about the design. The director was interested and excited about

participatory action research and was happy to tell me what a mutually beneficial

research project might look like. Potawat certainly met all of my research goals.

However, I decided against continuing with this project for several reasons. Simply

based on my experiences working as a community organizer in Vallejo, I felt that

forming connections of trust among that many people in a community garden would be

difficult within a two-year—or closer to a year and a half—time-frame to properly

conduct participatory action research. As Tuck and Yang point out, "It is a

misconception that by simply building participation into a project—by increasing the

number of people who collaborate in collecting data—ethical issues of representation,

voice, consumption, and voyeurism are resolved" (2014, p. 230). At the beginning of

this program I felt epistemically unprepared to work with Indigenous Peoples; I knew

that they have already been historically over-researched and plundered (Smith 2012). I

did not want to add to that legacy by being an unskilled researcher who was not yet well

versed in Indigenous scholarship and decolonial logics, on top of a limited time frame.

This simple decision was an act of refusing research. Tuck and Yang define refusing

research not just as a "no" on the part of the researcher or researched but as a generative

space that renders visible the fact that social science is settler colonial knowledge

production. Refusal "denudes power (and power-knowledge) without becoming an

advertisement for power" (245). They also contend that refusal humanizes the

researcher. By refusing to work with the Potawat Garden, I chose to not start my "novice" research—as Tuck and Yang define master's theses and doctoral dissertations––running the risk of "ventriloquizing" the perspectives of Indigenous Peoples of this area. I didn't try to use their voices to further my career and speak for them through me (2014). Even if I had chosen this project, I would have felt ethically compelled to actively refuse a position of authority about their experiences (hooks 1989, Smith 2012). Instead I chose another project and continued to show up to political events to be accountable to the Wiyot. I also volunteered at the garden several times during my studies. I am making these choices of refusal explicit in order to cast light on the complexities and power of research.

<div align="center">The note-taker</div>

Standing knee high in *Festuca californica* grasses in a spacious oak grove, surrounded by the 2018 Environment and Community cohort, the note-taker joyfully described his twenty years of land tending and natural history journaling (I refer to him as the note-taker as an arbitrary placeholder to respect his privacy). With my research interests in beauty, I felt curious when he described removing the fir trees that grew among the oaks as an aesthetic decision, not a rational or prescribed one. I certainly found the grasses lit by light filtered through oak branches beautiful, and felt much more comfortable than if we were standing in a congestion of Douglas fir saplings. Could I learn about how beauty informed the note-takers relations with life and land by reading his notes? He had read many of the authors that were influencing me about land

tending, such as Dennis Martinéz and M. Kat Anderson, seemed to have a respectful relationship with Indigenous knowledges, and a praxis of showing up for Indigenous led political initiatives such as undamming the Kalmath river. Did his notes document an awareness and refusal of colonialism? I became even more curious when he described witnessing the year the salmon stopped swimming up the creek to spawn, and he cried. At the risk of reifying stereotypes of race, gender, and performativity in education, I was surprised and moved to see him shed tears about a fish while teaching a class. In addition to objective counts of salmon runs, did the journals include note-taker's affective relationships with more-than-human beings? I offered to digitize, archive, and analyze the natural history notes for my project. This would safeguard them from being lost in a wildfire and form a mutually beneficial research outcome. The note-taker agreed. I felt that this project was pragmatically simple enough to fit within a two-year masters program, only requiring that I deepen connections with a few people. At the bare minimum, I planned for the note-taker to receive a digital copy of his journals, and potentially powerful new tools with which to analyze and visualize the information (Creswell 2003).

This project presented several positive benefits. The note-taker practices and writes about many techniques that might be considered critical adaptations to climate change: composting human waste, balancing subsistence and market farming, watershed restoration, passionate observation, ecological grief and resilience, "fire-mimicry," and decentralized renewable energy. Working with the journals was an opportunity for me and others to learn from his insight and experiences. Helping to

circulate the note-taker's observations would improve the availability of local ecological knowledge. The site-specificity, depth of time, and consistency of a single observer made the document a unique candidate for interdisciplinary ecological research that retained internal validity. There has been a correlation between intact Indigenous and/or local ecological knowledge with intact biodiversity, and conversely a deterioration where there is a lack (Aswani 2018), empirical evidence for Nick Reo's assertion that knowledge *is* relationship (2019). Helping to circulate the local knowledge that the note-taker had recorded might contribute to the enrichment of the collective watershed knowledge and caring system.

At the same time, even if the note-taker is a relatively more responsible ecological actor than his neighbors and (recent) predecessors, his relationship to land is still part of settler colonialism: it relies on the expulsion of Indigenous peoples from their lands, their continued exclusion, the exploitation of their labor, and the appropriation of their knowledge—in this case via permaculture (Wolfe 2006). The same is true of my own relationship to land. To pretend otherwise would be "playing Indian" (Tuck and Yang 2012). How could I work with the note-taker and still disrupt and refuse the logics of settler colonialism?

Epistemic Reparations

If knowledge is relationship, I decided to attempt a sort of epistemic reparation: offering the natural history notes and my analysis of them to the Sinkyone Intertribal Wilderness Council for their archives. This could be part of the project of decolonizing the digital humanities and contributing toward sensitive digital cultural archives

(Christen 2015). I also asked the note taker if they would be open to sharing access and management of the plants and animals on the land with members of the Sinkyone Tribes. The note-taker was open to and interested in the idea. The note-taker was renting, not the land-owner, so I did not bring up the subject of rematriating the land via property title. I hoped to act as facilitator of sharing knowledge and generating connections. I hoped that this connection would result in the Sinkyone having increased access to and relationship with the more-than-human-beings of the land, and this project might contribute to decolonization. Eve Tuck and K. Wayne Yang contend that decolonization is not a metaphor: in order to be a process of decolonization, it must result in the returning of land to Indigenous Peoples (2012). Elisabeth Middleton contends that restoring connections is critical for "A Political Ecology of Healing" (2010). Without having met the owner of the land who held the property title, I imagined a way for research to move beyond the narrow, binary notion of land as property and toward a functional usufruct or bundled notion of land relationships, in which multiple parties can access, manage and harvest. Such agreements were common in this area prior to colonization (Anderson 2013). Political economist Elinor Ostrom empirically concluded that shared natural resources in good or improving states of health often correlate with bundled land rights and the participants investing in ways that they share information about each other in order to build trust (2010). As an important note, the Sinkyone InterTribal Wilderness Council is not just a "participant" but an organization that works between ten sovereign nations. Determining a method for land access would require negotiating the complex terrain that settler colonial law

has constructed. Even so, after my first refusing research and selecting a project with another settler, I looked for a way out of the logics of settler colonialism that hold the assumption of ongoing, eternal settlement. Instead I moved toward a generative ground of alternatives.

In addition to this move toward actively restoring relationships, I undertook a critical genealogy of natural history and permaculture. I examined how they, like many other disciplines are in, of, and for empire. This is an activity of decolonizing methodologies, another part of the epistemic process of contributing toward decolonizing land relationships (Dunbar Ortiz 2013, Norgaard 2019, Smith 2012).

Natural History

Humans have had methods for observing and remembering the patterns and processes of the more-than-human world for thousands of years, including oral history (Anderson 2015). My intention here is to not to start from the beginning, but rather to briefly outline western natural history as a discipline implicated in science, modernity, and globalism. Much has been written about the so-called Enlightenment and Scientific Revolution; instead, writing as I am from Humboldt State University, in what is now called Humboldt County, it feels fitting to begin from the example set by the Prussian Romantic scientist, Fredrick Wilhelm Heinrich Alexander Von Humboldt. Despite the fact that there are more species, geographical features, and places named after him than nearly any other person, his ideas and legacy are relatively obscure. In *The Invention of Nature: Alexander Von Humboldt's New World,* Andrea Wulf combines a biography of Humboldt with an analysis of his influence on Charles Darwin, Henry David Thoreau,

John Muir, and others in order to resurface Humboldt's legacy in western ecological

sciences. Humboldt's writings about travels in North and South America from 1799

to1804 were both elite scientific and popular edutainment successes of the time.

Humboldt laid the foundation for the fields of biogeography and geomagnetic and

meteorological monitoring; emphasized the importance of both rational observation and

empathetic emotion; and translated scientific findings into immensely popular personal

narratives. Remarkably prescient, Humboldt warned of the dangers of human caused

climate change due to extractive agriculture and industry as early as 1800, admonished

Thomas Jefferson that the experiment of American democracy would be a failure unless

slavery was abolished, and advocated for the validity and protection of indigenous land

management practices (Wulf 2015). Despite these radically progressive outlooks (that

certainly resonate with the motivations of this project), Humboldt arrived with and

aided an unfolding apparatus of global hegemony. In *Decolonizing Methodology*, Maori

scholar Linda Tuhiwai Smith (Ngati Awa and Ngati Porou) outlines how early

European arrivals played a complex role in the institutionalization of knowledge about

and domination over Indigenous peoples, despite good intentions or durable friendships.

Smith contends that European accounts of Native peoples were not only distorted, but

privileged as expert above accounts of Native peoples about themselves (2012).

Alexander Von Humboldt illustrates several important points about natural history; it

has long been a subjective-objective endeavor, implicated with colonial expansion, and

a site of epistemic injustice. Humboldt also represents part of the submerged traditions

of western culture—the hegemonic has historically been self-contradictory and

polyphonic. Parts of Humboldt's legacy are worth resurfacing, particularly his early warning about human-caused climate change, while at the same time remaining critical of why his name is imposed on unceded Indigenous lands in Humboldt County (bergman & Montgomery 2017).

Douglas Chambers picks up "The History of Natural History" from the legacy of Humboldtian science through the twentieth century. He traces its development through time, across many authors, by analyzing two compilations: C*ultures of Natural History,* and *Visions of Empire*. These texts illustrate ongoing tensions between specialized nomenclature and popular discourse, systematic classification and generation of theory, and competing definitions of causality and reality. Chambers makes a point of exploring how botany provided a language for the sexual expression of European (elite) women, and how women were repeatedly excluded or erased from professionalized botanical societies (1998). Despite analyzing a book literally called *Visions of Empire,* Chambers' critique does not address colonialism and the dismissal, erasure, appropriation, or destruction of Indigenous knowledges, missing several layers of patriarchy in his analysis. Louise Fortmann, in *Doing Science Together*, documents how the methodology of "European botany was the *product* of South Asian local knowledge. Moreover, the people most directly involved in providing this knowledge were people whose knowledge is often, to this very day, discounted: women and non-elites." (p. 3 2008). M. Kat Anderson, in *Tending the Wild*, shows how Native Peoples in what is now called California had botanical knowledge systems equally or more complex and nuanced than European explorers, and yet they were mischaracterized as "simple"

hunter gatherers by anthropologists. This misrepresentation was used to justify

appropriating Indigenous lands (2005). Linda Tuhiwai Smith describes the ongoing

challenge of contemporary Indigenous peoples to reclaim and reinvent their ways of

knowing in post colonial and settler colonial worlds (2012). Debates about subjectivity,

objectivity, legitimacy, cultural appropriation, and trust reverberate in natural history to

this day. Humboldt County in particular is a site of active negotiation and conflict as

Tribes form research partnerships with settler colonial institutions such as the

University and U.S. Forest Service (Long & Lake 2018).

Permaculture

The contemporary notion of permaculture is younger than natural history, but

similarly imbricated in globalism. In "Towards Sustainable Agricultural Stewardship:

Evolution and Future Directions of the Permaculture Concept," Jungo Suh provides a

comprehensive, if uncritical, genealogy of permaculture as an "outcome of the

intellectual interplay between modern agricultural science and traditional ecological

wisdom." Suh traces the first records of permaculture in western accounts of Chinese,

Japanese, and Korean agriculture from 1911—then called permanent agriculture—

presented as an alternative to the burgeoning industrialization of agriculture.

Permaculture resurfaced with greater intensity in the 1970s as a set of theories instead

of descriptions, based on practices drawn from "India, Southwest Asia and peasant

Europe" as well as from Masanobu Fukuoka's "One Straw Revolution" (1978). Suh

emphasizes the influence of Tao and Buddhist philosophy on permaculture (2014). In

The Carbon Farming Solution, Eric Toensmier promotes permaculture as a method for

mitigating and adapting to climate change, while at the same time acknowledging that "permaculture itself has developed few if any new practices" and suffers from an "underestimation of the difficulty of managing complex integrated systems" (2016). Leah Penniman, author of *Farming While Black*, critiques how permaculture is based on the practices of Indigenous people from around the world, but it is presented as a mostly white, male practice. Penniman deliberately highlights the Afro-indigenous provenance of practices to counteract this trend (2018). Throughout *Tending the Wild*, M. Kat Anderson argues the land practices of native peoples in California were a sophisticated form of permanent agriculture that developed over thousands of years, did not resemble European preconceptions of settled agriculture, and were thus justified for destruction (2013).

Intended Methods

In working with the journals I planned to blend quantitative and qualitative techniques (Elwood 2010). I used voice transcription on Google Documents to digitize the text and make it searchable. This would allow for tracking of species occurrences and weather data over time based on the note-takers repeated surveys (Tingly 2009) and for the long-term data to be visualized (Tufte 2006). These visualizations might illustrate shifts in phenology with local responses to the hottest years on record, and how and when the note-taker and his family harvested from or tended the land. I planned to conduct sentiment analysis on the note-taker's subjective experience over the twenty years (Liu 2010). I also intended to perform a close reading of text for discourse analysis. I would take two samples, one based on the same time of year each year, and

another thematically organized around aesthetics and (de)coloniality based on a keyword search (Gill 2018). In order to form connections of trust and place the journals in a living context—and get to spend time with the oak trees and bunchgrasses myself— I planned to spend several weeks in participant observation with the note-taker and his family over the summer between my first and second year (Spradley 2016). This did not go according to plan.

II LIVING PRAXIS

In Fall 2018, when I learned that Environment & Community took their students out on a week-long camping trip (where we met the note-taker) as our first experience, I was sure that I had chosen the right program. I had a background in teaching outdoors and felt that groups can form better interpersonal connections while camping. However, immediately upon arriving I was astonished by the relentless pace of the schedule that did not allow for any peaceful time connecting with the river, forest, or my peers. It was a constant barrage of introductions to community members of the Mattole and discussions of readings, from morning into the night. Instead of facilitating icebreakers to introduce the students to each other, the group leaders constantly asked the cohort to repeat our research interests ad nauseam. I felt this was dehumanizing and set up the conditions for the conflicts that would unfold. The trip itinerary and readings erased or ignored contemporary Mattole People. We also did not have a scheduled event with migrant laborers in the area. The predominantly white community we were introduced to by the teachers perpetuated a narrative of the "extinction"of the Mattole and Sinkyone Peoples, as did much of the reading we were assigned (Freeman 2000, Bernard 2010). There were instances of racial microaggressions within the cohort and with people that we met. I was not present for a particular altercation between students that would have lasting impacts, but I did feel a distinct earthquake fracture in the group cohesion. Divisions between race, class, gender, and age became painfully inflamed among us. I found myself on the other side of a clique of people with whom in nearly

any other setting I would have gotten along well—it took us the next year and a half to sort this out. On the trip evaluation at the end of the week, I recommended that future cohorts play team-building games and spend quiet time resting and reflecting on their experiences in the gorgeous riverine ecosystem in order to make space for complex emotions and ideas to be processed. Upon returning to campus after the trip, I asked faculty if there was a way to facilitate a restorative dialog, and my concerns were brushed aside. I recommended that the program set up a day-long event with some extremely effective facilitators that I knew: Katia Sol and Christopher Kuntz of The Ecology of Leadership (Madjidi 2014). This recommendation was not responded to or supported. I still recommend their work. As the semester progressed, I mourned the vibrant community that I had left in order to go to school and coped with the loneliness of feeling like the cohort would not heal. I saw a counselor on campus through Counseling and Psychological Services (CAPS) for processing those issues, as well as finding awareness and integration of my childhood sexual trauma. I was triggered by classroom discussions about sexual orientation and felt I had no safe place to explain my experience and perspective. Classroom dialogs were tense and combative. As another attempt to facilitate change, I served as a student liaison between my cohort and the faculty for faculty meetings.

In Spring 2019 I grieved for the Earth's suffering as I read some of the dark prognoses of climate chaos and colonialism. I submitted applications for grants and scholarships full of my anger at systemic injustice and confusion about my positionality, which I feel did not particularly endear me to funders. This anger that I

felt was deeply informed by the anger of other people in the cohort. Tensions seethed beneath classes that we had together. In "State Violence, Environmental Justice, and Equity," students from other programs joined us in the class and wondered at the atmosphere of rage in the room, as did the professor. She eventually chose to hold class outdoors to improve the learning atmosphere, and to make space for people to express their anger. I catalyzed a day-long training in conflict resolution. That was taught not by Sol and Kuntz but by a professor who was available on campus. In my experience, he was not nearly as effective at setting up a container for learning and dialog. Instead the training felt similar to the academic environment: over-scheduled, draining, and ineffective for forming deep connections.

Over the summer, I devoted time to recharging myself and seeking solutions to the program problems. I studied *Non-Violent Communication* (Rosenberg 2015), applying mindfulness meditation to discussions about race (King 2018), and took a three hour workshop about the physiology of trauma in order to better understand the cognitive science of intergenerational trauma that was so present around me. Sensing a rift in my marriage, I spent extra time with my husband. Along with everything else, our dog was attacked by another dog: she got bit on her head and a tooth got knocked loose that needed to be surgically removed.

In my third semester, Fall 2019, I resonated with the John Lennon lyric "pools of sorrow waves of joy are drifting through my open mind" (I resonated with the lyric, but I was blasting Lizzo and Beyoncé on my stereo at home). I would find myself alternating between falling into a pool of deep sorrow, amazed at the kindness,

generosity, and love from people in my life, and immersed in the everyday splendor of small insects or clay on a pottery wheel. Sometimes I wondered if I could hold all of these feelings in my being. My marriage was falling apart and it felt like the program was too.

In the first week of instruction in graduate colloquium, where students present their research projects to each other, the classroom erupted in shouting over dynamics that had started in the Mattole and not been resolved. For the next several weeks the tension was palpable. I sensed it as a sort of electrical charge. There was a hesitancy in the group to sign up to present research. Even though I knew I was in an emotionally dangerous environment, I volunteered. The day of my talk, a student made a sharp remark about my positionality. Exhausted, I started to cry on the spot. I knew that the remark was rooted in the immense tension of the whole group dynamic so I did not respond with anger or blaming. I succeeded in recovering my composure, finishing my presentation and fielding difficult questions about aesthetics, ethics, and power. Afterward, I qualified this talk as an emotional catastrophe and an intellectual success. I commented that I felt as if I had been "energetically rubbed down with sandpaper." The head of the Department of Diversity, Equity, and Inclusion plus both of her staff came to address the colloquium as an attempt at restorative justice for several weeks in a row after this. She retired later that month. One student filed an academic restraining order through the office of the Dean of Students against several others. After all of this discord, five other female students and I got together off campus and did the hard emotional labor of figuring out what had separated us. This was a turning point for a

large fraction of the cohort. In a group of fewer than twenty people, six of them sorting

out their differences is a considerable number. After this, the students took over the

colloquium space and made it into a time for troubleshooting the program problems

instead of discussing student research. We invited in faculty who were more open

hearing student perspectives. There were few research presentations after the upheaval

in mine. Unfortunately, many students felt too unsafe in the classroom setting to show

up to the troubleshooting talks.

I felt so emotionally distressed at home I went and lived at a friend's house for a

few days. I dropped a ceramics class because I felt too overwhelmed to even do art as

therapy. Trigger warning, on the next page there is a photograph of my dog after a

second attack. I include it because she looked like how my heart felt. The bite went

necrotic, requiring the surgical removal of a portion of her shoulder and weeks of a drainage tube from the wounds. She made a full recovery.

Figure 2: How my heart felt

Fires elsewhere in the state of California led to power outages with little warning that semester, adding to the sense of chaos. My brothers and sister-in law drove up from the Bay Area to take care of me one weekend because I had spent three days nearly unable to get out of bed from the sadness of my divorce, what I was studying, and the social environment in which I was studying. I gave a final presentation in "Political Ecology" later that semester and could hardly string words together because I was in so much emotional fatigue. I took two "Incompletes" as grades and had to finish some of my papers for classes over the winter break after the semester ended. Through all of this, I still kept putting my values into practice: I spent extracurricular time getting

trained to be an ally/accomplice to Indigenous political causes, and time in class helping to set up a Food Sovereignty Laboratory on campus for traditional food, medicine, and regalia.

By the winter break 2019, I was overdrawn. I saw a physician who diagnosed me with "despair" and feeling like "events were out of my control." The doctor noted that I had developed a salt deficiency as my adrenal glands worked overtime to cope with the stress. It eventually took my eating several tablespoons in a 24 hour period to finally feel like I had caught up on that deficiency.

When I returned for the Spring 2020 semester, I found that I could no longer withstand being in the same room as my cohort because I felt everyone's emotions so acutely and did not have a reserve of happiness to draw from any longer. I sensed that my formerly deep emotional reservoir had been exhausted down to inches. I dropped a class about decolonizing methodologies that I had hoped to take all throughout my time at Humboldt. Despite my enthusiasm for the subject, I would start sobbing whenever I would even think about going to the lecture. Ironically, that class was finally the one that was designed around compassion, self-care and good relationships and taught by my thesis chair, Dr. Cutcha Risling-Baldy. It felt like too little too late for my experience at E&C. I am glad that it became available for other students. It was brought about by student organizing and demand.

Positionality

In navigating these fissures around institutional racism and intersecting identity politics, I reflected deeply on and became acutely aware of my positionality. Trinh T. Minh-ha names the challenge of stating one's location and identity in the shifting axes of power: "between the twin chasms of navel gazing and navel erasing, the ground is narrow and slippery, and none of us can pride ourselves on being sure-footed there." (1989, p. 28) In the argument against naval erasing, my positionality says something about me as a researcher, and the kind of knowledge that I offer. Stating positionality situates the geopolitical, embodied specifics of my perspective rather than speaking with an authoritative "view from nowhere" (Sprague and Kobrynowicz quoted in Hesse-Biber et al 2004, p. 12)). By describing the experiences and identities that shape my subjectivity, the way I sense myself, I disclose the parameters of my objectivity. I reveal the motivations of my research, and the world-view from which I make observations. I also reveal how I was perceived in the academic political environment. On the side against naval gazing, I heed Imani Perry's invocation that to try to use my positionality to excuse myself or distract from the systems of social and ecological destruction happening in the world is a waste of everyone's time. One need not be even near the top of the capitalist and privileged hierarchy to benefit from extractive, destructive material and discursive flows of power (2018). I also recognize that focusing on the oppressed aspects of my identity can be a setter "move toward innocence" as an attempt to dodge conversations about coloniality (Tuck and Yang

2013). In a self-reflexive practice of those admonishments, I've learned to let go of the white-privileged notion of myself as a good or even neutral person (McIntosh 1988). Instead, I cultivate a practice of resting in moral ambiguity while searching for pathways of ethical right action and simultaneous self-love (bergman & Montgomery 2017, brown 2017). Ultimately, I aspire toward sitting with my contradictions in what AnaLouise Keating calls transformational identity politics (2013). Drawing primarily from the examples of Audre Lorde, Gloria Anzaldúa, and Paula Gunn Allen, Keating calls for an identity politics that can move beyond the exclusive dichotomies reified by oppositional consciousness, the conventional mode of identity politics. Keating agrees with Chela Sandoval in favoring tactical, ambiguous, even contradictory identities, what Sandoval calls differential consciousness. Holding these tensions within an identity leads to an ability to act as a threshold person, capable of dialog between people in disagreement. This also evades or complicates the neoliberal marketization of identity politics, what Imani Perry calls the "entrepreneurial woman" who is expected to capitalize on all aspects of her identity and has replaced "homo economicus" or the rational, economical man as the model of capitalistic imagination. Perry describes this marketization as part of the backlash against the advances and gains made by intersectional feminism since the 1980s (2018).

Differential consciousness is not easy to cultivate: "entrance into this new order requires an emotional commitment within which one experiences the violent shattering of the unitary sense of self as the skill that allows it mobile identity to form takes hold"

(Sandoval 2013, p. 196). This notion resonates with Anzaldúa's uplifting of the notion of nepantla:

> "When you're in nepantla, you're in chaos—tugged between starkly different peoples and worldviews. Your previous theories, your beliefs about life, no longer make sense. You're in free fall—painful, terrifying free fall. Held in chaotic tension, these oppositional energies can activate transformation."
> (Keating 2013, p. 13).

I certainly experienced a shattering of self during the course of my studies. I questioned my education, upbringing, self-perception. In this new awareness I was able to find commonalities with members of coalitions, rather than be driven apart by difference or demand sameness. My classmates and I studied how to name institutional racism at the same time as observe and experience it. We struggled to co-create a safe learning environment. Oppositional consciousness illuminated important institutional shortcomings, and was part of rigid and stressed dialogs (Keating 2013, bergman and Montgomery 2017). Personally, I found myself in the interstitial spaces between seeming dichotomies. I am a white-passing, settler, US citizen, highly-educated, athletic, and femininely beautiful woman with a presently harmonious menstrual cycle. I am also a pansexual, queer, mixed-ethnicity, bilingual, empathic human being who has spent most of my working life outside of school doing manual labor and a few seasons of it disabled: unable to walk; use either of my thumbs; or read (three separate events). I turned thirty this year and filed for divorce. I don't have children. Where does all this put me in the discourse of margin or center, domination or subordination? What does

my positionality mean for my research? What does this mean for how I show up in political coalitions?

My liminal positionality and empathy helped me continue communication between students and faculty in tension. During the coalescing of my differential consciousness, I (re)named my identity. I formerly called myself "half Mexican, half Irish" Instead, I became "Latinish" (Latina + Irish), or more specifically, "Chicanish" (Chicana + Irish). The portmanteau clearly expresses my origins and adds an element of amusement: the -ish allows for the fact that I often pass for white. I also passed for straight. When I was in a heterosexual, monogamous marriage, I rarely disclosed my sexual orientation. Opening up about this as well as my sexual childhood trauma was an important part of commonality building between me and other students who had been isolated from each other by our hostile learning environment. Showing my vulnerability made space for others to show theirs, consistent with non-violent communication (Rosenberg 2015). I had previously only come out to my ex-husband and close friends. I also struggled for years about my queer identity. Much like wondering if I was "Latina enough," I found myself asking myself if I was queer "enough" to apply the label to myself. Then I remembered that I wore mostly men's clothing for several years in a row while I worked as a gardener and love playing with the range and liminality of my gender expression. I also resonate with the intersections of queer and feminist epistemologies (Marinucci 2016). I agree with Imani Perry that while we may not eliminate the categories of men and women entirely, we would do well to evacuate them of their rigid and exclusive attributes and instead find who we are in the

continuum (2018). I often present with a gender neutral appearance. Embracing the submerged or non-obvious aspects of my identity helped me to form connections with other students. One of the biggest shifts of my identity was realizing that I was an empath. This was difficult for me to understand or accept about myself, and had far-reaching implications in my life and research.

On Empaths

I didn't arrive at Environment & Community with any awareness of being an empath. The word was simply not in my lexicon. I didn't even encounter it until my fourth semester, after spending nearly two years discussing power and privilege in classroom settings where seemingly little thought was put into how students would navigate the power and privilege between themselves. I didn't fully embrace the word until Fall 2020, my technical fifth semester. I learned to identify as an empath because I needed to in order for my experiences to make sense. I spent two years struggling to differentiate the pain and anger of my classmates and even the authors I was reading from my own. I see how being an empath has influenced my whole life. I'm hoping that my highlighting of this part of myself will affirm the experiences of other people on the spectrum and help make resources more available. Based on my experience and research, the term empath hinges on both genetic factors and life events. Who might be called an empath and why may be a very idiosyncratic definition. I address here my identity as one as a specific combination of factors. I provide a recapitulation of how I came to understand the term, starting with the Sensory-Processing Sensitivity

framework, research on empaths, and concluding with Kundalini awakenings, which increase empathy.

Sensory-Processing Sensitivity (SPS)

SPS describes the 15-20% of human beings whose nervous systems are more sensitive to stimuli. This means that they have a lower threshold to both experiencing something and becoming over-aroused or overwhelmed by the experience. They also show greater depth of processing the stimulus and therefore increased awareness of their environment. The research on this trait is well established, statistically robust, and has been observed in over a hundred other animal species, such as rats, fruit flies, and horses. It can be observed from infancy and is suspected to be heritable via a complex suite of genes. There is some debate about if it is a categorical trait or a smooth continuum within neurological diversity (Greven 2019). In popular literature, the concept is called being a "Highly Sensitive Person" (HSP). Highly Sensitive People are known for needing time in nature, frequently a spiritual practice, and a peaceful environment due to their susceptibility to becoming overwhelmed (Aron 2013). I am an outlier on the spectrum based on my identification with all of the diagnostic characteristics. This self-diagnostic list is available online: https://hsperson.com/test/.

 I was not as outwardly obvious of an HSP when I arrived at HSU because I also inherited a seemingly contradictory set of traits known as High Sensation Seeking (HSS). The test for that is located at the same link. This characteristic, a drive to seek out novelty and stimulation, has been researched in tandem with HSP because it is possible, if rare, to inherit and exhibit both traits. It allows an HSP to "pass" as not

being one. I appeared more outgoing and adjusted to complex social settings than

someone with my degree of sensitivity because I also carried an inherent drive to test

my limits. HSP/HSS folks are described in the literature as having a narrow window

between over- and under-stimulation (Aaron 2013).

I learned about these traits during marriage-turned-separation counseling in my

fourth semester. The counselor told me that understanding myself as an HSP was an

essential survival skill. Moreover, one of the primary researchers of High Sensitivity,

Dr. Elaine Aron, contends that if there is such a thing as a "divorce gene," SPS might be

one because without a conscious understanding of the differences in neurological needs

and functioning, a couple can struggle with pernicious challenges. My husband and I

certainly encountered issues. He is neither HSP nor HSS. Aaron even suggests that

HSP/HSS folks might struggle to match their needs with anyone but another HSP/HSS,

which is tricky because people with both traits are quite rare (Aaron 2001).

In the classroom setting, my sensitivity translated to even an aversion to the

fluorescent lights and lack of natural light in the room that most of the E&C seminars

were located in. I felt that this environment did not at all help the interpersonal

dynamics of the group. I was relieved when a teacher in my second semester finally

thought to take the group outdoors during class time. By my fourth semester, the

thought of sitting in that setting with the emotional tension became unbearable. I took

up Kundalini Yoga some time in my second semester as a somatic and spiritual practice

to take care of myself and cope with the stress.

Empaths

At first I thought that HSP was sufficient to describe my reality. However, as I looked at the research on empaths and reflected on my experiences at HSU, I felt that HSP only explained part of my way of being. I presently understand empathy as a continuum with complex contributions from both genes and life experiences that affect the degree to which anyone can empathize with anyone else. Psychopaths and empaths might be described as slightly less than outer quartiles plus outliers of this spectrum, with some mobility on the continuum due to neuroplasticity and the non-deterministic nature of cultural contexts (Sharma 2015, Blair 2003). I fall far on the empathic end of the spectrum.

Dr. Judith Orloff is one of the primary researchers of empaths and one of the most visible academics popularizing the concept. She cites evidence for five mechanisms for how empaths experience other people's emotions. These include low thresholds to neurotransmitters such as dopamine, vulnerability to emotional contagion, sensitivity to electromagnetism, high activity in the mirror neuron system, and synesthesia, particularly a variety known as "mirror touch" synesthesia in which a person witnessing an event experiences it in their own body (Orloff 2017, Banissy 2007). Several of these seem highly related to neurological sensitivity; I find all of these to be present in my life. In the case of synesthesia, I have experienced the mixing of senses since childhood. I would visualize numbers, time, and music. I sometimes detect textures or sensations associated with certain people that later prove to be accurate or indicative of a dynamic. During the first week of instruction at E&C, I noticed that clear

"earthquake fracture" in the cohesion of the group. I have had other accurate examples that I will not publish here to respect those peoples' privacy. I feel that this form of sensitivity exceeds the descriptive metaphor or project of SPS alone and instead veers into the more subtle awareness described by being an empath and even the notion of mind reading (Robertson 2004, Singer 2006). As for emotional contagion, I realized that I had long been suffering from extreme cases. Before coming to HSU, I have had to schedule my work life around making time to clear my energy out after public events. I experienced emotional contagion simply from sitting in a meditation hall with other people for five days during a retreat. The acute suffering of others in the E&C program made my status as an empath all the more obvious to me, and critical that I learn advanced techniques of defending my emotional boundaries. I would find myself feeling vast amounts of emotions that did not feel like mine; I needed hours alone in the Arcata Community Forest in order to clear myself out. I also picked up emotions from the utter injustice that I read about on a daily basis for class. When I finally read *The Highly Sensitive Person: How to Thrive When the World Overwhelms You* by Dr. Elain Aaron in my fourth semester, I started crying. She wrote that the book was written by a sensitive person for sensitive people. The tone was so gentle. After a year and a half of immersing myself in ecological and social justice literature, I felt like I had walked out of a world of yelling and suddenly encountered someone speaking in a soft voice. I am committed to staying with the injustices of the world, and I have learned my personal thresholds beyond which I am no longer useful to anyone for helping.

Kundalini Awakening

My identification as an empath became even more pronounced after I started a

Kundalini awakening in March 2020, shortly after I dropped the "Decolonizing

Methodologies" class. As I mentioned in the section about sensitivity, I had taken up

Kundalini yoga at a local studio on a regular basis as a coping mechanism. This

meditative form of yoga felt like the most nourishing and restorative environment I

could find. Yogi Bahjan is cited as the first person to publicly teach this formerly secret

method of yoga, introducing it to the US counterculture in the 1960s, and it has spread

since as part of American yoga culture. It is a comprehensive form that integrates

movement, breath, chanting, and meditation. It is particularly known for helping to

integrate trauma (Nahai 2012). This did help with my well-being, except that I then

found myself in the middle of a Kundalini awakening in my fourth semester, precisely

as the Covid-19 pandemic started. All of a sudden I was sheltering in place with my

soon to be ex-husband, trying to write my thesis while I went through a massive shift of

consciousness that is poorly studied or understood by western medicine and can easily

resemble psychosis. It is often lumped into the same category as "near death

experiences"—except that a Kundalini awakening can go on for months or years. These

events are reported to increase sensitivity and empathy. Other symptoms include

unusual flows of energy through or around the body and a feeling of a call to service. I

can attest. At times I had so much energy flowing through my body that I felt

preternaturally strong and was tossing my aluminum kitchen step ladder up in the air

and behind my back. There is a lack of understanding in the western medical world for

caring for people undergoing them (Woolacott 2020). These events are routinely

discussed and celebrated in yogic science, but that was not the cultural context that I

found myself in in the midst of the awakening. My family members, neighbors, and ex-

husband had no concept of it. I was even separated from my instructor due to the shelter

in place order. Only a reiki practitioner I knew reassured me that what was happening

was a good thing, not a pathology. However, due to my hesitancy and pain about

cultural appropriation, even as I went through the awakening with obvious psycho-

physiological symptoms, I hesitated to call what I was experiencing a Kundalini

awakening because I was so new to the form and somehow felt that I was not respecting

the lineage of wisdom. I was very concerned about appropriating the knowledge

without being reciprocally politically responsible to the people's and lands where the

knowledge came from. I was also so full of energy that I struggled to read new

information. I was left on my own.

I *really* struggled to identify my personal emotional and energetic boundaries

after the awakening started. I could sense people's feelings not just locally, but from

hundreds of miles away via digital communications. I began to take on enormous

quantities of other people's energy that would leave me feeling thrashed and drained.

All of this added up to the point where I could not even approach my writing without an

acute degree of pain, sadness, and fear. I also had so much energy flowing through me

that I had to channel it into movement or singing or else I would feel it build up and

burst out of me as garbled noises and thrashing. I started to empathize with horses, bees,

my dog, and the forest in ways that I could not predict or manage. I had been pushed to

a brink of intellectual and emotional exhaustion. I started exhibiting behaviors that caused my therapist to wonder if I was developing bipolar II disorder as I oscillated between grief and an ecstatic, blissful joy of being alive. I feel that was due to the quantities of energies that I was picking up from other people, in addition to my own challenges.

With my relative economic and social privilege I was able to access resources to care for myself. I also self-advocated. I refused to dull my awareness through psychiatric medication. I distrusted any doctor who did not know me very well to prescribe anything that would alter my cognition, especially if they were not familiar with Kundalini awakenings (Woollacott 2020). I was aware of the challenges of getting off of psychiatric medication once treatment started, especially with a poorly defined diagnosis (Aviv 2019). I consulted three psychiatrists from May until August as I made this decision. In June I switched to a therapist outside of my insurance network who was versed in this kind of event. Around that time, my Kundalini awakening increased in intensity. I tried living on my own for a month and finally called my parents and asked them to bring me to their house to recover. This was when I was unable to read or cook for myself because of the energy coursing through me and the stage of trauma recovery. As part of the awakening, I came to terms with all of my life's traumatic memories.

What has made the biggest difference is that I am presently signed up for training to learn to defend my emotional and energetic boundaries at an organization called Intuitive Way (http://intuitiveway.com/). This has improved my daily life enormously. I can now identify and flush out any energy or emotions that are not my

own. That is part of their definition of meditation. I have practiced meditation for just over ten years in several formats, mostly Soto Zen, and never learned such specific techniques for prioritizing my own boundaries. Until I found this training, I struggled for months since the awakening started. I would have benefitted from this training even before entering kindergarten, where I was also overwhelmed by chaotic emotional settings. Now is the next best time to start, and absolutely essential for my functioning. Orloff stresses the importance of empaths learning coping mechanisms rather than being mischaracterized as exhibiting a pathology (2017).

After all that happened, my committee members agreed to allow me to publish this anthology rather than my original project. I found the Intuitive Way practice in October 2020. That improved my condition enough for me to write this autoethnography. Fortunately, one of the benefits of a Kundalini Awakening is the eventual integration of traumatic memories. I feel peaceful about my divorce, and about the program. I feel committed to being of service in the world, and to caring for my boundaries. I manage my sensitivity as an asset.

I firmly believe in finding joy and pleasure to balance the pain of catastrophe. Life can be considered a series of ongoing, managed (or not) catastrophes, series of events that form who we are. On on evolutionary scale, life writ large has been a series of nested catastrophes that organisms produce and respond to, from the first microorganisms photosynthesizing that triggered a global mass extinction event due to their high production of atmospheric oxygen to the present global mass extinction due to human's destruction of habitats and high production atmospheric carbon dioxide

(Sharma 2015, Morton 2017). On a social level, colonization is an ongoing catastrophe, that Indigenous peoples are committed to opposing on a long scale (Smith 2012). Patriarchy is a multi-layered catastrophe intersecting with colonization that is widely internalized and we respond to as social organisms (Perry 2018, Escobar 2018). Ultimately, my journey through nepanta, differential consciousness, and a Kundalini awakening helped me arrive at the non-dual, planetary identity that Anzaldúa calls for in "now let us shift...:"

> "Your identity has roots you share with all people and other beings—spirit, feeling, and body comprise a greater identity category. The body is rooted in the earth, la tierra itself. You meet ensoulment in trees, in woods, in streams. The roots del árbol de la vida of all planetary beings are nature, soul, body. (2013, p. 560)

I find my identity in where I am and who I am tending relationships with. The photograph and epigraphs that preceded the introduction were from my awakening in Spring of 2020. The poem in Spanish is a statement of my way of being and working in the world. Translated to English:

> The world is my office. I work in bed, in the kitchen, in the bathtub, in the garden, in the woods, and on the beach (occasionally I work at a desk, too).

> My job? Love of life, and life of love.

This was in May 2020, when I realized that my relational praxis was a way of being, not just a narrowly defined research project. Then, as the Kundalini awakening increased in intensity, I entered realms of consciousness that skimmed the border between rationality and irrationality, logos and mythos. That was when I wrote the second poem about the ecological texture of consciousness, in June 2020. For political context, I came to those awarenesses as the Student Coalition just formed, so I quote the email stating the demands to the program. I am now on terms of understanding and endearment with people from whom I was ostracized by the stressful and hierarchical academic environment, and we have asked that environment to change, rather than reproduce the old patterns. The students and the university are bringing each other into being. This is strong relationality. In addition to the student demands that were delivered, I make my own recommendations here.

<div align="center">An Empath's Recommendations</div>

Environment & Community markets itself as a research center for "environmental and social justice," "environmental education," and "Native American/Indigenous Natural Resource Management" (https://envcomm.humboldt.edu/). Despite that explicit marketing and attempts at theoretically equipping students to "unpack the knapsack of privilege" (McIntosh 1988), Environment & Community struggled as a program to emotionally prepare students to effectively navigate white fragility or create homespaces for students of

color. Successive cohorts had to withstand years of emotionally and intellectually draining coalition spaces before banding together and demanding change from the program. The list of demands was delivered after an online forum in November 2020 that included E&C students from four consecutive cohorts sharing stories of systemic racism in the program. Drawing from my background as an outdoor educator, I would like to bring in the metaphor of the comfort zone, and extrapolate it to the idea of white and intersecting forms of fragility. White fragility is the physiological and psychic distress response that people who are identified as white display when discussing racism. It is the cognitive dissonance that arises when the facts of racism go against the person's core identity and expectations as a "good person" (DiAngelo 2018, Sharma 2015). Analog forms of fragility might be described along any of the interesting axes of power and privilege where people draw their core identities. As a side note, I postulate that being sensitive or empathic is not fragility: if anything it deepens my ability to stay with racial dialogs.

A comfort zone is just what it sounds like: a space or activity where a person feels calm and comfortable. Outside of that comfort zone is the growth zone, a site of challenge and learning. Examples of growth zones might be learning a new language or dance. There is a moderate level of emotional or physiological arousal. A panic zone is out beyond the growth zone, where the situation or activity is so threatening or uncomfortable that physiological symptoms of trauma set in; trauma can be defined as a situation where a person's sense of agency or even ownership of their own body is removed (Ataria 2015). Just like comfort and growth, there are degrees of panic zones,

degrees of trauma. There are ways of modulating all of these degrees. When I worked as an outdoor educator, I would introduce the metaphor of comfort zones before an activity that might be potentially stressful or frightening to participants, such as climbing in a ropes-course high in some trees or playing a game that is emotionally and intellectually challenging. I did this to foster a respectful culture between the participants. I emphasized that every person has different comfort zones about different subjects, and these can vary from day to day. A person might have a wide threshold of growth zone before panic sets in, or a small one. They might begin to show acute physiological distress nearly immediately upon leaving their comfort zone. A person might be resilient to encountering their panic zone and quickly be able to return to their growth zone during the activity, or they may need extra support and care in order to get out of their panic zone. Contrary to Brown's finding that comfort zones are commonly used as a tool in outdoor education to push participants into non-effective "character building" experiences, I used the metaphor to encourage participants to respect their own internal consent, and that of other participants (2008). Rather than using the model of comfort zones to pressure participants into attempting an activity that they would not normally, I stressed that the challenging activity could be approached in ways that felt right to each person, or not at all at that moment.

Racial distress might be mapped onto such a metaphor. White fragility may be described as a white person suddenly moving from their comfort zone of unexamined racial relationships, quickly past the growth zone, and straight into the panic zone. Their core sense of identity as a good or moral person is threatened and they display

symptoms of cognitive dissonance. Given the dominance and ubiquity of "white

spaces," including outdoors and academia (Finney 2014, Todd 2015), a white person

might be defined as having a geographically and psychically broad comfort zone,

followed by a fragile and narrow "growth zone" of discussing race before panic sets in.

In *Mindful of Race,* Ruth King recommends mindfulness meditation practices for

increasing a person's ability to stay present and not panic while discussing race,

increasing the growth zone (2018). On the flip side of fragility is the expectation and

burden placed upon people of color to cater to a white person's fragility, to ameliorate

their panic. The metaphor of comfort, growth and panic zones can be applied differently

to people of color, or folks on the oppressed side of a given axis of power. A person of

color experiencing stress and fear in white spaces might be defined as having a narrow

set of comfort zones because of the predominance of white spaces. They might be

unfairly asked to try to have a more broad "growth zone," or diminish their signs of

discomfort in a panic zone in order to comfort a white person, as Audre Lorde describes

in *On the Uses of Anger*. She examines how differences in sexuality, race, and class can

trigger fragile responses between women. Her call to be able to be with the anger of

another woman without responding in a threatened way resonates as a call to increase

the growth zone (1981). Ruth King also writes about mindfulness practices for the

wellbeing of people of color (2018). bell hooks illustrates the difficulty and importance

of building comfort zones for Black women, calling them homeplaces (1981). Bernice

Johnson Reagon contrasts homeplaces with coalition spaces, reflecting on how coalition

spaces can be places of panic, but also necessary for survival and the expansion or

existence of homeplaces (1998). I hope that Environment & Community can become a homeplace for BIPOC doing research. The camping trip to the Mattole valley was both outdoors and academia, and constructed as a white space. E&C can work to build more effective containers for dialog and prioritize the emotional wellbeing of students of color and across multiple lines of marginalization.

<div align="center">On Pain</div>

In theorizing about refusing research, Tuck and Yang note an unspoken axiom of social science research. They disagree with Spivak's conclusion that the subaltern can not speak, instead offering that "the subaltern can speak but is only invited to speak her/our pain" (p. 227). They posit that the social sciences collect stories about pain under an assumption of change that telling those stories will result in reparations from a group outside of the communities studied. Instead, Tuck and Yang observe that the stories rarely result in the hoped for results, leaving communities with narratives of being broken without an ability to repair themselves, and researchers that aggrandize themselves by ventriloquizing the stories into their careers (2014). By refusing research with UIHS, I clearly avoided those hazards. When relational praxis superseded my research project with the note-taker, I ultimately narrated a research story that contains a lot of my own pain and the indirect pain of my peers. And I am not broken. I turned the light of inquiry on the site of research itself, and humanized myself as a researcher. Tuck and Yang contrast pain centered research with research that emphasizes desire:

"Pain narratives are always incomplete. They bemoan the food deserts, but forget to see the food innovations; they lament the concrete jungles and miss the roses and the tobacco from concrete. Desire centered research does not deny the experience of tragedy, trauma, and pain, but positions the knowing derived from such experiences as wise. This is not about seeing the bright side of hard times, or even believing that everything happens for a reason. Utilizing a desire-based framework is about working inside a more complex and dynamic understanding of what one, or a community, comes to know in (a) lived life." (p. 231)

My research from the beginning has been oriented around desire. I was not looking for a pain story at Potawat; I was looking to celebrate food and land-tending innovations and provide a mutually beneficial service through participatory action research. I certainly was not looking for a pain story with the note-taker. Their notes did contain a lot of personal pain—this was part of why I chose to not publish them on their behalf. Amid everything that arose in the two-year time frame of my research, I was not prepared to effectively and respectfully handle their pain as well as my own. In offering my story, I am hoping to provide a complex and dynamic understanding of what I came "to know in (a) lived life" of research. While I cannot speak for the Student Collective, I also want to show that in our collective pain we made innovative change and learning in the program.

On Humor

During the tumultuous events I described, I sometimes struggled to access my sense of humor. When the Kundalini awakening started, my sense of humor was amplified and helped me cope in the seemingly darkest moments. I even wanted to actively find a way to bring humor into my thesis. This was an instinctive, somatic response that I did not plan, but it is supported by evidence. Humor is an effective way to cope with trauma (Fry 1994, Casey 2013), even with the extreme trauma of people who have gone through the apocalypse of colonization (Garrick 2006). "Humor does not minimize the significance of a terrible event, but it does allow the survivor to see how they can cope and thrive in their environment" (Fry p. 111). Humor can be a tool of subversion for moving beyond colonization and other axes of oppression. Judith Bing traces humor along the axes of gender and sexuality and demonstrates how humor can be used to find a pathway to get past the cognitive dissonance that keeps someone from questioning their values. Humor can increase the growth zone. She makes a distinction between divisive and inclusive jokes. "Whereas divisive humor often attacks people, inclusive humor makes fun of absurd attitudes, ideas, beliefs and systems" (p. 28). Inclusive jokes that question and disrupt rigid boundaries between lines of domination can be particularly effective in bringing about transformation (2004). On a cosmological level, Robin-Wall Kimmerer asserts in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* that humor is a fundamental part of existence (2013). Of course, I acknowledge how humor can be used to reinforce oppression and reify stereotypes (Bing 2004). At the same time, I don't shy away from

allowing some of the humor that arose during my time at Humboldt State to slip into this project and I am committed to humor as an act of subversion.

Kintsugi Research

Kintsugi is the practice of taking a piece of pottery that has been broken and mending it with lacquer and gold dust. Rather than throw out the broken pottery, or even hide the traces of the damage, kintsugi highlights and celebrates the process of an object. This practice exemplifies the Japanese aesthetic of wabi-sabi: "a beauty of things imperfect, impermanent, and incomplete. It is a beauty of things modest and humble. It is a beauty of things unconventional." Wabi-sabi is an aesthetic that encourages material minimalism and spiritual wealth (Koren 2008). Architect Azby Brown looks to these aesthetics and practices—particularly in the context of Edo period Japan—for solutions to contemporary wicked problems in agriculture, philosophy, and education. He summarizes them as a mentality of "just enough" (2013). In feminist research, Imani Perry turns to kintsugi and wabi-sabi by extension as part of a practice of creatively transforming the oppressions of patriarchy. She raises Spiller's admonishment to "embrace the monstrosity" as an essential technique for escaping white-supremacist aesthetic and cultural values. This aesthetic turn resembles the origins of wabi-sabi in Japan as a rejection of "imperial" "gorgeousness" from mainland China (Koren 2008). Like Brown with the idea of "just enough," Perry uplifts the pragmatic art of "making do" with whatever is available. She expands the concept by

linking ecological justice inextricably with social justice. Like Brown, she sees these as potentially undergirded by an aesthetic enjoyment.

What about kintsugi as a literary and research metaphor? Perry structures her book about patriarchy—*Vexy Thing*—like kintsugi, bridging scholarly articles with interludes of personal reflections and artistic works. She follows in a feminist multigenra tradition, from Anzaldúa's *Borderlands/La Frontera* to Leslie Marmon Silko's *Almanac of the Dead*. Anzaldúa juxtaposes memoir, poetry, and academic writing, "in such a way as to make us feel her story with her," feeling into pain and silences. The seams between the genres encourage slow, attentive reading and challenge the reader to co-create meaning (Jung 2005). Silko's novel mirrors the structure of a family album with vivid fictional portraits of the characters placed side by side but in a non-linear timeline to form a nuanced exposition of colonialism and culture (1991). Kintsugi structured research and multigenre writing open up spaces of possibility for social sciences to effectively communicate across differences. They disrupt conventions of academic uniformity and celebrate a pluriverse of voices (Bridwell-Bowles 1992, 1995). Alexis Pauline Gumbs takes this to a beautiful extreme in *Dub: Finding Ceremony* by writing in a mixture of multi-decade interview with anti-colonialism scholar Sylvia Wynters, the verse and cadence of Caribbean Dub poetry, personal genealogy, and a channelling of the perspectives of her more-than-human ancestors, including barnacles and whales (2020). In this thesis, I join that tradition of multi-genre writing. I took the ruptured remains of my original project and repaired it with the gold of poetry and insight. This thesis arose in a personal, emotional, and physical

awakening. It is reflective of a scholarship that looks to refuse the logics of patriarchy and settler colonialism and instead move towards generative, transformative, relational care.

In a final note about kintsugi shaped research, I acknowledge I am entering a realm that Tuck and Yang warn about in their theorizing refusing research. In western, settler epistemologies, research is one of the few spaces so clearly devoted to curiosity and it is elevated in a hierarchical understanding of human activities. They warn against research appropriating multi-media and art for its own use, to the devaluing of art. They call for a celebration of other realms of human activity that can be devoted to curiosity.

"We aren't advising anyone to insert artificial or insurmountable barriers between research and other forms of human inquiry, or to think of research and art as impermeable or discrete—just to attend to the productive tensions between genres/epistemologies, to gather the benefits of what might be a dialogical relationship between research and art" (2014, p. 237).

They cite Silko's *Almanac of the Dead* as such a work that sits in that productive tension. This thesis is published in an archive of master's research and holds tension with art as part of research praxis. Part of my praxis was to care for myself through cooking, making ceramics, and dancing on campus. Art forms. I carried my evolving perspectives about decolonization with me in those extra-curricular realms, and contributed to changing how they are presented on campus with my interventions. In the last chapter, I present a sampling of "potsherds," bits of my daily art and theory practice, woven into this kintsugi thesis to illuminate how those intersected, mirroring

the poems and photograph at the opening. As I bring art into my research, I agree with Tuck and Yang to be generally attentive to realms other than research where curiosity, inquiry, and artistry meet. In the specific case of this thesis, linkages between art and research will also become clear in the next three chapters about spirit, more-than-human-beings, and aesthetics.

II NO SUCH THING AS A-POLITICAL, A-SPIRITUAL ECOLOGY

Geographer Paul Robbins explains that political ecology is a portmanteau of a portmanteau of western academic disciplines. The term hides the etymology and history that political ecology grew out of political economy. In the latter, researchers recognized the interworking of governments and financial markets. They frequently organized around Marxist, anti-capitalist, and anti-imperial economic theories such as surplus labor extraction. Political ecologists built upon the concept, realizing that both markets and governments are mutually constituted with the environment. They argued that there is no such thing as a-political ecology (or a-ecological politics) (2011). In that, they converged with Indigenous scholars writing about what has been and still is sometimes referred to as Traditional Ecological Knowledge (TEK): ecology is always political (Perrioti and Wildcat 2000). However, Indigenous scholars have challenged political ecology to go beyond "no such thing as a-political ecology," to an idea that there is no such thing as *a-spiritual* ecology (Ibid, Middleton 2010, Million 2018, Todd 2015). Spiritual ecological cosmologies go beyond the predominant frameworks that many political ecologists use for conceptualizing the agency of more-than-human-beings. For clarity, the term more-than-human has acquired many meanings. It can refer to non-human living species (plants, animals, fungi) in a way meant to decenter anthropocentrism. More-than-human can also include what are considered in western cosmology as non-living formations (e.g. water, landforms, or weather). In both cases, they are "more-than," rather than "non" which can imply "less-than." The word is also

gaining popularity in reference to techno-science assemblages (Shultz 2017). Political

ecologists typically account for the agency for all of these through political "objects and

actors," actor network theory, and new materialism. These frameworks postulate

degrees of agency beyond humans but fall short of a spiritual, animistic cosmology.

Moreover, they don't acknowledge the many human beings who are not acknowledged

as human, particularly the ones who carry political and spiritual connections to more-

than-humans (Perry 2018, Schulz 2017). I argue that this gap is an important failing of

political ecology's efficacy as a discipline because political ecologists themselves have

empirically demonstrated that the best methods of preserving or improving biodiversity

correlate with Indigenous Peoples practicing their spiritual and political connections

with more-than-human agents (Neumann 2005). Ignoring these connections halts

forming effective political connections (Million 2018) and healing relationships

(Middleton 2010). I briefly examine the history of political ecology as a field and reflect

on my experiences as a gardener through a conventional political ecological lens. I then

place political ecology in dialog with Indigenous and feminist authors, leading to a case

study of legal personhood for Te Uwera, a forested region in what is now called New

Zealand, homeland of the Tūhoe.

<div align="center">Political Ecology in the Garden</div>

Robbins attributes Alexander von Humboldt as an early, unrecognized

practitioner of political ecology. The field didn't blossom until the late twentieth

century. It owes much of its analytical frameworks to so-called and self-called Third

World scholars who named the problems and processes of coloniality. These scholars challenged Neo-Malthusian narratives that placed the burden and blame of environmental degradation on marginalized peoples. Political ecologists contend that ecological landscapes are "produced" by human discourses, political frameworks, and market forces. Robbins opines that the biggest struggle in political ecology is selecting an elegant, answerable research question that yields a coherent "chain of explanation" in the western positivist sense. Some scholars criticize political ecology for being wildly inclusive and difficult to define as a discipline—and the opposite. Political ecology researchers have been accused of integrating both too much or not enough theory or too much or not enough interdisciplinary thinking (Robbins 2011).

Prior to this program, I worked with community gardens that occupied "underdeveloped" urban spaces. As the Education and Development Coordinator of the Vallejo People's Garden (VPG), I was tasked with collaborating with nearly a dozen other gardens scattered across the city. I understand from experience what fellow Environment & Community alum, Elena L'Annunziata, concluded in her political ecological thesis working with a primarily Hmong community garden: "community garden" flattens the prolific diversity of cultural and political textures that make up urban gardens (2010). To illustrate the case in Vallejo: VPG was run by volunteers who were ethnically diverse and well-educated (lots of doctors in training); meanwhile, VPG was sponsored by a non-profit managed by a predominately Philippine Christian Church whose members regularly circularly migrated to and from the Philippines. VPG grew food for the house-less and women's shelters run by the same non-profit—the

residents of the shelters were predominantly African American, and the children at the women's shelter had their own garden. Funding for my position came from the city's Participatory Budget program, an initiative inspired by participatory budget movements in Brazil where residents voted directly for how to allocate certain funds. Gardening had won a large portion of the participatory funds, sowing seeds for gardens in two vacant lots and several schools (apart from VPG, which was extant and provided support for all these new gardens, through me). At the time, Vallejo was characterized as the most ethnically diverse city in the United States, as the largest municipality to declare bankruptcy, and as a food desert. As they coalesced, the two gardens in vacant lots became segregated (how?) by race and religion (white/secular/pagan, black/Christian), even though they were blocks away from each other. The gardens in the schools varied from a bilingual Spanish speaking elementary to the Cal State Maritime Academy (mostly white male). Political ecological questions abound. What was the effect of the predominant narrative that the Indigenous peoples of the region, the Karkin, are extinct? How did the 150 years of navy base operation and closure shape this political, economic, cultural, and culinary moment of the city? Why weren't there any grocery stores for miles? What was the discourse that convinced voters that gardens were a viable pathway toward food sovereignty? How effective were each of these gardens in serving their communities? How did LGBTQ gardeners experience and influence the production of these poly-cultural places? How did my positionality as a white-passing Latin-ish, educated, cis-gender woman facilitate or hinder my navigation of these myriad textures?

Robbins stresses how difficult finding a chain of explanation can be, even given a sophisticated question. Vallejo was a Gordian knot of global and local political ecologies. Indeed, rather than zooming out to a monolithic global capitalistic driver of these phenomena, factors such as cultural identity, mutual aid, and care must be considered to generate a coherent narrative of the dynamics of Vallejo's garden heyday. As I experienced it, I struggled to understand the overlapping layers of patriarchy and colonization, part of what drove me to seek training in critical theory.

The Third Option

"Under a 'critical' political ecology, there can be no unpoliticized use of the word 'ecology,' and every statement about the nature or causes of ecological degradation is examined to reveal how this link was established, and how far it may hide political assumptions and implications" (Forsyth 2013, p. 50)

"TEK defines politics and ethics as existing in the realm of ecosystems, and would argue that it makes no sense to limit the notion of politics and ethics only to human beings." (Peirotti and Wildcat 2000, p. 1336)

Drawing from examples in the global south, Piers Balikie, Mathew Turner, James Fairhead & Melissa Leach, and Tim Forsyth examine interplay between human and more-than-human causes of biogeophysical changes and how they become labeled "environmental degradation." While all the authors construct counter narratives to

dominant ecological thinking and reject apolitical explanations, they diverge in their specific analyses with respect to human agency, and largely ignore that of more-than-humans. I first outline the differences between the authors, and then explore the "third option" provided by how Peirotti and Wildcat define traditional ecological knowledge—where ecology, politics, and ethics all allow for the relations between humans and more-than-humans (2000). Literature about TEK has expanded since that landmark paper and the term TEK itself is problematic, for brevity I use it as the authors did.

Just as Robbins explains that developing a chain of causation can be difficult, the authors diverge in their conclusions about human agency and the role of political analysis. Turner argues that discourse about cattle stocking in the Sahel tends to "biologize" the system and "ignores social processes (1993, p. 402)." Forsyth points out how too much human agency has been attributed to geological forces such as sedimentation (2003). Blaikie constructs a political economic account of soil erosion around the world, one that emphasizes structures instead of blaming proximate factors (1985). Fairhead and Leach demonstrate that political colonial and postcolonial fantasies of Africa obscure the truth of forestation (1995). Clearly, it requires discernment to find if the dominant narrative in any situation is over- or under-emphasizing human agency, or if between humans, the shifting relations of surplus extraction. This makes theorizing about environmental degradation complex and power-imbued.

One of the core missions of political ecology—to reintegrate ecological

understandings with political and economic disciplines—converges with a distinctive trait of TEK: that it is impossible to segregate ecological from political (or ethical and spiritual) relationships (Peirotti and Wildcat 2000). Political ecology, feminist interventions in science (Hesse Bibber 2004), and TEK all agree that ecological systems and the knowledge generated about them are political. However, while political ecology attempts to account for the agency of the more-than-human world through political actors and object theory (Robbins), TEK explicitly embraces the agency and cognition of more-than-human beings. Considering the relationships between people and cattle (Turner), peanuts and people (Blaikie), or people and red palm trees (Fairhead and Leach) could reveal useful dynamics of kinship or exploitation and enhance political ecology.

By asking about the causes, conditions, and production of ecological degradation, political ecology scholars are doing good work pointing out exploitative relations in complex systems. At the same time, by invoking Peirotti and Wildcat, I hope to remember some epistemic humility. I close with how they open their essay, with a quote from Russel Means (Lakota): "Capitalism and communism are simply the opposite sides of the same eurocentric coin. What the world needs is not a choice between capitalism and communism, between one aspect of eurocentrism or eurosupremacism and another. What we need is a genuine alternative to the European tradition as a whole" (2000, p. 1333).

Colonialism and Conservation

The importance of the political agency of more-than-human beings and their human allies becomes particularly apparent in the construct of biodiversity conservation, one of the intended solutions to degradation. Roderick Neumann provides a general outline for understanding the primary actors of western concepts of conservation: states, international organizations, and (non)Indigenous civil society. He contrasts "fortress conservation" models in which humans are excluded from ecosystems with other models that allow for varying access. The models differ in the degree of autonomy held by state vs. local actors: the fortress model has the most colonial state autonomy, and Indigenous sovereignty has the most local. His evidence suggests that local autonomy leads to more resilient outcomes. Nancy Peluso and Karl Jacoby both document how colonial fortress models are often militaristically policed— Peluso between Global North and South, Jacoby within the colonized United States. The human violence is mirrored in destruction of more-than-humans. Vasant Saberwal and Aswini Chhatre confirm with empirical evidence Neumann's observation that conservation works best in concert with politically active, ecologically engaged grassroots communities (2001). The concept of biodiversity was born from the growing awareness of genetics and the value of genetic diversity: what it overlooks is kincentricity, how different species (including humans) care for one another (Salmón 2000). I draw in Kyle Powys Whyte, Joseph P. Brewer and Jay T. Johnson's, "Weaving Indigenous science, protocols, and sustainability science." They define Indigenous

protocols as a way of approaching more-than-human beings as relatives to be cared for, with humans often acting as younger siblings (2016). What if states and international organizations considered themselves as younger siblings to older organizations—such as watersheds and Indigenous societies—rather than as omniscient and omnipotent? Kincentric co-management models are gaining attention and application with signs of improved outcomes (Bhattacharyya & Slocombe 2017).

Conflicts around biodiversity are how international organizations and states come into being and reproduce themselves (and in a mutually-constituting, strange loop sense, conflicts around biodiversity come into being as states define them). Major international organizations, like WWF, arose from colonialist relations between upper class sport hunters and formerly colonized African countries, outlawing Indigenous hunting practices. Consistent with the "surplus extraction" model, states rely on labor and materials (taxes and revenues) extracted from peoples and lands in order to exist. Even in post-colonial independent states, colonial-era land practices still contribute to systemic injustice (Neumann 2005). States ultimately define their functions and identities by exerting control over peoples and lands (Jacoby 2001). States can even benefit at the expense of both local and international environmental interests as they consolidate power (Peluso 1993). These dynamics throw into question the assumption that states and international organizations are the best actors to resolve losses of biodiversity, when it is their functioning that manufactures and exacerbates those losses. The failures of fortress conservation models, as well as several alternative models, arise from the fact that states retain most of the power to regulate land practices, rather than

the people who actually live on the land.

As much as Peluso, Neumann, Jacoby, Saberwal and Chhatre agreed that states can abuse their control of land, and that Indigenous peoples are often ignored for their beneficial shaping of biodiversity, all of the authors failed to directly examine the relationships that Indigenous peoples retained with land. What made the San Blas Kuna Indigenous Protection Area successful (Nuemann)? What was important about how Himalayan villagers "have grazed their animals in the park, [...] have continued to harvest medicinal herbs, and [...] have continued to take their deities into the park" in spite of state reprimands (Saberwal & Chhatre p. 85)? These cases of successful nature/society hybrids rely on humans retaining healthy relationships with more-than-human relatives and not collapsing under pressure from the state to relocate. Modern Indigenous societies take shape under twin pressures: from more-than-human relationships, and from state/international coercion or cooperation. Staying with the former in spite of the latter is biocultural sovereignty (Risling Baldy 2013).

States have claimed biodiversity as a global common for a good reason: the diversity and well being of all life is the existential foundation upon which society depends. However, states and international organizations have mistakenly assumed that they can protect biodiversity by excluding all human influences. Oral histories and mounting empirical evidence suggest otherwise: that ecological systems can benefit from reciprocal care with human beings. "I celebrate[...] that the living planet has the capacity to ask something of us and that we have the capacity to respond. We are not passive recipients of her gifts, but active participants in her well- being. We are honored

by the request. It lets us know that we belong" (Kimmerer 2013, quoted in Whyte et al. 2015).

Capital, Cattle, Chattel: Finance & Environmental Governance

As state run attempts at maintaining the balance of ecological systems deteriorate, there has been a rising attempt to regulate environments through market regulations. Arun Agrawal & Maria Carmen Lemos, Sally Eden, Stefan Ouma, Leigh Johnson & Patrick Bigger, and Adeniyi P. Asiyanbi examine environmental governance, and particularly the ascendance of financial markets in the state/market/community triad of governance (Agrawal & Lemos 2007). In the neoliberal era, financial techniques are being leveraged to address multiple, intersecting crises—that were arguably caused by the same processes deployed to fix them, much like governments trying to conserve biodiversity (Agrawal & Lemos 2007, Ouma et al. 2018, Eden 2011, Asiyanbi 2018). These authors mention the other two agents—states and communities—mostly in relationship to finance: states lending legitimacy and infrastructure to arising markets, not uncommonly through violence (Ouma et al., Asiyanbi); and communities shifting into novel financial relations with nature through frictional, heterogeneous processes of force and incentive (Asiyanbi, Agrawal & Lemos, Sally). I centralize the more-than-humans that are peripherally invoked in the financialization of "nature" through Imani Perry's definition of non-persons (2018), and Timothy Morton's characterization of climate crisis as the outcome of agrilogistics (2017). Perry locates the roots of the crises in white supremacist patriarchy of the last

three centuries; Morton explicitly extends the argument over 12,000 years of

agrilogistics to encompass the more-than-human world. Both authors rely on examining

the notion of personhood in these systems.

The quantification of carbon in forests into commodities are a particularly

salient example of the dubious ascendance of finance to restore ecological decline

(Asiyanbi). This maneuver is exactly what the stock market has always been about—

counting up non-persons as property to be traded (or to protect other property from). In

the western construction, a legal person can own property, enter into contracts, and

engage in politics. Non-persons can be owned as property. Non-persons currently

include nearly all of the more-than-human world (e.g. cows, rivers, corn plants,

minerals—with a few notable recent exceptions), and has historically included most

human beings (women, people of color, poor people, Indigenous peoples) (Perry,

Morton). Capital, cattle, and chattel all share an etymological root: Latin, capitalis "of

or pertaining to the head" (Merriam-Webster). The stock market (still symbolized by a

bull) is about bringing the world of non-persons into the head: making beings thinkable,

countable, profitable, and—especially—interchangeable. Governments aid/regulate this

process through infrastructure, coercion and incentive. Communities, including more-

than-human-beings, live out the "situated, entangled operations" of these thought

systems, often violently (Ouma et al. p. 501). Human beings labeled as non-persons

resist, demanding better relations via abolition, labor rights, civil rights and feminist

movements. They demand personhood. Is global warming the civil rights movement of

the more-than-human world? Even carbon resists market flattening and profiteering

through its nature of being difficult to count (Asiyanbi). However, is the expansion of personhood and the attendant rights to own property the way out, even for human beings? This is one of the open questions left at the end of "Rethinking the Financialization of Nature:" Is expanding personhood "extending an imperial mode of living of various classes through 'the appropriation of labour and nature from elsewhere'" (Ouma et al., quoting Brand and Wissen, 2014 p. 507)? Both Perry and Morton question that route—allowing for its immediate pragmatic use for liberation of certain groups and doubting its long term viability.

Both Perry and Morton turn toward aesthetics and desire to point the way out of thin, rigid definitions of personhood, toward a politics (and economy) of care— emphasizing the strangeness of this turn. Agrawal & Lemos, Ouma et al., Eden, and Asiyanbi offer peeks at these operations in finance: consumers of organic produce ascribing positive feelings to the organic label never intended by certifying agencies (Sally); forest dwelling communities embracing carbon forestry based on (unofficial) fantasies of wealth and well-being (Asiyanbi); morals and identities helping to generate more coherent accounts of finance (Ouma et al.). These tendencies were explicitly banished by the "rational" actor assumed in economic models; they have been implicitly embraced by marketers who utilize the power of beauty, irrationality, and desire to make money (Morton). The same desires have been identified in the more-than-human world as drivers of biological evolution and diversification (Prum 2017). New markets-in-the making that materially and discursively link socio-natures all over the world— attempting to save the diversity of beings that are currently disappearing—and the

humans that study them must allow for this fullness, this weirdness of feeling. The political ecology field is starting to slowly turn.

Legal Personhood for Te Urewera

I use a case study of personhood for Te Urewera to illuminate the ambiguous usefulness of the (non)personhood/property framework, and the role of aesthetics and desire in moving toward a politic of care. I examine the Te Urewera Act (2014), Katherine Sander's "'Beyond human ownership'? Property, power and legal personality for nature in Aotearoa New Zealand" (2018) and Te Kawa o Te Urewera, the charter document for the personhood of the land (2017). Te Urewera is the rohe, home, of the Tūhoe People. It is forested, geographically rugged, and remained un-invaded by British colonists until the early 20th century. The New Zealand crown declared it a national park in the name of biological conservation in 1954. In 2014, the park was dissolved and Te Urewea was declared to have legal personhood. The bill itself acknowledges that personhood is an innovative alternative to the Crown or Tūhoe owning the land. It also goes beyond decolonization as a metaphor: "Tūhoe have made it clear that settlement of their historical grievances must provide for a meaningful re-connection of Tūhoe people with Te Urewera" (2014, p. 3).

Personhood for Te Urewera breaks a stalemate, reproduces settler colonialism, and births a hybrid space of possibility. The stalemate: Tūhoe, the tanata whenua (people of the land, or people with authority on the land) will not abandon their responsibilities to the land, and the manuhiri (guests), the Crown of New Zealand,

refuse to relinquish their admittedly illegal claims as colonizers. From a western legal perspective, land-being-a-person is the opposite of land-being-property, and appears to be a Tūhoe victory. However, as Sanders explains, it is a form of "ontological submission" for the Tūhoe because both the legal framework and daily operations retain language and features of western property (p. 217). When discussing the functions of the Te Urewera Board acting on behalf of the land's personality, the Act states that the board "must" fulfill western property functions, and "may" fulfill Tūhoe cultural and spiritual values (2014, Part 2, subpart 1). Underneath it all, the Crown retains mining rights. The Act can be read as both metaphorically and literally superficial. The Crown is able to define and reproduce its functions through environmental conflict; the settler state continues to come into being in a dialectic with the Tūhoe (Robbins 2012). Sanders identifies some hope in the hybridity of the Act: the elements of consensus incorporated from Tūhoe governance systems will at least result in a "somewhat longer conversation" and the framework of tanata whenua and manuhiri (people with authority on the land, and guests) is a novel discourse, disrupting the colonized/colonizer dialectic. Only experience will tell if this personhood case is an example of what Audre Lorde calls the master's tools not dismantling the master's house, or whether the legal formalization of Tūhoe cosmology will result in what might be called environmental and social justice. Perhaps most hopeful of all is that the Tūhoe have continuously exercised bio-cultural sovereignty on their territory regardless of any settler colonial legal frameworks, and will continue to do so with the added power of the Act (Risling Baldy 2013).

Te Kawa o Te Urewera, the Tūhoe language and cosmology-based document that guides the Board, declares itself as a Foucaldian organizing action: "it serves to disrupt the norm. Te Kawa is about the management of people for the benefit of the land—it is not about land management" (Te Kawa o Te Urewera 2017 p 7). Beauty and desire are explicitly listed among the strategies for managing people toward a politic of care. They explicitly account for more-than-human agency (Robbins 2012). The document describes Te Urewera's personality traits. Ãhua is "her Character, her seasons and natural cycles, how beauty is seen and felt and how it enraptures the human spirit." Whanau is "her love for Manuhiri enhancing inspiration and a responsibility role in Te Urewera life," and Tanata Whenua "her love for Tūhoe enlivening tanata whenua obligations, living with and for Te Urewera, maintaining Tūhoetana" (ibid p. 17). Beauty and desire are weaponized in capitalistic society for commercial gain. In Te Kawa o Te Urewera, they are explicitly recognized as ways to strengthen all people's responsibility to caring for the land and each other.

Te Kawa acknowledges the urgent imbalance of human relations, calls for immediate action, and simultaneously recognizes that "Te Urewera has a scale beyond our perception in which to balance and order life" (p. 23). This trust in Te Urewera inspires Tūhoe to resist and survive colonization, to uphold land responsibilities, and to continue to commit to caring for guests, manuhiri, even after the trauma of colonization. The visitor webpage invites manuhiri to reciprocate: "Te Urewera Act provides for you to experience and enjoy Te Urewera. With that comes responsibilities – from Tūhoe as tanata whenua to welcome and care for you, our manuhiri; and also from you in how

you care for, respect and give back to Te Urewera. A contribution can come in many ways. It is in how you conduct yourself with respect and how you contribute. Most useful to those who look after Te Urewera will be your feedback and comments on what you see and hear during your time in Te Urewera. Your eyes and ears are valuable to us, to tell what is good and healthy and what needs attention, care and management." This inspires me to behave as a better guest where I live and contribute my caring observation and political responsibility to the land where I live. In the next chapter, I examine convergences of epistemologies—mathematical modeling and Indigenous ethics—to move toward a politically productive conversation that might assist in the formation of another personhood case: personhood for the Klamath river.

IV SYSTEMS THEORY AND AN INDIGENOUS ETHIC

"If you want to grab the world and run it

I can see that you will not succeed.

The earth is a spiritual vessel, which can't be controlled."

Lao Tzu, *Tao Te Ching*, 6th Century BC

Ecologists of political and apolitical disciplines have been influenced by systems theory and its off-branches, which use as a tool and are cognitively influenced by mathematical modeling. A model is useful if it correlates to observations and can predict phenomena (Stewart 2017). In systems theory, the Earth can be described as a system of nested and interconnected systems (engulfed within a larger cosmic system) (Meadows 2008). Systems theory deeply influenced game theory which centralized the actors and relationships: in game theory the Earth might be described as a game of nested and interconnected games, with players making decisions (Osborne 2004). Resilience theory takes the notion of homeostasis from systems theory and looks for cycles of disturbance and equilibrium between the layers of systems or games at different scales (Walker and Salt 2006). A radical contingentism approach recognizes the applications and limitations of various metaphors for describing reality, and holds that reality is not exhausted by multiple metaphors. "What is" can be usefully described many ways (Sharma 2015). To stay with the metaphor of systems theory, global warming and nuclear proliferation are undesirable system behaviors that currently pose existential threats to socio-ecological integrity of the whole Earth system. They

accompany a suite of other undesirable global-scale behaviors: ocean acidification, sea level rise, loss of wild and domesticated biodiversity, extreme resource inequality, addiction, starvation and obesity, loss of arable topsoil, pollution of air, water and land, overpopulation, war, exploitation of labor, and intensification of storms, droughts and fires. At the outset of the threat posed by nuclear weapons, Albert Einstein and other scientists sent out a plea for funding education, insisting "a new type of thinking is essential if mankind is to survive and move toward higher levels" (*New York Times* - May 25 1946, p.13 - 'Atomic Education Urged by Einstein'). Systems, game, and resilience theory, informed and illustrated by mathematical modeling, seem to offer some new ways of thinking contrary to nuclear proliferation: attempts to "command and control" the behavior of a system can yield perverse results; instead, investing in trust between actors and the self-organizing, self-renewing capacity of a system can improve behavior and resilience (Holling & Meffe 1996, Walker and Salt 2006, Meadows 2008, Ostrom 2010). Nuclear proliferation can be seen as a paramount attempt to "command and control," through coercive threats of destruction.

Earth systems theory has been criticized for not sufficiently addressing issues of race and power, for not addressing the locus of enunciation of the scientists speaking, and for arising within the hegemony that created the destructive behaviors (Shulz 2017). In an act of commonality finding, I argue that systems theorists have converged with a core ethical value of Indigenous epistemologies and that convergence might be leveraged for effective political coordination for disrupting the norms of political systems. Prior to European invasion—another egregious example of "command and

control"— and ongoing today, the Native peoples of North America—sometimes called Turtle Island as an alternative to the colonial name—participated in socio-ecological systems of remarkable diversity, complexity, and resilience, united by that core value. Mohawk scholar Gerald Taiaiake Alfred describes it in *Peace, Power, Righteousness: An Indigenous Manifesto* as "a world view that values autonomy but also recognizes a universal interdependency and promotes peaceful coexistence among all the elements of creation. There may be five hundred different ways of expressing these values, but, in our singular commitment to them, we find what is perhaps the only pan-[Indigenous] commonality." (Alfred 2009 p. 14, with "Indigenous" instead of "Indian"). In her compilation of evidence for the sophistication of California Indigenous land tending practices, M. Kat Anderson stated the ethic another way and specific to what is now called California: "Although native ways of using and tending the earth were diverse, the people were nonetheless unified by a fundamental land use ethic: one must interact respectfully with nature and coexist with all life-forms. This ethic transcended cultural and political boundaries and enabled sustained relationships between human societies and California's environments over millennia" (2005 p. 85).

How exactly does this value of interdependence and autonomy relate back to the insights of systems and game theory? Making choices about investments in systems are acts of autonomy. Showing respect generates trust. Co-existence means to relinquish the impulse to control something and let it operate its own autonomy, acknowledging interdependence. Far from the "command and control" mentality that Holling and Meffe characterize as a pathology, this way of thinking manifested itself as land practices that

supported both human and ecological health. Anderson marshaled the diversity of land

tending practices under the title of "Tending the Wild," elegantly capturing the value of

autonomy and interdependence and challenging western notions of control. I explore the

etymology of that phrase, and compare the ethic it describes to the findings of systems,

game, and resilience theorists. I look to the revitalization of tending—particularly

intentional burning—in the Pacific Northwest as a case study. I close with how systems

thinking and Indigenous ethics have converged into a movement opposing nuclear

proliferation and toward a "Guardianship" ethic about nuclear waste and protecting the

self-renewing quality of life.

Tending and Wild Defined

In "Tending the Wild," M. Kat Anderson draws from multiple lines of evidence

to move beyond the limiting portrayal of Indigenous Californians as simple "hunter

gatherers" living a random "hand-to-mouth" existence and present them as a "middle

path" on the spectrum of agriculture (Anderson & Wohlgemuth 2012, Anderson 2013),

as mentioned in the earlier discussion on permaculture. She demonstrates that California

Indigenous Peoples had ecological knowledge systems equally or more detailed than

their western counterparts; they used that knowledge to actively manipulate ecological

systems to provide food, medicine, and materials; and that those actions led to the co-

evolution of ecosystems that not only benefited from human intervention, but depended

upon it to retain their form and function. These practices are ongoing and resurging

(Risling-Baldy 2013) The practices encompass selective harvesting, tilling, burning, pruning, sowing, weeding, irrigating, coppicing, and transplanting. These activities are tailored to suit the local species and micro-climate composition. Plants, animals, and minerals provide food, medicine, clothing, tools, fuel, and materials for artistic expression. The culture and knowledge systems that arose from this interaction were and are exceedingly complex. (Anderson 2013 p 76). In short, "tending the wild" describes practices that increase socio-ecological resilience. As a phrase, it also elegantly embraces the "investing in trust and self-organization" insight from game theory, and the Indigenous ethic of autonomy and interdependence, respect and co-existence. I unpack the paradox that the phrase "tending the wild" encompasses, and the seeming duality set up in western thinking that it transcends.

The dictionary definitions of tending encompass passive observation and direct action; "to incline, to move in a certain direction;" "to attend by work, services, care, etc.;" "to look over, watch after, care for." The word derives from old French "to stretch, hold forth, to offer." The Latin root of the word means to "aim, stretch or extend." Tending evokes stretching, but not overextending, the carrying capacity for humans in an ecosystem. It is also a variant on "attend," which means to be present with, to care for, to accompany, to listen to, devote time to, or watch carefully. Its antonym is to abandon, ignore or neglect. Tending has no limiting connotations of time or place; no implication of domination or control. This contrasts with the word "stewardship," which is widely used in the context of modern environmental movements–even Anderson sometimes uses it as a synonym for tending. Stewardship

only recently took on its positive, environmental connotation. It derives from Middle

English, to do the job of a steward; to manage, run, or govern a large household.

"Control" is listed among its synonyms. It's etymology derives from "sty," a hall, and

"ward," to protect, defend, fence, or armor (as does the root of the word garden). The

job of a steward is also synonymous with a "lackey," "servant" or "slavey" (Merriam-

Webster). As a word, tending more accurately connotes the intention, function, and

outcome of Indigenous land management. "Today, California Indians often refer to

these practices as 'caring about' the plant or animal. Traditionally, Indians did not

consider their actions as management per se; 'management' is a western term implying

control. Rather, caring for plants and animals in the California Indian sense meant

establishing a deeply experiential and reciprocal relationship with them" (Anderson

2013 p 182). Indigenous scholars Enrique Salmón and Dennis Martinez confirm the

caring aspect of tending in the Indigenous perspective of kincentricity: plants, animals,

and the land are family members to be cared for (which is not an unreasonable

conclusion to draw from the theory of evolution, the interrelatedness of life) (Salmón

2000, Martinez in Nelson 2008). Tending is the praxis of the Indigenous paradigm of

autonomy, interdependence, respect and co-existence.

The word wild originated in English as an adjective before the 12th century to

refer to "living in a state of nature and not normally tamed or domestic," and this

definition remains the first listed. It became a noun in the 13th century to refer to "a

sparsely inhabited or uncultivated tract." Its usage as an adverb arose around 1562,

meaning "without regulation or control; off an intended or expected course" (Merriam-

Webster). Anderson details how colonists perceived California as "wilderness" because it did not resemble their idea of "civilization." They used that idea, their definitions of control and property, to rationalize declaring Native Peoples as non- or sub-human, dispossessing them of their lands, their livelihoods, and lives. The "wealth" of California was extracted from the healthy ecosystems, the physical labor of Native Peoples, and, in some instances, saved from immediate disaster by Indigenous ecological knowledge (Anderson 2013 p 102). The word "wilderness" was transformed by the European and American Romantic movement as a place for elite white (mostly) men to attain spiritual awareness through experiencing the sublime and embraced as a good thing by the American preservationist and conservationist movements that arose to oppose the extraction of natural resources—still erasing Indigenous peoples as caring for and contributing to the co-arising of those ecosystems (Ray 2013). Conservation movements sometimes still operate under the duality that there is such a thing as nature outside of human influence, or humans outside of nature (Cronon 1997). The dualism between "civilization" and "wilderness" causes what some scholars are calling ecological "amnesia," "alienation," and "disenfranchisement" and diagnosing as a source of psychological distress in some humans (Tidball et al 2016). In contrast, Native Peoples refer to "wilderness" as a bad thing, as land suffering from a lack of human relationship (Cronon 1997, Anderson 2005, Nelson et al. 2008). The 1964 United States Wilderness Act defines wilderness as "untrammeled by Man;" this need not mean without relationship to humans (Clarke 2017): without the "command and control" mentality and instead subject to the rules of autonomy and interdependence.

Systems, Game, and Resilience Theory

Systems theory is a way of describing the world at many scales through the model of stocks, flows, the rate of flows, and feedback. The rules and relationships between parts of a system are important for its function, but often are hard to detect (Meadows and Wright 2008). Game theory is useful because it centralizes rules and relationships between actors in mathematical games, rendering them more visible (Osborn 2004, Ostrom 2010). Resilience is a property of systems (or games) that describes how well a system retains its function and identity in the face of disturbance, and is thus a useful tool for identifying opportunities and challenges to sustainability. Resilience theory uses visualizations of adaptive cycles at multiple scales–called panarchy–and ball in cup models of attractor states and thresholds. Adaptive cycles include flows of rigidity and chaos. Attractor states are points where a system is difficult to shift to another state (Tidball et al. 2016, Walker and Salt 2006). By comparing many case studies from the complex world to models, some insights have emerged, and they converge with the unifying ethic of the Indigenous peoples of California and Turtle Island.

Systems

After a career of modeling systems, Donella Meadows argued firmly against the predominant economic model of perpetual growth. She emphasizes that a hierarchy is sustainable only if the goals of the layers of the system are harmonious—for example that the goals of human political systems are not at odds with the goals of the soil

systems upon which they depend. For creating change in a system, she ranks twelve

leverage points by their power effect change. These points of leverage are (in order of

least to most effective):

- Constants, parameters, numbers (such as subsidies, taxes, standards)
- The size of buffers and other stabilizing stocks, relative to their flows
- Structure of material stocks and flows (such as transportation network, population age)
- Length of delays, relative to system changes
- Strength of negative feedback loops, relative to the effect they are trying to correct against
- Gain around driving positive feedback loops
- Structure of information flow (access to information)
- Rules of the system (incentives, punishments, constraints)
- Power to add, change, evolve, or self-organize system structure
- Goal of the system
- Mindset or paradigm that the system–its goals, structure, rules, parameters– arises from
- Power to transcend paradigms

As for creating change in a system and diverting unwanted behaviors, Meadows

provides examples of people expending a lot of energy in changing low-power leverage

points; or, correctly identifying a powerful leverage point, and then pulling it in the

wrong direction for the behavior they wished to produce. The results can be backfires,

oscillations, and traps (Meadows and Wright 2008). By calling for a "new way of

thinking," Einstein and his colleagues were pulling on one of the more powerful

leverage points–paradigms–of the global socio-ecological system in order to alter the

undesirable behavior of nuclear proliferation. Decolonial scholars are making a similar

effort to show the world view from which problem definitions and solutions arise

(Mignolo 2009). The Indigenous ethic of autonomy and interdependence, governed by

respect and co-existence may be a paradigm that transcend paradigms; it transcends languages, geography and attempted genocide (Alfred 2009). That mindset or world-view is still operationalized in tending practices whose overarching goal is to "protect the Earth's self-renewing character," as Anderson demonstrates in *Tending the Wild*, and cascades down to all of the other system leverage points such as rule making and stocks and flows (p. 90). The ethic of coexistence also applies to settler colonial and post colonial contexts where there is an acknowledgement that the dialectic between colonial states and Indigenous peoples is a never-ending arsing (Smith 2012). This can be seen in the discourse of Te Urewera, tenata whenua and manuhiri, the people with authority on the land and guests. That discourse is still organized around an ethic of care and generating trust, and acknowledges an ongoing co-existence.

Games

The vast majority of game theory was applied in service to the predominant, rational economic models of the twentieth century, and only overturned at the end of the century. In her acceptance of the Nobel Prize for her work on common pool resources and game theory, Elinor Ostrom concluded from empirical evidence that investing in the trust and self-organizational capacity of people and ecosystems should be a central focus of public policy. Her observations about polycentric governance and shared tending of resources overturn earlier decades of game theory organized around what Harding called "the tragedy of the commons," in which people in relationship to a shared resource consistently fail to care for its well being due to their selfish actions. Ostrom uses elements of game theory as an activity between participants in order to

work towards better outcomes. She concludes that "Building trust in one another and developing institutional rules that are well matched to the ecological systems being used are of central importance for solving social dilemmas. The surprising but repeated finding that users of resources that are in relatively good condition—or even improving—do invest in various ways of monitoring one another relates to the core problem of building trust" (2010, p. 664). Building trust through relationship and respect is central to Indigenous Peoples of California, perhaps the world, and applied in all realms of life. Anderson describes: "trusting that respect and understanding would come through relationship, native people believed that animals—birds, toads, lizards, bears—could become familiar with, even grow accustomed to, the ways of *Homo sapiens*. Thus, we see many examples of Indigenous groups living and interacting with potentially dangerous animals" (2013 p. 88). This emphasis on trust through relationships continues today in the context of Indigenous and western research, where it is particularly fraught due to the abuse that has been and continues to be perpetuated (Smith 2012, Tuck and Yang 2014). There are efforts to centralize trust. The National Geographic Genographic Project official ethical framework notes that in working with Indigenous peoples, a written contract is not a sufficient replacement for the trust built through connection. "It is a common factor in Indigenous societies that a formal contract can never count as a substitute for a proper relationship based on mutual respect. As such, agreements between total strangers are hardly possible – and where they do exist, they are usually evidence of some imposition" (2012). With this framework, the project seeks to distance itself from the breakages of trust in

genographic research, such as the multiple uses of Havasupai Tribe blood samples by University of Arizona researchers (Tallbear 2007). In Northern California, building trust between tribes and the United States Forest Service has begun to yield useful advances in fire adaptation. The forest service and tribes are investing in workshops discussing overlap between WK (western knowledge) and TK (Traditional Knowledge) and where the ontological breakdown of implementation can be bridged (Long and Lake 2018). That partnership utilizes another of Ostrom's core findings, already addressed in this thesis. Instead of a singular notion of land "ownership," a "bundle" of rights facilitates better outcomes for common pool resources: the bundle includes access, harvest, management, exclusion (the power to decide who has the first three rights), and alienation (the right to lease or sell the other four rights) (Ostrom 2010 p 651). This converges with the pre-contact "usufruct" land rights of California native peoples, a combination of exclusive (family heritage) and communal rights to access, harvest, and manage resources (Anderson 2013 p 163). How these bundled rights are currently being re-configured between tribes and the United States Forest Service in the Pacific Northwest will be discussed in a later section.

Resilience

The key insights from resilience models are to know where the thresholds of a system lie, beyond which the system moves to an undesirable regime; and where in an adaptive cycle a system is and how it relates to other adaptive cycles at multiple scales (Walker and Salt 2006). Adaptive cycles refer to states of disturbance and growth versus states of rigidity and decadence. Through millennia of intergenerational trial and

error, the native peoples of California determined where the thresholds of the landscape were. "The earliest humans in California may have been responsible, at least in part, for the Pleistocene extinction of the region's megafauna" (Anderson 2013 p 33). By the time of European invasion, "Indians so exhaustively explored the plant kingdom for its uses and so thoroughly tested nature's responses to human harvesting and tending that they discovered how to use nature in a way that provided them with a relatively secure existence while allowing for the maximum diversity of other species." This allowance of diversity also illustrates another key concept of resilience thinking: redundancy through diversity is a critical safeguard against disturbance. As for adaptive cycles, "native peoples humbled themselves to the more powerful forces that controlled the seasonal rhythms of plants and animals" and organized their culture and movements around the cycles of nature (Anderson 2013 p. 84). The longevity of their socio-ecological systems in dynamically changing regions indicates their resilience (Trosper 2003). In addition, the survival and resurgence of native cultures despite systematic attempts at genocide and destruction speaks of even deeper resilience (Alfred 2009, Anderson 2005, Long and Lake 2018). In a powerful example of survivance, the Karuk Peoples, one of the tribes of the Pacific Northwest, are innovating in climate change response (Norgaard et al 2020).

<div align="center">Tending in the Pacific Northwest</div>

Living in alliance with the salmon and tan oak acorn, peoples in the Pacific Northwest, particularly along the Klamath River were some of the wealthiest tribes in

California. Because of the rugged physical terrain, this area was colonized recently,

relative to many other parts of the state, country and world. The process of colonization

has greatly reduced native peoples' populations and access to ancestral territories; it has

increased their poverty, hunger, and type 2 diabetes. This process and structure is

ongoing (Reed et al 2010). The horrors and abuses of colonization are still present in

living memory, although not publicly accounted for (Oros 2016). Also present in living

memory are complex forms of ecological and cultural knowledge. The social-ecological

structure has been fractured and conglomerated from families with proprietorship

claims to tribes with and without federal recognition and land (Anderson 2013). The

land has been divided into a mosaic of private, federal, state, and tribal territories, with

the US forest service occupying vast portions of unceded territory. Fire suppression has

led to catastrophic fires that harm ecosystems that co-evolved with frequent fire

regimes. These "firestorms" particularly threaten people presently living at the "wild-

urban interface" between urban areas and forested lands. However, fires have also

jumped that divide and burned central urban spaces in recent years. Less frequently

thought of is how they threaten ecosystems and cultural sites that Indigenous families

have tended for millennia. For example, the lack of fire followed by high intensity fires

have diminished the availability of basket weaving materials like hazel sticks, or foods

such as acorns. Burning produces better basketry material through coppicing, cutting

the stalks to the ground. Too little fire can lead to an increase of pests in oak tree groves

that produce oaks for food and make harvesting more difficult. The high-intensity fires

that follow the suppression can get into the canopy of the tree and destroy it. Tribes are

now partnering with the Forest Service overcome the widerness/culture divide, the "command and control" tactic of fire suppression, and document the efficacy of low-intensity fires to improve the availability of cultural materials (Marks-Block et al. 2019). They are organizing and participating in workshops that focus on culturally mindful ways of sharing information about fire ecology and building trust. They are engaging in dialogue across epistemologies and regaining access to land (Lake 2017). This is a local manifestation of a global effort to preclude catastrophic forest destruction as fire regimes shift along with climate change. Local prescribed burning increases the resilience (illustrated by a ball and cup model) of forest systems to climate change shifts (Bowman et al. 2013). Rather than be a single goal factor, however, restoring cultural burning positively affects all levels of Karuk society. The increase in basketry and regalia materials facilitates the reinstating of ceremonies like the World Renewal Dance, the Brush Dance, and the Jump Dance that were declared illegal during colonization (Lang 2008). The fires improve the health of the downstream river. The holistic system is part of the emotional and spiritual health of Karuk peoples (Norgaard 2019). The overlaps between epistemologies and efforts to build trust are opportunities to actively restore land relationships and move toward decolonization. Similar to the case of Te Urewera, the Forest Service has not yet relinquished its claim on the land as a settler institution, but there is an opening of connection, facilitated by communication across epistemologies. The Forest Service and the Karuk Peoples are influencing how they each come into being. Elsewhere on the Klamath River, the Yurok Tribe declared legal rights of personhood for the Klamath river in 2019 (Thompson 2020).

Application As a Way of Being

Taken together, the phrase "tending the wild" describes a convergence of
systems, game, and resilience theory and a central ethic of Indigenous peoples.
Examining this convergence has pragmatic applications. It is a useful entry into
working as an accomplice with Indigenous Nations forming partnerships with agencies
that privilege the language of western science, with the ultimate goal of restoring land
connections, improving health of people and land, and unsettling racist structures (Reed
et al 2010). It also highlights the insight, ingenuity, and power of people who are
perceived as victims of the system or non-persons; women, people of color,
"uncivilized" people who have been epistemically maligned. Indigenous scholars are
calling for the application of western science with the guidance of Indigenous wisdom
(Martinez in Nelson 2008, Kimmerer 2013, Whyte et al 2016). Donella Meadows, in
Thinking in Systems, advocates for the incorporation of all knowledge, including
spiritual, into systems approaches. Dennis Martinez writes, "Humans are keystone
species where they have been involved in ecosystem dynamics for millennia, and even
for shorter periods of time when their actions and practices have been ecologically
appropriate. Humans are not innately destructive, innately exploitative; it has to do with
culture, it has to do with a way of relating to the land that implies both spiritual and
ecological wisdom, and this is embodied in Traditional Ecological Knowledge" (in
Nelson et al. 2008 p 107). A parallel in mathematics may ally fears of incorporating
"spiritual wisdom" into models. An enormous advancement in mathematics occurred in

1545 when mathematicians began accepting and using the square root of negative

numbers, known as complex numbers. "Provided you stop worrying about what this

beast is," the square root of negative one, *i*, can be used in arithmetic and algebra, "and

never run into any difficulties." When Mandebrot incorporated complex numbers into

dynamics–"what happens when you repeatedly apply some rule"–the result was the

Mandelbrot set, a visualization of the self-organizing, richly complex galaxy of fractal

geometry. "It is absolutely amazing how much complexity can be generated by such a

simple rule" (Stewart 2017). The dynamic application of the Indigenous ethic results in

self-organizing socio-ecological complexity. My intention as a person, as a researcher is

to try to internalize the ethic of autonomy and interdependence. I don't have to be in a

hurry. "This knowledge is a reflection of a way of being or what may be considered a

way of life. This is not so much a lifestyle, which often suggests choice, but just being.

It is not a movement that can be joined, but rather a resilient worldview from which the

people draw whole thinking approaches to every action and choice related to people and

place" (Salmón 2012, p. 161). How this ethic is being enacted globally in resistance to

the command and control logics of coloniality and extractive capitalism and at the same

time in tandem with western scientific methods and technologies is part of the novel

ways of relating the Arturo Escobar highlights in *Designs for the Pluriverse:*

Interdependence, Autonomy, and the Making of Worlds (2018). There is an autopoiesis

between Indigenous communities, colonial states, and the land. As for attending to the

global scale challenges of nuclear proliferation and climate change, the generative

convergences between systems theory and Indigenous ethics are being mobilized into

resistance movements that come from a place of care (Macey 2003). I commit finding my place amid those relationships, speaking in multiple metaphors, seeking out an ethic of coexistence and tending in a settings. I apply that ethic to my way of being and working, in amor de vida y vida de amor. Life of love and love of life.

"Therefore, if you dedicate your life for the benefit of the world,

You can rely on the world.

If you love dedicating yourself in this way,

You you can be entrusted with the world"

Lao Tzu, *Tao Te Ching*, 6th Century BC

IV BEAUTY, (IN)JUSTICE & THE (UN)MAKING OF WORLDS

Based on my gardening and community organizing experiences, I had a strong felt sense and intuition that beauty is an important part of effecting change and adaptation. I looked for research projects and partners that valued or were guided by aesthetics. So far in this thesis I have alluded that beauty can be a strange and integral element of the turn in political ecology toward accounting for the agency of more-than-human beings and in fostering relationships. In this chapter, I elaborate on the topic to provide a transdisiplinary framework for considering beauty, including the spiritual—if not filling a gap in the literature, opening ways to think about the gap. Scholars in multiple disciplines—natural history, phenomenology, landscape ecology, and ironically, aesthetics as a branch of philosophy—have noted an absence of beauty as a subject of study (Prum 2017, Scarry 1999, Scruton 2009, Jóhannesdóttir 2016, Gobster et al. 2017). My attempts to find self-identified political ecology literature that explicitly engaged beauty were fruitless. Even as humans are awash in beautiful, multi-sensory phenomena, according to Scruton in a treatise on the subject, beauty as a topic of philosophy or a goal of art was banished during the later twentieth century (Scruton 2009). Aesthetics as a field and many artists turned toward other sensations such as disgust—finding them linked to beauty in surprising ways (Korsmeyer 2011). Around the same time, political ecology coalesced as a field (Robbins 2011), and beauty was rapaciously taken up as a method of advertising (Morton 2017, Sutton 2009). Feminist

scholars have identified beauty as a both a means of oppression (Wolf 1999, Painter 2010, Lazar 2011) and liberation (Lorde 1984, Scarry 1999, brown 2019, Perry 2018). There is general consensus that the concept of beauty (while arguably universally accessible) is difficult to define, nearly impossible to study, and elicits strong reactions. It exceeds strict categorization into subjectivity, objectivity, or process—making it an excellent concept to study through the lens of radical contingentism. It arises in personal and landscape perceptions and politics in overlapping ways. Beauty has been both dismissed as feminine, irrational, and irrelevant, and tasked with saving the world (Scarry 1999, Prum 2017, Scruton 2009). I provide a working definition of beauty and examine it through a radical contingentist perspective. I then move through individual, landscape, and evolutionary perspectives on how beauty influences change and relationships, examining the distinction between the erotic and pornographic as a normative framework. I make an argument for community autonomous beauty sovereignty as part of autonomous design. I close with several more shards of my own aesthetic work on campus and a reflection on my praxis.

Beauty Arising

Beauty arises when there is pleasure in sensing: it is "the quality or aggregate of qualities in a person or thing that gives pleasure to the senses or pleasurably exalts the mind or spirit" (Merriam-Webster). Aesthetics is the study of sensing. It was synonymous with studying beauty in the Eurocentric academy from the eighteenth century onward, particularly in the context of sight (Ginsborg 2019). Neurobiologists

Tomohiro Ishizu and Semir Zeki have been testing these aesthetic philosophy

hypotheses with visual studies and examining brain responses (2014, 2017). Beauty and

pleasure extend to other senses beyond the visual. These includes senses considered

primary in western epistemology—taste, touch, smell, and sound—as well as senses not

typically discussed in anglophone societies—for example feeling the balance between

one's body and the gravitational pull of the Earth. Noticing the way senses are named,

organized and valued brings attention to how they shape our sensing: having a name for

one can heighten perception of it (Rose 2001, Shepherd 2017). As evinced by the

dictionary definition, beauty can also arise from cognition, as in appreciating the beauty

of an idea or mathematical equation (Stewart 2017), or in a spiritual connection (Lorde

1987). From a radical continent account, unpacked in the next section, neither of these–

–mind or spirit—is independent of matter, nor can matter be extricated from mind and

spirit. Philosophers of aesthetics separated the beautiful from the sublime (pleasure

mixed with horror or terror) in the eighteenth century Romantic movement, then opened

in the late twentieth century to studying qualities of senses other than pleasure, such as

pain and disgust (Scruton 2009, Siebers 2010, Korsmeyer 2011). While these may seem

quite distinct from each other—pleasure, pain, and disgust—there is considerable

overlap. All share factors that appear reflexive, automatic, and universal on the one

hand, and under a high degree of cognitive control, social construction, and context

specificity on the other (Leknes & Tracey 2008, Korsmeyer 2011, Twilley 2018).

Transdisciplinary studies, including neurobiology, have found that sensing pain and

pleasure share biological and social pathways; to study one is to study the other, even

though much more has been invested in studying pain for the alleviation of suffering in medicine. Both pleasure and pain are non-localized in the body-mind and modulated by complex factors such as anticipation, social conditioning, and faith (Leknes & Tracey 2008, Wiech et al. 2008 Twilley 2018). They can influence each other's intensity and perception—perhaps nowhere more radically apparent than the experience of giving birth and the effect of orgasm on that pain. Pleasure can increase a woman's ability to withstand pain by as much as 100% and replace anesthetic drugs (Mayber & Daniel 2016). Disgust shares similar overlaps with pleasure, also modulated by social norms and morals. Korsmeyer illustrates this in the case of food and eating, where pleasure sometimes can converge with disgust (2011). As for emotions, a pleasurable response can be just as easily elicited from a joyful image as a sorrowful one: in both cases a part of the brain correlated to pleasure reward is activated along with one correlated to empathy, then distinct regions for joy and sorrow (Ishizu & Zeki 2017). Beauty is pleasure in sensing; it is mutually constituted with it seeming opposites, pain and disgust; and it can just as easily arise in joy, sorrow, or fear. It arises in a deep interplay with bodily senses, cognitive and social coordinating, and spirituality.

Pleasure, pain, and disgust have been cited as difficult to study because of their relative intensities between (human) subjectivities (Twilley 2018). They are also recognized as important to understand because of how much they influence and motivate behavior. Western scientists have actively avoided studying the subjectivities of more-than-human beings due to a social taboo against anthropomorphizing other beings and a conviction that cross-species communication is impossible (Prum 2017).

Radical contingentism helps alleviate the anxiety about studying human and more-than-human subjectivities by recognizing that subjects and objects have no inherent properties in themselves and instead looks at how they arise as mutually constituted. Organisms bring objects into being by sensing them as bounded, continuous, and distinct from the background environment, and responding to them. The properties that organisms sense do not exist inherently in the object. This way of looking at objects and subjects can extend from the unicellular level to the global national level. Non-essentialism. Organisms go through this process of "thing-making" (a more neutral term than objectification) with non-living matter, other organisms, and themselves in much the same way. In the case of an organism sensing itself, the process of sensing itself as a bounded, continuous, and distinct object gives rise to what we call subjectivity. It results in a collection of experiences that feel unique and personal, and are fully dependent upon other organisms and non-living matter (Sharma 2015). Like other forms of sensing, self-sensing is highly influenced by social coordination of what is acceptable. In the case of an organism sensing another organism as bounded, continuous, and discrete, anxieties arise about objectification and not considering the subjectivity of that organism. Sharma posits that it is not necessary to assume an inherent subjectivity in another person in order to relate with them empathically and respectfully. She contends that such relationships can and do arise prior to postulating about the inherent subjective experience of another simply through relating. Organisms sense non-living matter as bounded, continuous, and discrete objects. Objects depend upon this process of sensing, and organisms fully depend upon non-living matter to

exist. No properties inhere in organisms, their environments, or sensing. Rather than divide subjects and objects into distinct categories and then note that they always interact, radical contingentism names them as mutually constituted, bringing each other into being anew again and again. Each of these sites of sensing self and others are possibility spaces for pleasure (deeply linked with pain and disgust) to arise.

Pleasure as Erotica or Pornography?

Sensing pleasure is a major component of change—for better or for worse. Elaine Scarry writes that at its most basic, beauty is about replication, whether sexual, artistic, or, temporal through sharing time with a beautiful something (1999), and this aligns with the neurobiological notion of pleasure as a reward motivator. On an individual level, neurobiologists are now recognizing that pleasure is integral to salutogenesis—the arising and maintenance of health and wellbeing, even when faced with adverse conditions. On the flip side, pleasure sensing and seeking can spiral into cycles of addiction and the deterioration of wellbeing (Esch & Stefano 2004). In social interactions, pleasure in beauty can facilitate harmonious interacting between peoples, or deleterious oppression (Painter 2010, Prum 2017). On the landscape level, aesthetic pleasure can motivate actions that benefit or deteriorate ecological health (Gobster et al. 2007). In mathematics, pleasure in an equation can correlate to a useful fit with experimental data…or not (Hossenfelder 2018). On an evolutionary scale, pleasure over deep time can lead to a wide diversity of forms that are resilient to disruption—or lead to "unhinged" maladaption (Prum 2017). Pleasure is an important motivator of change;

it seems necessary but not sufficient for resilience and wellbeing. Is there a normative

metric for discernment?

Audre Lorde provides a potential answer in her distinction between the erotic

and the pornographic, and this metric can be brought to bear on individual, social, and

ecological connections of beauty. She defines the erotic as "the measure between our

sense of self and the chaos of our strongest feelings" and locates it as a "resource within

each of us [including men] that lies in a deeply female and spiritual plane" that has been

suppressed and exploited by the intersecting layers of patriarchy (p. 53). She names the

erotic as pleasure that can be accessed in all realms, not just sexuality. She emphasizes

strong ties of relationality in sharing these feelings. This definition, "the measure

between our sense of self and the chaos of our strongest feelings," aligns with a

common dynamic attributed to the experience of beauty that results in caring

relationships: the opening between the sense of self to the other being sensed, a radical

de-centering of self (Scarry 1999, Jóhannesdóttir 2016, Morton 2016). This overlaps

with brain imaging that shows a pleasure center and an empathy center both activate

while sensing beauty—whether joyful or sorrowful (Ishizu & Zeki 2017). This brings

up the point that the erotic is not limited to joy, anger, or sorrow, but encompasses "the

chaos of our strongest feelings." Lorde contrasts the erotic with the pornographic,

which she defines as shallow sensation without intensity of feeling (1984). This

definition of pornography has sparked vigorous debate and disagreement among

feminists in the subsequent decades with the rise of internet pornography (Furguson

2013). Imani Perry offers an updated definition of pornography as that which

diminishes humanity, where humanity connotes a relationship of reciprocity, respect, and responsibility. Humanity involves political and material care, as well as an intensity and range of feeling, from joy, to sorrow, to anger. The erotic is action beyond consumptive voyeurism (2018). Perry stresses that in this sense, the term pornography may not describe some videos on the internet that many would call pornography—those are erotica if they deepen relationships of humanity. In turn, pornography might describe many interactions that exceed the conventional definition (e.g. research that does not deepen humanity, as evinced by the history of research in colonialism?). Lorde posits that an erotic connection while sensing oneself (proprioception) leads to daily satisfaction and empowerment—a form of salutogenesis. Morton goes as far as to argue for narcissism as a healthy part of a logic for coexistence (2016). The opening of self with pleasure when shared between human beings can facilitate better social coordination. Prum postulates that this very action has been a major factor in human and bird evolution, the formation of human culture, and even capable of "aesthetically renovating" destructive competitive behaviors (2017). I extend Lorde's definition of erotica and Perry's definition of pornography to relationships between humans and more-than-human-beings, converging with kincentric ecology and Vanessa Watts' articulation of Indigenous Place-Thought, in which society is organized around a feminine and spiritual political alliances of care among humans and more-than-human-beings (2013). An erotic connection with a more-than-human-being, including spirituality, is an intimate connection of care and pleasure that results in deepening of humanity. A pornographic relationship may involve pleasure, but without a deep,

spiritual connection and reciprocity, the relationship can be exploitive and destructive. Lorde also stresses that consent between parties is a critical element of an erotic connection.

Two more distinctions may be useful for defining the erotic and contrasting it with pornography: engagement of senses beyond or in addition to the visual, and accepting the blend of pleasure with its seeming opposites. Lorde's call in "On the Uses of the Erotic" is for a fully embodied intelligence as part of social organizing; for a deeper connection to pleasure in all senses counteracting the modernist focus on visual sensing alone and ocularcentrism. Lorde writes about the pleasure and satisfaction of dancing, lovemaking, assembling a bookcase, working (Lorde 1984, Ferguson 2013). Perry echos this call, asserting that the shallow visual and audio connections over digital representations, "the simulacra," can be rife with pornographic relationships (2018). This is not to say that visual connections cannot be erotic, but they simply do not encompass the many ways to feel and share feelings with others. As mentioned before, there are also senses beyond what Philip Shepherd calls "The Big Five"—sight, sound, taste, touch, and smell. Synesthesia, the blending of senses, produces a wide array of other senses, such as "mirror touch" that are possible sites for pleasure. There are also senses available to humans not named or developed in hegemonic western society (Shepherd 2019), and senses that more-than-humans access that humans do not, such as seeing the ultraviolet spectrum (Sharma 2015). I also posit that erotic connections are open to their intersections with sensations that seem to conflict with pleasure, such as pain and disgust, while pornographic relationships narrowly emphasize pleasure,

leading to addiction cycles, abuse, and deterioration as they avoid helpful relationships that bring up these conflicting feelings. The blend of pleasure and disgust is certainly how foods that promote health such as fermented foods come to be enjoyed (Korsmeyer 2011), while a focus only on the pleasure of sweetness is disastrous upon health, leading to runaway feedback loops.

<div align="center">The Erotic and the Spiritual</div>

Finally, Lorde locates the erotic on a feminine and spiritual plane; so far in this thesis I have extensively engaged the spiritual from personal experience or pragmatic convergences with political ecology or mathematics. Here I expand the topic, and demonstrate ways it is compatible with a radical contingentist account of the world. Rather than assert a particular definition of spirit, I remain open to a pluriverse of spiritual orders and experiences. Kari Mari Norgaard in writing with and for the Karuk Peoples and M. Kat Anderson writing about many California Peoples both cite spiritual and ecological orders that sustained life (Norgaard 2019, Anderson 2013). Vine Deloria Jr. compiled testimony of many North American Tribes, explaining that each

> "tribe has a spiritual heritage that distinguishes them from all other people. Indeed, in the past, recognizing their unique relationship to the world and its creatures, most tribes described themselves as 'the people' or 'the original people.' Regarding themselves as unique, they rigorously followed the commands of the spirits as they had experienced them over uncounted generations and recognized that other peoples had the same rights and status as

themselves. So the idea of quarreling [between Tribes] over the traditions by

which they lived was felt to be absurd" (Deloria Jr. 2006, p.13).

Spiritual traditions were established in communication with plants, animals, rocks, and

weather formations. This order was disrupted by colonization and the arrival of

Christianity and western philosophy-science that insisted on superiority of a way of

knowing and being (Mignolo 2009), and remains resilient today after attempted

genocide and the colonial outlawing of its practice (Risling-Baldy 2013, Norgaard

2019). Vanessa Watts (Haudenosaunee and Anishaabe) asserts that the power to

communicate with more-than-human beings remains, and "this is why, despite five

hundred years of colonialism, we are still not fully colonized and we are still continuing

to fight; we have within us the ability to communicate with the land[…]" (p. 32). She

posits that ongoing communication requires escaping the epistemic-ontological divide

imposed by western dualism, opening to the cyclical communication of spirit and

people as extensions of land, and continuing the practices of dreams, shapeshifting, and

ceremony (Watts 2013). Ceremony involves intimate connection with all senses and a

congress of participants (Lang 2008, Karen 2008).

While Watts' proposal, "if we think of agency as being tied to spirit, and spirit

exists in all things, then all things possess agency" (Watts 2013, p. 30) may seem to run

counter to the non-essentialist epistemology and ontology of radical contingentism by

positing spirit in all things, it is actually compatible with a radical contingentist account.

Watts clarifies that spirituality arises as place specific, and is part of a loop of the

arising of inter-being, much like the strange loop that Sharma posits. Watts does not

imply that the *same* spirit exists in all things. In her conclusion to *Interdependence: Biology and Beyond*, Kriti Sharma asserts that:

> "[…] we do not need to separate the material from the mystical, nor do we need to eliminate either the material or the mystical from existence. The material world and the mystical world could be *exactly* the same place in every respect. For one, the world of cold, unfeeling, and inanimate matter [posited by physical monists] is already vibrantly *animated* by our instinct that matter is, by itself, capable of being cold, unfeeling, and inanimate" (2015, p. 105).

Sharma contends that the value of any theory or metaphor is how well it correlates to observation. As discussed in the ecology and mathematical modeling chapters, spiritual connections between human and more-than-human beings correlate with ecological wellbeing. Deloria Jr. notes a pragmatic, skeptical approach to dreams and spirit in Indigenous Tribes in that these events correlated to lived observation and experience (2006). Sharma posits that theory is not better than another if it is more "universal," than another; it just has a specific application. Local spirituality might be seen this way. Watts insists that Place-Thought is site and ecosystem specific (2003). Elinor Ostrom documents how ecological rules work best when they are tailored to the site where they operate (2010). Graham Harvey writes in *The Handbook of Contemporary Animism,* "animism is always local and specific. It might not be at all romantic, transcendent or esoteric, but might instead be quite practical or pragmatic as people negotiate everyday needs" (Harvey 2013, p. 3). Animism and spirit are about negotiating the everyday relationships of living. These vary from the Pacific Northwest, to Siberia, to the

Amazon depending on the social and ecological context in which they arise, how peoples relate with each other for food, medicine, shelter, and prayer. These connections persist and are reemerging in European lands and societies where their practice was also placed under attack by patriarchy, industrialization, and capitalism (Blackie 2016). Perry comments in her conclusions about transforming patriarchy: "Seeking good relations with the world around us by answering the desire for intimacy, joy, and meaning is indeed a pathway toward transformative relations with ourselves and others […] that path is an opening, a praxis and ethos, not a telos." Resonating with Deloria Jr's introduction to Indigenous spirituality, Perry comments that she is "borrowing from the Quaker principle of believing there is that of God in everyone and pursing a social order that preserves and protects the integrity, resilience, and beauty of everyone. To adopt this ethical belief does not require a specific theology, or any theology at all, but rather a commitment to generosity and mutuality" (2018, p. 200). As a researcher, my skepticism and pragmatism has opened me, perhaps surprisingly to some, to a pluriverse of spirituality.

Of spiritual practices, I have been deeply influenced by lineages of mindfulness meditation, arising out of Buddhism from India, China, Tibet, and Japan. I already cited mindfulness as part of a pathway towards navigating power divides in academic settings (King 2018). It also has effects on perceptions of beauty. Mediation is an opening of self to self, and finding that the self co-arises with non-self. Sharma cites Nagarjuna, a third century Buddhist scholar, for the dependent co-arising element of radical contingentism. As an ontology, this involves experiencing that connection, not just

theorizing it. Mindfulness meditation is a practice that facilitates that experience. It is both shaped by aesthetic experience, and shapes how aesthetic experiences arise. It facilitates experiencing the present moment, not avoiding unpleasant sensations, and dropping judgements that block the embodied perception of beauty (Langer et al. 2017). Mindfulness meditation training is showing potential for reversing one of the most pernicious pleasure addictions—opiod drugs—and restoring enjoyment of pleasures that promote salutogenesis that were dulled by the intense addiction to the drug and the avoidance of trauma (Garland et al. 2014). adrienne maree brown, a proponent of pleasure political activism that is guided by Lorde's concept of the erotic, encourages mediation and spiritual practices along with pleasure in building political coalitions. She asks how social justice might become the most pleasurable of human experiences (2016, 2019).

<div align="center">Pleasure Prejudice</div>

A large part of pleasure activism and justice involves identifying and overcoming pleasure prejudice: what Elaine Scarry calls errors in judging beauty. She classifies them as over-crediting or under-crediting forms of beauty. Scarry uses a fairly neutral, personal example of how she under-credited the beauty of palm trees until she experienced the living shimmering beauty of one. That immanent (and I would argue erotic) connection changed her perception of palm-trees. Over-crediting and under-crediting can work in tandem at vast socially coordinated scales, forming prejudices, with devastating social and ecological consequences. As Nell Irving Painter documents

in *The History of White People,* white supremacy and racism have involved two thousand years of over crediting particular forms of beauty among human beings and under-crediting others—marking them for slavery, genocide, incarceration. Painter shows that at the outset of slavery in the Roman Empire, colorism was not the metric for enslavement, and many writers of the time idealized Black beauty as well as white. Painter documents how social norms narrowed to white beauty, with distribution of images forming coercive norms. The methods of distributing these norms have shifted, from art historians idealizing Italian statues made of snowy white marble (the original Greek statues upon which these were based as replicas were colorful), to representation in advertising and media. Painter documents how norms about white beauty have expanded several times over the last two thousand years as new groups are accepted into white privilege. Painter calls the power to name, promote, and reproduce beauty norms as one of the major mechanisms of white privilege (2010) Denise Sutton documents how in the twentieth century, beauty norms became quickly globalized through advertising. "Particular facial and body features are repeatedly used in ads, for instance, and gain (normative) value through repetition and saturation. It is, in part, through this process that a particular form of beauty becomes the "ideal" beauty" (Sutton 2009, p. 4). bell hooks points out how these norms can be internalized:

> "A dangerous form of psychological splitting had to have taken place, and it
> continues to take place, in the psyches of many African Americans who can on
> one hand oppose racism, and then on the other hand passively absorb ways of

thinking about beauty that are rooted in white supremacist thought" (2003, p. 47).

Beauty feels good: if the contexts and outcomes go unexamined, they continue to replicate. Artificial intelligence circuits are already showing signs of inheriting the legacy of white supremacist bias in judging beauty (Gersgorn 2016). Perry asks how we can abandon these normative cues about what kinds of lives matter, loosening restrictions on gender, race, and class beauty norms, being open to the beauty of asymmetry, atonality, and the scars of life lived (2018). Mindfulness can be part of seeing how beauty prejudices arise, and being open to erotic connections in the present moment, with less influence from socially constructed judgements.

Just as personal beauty norms can be spread and perpetuated, so can landscape norms of beauty, with the over-crediting of some beauties over others. Lawns spread from a small ecological niche in Britain to a global, highly ecologically destructive produced ecosystem (Robbins et al. 2001). Prejudice against the beauty of marshes contributed to their mass destruction during the colonization, with disastrous results for global ecology (Levy 2018), and their ongoing devaluation in conservation funding and trouble aligning aesthetic appreciation with their ecological function (Gobster et al 2007). Just like in personal beauty, identifying and changing aesthetic social norms around landscapes is a praxis. Norms about personal beauty and landscape beauty also intersect. Landscapes can be seen as producing personal beauty, where people derive their nourishment, physical movement, adornment, spiritual connections (Norgaard 2019). This can function in injustice. For example, Sara Ray argues that the American

conservation idea of wilderness needed for producing the "ideal" American white masculinity and required the racist exclusion of others deemed not ideal in order to produce that unpeopled space for transcendental spiritual experiences and a feeling of frontier. At the same time, those peoples deemed excludable were associated with and blamed for the degraded landscapes that funded the wealth of the people who enjoyed the constructed wilderness (Ray 2013). That coercive exclusion prevents the (re)production of the landscape through practical, reciprocal caring between humans and more-than-human beings, as discussed in the previous chapters. What is the way forward for eliminating or relaxing or modifying personal and landscape beauty for equity and regeneration?

Beauty and Design

Recognizing the power of aesthetic, erotic connections for shaping the world might be a first step to undoing heteropatriarchy, racism, and and the overlapping ecological destruction. Those systems reproduce through a supremacist interpretation of adaptive selection, social Darwinism, eugenics, and "survival of the fittest" (Ray 2013). Prum argues that Darwin's proposal of aesthetic evolution as another mechanism for explaining the diversity of beauty in the world was dismissed because his contemporaries in patriarchal Victorian England doubted the cognitive capacity of both women and other female animals to shape evolution: "vicious feminine caprice," in the words of one commentator. In the lexicon of the time, this phrase meant that females and more-than-humans were too immoral (Prum 2017), affirmation of Lorde's assertion

that the erotic has been "vilified, abused, and devalued within western society" (1984 p. 53), and Watts assertion that western science is predicated on a view of women and other animals as sinful and to be dismissed (2013). This is testimonial epistemic and ontological injustice against women and more-than-human beings: discrediting them as knowers and shapers of the world, based on a prejudice against part of their identity (Kid et al. 2017). Prum documents how the idea of aesthetic evolution arose and was actively suppressed over the next 150 years of natural sciences because it upended the teleological, "progressive," and ultimately eugenicist and racist view of evolution that adaptive selection logically alludes to. Darwin was accused of being *un-Dawinian* by supporters of evolution only though adaptive selection. Aesthetic evolution is a theory that explains how features or behaviors can arise just because they feel good, and not for a functional purpose. Adaptive selection is a powerful and accurate theory that explains a lot of phenomena, but it is not the only mechanism of evolution. I quote Prum here at length as a bridge to ontological design:

> "Richard Dawkins once described evolution by natural selection as the 'blind watchmaker'—the impersonal, inexorable force that produces functional design from variation, heritability, and differential survival. This analogy is entirely accurate. But because natural selection is *not* the only source of organic design in nature, as Darwin himself was the first to recognize, Dawkins's analogy remains an incomplete description of evolutionary process and the natural world. The blind watchmaker cannot actually look at nature and see all the stuff that he hasn't made and cannot explain. Indeed, nature has evolved its own eyes,

ears, noses, and so on and the cognitive mechanisms to evaluate these sensory

signals. Myriad organisms have then evolved to use their senses to make sexual,

social, and ecological choices. Although animals are not conscious of their role,

they have become their *own* designers. Aesthetic mate choice creates a new

mode of evolution that is neither equivalent nor a mere offshoot of natural

selection" (2017, p 524).

If animals are their own designers through erotic connections and choices, if

presumably unaware of it, Arturo Escobar is calling for humans to become aware of

themselves as designers in order to transform away from the destructive, extractive

civilization at present. He distinguishes between patriarchal, colonial, exploitive,

techno-centric global movements and relational, spiritual, decolonial, and possibly

matrial movements. In their interplay, he identifies possibilities for autonomous regions

to design their own lifeways, projects of buen vivir, and conviviality. He recounts the

history of design as a practice in and for empire after WWII industrialization and the

conceptualization of "development" of the third world. He shows how this narratives of

development declared the endogenous design practices that Indigenous Peoples had

used for millennia to bring about their life-ways worthless, to be replaced by

centralized, expert, "modern" designers. Escobar calls this vision of design the One

World World and a disaster of a global experiment that has resulted in socio-ecological

unravelling. He contrasts the One World World with the Zapatista notion of un mundo

donde quepan muchos mundos, a world where many worlds fit. A pluriverse of

lifeworlds (2018). Walter Mignolo calls this many "modernities" rather than a singular

modernity (2009). While Escobar does not directly engage beauty, mentioning it only briefly, I suggest that there is a critical overlap. The One World World movement of design coincides with the spread of a globalized, centralized aesthetic of beauty that Sutton describes (2009), a devaluing of the endogenous beauties that co-arose with local design practices. Leonard Koren calls his book about wabi-sabi an attempt to preserve part of the world's beauty diversity that is being eroded during globalization and the spread of homogenized aesthetics (2008). The One World World vision of design has included the pornographic flattening of pleasure to consumption, the disconnection of humans from their more-than-human allies, and the endangering human and more-than-human lifeworlds through global warming and heteropatriarchal social-ecological extraction and destruction. Escobar and Prum cite feminist movements as the appropriate cultural antidote—although Prum fails to render the layers of patriarchy and engage colonialism as thoroughly as Escobar. Prum does align with Escobar's notion of the pluriverse: he calls it artworlds, and they are not limited to humans but are the aesthetic and functional worlds made and selected by human and more-than-human animals and plants through their aesthetic choices and survival (2017). In stark contrast to Dawkin's blind watchmaker, Audre Lorde calls the suppression of the erotic in women outside the strict bounds of sexuality (e.g. economic, political, ecological life) "tantamount to blinding a painter and then telling her to improve her work, and to enjoy the act of painting. It is not only next to impossible, it is also profoundly cruel" (1984). While both of these metaphors of the watchmaker and the painter circle around

ocularcentrism, and in a highly visual society, ableism(brown 2019), they illustrate a contrast. Escobar calls for a middle path of peoples and regions in the Global North and the Global South intentionally (re)claiming the tools of design for their own wellbeing, much the same way other authors call for globalized science to be guided by regional, Indigenous ethics and protocols (Whyte et all 2016). Escobar refers to transition towns in the Global North, and autonomous regions in the Global South as expressions of the movement toward sustainment, a way of being that cares for the Earth (2018). Through examining the qualities of erotic connections, I hope to have opened some ways of thinking about how beauty functions at multiple scales in these movements, for better or for worse in the distinction between pornographic and erotic. This is a bridging of natural sciences, social [political] sciences, and art/aesthetics as a way of bringing about a world. The movement of erotic connecting spans individuals sensing themselves, other individuals, sensing themselves within groups, and groups sensing each other in political coordination.

<div align="center">Closing Thoughts and Opening Questions</div>

Sharma writes radical contingentism works best as a practice of asking, "what does this depend on?" She asks what her own life depends on, and writes out a list of the historical factors that came together so that she is living and writing:

> "my parents conceived me—they were humans and not cats; people held me and spoke to me when I was an infant; people treated me as if I mattered; I loved my family enough to decide to live when I was in pain; primates formed social

groups; cities came together and ensured that I had clean water to drink every day; when I drove, the parts of my car functioned well enough that it didn't steer out of control and crash at a high speed, and the intricate parts of the other cars hummed along the same way; no driver's heart gave out, nor did the baby in the backseat put something in her mouth and turn blue, panicking the driver and causing him to swerve; food has consistently found its way into my esophagus and not my windpipe; matter had a tendency to be lumpy and form aggregates; and I didn't die, I didn't die." (Sharma 2015, p. 83).

In addition to "what does this depend on," I ask, what is the quality of those relationships? Are they erotic, or pornographic? Do they tend to the self-renewing character of life? In examining my relationships that I depend on, I went through the grieving process of realizing that many of the political, economic, and ecological relationships that my present-at-the-time way of being depended on are extractive and destructive of the very relational fabric upon which my life and life on Earth depend. I also realized that those relationships such as racism, colonialism and patriarchy depend on me and others to reproduce them, and do so best when they are unexamined and unquestioned. I may come to depend on very different relationships in the future, depending on my actions and the actions of myriad other human and more-than-human-beings. Learning to see these relationships is part of arriving at an Anzaldúan global consciousness. Shining the light of awareness on them invites me to make choices about them. Escobar writes that the task of moving toward Sustainment, a society that can live

here together on Earth, requires redesigning every single element of everyday living (2018). I contend that redesign can be guided by the erotic: finding fullness, pleasure in all relationships, deepening humanity, finding what is just enough. This includes sadness. This includes disgust. This includes pain. This includes spirit. I hope that by attending to erotic connections in my lifetime, the present suffering of social ecological extraction can be transformed in to plecrutiation (pleasure and excruciation).

I experienced a great deal of pain while completing this thesis, empathically sharing the pain of others along with my own. And I got through it with a fully embodied praxis of examining the social norms that contribute to injustices, attending to all of my senses, and caring for myself and those around me. I was cared for as well. Illustrated in the following images, my praxis included the fullness of dancing and the satisfaction of creating, at the same time as questioning the colonial and racist relationships. I shared these experiences with my fellow students as we formed coalitions. The Environment & Community faculty announced in January, 2021 that they will pause accepting new students for one year in order to make time time to reform the program with participation from current students. Humboldt State University is founding a Food Sovereignty Laboratory, a space to make traditional food, regalia, and medicine, deepening erotic connections between humans and more-than-humans. I helped with the formation of that space through research and helping to write grant materials. The following images are potsherds of those everyday relationships, final fragments in this kintsugi shaped research.
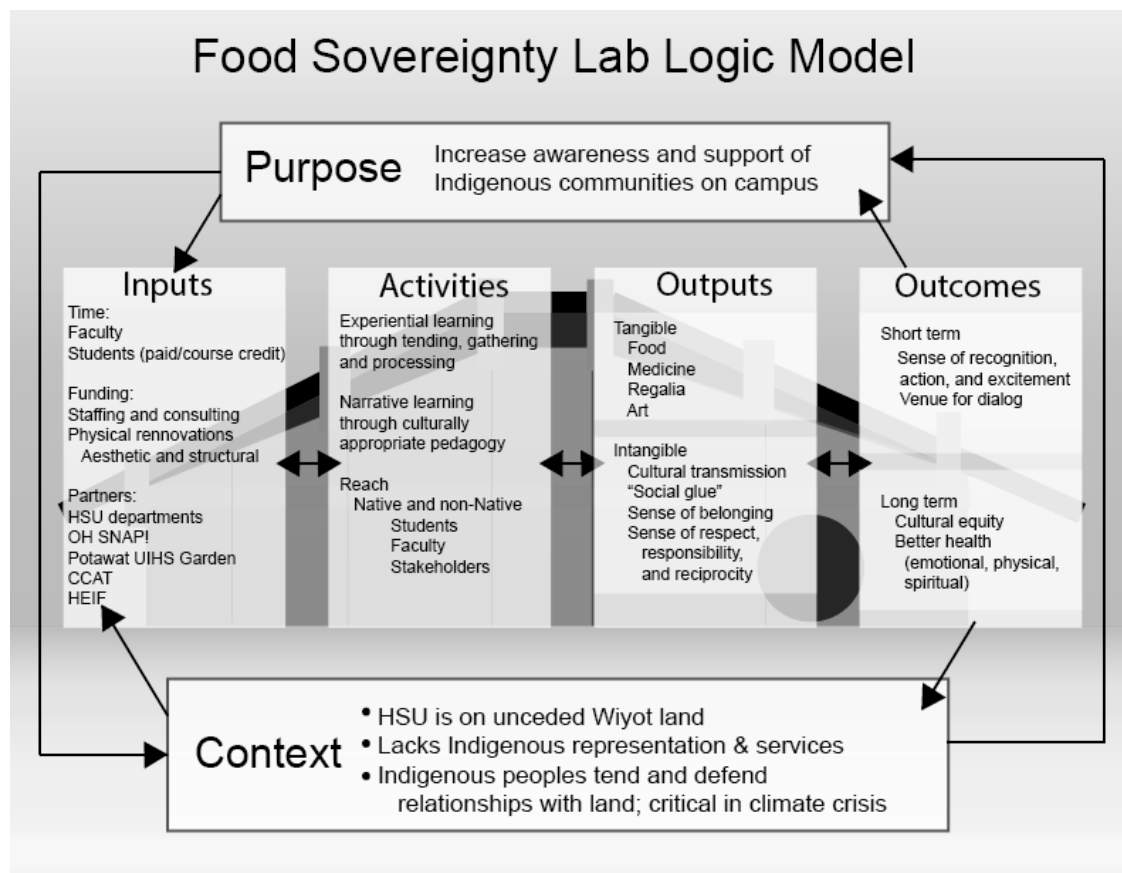
Figure 3: Food Sovereignty Lab Logic Model

A visual graphic logic model to support grant writing for establishing the HSU Food Sovereignty Lab. The background image is based on the architectural design of the Native American Forum on campus, which is based on a traditional Wiyot house with a beam roof and a round door. The model illustrates the rationale for the space for making traditional food, regalia, basketry, and medicine. The application was successful and the Lab has been founded.

Figure 4: Ceramic octopus

I was instructed to make a shoe a ceramics class I was taking for stress relief. I told the instructor that I had no aesthetic or functional use for a ceramic shoe and asked him if I could make a fish instead. He told me that when he took the class before becoming a professor, he had to make a shoe even though he didn't want to, so therefore I should make a shoe too. I told him that seemed like a terrible reason to perpetuate a practice, and I even insinuated that the shoe could be seen as a symbol of colonialism. He didn't budge. I just made an octopus because I wasn't in the mood to be told what to do in an art class. The octopus is hiding a shoe in one of her tentacles (not pictured).

Figure 5: Dancing

Dance is part of my embodied praxis. These are stills from a video taken by Melissa Whipkey during the Kundalini awakening, in my livingroom while I packed to move.

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