

RESTORING PEOPLE AND PLACE:
BUILDING BIOCULTURAL CITIZENSHIP THROUGH GRASSROOTS RESTORATION

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By
Jocelyn W. Grandinetti

Thesis Committee:

Krisna Suryanata
Mehana Vaughan
Hong Jiang

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Abstract

Motivating people to take action on ecological and sociocultural issues within their communities is vital and often difficult. Initiatives that engage people to participate in restoration and other forms of volunteering have the potential for empowering people to act both on large-scales and individual-levels. The increase in biocultural restoration sites in Hawai‘i contributes to the conservation and restoration of threatened ecosystems while also perpetuating Native Hawaiian practices and Indigenous resurgence. Welcoming people from various backgrounds to participate, these biocultural restoration programs expose people both well-versed in as well as ignorant of the environmental and sociocultural issues in Hawai‘i to grassroots biocultural efforts, transforming participants’ values and behaviors in the process. Through semi-structured interviews among volunteers, interns, and site managers, participatory observation at volunteer and intern workdays, as well as volunteer surveys, I uncover various ways these experiences foster culturally-embedded ecological citizenship, or biocultural citizenship. Though settler-colonial and capitalistic legacies continue to constrain the progress of these organizations, participants showed signs of biocultural citizenship fostered from experiences that restored their pilina (relationship) to ‘āina and people and empowered them to commit to this mālama ‘āina (taking care of the land) movement. Mechanisms that fostered citizenship included: having embodied experiences with land and food; connecting to nature and culture from a biocultural perspective; building social relationships and community; witnessing their direct impact on the landscape; (re)learning mo’olelo that decolonize particular places; having affective experiences; and (re)articulating one’s identity within the overall movement.

Keywords: Biocultural restoration, Volunteerism, Ecological citizenship, Civic engagement

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Mo‘olelo— Ka‘u Pule Pōhaku Ku‘i‘ai

To the Buddhas, Ke Akua, and all other forms of the divine,

To the divine nature from which the sun shines, the kalo grows, and the rivers flow,

To the life force that breathes life into us all, from the smallest Kupu Kupu fern to the largest Koa tree,

I am in awe of all you bring into being in this world.

Every time the ocean glistens at just the right angle becoming a sheet of silver sparkles,

Every time I see a stranger smile at me on the street,

Every time I recollect all of the people in my life that love me near and far,

I am amazed by the divine nature that has made all the wonders of this world possible.

I know that I am not near perfection,

I apologize for my hypocrisies and judgments,

For my high principles that sometimes even I cannot stick to,

For the self-conflicts that I struggle with as I attempt to convince others of what’s just, while also trying to respect their own perspective.

Please forgive me for these bouts of over-thinking, and for trying to change things that sometimes cannot be changed.

Forgive me also for my over-sentimentality and my tendency to live in the past even as I attempt to live in the here and now.

Please forgive my silly bouts of clumsiness and forgetfulness, even while I try to be of help.

Forgive my privileged position in life that I am constantly trying to rectify and equalize.

In this vulnerable position as an imperfect individual, trying to find her way through this wondrous yet crazy world,

I humbly ask if I may be able to take a single stone,

If I may take this ancient pōhaku and shape it with my very hands,

Till it is reincarnated as a ku‘i‘ai so that I, too, may be able to experience your powers of breathing life into things,

And so that it may live anew to feed those that share its new home,

And so that I may be one step closer to understanding and experiencing the wondrousness of Hawaiian cultural practices of which I have only just scratched the surface.

Please let me help breathe life into this single pōhaku, and breathe life into these practices so that they may proliferate among both kanaka maoli and haole alike,

And with it proliferate the deep wisdom of aloha ‘āina in its great complexities.

I mahalo you for sharing this sacred piece of ‘āina with me to shape with my hands,

And mahalo for all the opportunities and privileges that you have given me in this life,

Mahalo for my family, for my homes away from home in Taiwan and California, for my friends spanning from Hawai‘i to Korea to Niger.

Mahalo for all the adventures I’ve had and the adventures to come, and for the excitement of youth and life.

And finally, mahalo for this opportunity to take part in this ancient, sacred practice of shaping pōhaku ku‘i‘ai, despite my privileged background and my lack of Hawaiian blood.

I am so humbled to be able to have this intimate experience of connection to ‘āina and kanaka.

I hope to be able to feed my family with the board and stone I create,

To introduce Hawaiian foods, knowledge, and values into my household,

To proliferate these teachings wherever I go,

And to have a spiritual connection with my pōhaku and the place it comes from as I breathe new life and love into its every puka and crevice.

I hope to pound that spiritual love into the poi that I share with friends and family.

Mahalo nui loa.

*

*

*

When we stepped out of Kawainui fishpond with mud dripping slowly in warm clumps down our legs, ready to call it a day, I was not expecting my supervisor to tell me not to go home just yet.

“Come to the Board and Stone class tonight in Waimānalo,” he said, referring to this community class he helped to teach where you learned how to make your own pōhaku ku‘i‘ai (poi pounder) and papa ku‘i‘ai (board for pounding poi). I was taken aback; having lived in Hawai‘i my entire life as someone neither of Native Hawaiian ancestry nor raised around many Hawaiian families, I had never been given such an amazing offer to participate in something so embodied and culturally significant as this. I hadn’t even known such a class existed.

“Okay,” I replied.

But I couldn’t attend that easily; we were tested before we were accepted in the class. In order to gather our stone to make our pōhaku ku‘i‘ai, we first had to write a pule (prayer) in order to ask permission for the stone. We could not merely grab a stone from anywhere and assume it was fine. This was our first lesson of the class: that all things—from plants to animals to even stones—needed to be understood as sacred and deserving of respect. Stones held mana (spiritual power) and belonged in particular places, and because of that, we needed to pule and ask permission before taking a stone for our own use. The passage above was my personal pule, with which I was accepted into the class.

After that, it was a whirlwind of activity. We would work in the lo‘i (taro patches) by day, sometimes working waist deep in mud and hammering away at our stones in the interim. By night each Thursday, we would meet in Waimānalo to listen to Kumu Kawa‘a’s stories and learn

the next step in the process. With each stroke of the hammer, our stones went from spherical, to cylindrical, to cone-like, until finally we began to expose the pōhaku ku‘i‘ai within.

After our pōhaku were complete, we began to work on our papa. But before I could begin carving into the slab of mango wood that my supervisor had cut for me with his chainsaw, I first had to find and make my ko‘i (carving ax). To find a ko‘i in the Hau bushes where they were harvested, one could not merely find a log with which to carve out the perfect shape for its use. Instead, we were instructed to do our pule, walk into the bushes, and let the ko‘i find us. Once we found the perfect branch that resembled the same natural shape as a ko‘i, that is when we would cut and harvest it for our own use. That day, we hosted a group of about 100 people to come to Ulupō, the restoration site where we worked, to get their hands muddy in the lo‘i with us and to harvest the Hau branch they needed to make their ko‘i.

There was something about seeing all of these people chipping away at their pōhaku and sanding their ko‘i beside the grand presence of Ulupō Heiau and beside the spring that babbled from beneath it. This moment remains a tableau in my mind, with families working together on a single pōhaku ku‘i‘ai, the fathers letting the children try out the hammer, the mothers focused on smoothing their ko‘i to perfection. Something about seeing the kukui leaves littered around them, and the sound of clanking hammers-on-stone punctuating constant conversation and laughter. In that moment, Ulupō came alive again. People at this moment came to realize that Ulupō Heiau is not a “historic” site, but rather a living, breathing site in which Hawaiian ways of living and knowing and these close connections with pōhaku, Hau, and each other could be perpetuated for generations. This became a clear image in my mind of what a kīpuka aloha ‘āina looked like; an island of love and care for ‘āina that lives and grows in the midst of an overdeveloped and overpopulated Kailua.

Part 1: Contextualizing Biocultural Restoration

Ch.1: Introduction

“Restoring land without restoring relationship is an empty exercise. It is relationship that will endure and relationship that will sustain the restored land. Therefore, reconnecting people and the landscape is as essential as reestablishing proper hydrology or cleaning up contaminants. It is medicine for the earth.” (p.338)

- Robin Wall Kimmerer

Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants

Biocultural restoration refers to restoration practices that seek to restore both biological as well as cultural diversity through the incorporation of cultural values, epistemologies, and practices in environmental restoration (Maffi & Woodley, 2010). In the context of Hawai‘i, biocultural restoration incorporates the customary ways in which Kānaka Maoli (Native Hawaiians) culturally embed “the idea of the unity of people and nature” (Chang et al., 2019, p.2) in their interaction with the environment. This contrasts from current mainstream preservationist practices such as “fortress conservation” that often separate humans from their local lands and waters (Siurua, 2006). Rather, a biocultural approach aims to reinstall commitment and care for local natural resources by restoring human relationships to the environment as much as restoring the environment itself (Wehi & Lord, 2017).

Various biocultural restoration sites have sprung up throughout the Hawaiian archipelago in recent years as part of a larger cultural revitalization movement that began in the 1970s (Chang et al., 2019, p.4). These sites often take place in culturally significant places such as heiau (temples), or areas practicing traditional resource management practices like lo‘i kalo (taro patches) and loko i‘a (fishponds). Community workdays, summer youth programs, and other internship programs are often hosted at these sites to incite community participation and to educate a new generation committed to mālama ‘āina (taking care of the land). Because this educational aspect is actually prioritized by stewardship organizations just as much as the on-the-

ground restoration work itself (Dacks et al., 2021), it is clear that inciting a greater understanding of local ecosystems and building human-environment relationships among participants is a major goal for these organizations. Furthermore, current scholarship suggests that building closer human-environment relationships is an important means of inciting increased community involvement with local environmental issues (Wehi & Lord, 2017). This raises questions about how biocultural restoration experiences may foster increased dedication to mālama ‘āina and other acts of biocultural citizenship in volunteers and interns. I aim to examine this phenomenon by looking at the mechanisms of participation that foster (or not) biocultural citizenship in volunteers and interns at these sites.

I define biocultural citizenship as a type of citizenship that combines taking action on socio-cultural efforts and ecological concerns. This concept follows Bremer et al.’s (2018) conception of biocultural restoration, which “explicitly recognize[s] that cultural and biological outcomes are interlinked and mutually reinforcing” (p.2). Thus, these sites are often places where local community members, many of who had drifted away from ancestral or multi-generational lands due to Hawai‘i’s colonial history, can come to reconnect to both land and culture. Furthermore, these biocultural restoration sites are not exclusive to locals, making them unique spaces in which conservationists, cultural practitioners, activists, youth, and even tourists can come together and contribute to ecological restoration efforts that combine cultural as well as ecological values and methods. This mixture of participants with various geographical imaginaries of biocultural restoration sites provides an intriguing case study in which to examine the ways that their volunteer experience impacts their lifestyles and values, both culturally- and ecologically-speaking. Thus, biocultural restoration sites provide a unique opportunity in which to examine how the engagement of a heterogenous group of individuals carrying diverse

ideological assumptions and values with them may in turn be transformed through the embodied experience of place-based volunteering, and how these experiences may promote further civic engagement.

My research is guided by the following question: *What are the processes that instill biocultural citizenship in volunteers and interns?* This guiding question is supplemented by the following sub-questions:

1. In what ways do particular conditions, perspectives, and/or past experiences contextualize and affect the impact of volunteer experiences?
2. What are the mechanisms (ie., experiences, narratives, activities) implemented by biocultural restoration programs that have affected and potentially altered volunteer perspectives/values?
3. What are the possibilities and structural constraints involved in fostering biocultural citizenship?

The purpose of this research is therefore to analyze the impacts of participating in biocultural restoration programs in Hawai‘i, and how these experiences may instigate changes in participant lifestyles and aspirations, as well as a greater civic consciousness. By conducting interviews among volunteers, interns, and site managers, as well as participant observation at volunteer workdays, I uncover how these programs may or may not transform participants into biocultural citizens, how their biocultural citizenship is enacted as well as constrained, and what mechanisms foster or inhibit the transformative power of participation. This case study of biocultural restoration provides valuable insight into the transformative power of civic engagement, and sheds light on the relationship between participation and civic engagement, especially in the context of Hawai‘i. On a more practical level, it will also help to inform site managers about the particular mechanisms that are more or less effective in educating and inspiring their volunteers and interns to be more involved. As education is a significant aspect of nonprofits promoting more biocultural community engagement, this study could also be helpful

in providing insight into best practices for transformative educational experiences in order to more effectively foster new generations of mālama ‘āina warriors.

Literature Review

In this chapter, I will briefly go over biocultural restoration and its relation to indigenous resurgence, indigenous knowledge systems, and ecological sustainability. I situate this movement along the rise in the experience economy and the various trends that have entailed. I draw on literature on participation, civic engagement, as well as collective action to examine the relationship between volunteer participation and biocultural citizenship.

Incorporating Indigenous Knowledge and Values in Biocultural Restoration

Native Hawaiians, like most Indigenous peoples, have suffered from a colonial history of dispossession through the erasure of cultural practices and values, loss of language, as well as displacement from their ancestral lands (Hussey et al., 2014). Following the privatization of land in Hawai‘i, the traditional communal land tenure system of ancient Hawai‘i was first transformed into huge swaths of sugar plantations, and later into hotel, commercial, and residential developments for growing tourist and incoming-resident populations. This has greatly altered Indigenous relationships to ‘āina (land) and further erased their cultural presence from the landscape. Land struggles protesting against further development, starting with the Kalama Valley protests from the 1970s, sparked the modern Hawaiian movement (Trask, 1987) which has sought to protect Native Hawaiian ancestral lands from further development and revitalize Hawaiian cultural values and practices. This movement has catalyzed the growth of grassroots organizations that promote growing culturally significant foods, reinstating cultural protocols, and ecological restoration.

Indigenous communities have sustained themselves on their native lands for generations due to their ability to adapt to local variability through continual observations and direct experience of particular local, social-ecological systems (Berkes et al., 1998). While Indigenous groups are

by no means homogenous, nor do they conform to the outdated imagery of being “noble savages” of nature, Indigenous as well as local, place-based knowledge is nonetheless becoming recognized as ideal for better understanding and in turn restoring or conserving natural lands and resources (Lyver et al., 2015). While Hawai‘i’s colonial history has erased many of these sustainable practices from the landscape, biocultural restoration sites have begun popping up throughout the Hawaiian archipelago to rekindle these Indigenous knowledge systems, worldviews, and practices.

Along with being a method in which natural areas are ecologically restored, Chang et al. (2019) frame this rise in biocultural restoration sites as part of a larger revitalization movement to "restore Native Hawaiian epistemologies, language, cultural practices, and connection to place" (p.5) through the biocultural restoration of culturally significant resources and landscapes. This is done through practices of *mālama ‘āina*, or taking care of the land/that which feeds. Thus, biocultural restoration programs lie where environmental restoration and Indigenous resurgence converge, echoing the trend of “back to the land” initiatives popular in the 1960s within an Indigenous socio-political context. At the same time, the increase in commodification and efficiency in modern society has alienated people from the more embodied, multi-sensorial experiences of nature from whence commodities ultimately originate. This makes the act of “experiencing” itself attractive for many people yearning for more-than-commodity interactions, demonstrated in the rise of “experience economies” (Pine & Gilmore, 1999). As wealth does not indicate money but rather “the ability to give” in traditional Hawaiian society (Vaughan, 2018), conveyed in the communal sharing of cultivated resources within communities rather than the hoarding of monetary wealth, the experience economy of reciprocal experience, work, and relationships at biocultural restoration sites share a similar system of exchange.

With all these trends toward more embodied, land-based experiences, participants of diverse backgrounds are driven to come and participate in volunteer workdays at biocultural restoration sites. These participants range from conservationists motivated to restore Hawai'i's native ecosystems, Native Hawaiian activists participating in acts of resurgence, to even young interns craving an exciting summer experience outdoors. While coming from diverse epistemological and cultural backgrounds, these volunteers and interns are nonetheless driven in some way to participate in this biocultural movement, potentially transforming their own values in the process and fostering localized "cultures of nature" (Chan et al., 2016, p.1464).

In her study on developing critical dialogues of agriculture in South Jersey, Hayes-Conroy (2007, p.31) describes agriculture "as a realm where society, ecology, and politics come together most vividly...the realm where life and land merge". Likewise, biocultural restoration sites can be conceptualized as such, reflecting how holistic Indigenous conceptions of culture and nature are considered inseparable entities. Biocultural restoration experiences therefore have many facets that may motivate continued participation by appealing to the diverse values of various participants. While this is promising for fostering more civic engagement across various types of people and communities, Morgan (2010) warns us that this diversity in values can also result in dissonant priorities among participants. In his paper on ethical foodscapes, Morgan (2010) praises ethical consumerism for combining "values associated with ecological integrity and social justice, the two key features of a sustainable agrifood system" (p.1853), yet he also reveals the tensions between these related yet dissimilar moral priorities. For example, is it ethically better for a product to have a low-carbon footprint, or to be fair-trade from a low-income country? This shows the need to consider the potential tensions between cultural and environmental components of biocultural restoration as well, especially when navigating

between those ethics in dealing with the more interconnected framing of Indigenous worldviews. Nonetheless, as Morgan (2010) contends, considering “the integration of socioecological systems”, rather than dividing the ecological and the social, is vital for the future of sustainable agrifood systems.

While Indigeneity is mentioned throughout this thesis, it is important to recognize that Indigeneity itself is a contested concept. Scholarly debates continue on this point, with some scholars viewing Indigeneity and other forms of cultural identity as something people are born with, while others consider it an example of the socially constructed “invention of tradition”. Li (2000) bridges these polarized debates, arguing that “a group's self-identification as tribal or Indigenous is not natural or inevitable, but neither is it simply invented, adopted, or imposed. It is, rather, a positioning which draws upon historically sedimented practices, landscapes, and repertoires of meaning, and emerges through particular patterns of engagement and struggle” (p.151). Volunteering in biocultural restoration is itself a form of engagement where such repertoires of meaning may promote particular articulations and re-alignments with Indigenous and even biocultural identities.

The Search for Embodied Experience

Movements for Indigenous resurgence aiming to reconnect people with their native lands work in tandem with the rise in the aforementioned “experience economy” (Pine & Gilmore, 1999), an economic trend involving the desire for embodied experiences over mere commoditized exchange. Just as some have become driven to reconnect to ancestral lands for cultural and spiritual purposes, others have begun to also crave a connection to nature and community through embodied, meaningful experiences. The rise in volunteer tourism exemplifies this trend, providing an opportunity for volunteer tourists to “purchase” meaningful

experiences and personal development in exchange for assisting in conservation or development-related projects (Wearing & Wearing, 2001). Volunteer tourism experiences like World Wide Opportunities on Organic Farms (WWOOF) lie at the intersection of embodied touristic experiences and environmental trends focused on local food production and green consumerism (Mostafanezhad et al., 2015). Similarly, biocultural restoration sites provide embodied experiences that resonate with various social movements including the Hawaiian sovereignty movement, the food-sovereignty movement, and the conservation movement in Hawai‘i, appealing to people with various values and identities. The underlying desire for connection that these movements share, from connection to cultural practices and community to connections to nature and food systems, echo this desire for embodied experience that make biocultural restoration work appealing to so many different people.

The search for “authenticity” is an important aspect of the embodied experience, and is a major theme in tourism studies. Wang’s (1999) concept of existential authenticity, for example, describes an authentic state of mind and body which contrasts from the alienating, restrictive, and over-rational nature of everyday life in modern society. Sentiments of “knowing your farmer”, being in touch with where one’s food comes from, and spending time with a like-minded community are all examples of authentic experiences that attract people to volunteer at biocultural restoration sites. This desire for embodied, authentic experience may explain why some non-Indigenous volunteers choose to participate in the rigorous manual labor of biocultural restoration without necessarily having strong desires about Indigenous resurgence. While volunteers at biocultural restoration sites are not volunteer tourists per se, the fact that volunteers range from Native Hawaiians and other local residents to foreign students and sometimes tourists nonetheless portrays the wide variation in familiarity with Hawaiian culture and history among

participants, making most of these non-Indigenous volunteers cultural tourists to Hawaiian cultural practices. Even Native Hawaiians who volunteer at these biocultural restoration sites may have been subject to cultural erasure, and therefore could also be on a similar search for cultural authenticity and (re)connection.

Programs such as WWOOF, where participants are fueled by the desire for authentic experiences with embodied food production and social connection, have been critiqued for being structurally limited by the constraints of an overarching capitalistic system (Mostafanezhad et al., 2015). While this critique is important to keep in mind, it focuses on the limitations of structural rather than individual-level change. Thus, the transformation of volunteer values and consequential lifestyle changes is worthy of scholarly attention. By looking at the transformative effects of these volunteer experiences on the individual agency of participants, which can potentially spark later collective efforts among individual biocultural citizens, we avoid dismissing efforts of volunteer labor as unviable. Rather, it works toward “endowing it with encompassing power... and enlarging the spaces of its agency” (Gibson-Graham, 2008, p. 626). The performative power of these biocultural restoration sites is therefore the focus of this study, as the performance of mālama ‘āina practices at these sites has the potential of having a rippling, affective imprint on participants’ future behaviors.

From Participation to Citizenship

While research around the authenticity of volunteer tourism experiences hint at volunteers’ initial motivations for participating in biocultural restoration, it does not speak to the potential transformative effect these experiences have on the civic engagement of volunteers. This question of the transformative power of participation has been a subject of scholarly debate. Arnstein (1969) frames participation as a form of citizen empowerment, whereby citizens

participate in order to take matters into their own hands in efforts to redistribute power to the “have-nots” of society. While her “ladder of participation” provides insight into the various levels of empowerment that come about with different types of participation, this empowerment is described on a more institutional scale without delving into the individual impacts of such participation as well.

Meanwhile, Goodwin (1998) conceptualizes participation as being either instrumental or transformative in nature. While instrumental participation refers to top-down participation defined by other more powerful institutions, often comprising menial rather than meaningful tasks, transformative participation refers to participation that changes meanings, power, or even social organization for those involved. Thus, transformative participation is often assumed to be more empowering than mere instrumental tasks. Yet these two types of participation are not mutually exclusive. Lawrence (2006) argues that within the process of participation, whether it originates as instrumental or transformative, individuals have the potential for transformation from the process itself regardless. Thus, while the direct political effect of participation may vary, the transformative effect of participation as internalized by the individual can still be significant in changing their values and future behaviors. As Larson & Soto (2008) contend in their literature review of natural resource decentralization, “The simple technocratic opening of new spaces for participation may...open channels for the energies of popular movements or social organizations that could be transformative” (p.230). This further indicates that instrumental participation may nonetheless help empower citizens to pursue more transformative roles and potentially instigate collective action. In a similar way, while manual labor like weeding done by volunteers at biocultural restoration sites may seem merely an instrumental role in the grand scheme of socio-ecological issues, examining how participating in these menial

tasks can incite ongoing participation or other behavioral changes may shed light on how such instrumental participation can become transformative.

Rocha's (1997) graduated rungs of individual- to community-level empowerment indicate that even on an individual level, if an individual is empowered in a way that is embedded within particular socio-political contexts and mediated through knowledge exchange, they may continue on their own singular path while carrying their transformed values with them. Afterall, participation is correlated with civic engagement in the case of civic agriculture (Obach & Tobin, 2013), indicating a positive relationship between organizational participation and other civic involvement. Like with civic agriculture, "civic belongs to all people as inhabitants of places. It emerges from lived experiences, shifting relationships, and common cause. It is the culture of shared understandings and responsibilities" (DeLind & Bingen, 2008, p.129). Thus, participating in organizations and larger movements that foster a collective civic culture and identity could in turn catalyze internal transformations like those posed by Lawrence (2006), by providing a sense of embeddedness and socio-political empowerment on an individual level. In the case of biocultural restoration sites, this could manifest in volunteers and interns cultivating varying levels of biocultural citizenship that they carry with them after their restoration experiences.

When we talk about biocultural citizenship, we therefore must consider a broad repertoire of behavioral and value changes that could come about through participation in biocultural restoration depending on what "common cause" and "shared understandings" they end up identifying with. These realignments of positionality can manifest in various transformed behaviors that are not limited to participation in a single activity like volunteering or voting, but rather include various forms of engagement that individuals pull from their particular "political tool kits" (Oser, 2017). Determining the "political tool kits" that volunteers and interns draw

from through various acts of biocultural citizenship is important to get a better sense of the full civic effect of participating in biocultural restoration. This is especially useful to consider when attempting to tease out different levels of transformability in both values and civic engagement among volunteers from various epistemological and cultural backgrounds, as the transformative effects of participation may manifest in different ways for different people. For example, some may manifest biocultural citizenship in acts of ethical consumerism such as buying local produce or Community Supported Agriculture (CSA) boxes, others may manifest this in pursuing a career in conservation, and still others through teaching Hawaiian language to their children.

Biocultural citizenship can thus be conceptualized as a spectrum that lies between ecological citizenship and socio-cultural involvement, recognizing the inseparability of nature and culture and acknowledging that with Indigenous knowledge and values often come environmentally pono (balanced/righteous) practices as well.

Participation in civic agriculture has indicated higher civic engagement among individuals within their communities (Obach & Tobin, 2014), but it is still unclear whether participation in certain initiatives of civic agriculture such as CSA boxes actually *foster* civic engagement. As Brady et al. (1995) suggests, “In the absence of actual life histories collected over respondents’ lifetimes, we cannot be absolutely certain” (p. 272) about whether participation actually causes the transformation of internal values or merely attracts people who already value and take part in civic engagement. Thus, more in-depth, qualitative investigations are needed to determine at what degrees participation in certain civic initiatives such as biocultural restoration actually have a direct effect on peoples’ citizenship. Interviews with staff, long-term and short-term interns, and volunteers inquiring about the background stories of what brought them to their current roles provide insight into how much the biocultural restoration work itself has had an effect on their

biocultural citizenship, versus any preexistent biocultural inclinations they might have.

‘Āina as Common Pool Resource

Why is fostering a sense of biocultural citizenship important? As invasive weeds replace native vegetation, hotels replace taro patches, and marinas replace customary fishing areas, Hawai‘i is in as much danger of losing its ecological abundance as its cultural knowledge and practices. This reflects the broader phenomenon of biological and cultural diversity loss occurring worldwide (Gorenflo et al., 2012). Like many other Indigenous groups, Kānaka Maoli once collectively cared for the common pool resources within their ahupua‘a through collaboration and strict rules, or kapu. This reflects similar phenomena described by Ostrom (1998), who disproved the assumption of “rational behavior” with the “better-than-rational” behavior of collective action. Studying many local institutions where a common pool resource (CPR) was collectively cared for for generations without depleting the resource, Ostrom (1990) demonstrated that the collective creation of self-sustained CPRs was indeed possible.

While large strides to protect Hawai‘i’s ecological diversity and cultural practices could be made if people throughout Hawai‘i took collective action on these issues, the question remains on how this alliance could come about. As Ostrom (1990) points out, while there is a demand for collective action due to the prevalence of environmental issues in need of solving, the problem remains regarding the supply of such collective action institutions when free riding is an easier option. Free riding in this case refers to not taking action on environmental or cultural issues, and assuming others will do so instead. This raises the question: how might people be driven to take collective action as biocultural citizens to protect their local environments? This is where the question of fostering citizenship comes in, and thus makes the potential of biocultural restoration site experiences so intriguing. Cultural values and Indigenous knowledge are not only highly

valued for their practical benefits toward place-based environmental management, but also for their ability to act as a boundary concept that brings more people into the ecological restoration sphere. In turn, the biocultural nature of some restoration sites also provide prime breeding grounds for conventional conservationists and resource managers to become more open to cultural values and protocols as well. Biocultural restoration thus provides a particularly exciting experience that could indeed act as a boundary concept between the ecological and the cultural, and a merger of these different communities of interest.

While Ostrom's (1990) examples demonstrate how single societies with shared norms were able to collectively manage common pool resources (CPR), the case of mālama 'āina today calls for the coming together of dissimilar groups of people for the sake of taking care one of Hawai'i's largest CPRs: the 'āina itself. While singular so-called "communities" are never truly homogeneous (Agrawal & Gibson, 1999), Hawai'i provides a particularly heterogeneous population with divergent geographical imaginaries¹ of Hawai'i and dissimilar views on the importance of 'āina. With settler colonial legacies still present on the landscape, exacerbated by an Americanized education system that fails to acknowledge that violent history, bringing together a like-minded "community" in today's largely urbanized O'ahu may seem a daunting task. However, as Hall (1985) argues in his analysis of Louis Althusser's work, it is possible "to bring classes or fractions of classes, or indeed other kinds of social movements, through a developing practice of struggle, into articulation with those forms of politics and ideology which allow them to become historically effective as collective social agents" (p.95). Thus, different

¹ When I mention "geographical imaginaries" in this thesis, I do not assume that these various visions and senses of place are merely "imagined", but rather that these understandings of place are often contested by many layers of meaning that often have material consequences.

actors and groups experiencing different struggles, such as environmental degradation or cultural erasure, could in theory become united in a collective struggle of promoting biocultural restoration.

Stuart Hall's theory of articulation is useful here, summed up by Li (2000) as "the process of rendering a collective identity, position, or set of interests explicit (articulate, comprehensible, distinct, accessible to an audience), and of conjoining (articulating) that position to definite political subjects" (p.152). By taking part in biocultural restoration work and considering themselves as part of that movement, participants are articulating their positionality as a subject to the ideology of biocultural restoration. The cultivation of biocultural citizens can therefore be understood as the articulation of a collective identity that unifies dissimilar actors in a common cause of restoring 'āina. This work makes a key contribution to this question of whether heterogenous and large-scale conceptions of "community" forged through collaborative participation can still lead to citizenship and collective action outcomes.

A collective identity of biocultural citizenship is vital for the sustainable continuation and reproduction of these biocultural restoration sites. The limited capacity of these organizations often makes volunteers as much a necessary unpaid labor force as a means of community engagement. This phenomenon resonates with the labor constraints and need for unpaid labor among small farmers who rely on WWOOF (Mostafanezhad et al., 2015) and family members (Suryanata et al., 2021). Thus, teasing out which mechanisms increase volunteer commitment to restoring these places may be useful in this regard, as commitment that goes beyond monetary compensation is needed for the sustained operation of biocultural restoration sites. Since these nonprofits are ultimately maintained and reproduced by passionate individuals invested in what biocultural restoration represents, determining the more-than-monetary values that help to foster

committed individuals in line with biocultural citizenship also provides clues into how these operations can sustainably be maintained and even grow as a movement despite the structural constraints that they are subject to.

Community participation in restoration and other place-based activities has been studied among both Indigenous and non-Indigenous community members (Diver et al., 2018). However, few studies consider how participating in biocultural restoration projects in particular affect participants, especially participants from various communities with various geographical imaginaries of place. Answering Diver et al.'s (2018) call for more research that recognizes how reciprocal relationships with place can strengthen and perpetuate “mutual responsibility” for taking care of the Earth, I address this gap by studying how biocultural restoration programs affect participants of various backgrounds through a transformation of values and behaviors. In doing so, I determine in what ways these biocultural experiences can transform participants into biocultural citizens, what the limitations of this citizenship may be, and in turn discover the mechanisms with which biocultural citizenship and civic engagement in general can be fostered through embodied and embedded volunteering experiences. This study enables us to better understand the implications of volunteerism and place-based experiences towards civic engagement in general. It also highlights the benefits of biocultural restoration volunteering, addressing limitations to their social impact and informing site and program managers on aspects of the experience that are most impactful to volunteers.

Research Site

While this research surveys a wide variety of biocultural restoration organizations, the bulk of my research was focused at a case study site where I spent a summer conducting participatory observation. The case study site for this study was Ulupō Nui, also known as Ulupō Heiau State Historic Site, a biocultural restoration site located on the moku (district) of Ko‘olaupoko, the ahupua‘a (customary land division) of Kailua, and the ‘ili ‘āina (smaller land division) of Kūkanono. Loosely translated, Ulupō means “sprouting/gushing out of darkness”, a name resonant with the freshwater spring that gushes out from under Ulupō heiau and feeds the sprouting taro patches at its base. The area of interest spans from Ulupō heiau to the edge of Kawainui, Hawai‘i’s largest remaining wetland and formerly the second largest fishpond in the entire archipelago. Kawainui fishpond once was bountiful enough to produce 500,000 pounds of fish each year, and was so clean that lepo ‘ai, or edible mud, is said to have once lined the fishpond floor (Kauluakalana, n.d.). Ulupō heiau itself, a stone temple of stacked rocks, takes up an area of 140 by 180 feet, and extends up to 30 feet high (Department of Land and Natural Resources, n.d.). These sizable rocks came from all over the island, and were said to have either been stacked there all in a single night by menehune, or passed hand to hand in long human chains across the island. These stories demonstrate the huge amount of labor involved in its construction and the cultural and historical significance of the site.

After being transferred from the Territorial Board of Agriculture and Forestry to Territorial Parks in 1954, the Department of Land and Natural Resources has now been put in charge of the land (Department of Land and Natural Resources, n.d.). However, while the land is owned by the state, groups like Kailua Hawaiian Civic Club, 'Ahahui Mālama i ka Lōkahi, and Hika‘alani have taken responsibility to restore the area over time, much of which had been degraded due to cattle

grazing, illegal dumping, and general neglect. This is a common phenomenon among land-based nonprofits in Hawai‘i, which often take place on lands owned by the state or by multiple other entities. Kauluakalana, founded in 2019, is the most recent nonprofit organization which has taken on the kuleana (responsibility and privilege) to mālama (take care of) the site. Besides comprising of regular staff who manage and restore the land there, tending to the lo‘i kalo and other native and non-native plant varieties, they also facilitate community workdays where children, community members, and people of a variety of backgrounds can participate in land-based activities. Kauluakalana is not merely a conservation organization, nor an organization based solely on community-building and cultural restoration. Rather, they combine all of these aims together in a biocultural manner so that the Kailua community can be “lashed together by a braid of ‘āina, kanaka, and culture” (Kauluakalana, n.d.). Thus, Ulupō is a perfect example of biocultural restoration, and provides a suitable case study of the biocultural citizenship that may be ignited amongst volunteer participants.

Positionality of the Researcher

Ulupō Nui is not unfamiliar to me. This case study site was chosen particularly because I have connections to the people and the place of Ulupō from having done biocultural restoration work there various times previously. In 2018, I participated in a service learning program with UH Mānoa called Mālama I Nā Ahupua‘a (MINA), where I was first introduced to Ulupō through a large community workday there. That summer, I was reconnected with the place when I took part in the Kupu Hawai‘i Youth Conservation Corps (HYCC) internship program, in which I spent a week working there. While I had always enjoyed the lushness and serenity of that place, looking out from the ancient lo‘i walls across the vastness of Kawainui while I worked, it was only in the summer of 2020 that I became more deeply acquainted with the place after volunteering there two days a week for three months. In addition, the summer of 2021 was spent interning at Ulupō through the Kupu Conservation Leadership Development Program in partnership with UH Mānoa’s REEU (Research and Extension Experiences for Undergraduates) fellowship, where I did participatory observation and interview work.

While my familiarity with the site could have potentially led to some bias on my part due to my partiality to the place and people of Ulupō, it has also placed me in a position in which I have worked to gain the trust of the people who work and manage the area. This made it easier to delve into my research with the consent and support of Kauluakalana rather than being an extractive outside researcher. Furthermore, my familiarity with their own attitudes and positions enabled me to have a much deeper perspective of the sociocultural context with which I was conducting this research. Finally, as I was born and raised on O‘ahu, but am not of Native Hawaiian blood, my positionality as a settler in Hawai‘i puts me both in the action while also making me just enough of an outsider to have a more objective view of the various perspectives

and motives that will arise while conducting the project.

I have taken a settler-accompaniment approach to this study, which “collaborates across positionalities to work against racial logics in order to craft and imagine futures that rely on interdependence rather than partitions” (Mei-Singh, 2021, p.79-80). Unlike settler-allyship, accompaniment does not assume Indigenous groups to be a homogenous entity but rather embraces the contestations in meaning and worldview that arise within these social groups. Although having a background of doing work at the site at which this research was conducted prevented me from being a completely impartial researcher, it is this same background and connection to the community that continues to fuel my passion to study biocultural restoration and has made me more sensitive to the wide variety of perspectives and interpretations of the participants in this study.

My prior experience of doing biocultural restoration has led me to pursue this research topic in large part because these research questions are ones I have often asked myself. In my own experience, each time I participated in biocultural restoration work, I became more inspired and driven to continue to *mālama ‘āina* (take care of the land) as well as do my part to perform settler-accompaniment by respecting and legitimizing Native Hawaiian people and culture. This self-transformation on my part from these volunteer experiences has led me to ask the question: is my transformative experience universally shared among other volunteers? And what might be the drivers or limitations of this sort of transformative experience in the pursuit of biocultural citizenship?

Research Methods

My research focuses on Ulupō Nui as a representative case of civic participation, and supplements this case study with a survey of participants at biocultural restoration programs on O‘ahu and Hawai‘i Island more broadly. I followed the triangulation principle—comparing results of multiple methods—by interviewing participants in various roles at the site from staff to volunteers and interns, as well as utilizing multiple methods. Twenty nine semi-structured interviews were conducted among volunteers, interns, and staff to gain a deep understanding of how these various actors were motivated to participate in this sort of biocultural restoration work, as well as the various ways that biocultural citizenship is or is not manifested in their everyday lives. Participant observation further enriched my research, as I was able to directly witness and contribute to daily operations on site as a summer intern. An online survey was also filled out by 150 volunteers and interns at biocultural restoration programs throughout O‘ahu and Hawai‘i Island to gather information on how their experiences affected them.

Interviews

Of the 29 interviews conducted for this research, 6 were with staff (long-term interns were considered staff) and 23 with volunteers and short-term interns. Interviews were conducted in two phases: the first was done with volunteers, interns, and staff at Ulupō Nui, and the second was conducted with survey participants as follow-up interviews. The initial 11 interview participants associated with Kauluakalana included all 6 organizational staff, as well as 5 volunteers and short-term interns recruited through the program director’s contacts and my own on-site encounters. Staff interviews focused on the background story of how they became committed to their current position doing biocultural restoration work, as well as under what circumstances they had noted moments of inspiration or transformation in their volunteers and

interns.

All interviews with volunteers and interns included the following questions to allow for guidance on the part of the researcher:

- What motivated them to participate in biocultural restoration work in the first place?
- What are key moments that moved them during their volunteer/internship experiences?
- Have they continued/plan to continue doing biocultural restoration-related work since their first experience? Why or why not?
- What changes have they made in their lifestyle after participating in biocultural restoration work?
- In what other ways did their experience impact them?

These working questions (more in Appendix A) loosely guided the conversation to allow participants to delve into their own stories and thoughts, which provided them the freedom to reveal their particular perspectives more fully. Because much of this research was done during the COVID-19 pandemic, most interviews were conducted over the phone or via zoom.

Interviews were recorded, transcribed using Trint transcription service, and then coded for common themes using Dedoose software. Transcripts were coded and re-coded until the themes were refined and able to inform an interpretive analysis of the data. All interviewee names mentioned in this thesis are pseudonyms.

Participant Observation

Along with semi-structured interviews, I conducted participatory observation at the site 5 days a week for 10 weeks during my own REEU fellowship at Ulupō from between June and July, 2021. I kept a field notebook with which to write down observations of particular activities being done by volunteers, the social dynamics that come into play during workdays, various

framings of the significance of biocultural restoration work while in the field, and any other significant observations that may relate to the research questions. These field notes were interpreted to supplement themes emerging from the interview data. By doing so, observations of the behaviors and social dynamics among volunteers, interns, program managers and staff were triangulated with the interview and survey data to fill in any gaps between self-reported values and values in practice. Being an intern at the site myself also provided me with the amount of time needed to make better acquaintance with volunteers and other interns who were present at the site so I could paint a better analytical picture of their transformation over time throughout the summer.

Kupu² HYCC interns were also present at Ulupō for three weeks during their program. This provided the opportunity to conduct focus groups with the Kupu teams who are temporarily working there during the summer, which provided deeper insight into the impact of their experiences at Ulupō as well as other various biocultural restoration sites. At the end of each group's program, I gathered them in a circle to "debrief" about their experiences and discuss how their perspectives had changed throughout the program.

Survey

The online survey was created using Qualtrics software, and targeted past and current volunteers and interns who have participated in biocultural restoration work in Hawai'i. The results of this thesis are based on the responses of 150 respondents; although a total of 177

² Kupu is a nonprofit organization that empowers youth through internship opportunities with various conservation and biocultural restoration agencies and organizations throughout the Hawaiian islands. The Kupu HYCC program is a 7-week program they offer to youth ages 17-24 where interns work in teams at a different site each week to discover various field work opportunities.

individuals participated in the survey, 27 did not complete enough of it to provide sufficient data. Survey links were distributed to the listservs, newsletters, and/or facebook pages of the following groups and organizations: Kauluakalana, Kupu, MINA, Paepae O He‘eia, Protect Kaho‘olawe ‘Ohana, University of Hawai‘i at Mānoa Geography and Environment Department, DAWSON, Hawai‘i Island Kamehameha Schools alumni, Pacific Regional Invasive Species and Climate Change Network. Survey questions probed at the frequency of individuals’ participation in biocultural restoration, their personal values along the biocultural spectrum (ie., Ranking the importance between Hawaiian sovereignty, ecological restoration, etc.), and the extent of their biocultural citizenship (measured by various pro-environmental lifestyle choices, cultural engagement, and continued volunteering). For the full survey, see appendix B

Skip and display logic were used during survey creation in order to make the survey experience less redundant and more tailored to the respondent. For example, if a respondent indicated that they participated in biocultural restoration work only once, the question on why they continue to participate would not be displayed. Surveys were kept anonymous unless participants explicitly revealed their identities for a follow-up interview. The average respondent was 26-45 years old, had participated in biocultural restoration 20 times or more, and identified as “local” to Hawai‘i (“local” and “Native Hawaiian” were provided as distinct choices). While this indicates some bias in the survey population in favor of frequently participating local volunteers, almost all local and even Native Hawaiian participants that I interviewed were not brought up around biocultural restoration or Hawaiian culture, making their more recent experiences at these sites just as novel to them as many new residents and foreign students.

Post-Survey Interviews

The 18 interview participants not associated with Kauluakalana were recruited through

contact information disclosed in the online-survey. Four participants were interviewed in-person, either at the biocultural restoration site where they worked or at a cafe. The post-survey interview data may be biased because most of the people who were eager to speak about their experience were also driven to participate in various biocultural restoration-related efforts. Interview questions for these participants omitted questions already answered in the survey, and helped to add a qualitative dimension to the survey data.

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In the following pages, I use various theoretical lenses that help contextualize and conceptualize this research. First, provide a brief history of the dispossession in Hawai‘i, the start of the modern Hawaiian revitalization movement, and how this history paves the way for biocultural restoration. I then talk about neoliberalism and the contradictions of the volunteer economy in both limiting the efficacy of biocultural nonprofits and also enabling the potential for performative acts of citizenship. Finally, I go over the results of this research from both the quantitative and qualitative data, and provide recommendations that I draw as food-for-thought from the findings.

Ch.2: Aloha ‘Āina and Biocultural Citizenship

We currently live in a time in which sea levels encroach on lowland communities, the agro-industrial complex engineers away embodied connections to food, and development projects progress at the expense of native habitats and Indigenous livelihoods. With the continued growth of socio-environmental issues like these from local to global scales, it is more important than ever to acknowledge and confront the ways we perceive and act on our environments in order to cultivate more positive human-environment relations. The question is: how do we do this? How can we foster human-environment relations that are harmonious rather than exploitative? One way to approach this question is by looking at the various perceptions of nature that underlie human-environment relations to understand their ideological roots, and by doing so pursue alternative worldviews that promote more reciprocal relationships with the nature around (and within) us.

The increasingly hegemonic dualistic view between humans and nature has bred an environmental ethic that severs our relationship to the natural world and thus promotes behaviors working against environmental sustainability and abundance. This, paired with objectified, reductionist approaches to conservation and science in general, has compartmentalized nature in a way that steers us further away from a more integrated understanding of nature and our place in it (Glacken, 1999). Confronting this unhealthy relationship with nature, and considering alternative ways with which to perceive our role as humans within nature, is an important starting point for instigating more harmonious human-environment relations. The good news is that there is no need to craft an entirely new environmental understanding, as there are many non-Western, and even some Western, worldviews and ethics that put humans in a more embedded position within, rather than above, nature.

Growing interest in community-based resource management and the incorporation of Indigenous knowledge in restoration is pushing scholars and practitioners to acknowledge the importance of Indigenous epistemologies and worldviews (Berkes, 2021). In these instances, differences in worldview regarding the relationship between nature and culture are thrown into sharp relief, distinguishing the more dualistic nature-culture conceptions of the western worldview from the more integrated understandings of nature among many non-western cultures. The rise in grassroots organizations practicing biocultural restoration in Hawai‘i is a prime example of this shift to include the cultural with the natural, and in turn come to grips with the much more integrated, reciprocal relationships with nature that the Native Hawaiian and other Indigenous worldviews assume. These alternative views of nature, which consider humans as part of an integrated, social-ecological system, rather than separate from the natural environment, may be extremely helpful in paving the way toward a more integrated, less exploitative relationship between humans and the natural world.

I am particularly interested in what mechanisms incite acts of biocultural citizenship, and how participating at these biocultural restoration sites plays a role in this. My question is: how is biocultural citizenship fostered? How do we cultivate individuals invested in both the environmental and cultural integrity of their own communities? To attack this inquiry, we must first explore the very cultural underpinnings that promote a more integrated rather than separate view of our place as humans within nature. These cultural perspectives of nature, I argue, are the basis on which individuals are driven toward either environmentally beneficial, destructive, or even indifferent behaviors. Thus, examining various cultural views about nature enables us to both recognize the ideological origins of particular human-environment relations, and also contextualizes the trends that have made biocultural restoration so attractive and potentially

transformative for volunteers today.

Before we begin contemplating these questions, I should clarify that my use of the terms “resource management” and “conservation” throughout this thesis are not intended to frame the useful components of socioecological systems as simply ‘resources’ for human-use. Coming from a biocultural perspective that acknowledges the holistic spiritual, psychological, cultural, as well as physical benefits of nature, I use these terms merely to echo what other scholars have used to describe these useful elements of nature. On a similar note, I utilize the term “nature” to simplify the concept of the natural environment in my explanations, but I do so while acknowledging that nature is by no means truly separate from culture and the realm of people.

The Power of Narrative and Ideology

While the historical roots of our various conceptions of nature may seem to be of little import in the face of the very urgent, tangible environmental issues of today, it is important not to overlook the power of ideology and narrative. Ideologically-mediated perceptions, which are often based on shared narratives, can have material effects. According to Merchant (2003), “To the extent to which people believe in or absorb the story, it organizes their behavior and hence their perception of the material world” (p.36). The ethic that results in turn “gives permission to act in a particular way toward nature and other people” (p.36). Narratives thus create particular logics with which individuals perceive, and in turn act within, the world around them. This aligns closely with Althusser’s (1972) ideas of Ideological State Apparatuses, an addition to Marx’s concept of Repressive State Apparatuses on a more cultural, ideological level of behavioral control. According to Althusser, ideologies not only present an imaginary relationship to the real world based on a particular ideology, but ideologies in turn can have material consequences and hail individuals as subjects. In other words, people become subjects to particular narratives and

the logics that they put in motion, and perpetuate these logics through the on-the-ground actions that they inform. Thus, these stories that have been produced and reproduced over time should not be underestimated in the perceptual impact that they eventually wreak among individuals that become subject to such logics.

Interestingly, Althusser in the same essay notes the danger of the “naturalness” of institutions, as considering particular institutions to be ‘natural’ makes them seem like “a neutral environment purged of ideology” (p.156). Depoliticizing particular institutions and ideas as ‘natural’ makes it easy to maintain the status quo without individuals even realizing that such circumstances are not ‘natural’ at all but are ideologically based, in turn making alternatives seem illogical or even disruptive. The power of ideology is useful for thinking about human-environment relationships, as particular ideologies of humans’ place in nature renders individuals as subjects to those particular environmental ethics, which in turn have material consequences by explaining and guiding their actions. Thus, ironically, the ‘natural’ ways that we perceive nature are not natural at all, but rather are mediated by these other narratives and ideologies that we were raised with. Investigating various environmental ethics, and the effects of particular ideological assumptions and values on individual behaviors, is therefore an important first step toward tackling socio-environmental issues that start with the ideological.

At Ulupō and other biocultural restoration sites, not only do volunteers and interns participate in physical restoration work, but they are also told mo‘olelo (stories) of the place. These stories do not just make these experiences more interesting for participants, but actually re-frame the context of the work they are doing and the place they are working in. In the context of Ulupō, these stories are significant in changing the narrative from the settler-colonial imaginary of Kailua as a commercialized destination for tourists and new residents to a sacred, storied place

that needs to be cared for. By challenging the dominant narrative that perpetuates settler-colonial, extractive relationships with land, these mo‘olelo de-naturalize that ideology and instead welcome participants to envision an alternative world of reciprocal relationships with ‘āina and people.

Aloha ‘Āina and the Hawaiian View of Nature

Starkly contrasting from the dominant western perspective, Indigenous worldviews that are based on intergenerational attachments and deep knowledge of particular places view nature as inseparable from humans rather than an entity to be dominated. Kimmerer (2013a) illustrates how this ontological difference shapes our actions toward nature with the example of a maple tree: “If the maple is an *it*, we can take up the chain saw. If the maple is a *her*, we think twice” (p.57). Therefore, if plants and animals are considered equals to humans rather than objects to be dominated, the moral code that underlies our actions toward it are transformed, as the exploitation of “resources” becomes exploitation of kinfolk.

The Hawaiian worldview in particular also positions humans as inseparable from nature through reciprocal relationships and interdependence rather than anthropocentric dominance (Chang et al., 2019; Howes & Osorio., 2010; Silva & Thiong'o, 2017). Aloha ‘āina, or love for the land, is a major concept of human-nature relations according to the Hawaiian worldview, and is described by Silva & Thiong'o (2017) as “a central ideology for our ancestors that is striking in...our current movement(s) of resurgence” (p.4). The literal translation of aloha ‘āina exemplifies this intimate human-nature relationship when broken down, with “aloha” meaning “love” and “‘āina” meaning “that which feeds”. Therefore, the concept of aloha ‘āina goes deeper than a mere love for land, rather encompassing the value of land being abundant and able to feed and provide for those that live upon it.

The concept of aloha ‘āina stems from the cosmological and genealogical tie of Hawaiians to ‘āina. Viewing ‘āina as an ancestor provokes a much deeper level of love for ‘āina in the Hawaiian worldview than an average westerner might perceive from a generic plot of land. The settler colonial idea of land being a mere commodity, as a parcel of private land that can be bought and sold without acknowledgement of the surrounding socio-ecological community, is foreign in traditional Hawaiian thought. Rather, rich oral histories of Hawaiian genealogy such as the Kumulipo hail all aspects of the natural environment, from rats and algae to plants and animals, as having familial connections to the Hawaiian people (Silva et al., 2004).

Kame‘eleihiwa (1992) describes this close familial relationship with ‘āina: “The Hawaiian does not desire to conquer his elder female sibling, the ‘Āina, but to take care of her, to cultivate her properly, and to make her beautiful” (p.25). Kame‘eleihiwa further argues that this familial love for ‘āina led to the reciprocal relationship with ‘āina that pervaded traditional Hawaiian society, since to mālama (take care of) ‘āina allows the ‘āina to in turn mālama its caretakers. In this way, aloha ‘āina represents an ancient genealogical connection to ‘āina that was expressed through continual stewardship. Understanding ‘āina and its creatures as not only sacred but as family provides a unique environmental perspective that not only equalizes the human’s role within nature, but creates an understanding of all beings being genealogically linked.

This kinship perspective thus requires the utmost love and care for the natural environment, and would abhor over-exploitive, destructive behaviors on the landscape perceived as equivalent to hurting a family member. Furthermore, all of these genealogically connected aspects of nature are considered manifestations of the akua (gods), making the land genealogically as well as spiritually significant according to the traditional Hawaiian worldview.

An example of this mindset can be seen in the ‘ōlelo no‘eau (proverb) of nani ke kalo,

meaning “the beautiful taro”, which implies the need to act respectfully when around kalo. One should not only be gentle with the plant and its parts, but should refrain from inappropriate speech or even thought as well. This demonstrates the depth of this respect for nature, as individuals must sustain this pono (balanced, righteous) mindset even as the corm is pulled from the ground and is being prepared for eating. Kalo is especially exalted among Hawaiians, as cosmogonic stories tell of kalo being the elder sibling of the first kanaka, or human:

“The first child of Wākea and Ho‘ohōkūkalani was an unformed foetus, born prematurely; they named him Hāloa-naka (quivering long stalk). They buried Hāloa-naka in the earth, and from that spot grew the first kalo plant. The second child, named Hāloa in honor of his elder brother, was the first Hawaiian Ali'i Nui and became the ancestor of all the Hawaiian people. Thus the kalo plant, which was the main staple of the people of old, is also the elder brother of the Hawaiian race, and as such deserves great respect” (Kame‘eleihiwa, 1992, p.24).

With the kalo being understood as one’s elder sibling, born from the deities of Wākea and Ho‘ohōkūkalani, it is no wonder that such a plant garners familial respect as much as divine reverence.

The traditional land tenure system of Hawai‘i embodies the intrinsic relationship of Hawaiians to their environment. Of the many scales of land division that were conceived in the traditional Hawaiian consciousness, the ahupua‘a best demonstrates the sustainable results of mālama ‘āina. These ahupua‘a were created from the mountains to the sea, aligning with watersheds as a means of cultivating the most abundance of natural resources through the natural flow of water to the ocean. Stream water from the mountains worked its way through patches of taro and other agricultural staples, before emptying nutrient-rich water into fishponds near the shoreline (Kagawa-Viviani et al., 2018). Since the health of an entire ahupua‘a rested on the successful maintenance of each part of it by different members of the community, to mālama one’s ‘āina well meant resource, nutrition, and community abundance for everyone. Such an environmental ethic of aloha ‘āina thus presents a more reciprocal and respectful relationship

with nature, and serves to intertwine rather than separate humans from nature, as well as each other.

A History of Dispossession

Post western contact, the Māhele served as a pivotal moment of change in the socioeconomic as well as physical landscape of Hawai‘i. Although there had been a slow and steady encroachment of foreign powers upon Hawaiian soil prior to this event with the immigration of foreign missionaries and merchants, the Māhele gave foreigners more concrete influence in the islands by allowing them to own land. While Hawai‘i had once been a subsistence economy in which land was considered an ancestor and intrinsically connected to the humans that lived and worked upon it, the Māhele commodified the landscape, making it possible to own, buy, and sell land. Although Hawaiians were supposed to, in theory, be able to continue to live off the land that they had for generations through the new system of ownership, the process required for parcel ownership consisted of many rules that were unfamiliar to the specific cultural and economic context of Hawai‘i. After all, the idea of owning land alone went against Hawaiian worldviews, making the process of land ownership almost inconceivable to the Hawaiians who were expected to apply for the land they had already lived off of for generations (Kent, 1993). Because of this, less than one percent of land in Hawai‘i was given to Hawaiian commoners. Furthermore, the 49 percent of lands held for the Hawaiian Kingdom government was misused with the shift to US governing powers (Vaughan, 2018, p.89).

According to Vaughan (2018), privatization of Hawaiian lands after the Māhele “created new boundaries around measured individual parcels, which accorded with Western ideals of ownership...while failing to recognize existing rights to the expansive diversity of ecosystems that Hawaiians actually used” (p.91). In this way, not only were Hawaiians dispossessed through

a privatization process completely foreign to their own cultural worldviews, but they were also denied access to resources according to the ahupua‘a land tenure system which had sustained them for hundreds of years. This in turn becomes both an issue of Indigenous rights, in the sense that Hawaiians could no longer access resources vital to their Indigenous lifestyles, as well as an issue of ecological health, as ownership and development of privatized plots of land according to arbitrary boundaries completely disregarded existing ecosystems. In this way, the shift from ecologically-aware ahupua‘a land tenure to a human-centric, commodified landscape disrupted the socioecological balance between humans and the environment in Hawai‘i.

After further dispossession from both land and culture through a newly imposed economic system, and the subsequent overthrow and annexation of the Hawaiian Kingdom, the disconnect of Hawaiians from their own culture and land became more significant. The large swaths of Hawaiian land altered over time according to Western developmental models of progress made access to more simple, ‘āina-based ways of life nearly obsolete, first with large-scale plantations which redirected water resources, and later with urbanization, militarization, and tourism development. With a cash economy becoming mainstream over subsistence, many Hawaiians who were unable to pay taxes on lands they had worked on for generations were forced to move into urban centers to earn money for a living (Vaughan, 2018).

These drastic changes in Hawai‘i’s cultural landscape spurred on land-based protests like the Kalama valley protests in 1970. Organized by the Kokua Kalama Committee, these protests were initially performed on the basis of “land for local people” and the preservation of the more “Hawaiian-style” rural existence that was quickly diminishing during the time that Kalama Valley was being planned for development. As a place that at the time was home to pig- and vegetable-farmers that considered their community a “big family” (Trask, 1987, p.129), Kalama

valley was a haven for rural people who had been evicted from elsewhere in the rapidly developing city of Honolulu. As the protest efforts grew, the focus of discourse went from the preservation of local lifestyles to the more culturally embedded cry for aloha ‘āina by the 1980s (p.126-127). In this way, the land struggle shifted from focusing on local land rights to the closer relationship of Hawaiians to their environment, indigenizing the movement.

It is not surprising, then, that according to Trask (1987), the Kalama Valley protests were the “the spark that ignited the modern Hawaiian Movement,” defining the movement as “an ongoing series of land struggles throughout the decade of the seventies that was destined to change the consciousness of Hawai‘i’s people, especially her native people” (p. 126). Since then, from the efforts of the PKO (Protect Kaho‘olawe ‘Ohana) to Kapu Aloha protests on Maunakea, Hawaiians have become more aware of their systemic oppression and the misuse of their lands, empowering them to defy rather than succumb to the imposed settler-colonial system in Hawai‘i. Within all of these land struggles beginning with that of Kalama Valley, Trask bluntly points out that “government, landowners, and developers had plotted the future landscape of O‘ahu with barely a thought for the people on the land,” calling this “business as usual” (p.130). I argue that what connects all of these struggles into a movement is not just the Hawaiian people whose culture was at stake, nor the land that was being encroached upon by settler-colonial powers, but the broader drive to return to the deep, reciprocal relationship between people and ‘āina through the collective feeling and action of aloha ‘āina.

When considering this history of land and cultural dispossession in Hawai‘i, the protesters’ call for aloha ‘āina both invokes culturally-rooted love for land as well as a political call for ‘āina to be able to feed and sustain Hawai‘i’s people once again. In this way, the concept becomes political, critiquing the hegemonic power structures that limit access to ancestral ‘āina

for the Hawaiian people to sustain their ways of life. The collective frustration that these phenomena have caused has created a new basis of aloha ‘āina defined as “the kuleana to mālama or care for the ‘āina” (Silva & Thiong'o, 2017, p.4) through efforts to stop the encroachment of development, desecration of sacred lands, and protection of the environment (Silva & Thiong'o, 2017, p.4-5). As Baker (2018) contends, aloha ‘āina has thus become a counter-hegemonic ideology in itself, functioning “as a core organizing principle for political action and an embodied cultural practice. Aloha ‘āina is interpellating Native Hawaiians into a (re)newed relationship with the ‘āina” (p.57).

An Ethic of Biocultural Citizenship

So how do we foster the “ecological conscience” that Aldo Leopold infamously suggests, or similarly, a “biocultural ethic” that incorporates both ecology and culture into a single “land-community” (Leopold, 1968, p.207) of aloha ‘āina-based values? Phenomenology points to embodiment as one entry point for establishing connections to nature that may spill into other aspects of life as well. Abram (1997) argues that “phenomenology is the Western philosophical tradition that has most forcefully called into question the modern assumption of a single, wholly determinable, objective reality” (p.29). Thus, pushing back against the reductionist tendencies of science and society in general, phenomenology instead seeks to turn to “the things themselves” (Abram, 1997, p.162), toward the world as it is experienced in its felt immediacy, promoting a “science of experience”. Experience and embodiment in this case is prioritized over objectivity, situating the human back into the nature that is being studied. Rather than sensory experiences of nature being irrelevant to one’s research and calculations, for example, they become the very aspects that heighten the experience and therefore connect us to nature. This approach considers the holism of experience, which provides an intriguing perspective to consider how experiences

on the land may have transformative potential for those who work upon it. Is it merely what biocultural restoration work represents that attracts people to volunteer? Or are there aspects of the holistic experience of volunteering that motivates continued participation and other related forms of citizenship?

Getting back in touch with the holistic experience of nature has become a growing trend in response to increasing modern alienation from nature. One example of this is the countertrend to fast food and industrialized food production. Vegetarianism, organics, farmer-to-consumer marketing, and the Slow Food movement are just a few of the trends that have arisen out of the growing hunger for more embodied, wholesome relationships with food and where food comes from. In Hawai‘i, this has also manifested in “buy local” trends that attempt to support local farmers and promote intimate relationships such as “knowing your farmer”. What is unique about these trends is that they are not based merely on aesthetics or health per se but are part of an ethical turn in consumption practices that are “driven by a conscious reflexivity” (Guthman, 2003, p.46) based on peoples’ individual ethical values and thirst for reconnection. This presents a shift in consciousness, albeit consumer consciousness, that indicates a craving for reconnecting to the natural systems that feed us.

Yi-Fu Tuan (1998) presents an interesting thesis about the tendency of humans to seek escape, whether that be from our own animal natures or nature itself. According to Tuan, we do this by replacing nature with culture, making culture a distancing factor with which humans were able to escape the uncertainties of a completely wild nature. And yet, ironically, even when acknowledging the more recent trends in the other direction that drive people to escape back to nature rather than away from it, Tuan contends that these back-to-nature desires would not have arisen had humans not escaped from nature in the first place. He argues that the “pressures of

population and social constraint must build up first before the desire to escape from them can arise; and...these pressures are themselves a consequence of culture—of our desire and ability to escape from nature" (Tuan, 1998, p.19). Thus, there is no escaping nature, as both our desires to escape nature and to return to it are cultural processes, mediated by our own experiences and ideological upbringings. In this way, there is no escaping culture as well, thus demonstrating the need for a more biocultural approach to nature in which nature and culture are inseparable.

As we have seen from the many examples of nature-culture relations that vie for a more integrated rather than dualistic view, our relationships to land and nature are cultural phenomena. While this may seem inconsequential to some, it is in fact a significant point to highlight, as this indicates that current negative human-environment relations can be remedied by an alternative cultural understanding. While this is of course easier said than done, it nonetheless tells us that there is hope for a change in ecological consciousness through culture. In order to utilize culture as a tool for altering peoples' perspectives toward more non-dualistic views of nature, as well as toward more positive environmental behaviors that such an understanding would reinforce, I call for a biocultural ethic that promotes cultural views that in turn nurture the environment. This biocultural ethic, I argue, is derived from embodied experiences on the landscape, particular understandings of integrated socioecological systems, and cultural awareness that in turn informs biocultural citizenship. Just as the sustainable ahupua'a system reflects Hawaiian values of aloha 'āina, so have countless other Indigenous and ethnic groups created similar systems that have worked within their particular integrated human-environment understandings. Thus, rather than attempting to create a new ethic for environmentalism, a biocultural ethic calls for acknowledging and perpetuating preexistent cultural relationships to land and understandings to foster more intimate human-environment relations.

How might this cultural shift be done? This question is especially pressing at a time when, in Hawai‘i and elsewhere, many Indigenous peoples are no longer raised with their cultural customs, values, and practices in the face of settler-colonial legacies. Regardless, to draw from phenomenology once more, embodied encounters with ‘āina and people with an aloha ‘āina mindset may be a good start. While it is easy to consider oneself separate from nature without having any experiences in nature, embodied experiences on the land provide the potential for changes in perspective and affective moments. As Bennet (2010) contends, "moments of sensuous enchantment with the everyday world...might augment the motivational energy needed to move selves from the endorsement of ethical principles to the actual practice of ethical behaviors" (p.xi). Similarly, fostering sensuous attachments to local landscapes and communities provides a starting point for value and behavioral change, as one becomes emotionally invested in particular socio-ecological communities.

Biocultural restoration provides the opportunity for fostering these very intimate connections with land and people. In Hawai‘i in particular, these biocultural restoration sites promote an aloha ‘āina mindset through mālama ‘āina practices on the land. By planting culturally significant plants such as kalo, and restoring ancient fishponds based on ahupua‘a management, these restoration efforts not only assist in environmental restoration but also restore cultural practices and relationships on the landscape as well. Furthermore, as community workdays are often contextualized with place-based mo‘olelo (stories) shared by site managers and staff, participants are invited to reimagine the meaning and vision of the landscape they are working on. Thus, their embodied experiences with mud between their toes become contextualized by culturally-embedded narratives that frame the work through an aloha ‘āina lens. After all, like Tuan (1998) pointed out, the ways we interact with nature are also steeped in cultural framings

and understandings, so biocultural restoration work provides an opportunity for people to get closer to nature *through* culture, and also to become more connected to culture *through* interacting with nature. This combination of embodied practice and cultural context at biocultural restoration sites creates “an embodiment of meanings” within a “geography of enactment. To be symbolically enacted, to be taken up into the body schema are gestures symbolizing this reconciliation [of meaning], not as mere mental representation, but as expressed bodily” (Herman, 2009, p.105). Thus, mo‘olelo that reflect aloha ‘āina and biocultural values become enacted through bodily practices on the landscape, which are contextualized by the cultural narratives shared with volunteers.

Furthermore, as biocultural restoration sites in Hawai‘i welcome people from various backgrounds, from local and Native Hawaiian residents to foreign students and visitors, the biocultural restoration site serves as a place where everyone is given the chance to learn and build community and attachment to place. Aloha circles at the beginning of each work day, where all participants come in a circle and introduce themselves to the ‘āina, are another “invitation to rebuild relationship to land, others and yourself, that asks us to become vulnerable to connection” (Baker, 2018, p.109) by equally acknowledging each participant as well as the land itself. Thus, biocultural restoration sites simultaneously become a place for restoring ecological health, increasing local food production, and “enacting Indigenous futurities” (Baker, 2018) through culturally-informed practices and values enacted on the landscape. This not only creates places for community building but also spaces for transformation, as the fusion of a more Hawaiian worldview into biocultural restoration work has the potential for altering participant values and eventual behaviors. Thus, I argue that mālama ‘āina volunteering can foster biocultural citizenship among volunteers by imbuing participants with values and perspectives in

line with an ethic of biocultural citizenship.

Conclusion

As we have seen in our exploration of various views of nature, humans throughout history have been subject to the narratives and ideological assumptions that surround them, shaping their perspectives of, relationship with, and behavior towards nature. Thus, incorporating cultural aspects into our engagement with nature in the form of biocultural restoration is as natural (and cultural) as any other engagement with nature. It also comes as no surprise that, with current trends leading people back to nature, biocultural restoration has been attractive to many who are seeking to reconnect to the land through embodied experiences. It is here that these two phenomena meet: individuals, many of which were distanced from nature due to upbringings tinged with dominant Western ideologies, attempt to “escape” back to nature through volunteering at biocultural restoration sites. And, because of the biocultural nature of these experiences, many are in turn exposed to alternative worldviews and narratives that may destabilize or even completely untether their original relationship to nature. Furthermore, Indigenous people such as Native Hawaiians, who have experienced a loss of cultural knowledge from settler colonial influences, can further reconnect to their ancestral lands by (re)learning cultural practices and values at these sites as well. This is where the transformative potential of these experiences lie; embodied experiences of doing biocultural restoration work on the land, coupled with more integrated nature-culture narratives, provide an avenue by which individuals can experience an intimate connection to nature, and internalize values that are more bioculturally favorable. Thus, in my call for an ethic of biocultural citizenship, I point to biocultural restoration sites as the breeding ground for this new acknowledgment of the “old”, and the incorporation of place-based, inseparable human-nature values for the future. As the

Hawaiian ‘ōlelo no‘eau (saying) goes, i ka wā ma mua, ka wā ma hope: “the future is found in the past”. As Kame‘eleihiwa (1992) puts it: “It is as if the Hawaiian stands firmly in the present, with his back to the future, and his eyes fixed upon the past, seeing historical answers for present-day dilemmas” (p.22).

Ch.4: Neoliberal Contradictions Amidst Grassroots Efforts

While community-based resource management and conservation have the potential to empower local communities to care for the lands and resources closest to them, it is important to contextualize the discourse that has made community-based approaches seem like a panacea for both local communities themselves as well as the state entities that work with them. What makes localized, place-based resource management, an approach that many Indigenous and local populations had already customarily been implementing for generations, suddenly a hot topic of conservation in recent years? Ironically, while the rise in grassroots biocultural restoration in Hawai‘i has gone hand in hand with the Hawaiian cultural revitalization movement and a growing desire to (re)connect to and revitalize particular places, it also comes into being due in part to current trends of neoliberalism which have become widespread on national and international scales.

The term neoliberalism is used here to “describe the wave of market deregulation, privatization and welfare-state withdrawal that swept the first, second and third worlds” (Venugopal, 2015, p.168) starting in the 1970s. According to Harvey (2007), the doctrine of neoliberalism “proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade” (p.2). Neoliberalism swept in to reduce the welfare state in the US and elsewhere with the promise that utilizing neoclassical economic theories of the market would make room for these “individual freedoms” through radically freeing the market. With welfare safety-nets shrinking, government regulations loosening, and tariffs getting eliminated, the neoliberal method of social responsibility changed from unionized, collective action to entrepreneurship and individual, rational choice. Using Venugopal’s (2015)

words, neoliberal logics assume that “economic rationality [will] prevail” (p.172), echoing the assumptions of the “rational” choice theorists mentioned earlier.

According to these neoliberal logics, the state must take a hands-off approach in order to let the market “do its thing”. Neoliberalism has thus “led to a new politics of care played out through devolution and privatization of services” (Hasenfeld and Garrow, 2012, p.297), which assumes that “the state and its bureaucracies would be more responsive to its citizens if entitled services were devolved to the local level and subjected to market principles.” Does this championing of the local sound familiar? Neoliberal discourses around devolving government services uncannily echo the discourses around the benefits of community-based resource management. McCarthy (2004) refers to this phenomenon as hybrid neoliberalism in the case of community forestry, noting that “community forestry and neoliberalism in the United States have much in common in their timing; in their assumptions about communities, states, and markets; and in their institutional forms and legitimating discourses” (p.996). This is part of a broader trend in which “neoliberalism is hybridizing with other institutional forms and political agendas” (p.998) like community-based resource management and grassroots restoration. The emphasis on localizing natural resource governance happens to conveniently fit into this neoliberal structure. This subsequently enables hegemonic structures to support potentially counter-hegemonic community-driven governance schemes—at least to the degree that current neoliberal constraints would allow.

It is around this time of neoliberal restructuring throughout the US and globally that mālama ‘āina organizations began to spread throughout the Hawaiian islands in the 1970s. This is certainly not to say that neoliberal forces *caused* the proliferation of biocultural nonprofits, but rather that they provided favorable political-economic circumstances in which the Hawaiian

cultural revitalization movement and rise in environmentalism could translate into state-legitimized nonprofit institutions practicing biocultural restoration. It is also important to remember that this political-economic shift is a direct symptom of settler-colonialism in Hawai‘i, as American politics were dominating the political discourses in a place that formerly had its own political sovereignty and subsistence economy. Therefore, as I speak to the political-economic conditions that assisted in the proliferation of biocultural restoration organizations, I am also speaking directly to settler-colonial legacies that continue to structure the political-economic, social, and physical landscapes here in Hawai‘i.

History of Biocultural Restoration in Hawai‘i

The massive land-use and land tenure changes of modern Hawai‘i that have transformed the land from communally cultivated ahupua‘a to privately owned sugarcane fields—and later on, to apartment buildings, hotels, and military bases—all have their roots in the imposition of settler-colonial capitalism. With the privatization of ‘āina came the opportunity for foreigners to capitalize on lands that they saw as commodities rather than ancestors, therefore not only leading to severed ancestral ties to land and less intimate human-environment relationships, but also to a classic example of Marx’s primitive accumulation. Harvey (2003) provides a succinct overview of Marx’s concept, which includes the following aspects:

“the commodification and privatization of land and the forceful expulsion of peasant populations; the conversion of various forms of property rights (common, collective, state, etc.) into exclusive private property rights; the suppression of rights to the commons; the commodification of labour power and the suppression of alternative (Indigenous) forms of production and consumption; colonial, neo-colonial, and imperial processes of appropriation of assets (including natural resources); the monetization of exchange and taxation, particularly of land...” (p.145).

These conditions accurately describe the dispossession from land and switch to a capitalist economy which occurred in Hawai‘i with the slow but steady encroachment of settler-colonial institutions and ideologies on the landscape.

This modern history of primitive accumulation in Hawai‘i was only the start of capitalism’s drastic alterations to the socioecological landscape, paving the way for continued systemic injustice as Hawai‘i’s economy remains dependent on the US military and tourism industries, foreign land-grabs continue with luxury, beach-front properties that most locals cannot afford, property taxes continue to soar, and Native Hawaiians often become houseless or must move off-island because they cannot afford to buy land on their own ‘āina. These and many other issues are rooted in this history of land dispossession, and continue to perpetuate systemic inequalities and settler-colonial ideologies that make the current status quo seem “natural”, despite the violent injustices on which this modern Hawai‘i was built.

This is where mālama ‘āina and aloha ‘āina come in as part of the Hawaiian cultural revitalization movement as was earlier discussed; to push back against this encroachment of settler-colonial injustices and restore connections between people and ‘āina as well as the ‘āina itself. Understood as a counter-hegemonic movement toward Indigenous resurgence and community-empowering grassroots restoration, the realization that neoliberalism had a hand in this resurgence as well is striking.

Neoliberalism has assisted in setting the stage for the growth of biocultural restoration organizations in Hawai‘i in two distinct ways:

1. By devolving governmental responsibilities to the nonprofit sector, and
2. By stressing the importance of individual social responsibility.

With the roll-back of the US welfare state came a void in social service provisions that were in turn filled by private and nonprofit entities. Because of this, Turner (2001) explains that “the third sector has expanded to satisfy communal needs” (p.199) but are simultaneously placed “under the same financial and management pressures that shape the capitalist corporations”

(p.202). Thus, rather than being motivated by the sheer desire to give back to the community, nonprofits are often also “driven by a logic of resource maximization and enhancement” (Turner, 2003, p.202) and are starting to turn towards a “‘workplace model’ that sees volunteers as unpaid workers” (NCIA, 2015, p.9). In other words, the third sector is now expected to provide social services that the government was once expected to provide, except without much governmental support. This leads to organizations with limited financial and labor capacity that in turn depend on the unpaid labor of volunteers, changing the role of volunteers from “extra” to “necessary” help.

In the context of Hawai‘i, we see this happening with biocultural restoration organizations as well. Many of these organizations work in partnership with the state to gain access to government lands and in turn help the government to manage them. At face value, this seems to be a decent arrangement; the organization can work and access the land they wish to restore without owning it, and the state is able to “manage” state lands that it did not have the capacity to manage on its own. However, in the case of Kauluakalana, this arrangement came with the cost of extreme financial burden and instability. With the devolution of government responsibilities onto biocultural restoration organizations like Kauluakalana, these organizations are left with lots of land to manage and with little resources to do so.

On a smaller scale, neoliberalism has also shaped the way in which we perceive citizenship and social responsibility. As Vradi and Montsion (2014) contend in the context of volunteer tourism, “Situated at the intersection between the de-responsibilised post-Fordist state and the re-responsibilised entrepreneurial self (doubly responsible for its own well-being and that of its community)” (p.338), the new ideal citizen emphasizes individual choice rather collective political action. Thus, as the government retracts its role in providing social services, citizens are

encouraged to perform the neoliberal ideal of individual freedoms through making responsible, rational life choices that provide a service rather than collective mobilization, the latter of which is “stigmatized as too disruptive, unproductive, and idealistic” (Kimura & Kinchy, 2016, p.352). This logic conveniently reinforces the hands-off role of government services while also preventing collective political action that could disrupt these neoliberal processes. Citizens are therefore encouraged to partake in individual actions of social responsibility such as volunteering, green and ethical consumerism, and making minimalistic lifestyle choices which work within rather than against the current political-economic system. Vrasti and Montsion (2014) describe these ideal citizens as:

“responsible, self-reliant and self-governing individuals conforming to the (neo)liberal injunctions of good citizenship. These are the flexible subjects who can assume responsibility for themselves and the welfare of their communities without burdening the state or blaming the economy for the free labour they have to perform, the social goods they must distribute and the ties of sociality and affectivity they need to build in the wake of shrinking social services” (p.354).

Thus, volunteering and other individual acts of service depoliticize the roll back of state services and obscures the option of collective political action by placing the responsibility on the individual to help themselves and others.

Neoliberal Pervasion or Diverse Economies?

In the context of this research, my interest in fostering biocultural citizenship ironically resonates closely with this neoliberal idea of individual citizenship. Examining how volunteers’ and interns’ experiences at biocultural restoration sites have altered their individual values and behaviors seems in essence to echo this logic of instilling civic duties in individuals to volunteer rather than organize for the benefit of their communities. While it is important to recognize the political-economic context in which these ideas of individual citizenship have become prominent, this research seeks to uncover the transformative and performative potential of these

experiences *despite* the structural constraints that surround them.

The work of diverse economies is key to this perspective. Diverse economies research aims to explore the many small-scale economic arrangements that currently exist as alternatives to a pure capitalistic economic model to envision “other worlds” outside of the dominant capitalistic framework (Gibson-Graham, 2008). This area of research, rather than proposing the potential imposition of a new singular economic system, attempts to create an ontology of new economic possibilities that spring up in the midst of capitalistic hegemony. In simpler terms, a diverse economies lens seeks to challenge the assumption that capitalism is an all-encompassing, inevitable economic structure, and instead urges us to focus on the pockets and possibilities of other-than-capitalistic relations that already exist.

According to Gibson-Graham (2008), the performative power of studying alternative economic arrangements may be the key to “bringing new worlds into being” (p.614) by shedding light on existing and budding alternatives that contest the hegemonic assumptions of capitalism rather than merely criticizing the current status quo. The performative power of these small-scale alternatives stems from the discursive power which such operations continue to proliferate, disrupting normative assumptions of hegemonic capitalistic relations through the continued (re)presentation and (re)production of alternative economic worlds. Thus, while small-scale alternatives such as WWOOF are still constrained by capitalistic limitations (Mostafanezhad et al., 2015), such programs continue an alternative discourse of more intimate human-environment relations and organic farming that fuels similar efforts elsewhere. Just as Ostrom (1990) contends that CPRs *can* be managed collectively without privatization, so does biocultural restoration provide a “politics of possibility” in its alternative to hegemonic geographical imaginaries of Hawai‘i and the economic structures that underlie them.

What do I mean by “performative power”? In this case, performativity refers to the ability of embodied performances of identity to enact, perpetuate, and also challenge particular power dynamics and ways of being. As McKinlay (2010) summarizes from Judith Butler’s work on performativity, “Performativity is the materialisation of norms, a process that is inherently unstable, latent with the possibility of resistance. Performativity refers both to the fragility and the stubborn consistency of identity” (p.235). If we unpack this, we can see that ideas of performativity do not at all deny the materiality of structural constraints, but rather convey the possibility of altering those materialities by destabilizing the consistency of hegemonic identities and performing outside of normative constructs.

Biocultural restoration sites can be considered one of these potential performative worlds. While presiding in the midst of neoliberal structures of decentralized resource management, with many of these sites being run by poorly funded nonprofit organizations, these spaces nonetheless present potential for alternative economic exchanges and relationships that go beyond monetary value. Not only is food being planted, harvested, prepared, and shared with volunteers on-site without any monetary exchange, but the labor on the land itself is often volunteer-heavy as well, demonstrating that individuals are driven to provide time and labor to these places without monetary reward.

Therefore, people are driven to participate at these sites by more-than-monetary benefits that involve reciprocal economies of sharing rather than purely monetary transactions. As Kimmerer (2013a) describes, these types of sharing exchanges create reciprocal relationships, both to land and each other:

“From the viewpoint of a private property economy, the “gift” is deemed to be “free” because we obtain it free of charge, at no cost. But in the gift economy, gifts are not free. The essence of the gift is that it creates a set of relationships. The currency of a gift economy is, at its root, reciprocity.” (p.28)

Therefore, biocultural restoration sites, however small and spread out, nonetheless present “other worlds” of economic difference and possibility by fostering reciprocal relationships and non-monetary transactions between people and ‘āina.

“Other Worlds” of Biocultural Citizenship

Gibson-Graham (2006) exemplify this “politics of possibility” with the case of second-wave feminism. They contend that feminism did not make its way into the global mainstream consciousness from top-down, large-scale societal and state transformations, but rather from the amplification of small-scale transformations in local places throughout the world:

“The complex intermixing of alternative discourses, shared language, embodied practices, self-cultivation, emplaced actions, and global transformation associated with second-wave feminism has nourished our thinking about a politics of economic possibility—impressing us with the strikingly simple ontological contours of a feminist imaginary: *if women are everywhere, a woman is always somewhere, and those places of women are transformed as women transform themselves*” (p.xxiv).

Similarly, if local communities island- and world-wide took part in biocultural restoration programs and other place-based practices that strengthened their relationship to place and community, then biocultural citizenship could be adopted on local levels worldwide. Thus: *if nature is everywhere, and people are always somewhere within the “natural” environment, then those places of people are transformed as people transform themselves*. This does not only include communities that live near “pristine nature” or rural areas; urban environments, too, have the potential for place-based interactions and relationships, and arguably are in more need of such programs and opportunities to connect with nature. Like in the case of my case study site of Ulupō Nui located within urbanized Kailua Town, there is potential for place-based connection even within the belly of the urban beast. Hence, we can think about localized, embodied, and small-scale transformations at biocultural restoration sites throughout the islands as potential places for participants to transform themselves and in turn their own communities; communities

after all start with the people that comprise them.

This is not to say that a single individual's behavioral change will automatically make a large impact on the very powers that be; we are all well aware of the futility of one person's attempt to impact the messy entanglement of the global food supply chain by simply buying a locally-sourced papaya at the farmer's market. But it is the repetitive act of this, its impact on the market as well as the communities that person dwells in, that can begin a collective movement for change. As Butler (1990) noted, "The subject is not determined by the rules through which it is generated because signification is not a founding act, but rather a *regulated process of repetition* that both conceals itself and enforces its rules precisely through the production of substantializing effects' (Butler, 1990: 145).

And key to this understanding is the difficult but necessary ontological shift that acknowledges *all* social norms, rules, and transactions as a series of collectively-held repetitions that are mimicked at various degrees by a society. Conceptualizing hegemony in this way better enables us to find the pukas, or holes, in the fabric of settler-colonialism, capitalism, neoliberalism, and all the other structural "-isms" that threaten to constrain visions of alternative futures. If all societal norms and rules are a set of repetitive performances of identity and subjectification, then individual acts to alter these performances in repetitious ways can subsequently begin to turn the tide of society in a different direction.

Similarly, this idea of "other worlds" can apply to the performative power of biocultural citizenship. As Vaughan (2018) argues, stories of community-based resurgence in Hawai'i "do not negate ongoing loss and injustice" that have occurred, but rather "offer possibilities: to restore lost connections, grow new ones, and build models that emphasize responsibility and caretaking of lands and resources, rather than ownership" (Vaughan, 2018, p.88). Just as

alternative economic spaces are small pockets of possibility in the midst of capitalistic hegemony, so too can biocultural restoration sites be as pockets of aloha ‘āina in the midst of settler-colonial, capitalistic hegemony. From a diverse economies perspective, biocultural restoration sites can therefore be considered performative worlds of biocultural resurgence within the settler-colonial system of Hawai‘i. Studying the mechanisms that establish, maintain, and perpetuate biocultural citizenship at these sites therefore provides an opportunity to study how these places perform alternative futures for Hawai‘i that in turn have the potential for continuing these discourses and efforts elsewhere.

All of this sounds very dazzling and hopeful, and many would argue that it is *too* idealistic and agency-oriented to be a realistic approach. However, as Gibson-Graham argue, “Narratives and social representations of existing and potential alternatives to capitalism may begin to resonate, to generate affect, to interpolate subjects, to ignite desire. In other words, they may become compelling, just as so many representations of capitalism now are” (Gibson-Graham, 2006, p.20-21). This again enables us to understand the non-essentialism of capitalism, and instead recognize its continuation is based on the reproduction of its processes as well as the logics that come with it. If the logics of settler-colonial capitalism could switch to more decolonized, reciprocal perspectives, these could in turn become the new “logics” with which social norms and structures are constituted.

Furthermore, it is important to note that taking a diverse economies approach to biocultural restoration in Hawai‘i does not mean that we must ignore the structural constraints of these efforts. Indeed, these spaces always hang in the balance between the potentialities of agency and the constraints of structuralism. Butler herself acknowledged that the term subjection simultaneously “signifies subjectivity and subjugation” (Disch, 1999, p.550). But what Gibson-

Graham and Butler point out is that we may be missing exciting opportunities for change if we do not pay attention to the small-scale pockets of alternative agency within the broader structural constraints that exist.

Kīpuka Aloha ‘Āina

Conceptualizing biocultural restoration sites as kīpuka help us to envision them as the performative, economic “other worlds” that Gibson-Graham envision. Kīpuka refer to oases of green that are left intact and flourishing amid lifeless lava fields. According to Davianna McGregor, these natural kīpuka metaphorically reflect the phenomenon of what she calls “cultural kīpuka”, which she defines as “rural communities that have been bypassed by major historic forces of economic, political, and social change in Hawai‘i” (Howes et al., 2010, p.209). These culturally-rich spaces that survive despite the drastic change of the surrounding socio-political as well as physical landscape go beyond the imagery of oases as, like natural kīpuka which survive and slowly spread seeds to re-enliven the land around it, “cultural kīpuka are communities from which Kānaka ‘Ōiwi culture can be regenerated and revitalized in the contemporary settings of Hawai‘i” (p. 209). Peralto (2018) also extended the definition of cultural kīpuka to include kīpuka aloha ‘āina, which aims "to move us beyond understandings of kīpuka as mere remnants of the past, to assert, rather, the importance of these kīpuka as piko of resurgence for the regeneration of our lāhui, today and in the future" (p.15). In other words, kīpuka are not limited to remnant places and communities of cultural richness, but can also include new spaces where these cultural practices and knowledges are being enacted on the landscape.

In the context of biocultural restoration, kīpuka are both physical places of ecological restoration as well as social spaces of cultural revitalization, Indigenous resurgence, and

community (re)building. These spaces echo what Goodyear-Ka'ōpua (2013) describes as "zones of Indigenous cultural growth" (p.7). By referring to biocultural restoration sites as biocultural kīpuka, I hope to call to mind the imagery of these sites as being kīpuka that, through participation by volunteers and interns alike, have the ability to plant the seeds of aloha 'āina to grow freely throughout Hawai'i once again. Envisioning these biocultural seeds spreading across the landscape from particular biocultural kīpuka helps us to visualize the performative power of these "other worlds" of non-monetary exchange, ecological restoration, and Indigenous resurgence. Just as natural kīpuka spread seeds between themselves until the lava fields are restored to vibrant native forests, so can we hope that spreading seeds of biocultural citizenship can broaden the scale of these efforts to grow and fill out throughout the islands one person at a time.

Part 2: Results

Ch. 5: Seeds of Transformation

It is early morning, and the stones of Ulupō heiau have become fully awakened to the sunlight of a new day. Below it lay rows of lo‘i kalo, and to the side, hala and kukui trees litter the grassy ground with lau (leaves). These lau are perfect for mulch, though we were warned to be careful when handling the lau hala (leaves of the Hala tree) else they prick our fingers with their thorny edges.

We gather in an aloha circle to start the day and introduce ourselves to the ‘āina, saying our names, where we call home, and one relative or special person we bring with us. After introductions, we must ‘oli (chant) to clear the space with intention and ask for permission to enter this ‘āina. The staff begin to chant:

“O Kailua i ke oho o ka Malanai
Moe e ka lau o ke ‘uki
I pu‘iwa i ka leo o ka manu lae
E kuli ana ‘oe he wahine
‘A‘ole lā
‘O Hauwahine mā no kēia lae
Nā wāhine o Kailua i ka la‘i.”

They explain that Hi‘iakaikapoliopole (also known as Hi‘iaka), the infamous goddess Pele’s sister, chanted this oli on her journey through the islands. When she stopped in Kailua, Hi‘iaka and her friend, Hauwahine, looked back at Kawainui and saw two female figures sitting by the water. Hauwahine exclaimed that they were two beautiful women there, glowing yellow with ‘ilima lei, but Hi‘iaka was not convinced. She instead thought that these two figures were mo‘o; lizard water guardians. Hauwahine did not believe her and insisted they were two beautiful women, so Hi‘iaka began this chant to show her the truth that lay beyond what the eye could see. Translated into English, this is what she said:

“Kailua in the wisps of the Malanai wind
Where the leaves of ‘uki lie at rest;
When startled by the voice of a bird

You will assume that these are women
But no
They are Hauwahine and her companion
The women of Kailua in the calm.” (De Silva & De Silva, n.d.)

After chanting this ‘oli, the two women morphed into mo’o and slithered back into the waters of Kawainui, proving that Hi‘iaka was right, and that the women were not really what they seemed to be.

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Some people call Kailua “Kailua-fornia”, a place which Kelsey noted locals often assume is “just where the white people live”. This is because of the influx of residents from the US mainland, the skyrocketing housing prices, and the California-esque residential developments that riddle the town. Many people who consider themselves “locals” try to avoid crowded, gentrified, and white-washed places like Kailua and the infamous Waikīkī, as these urbanized, concrete communities seem to some to be ruined landscapes of commercialism and recreation. Conversely, new residents are likely dazzled by the turquoise-blue waters of Kailua beach and the familiar renovated Whole Foods and Wendy’s that stand proud along the main road.

When people come to Ulupō Nui to volunteer, they must first drive through this suburban chaos, take a turn by the local YMCA, and suddenly find themselves transported to another place all together. A place where there are no more buildings, a Heiau stretches far and high, lo‘i kalo lay in rows down the hill, and the expanse of Kawainui continues almost as far as the eye can see. In this place, one forgets that they are in Kailua; at least the Kailua that so many locals and tourists were conditioned to believe it to be. The settler-colonial vision of this place becomes replaced with an aloha ‘āina vision of cultural perpetuation and reciprocal relationships with ‘āina.

Before the physical part of the workday starts, volunteers are gathered together in a circle at the base of Ulupō Heiau to introduce themselves to the ‘āina and to take part in oli, or chanting. These are times where intentions are set for the day and everyone takes a moment to center themselves in the sacredness of the place before the work begins. Kimmerer (2013a) states that these moments of ceremony are what “marries the mundane to the sacred. The water turns to wine, the coffee to a prayer” (p.37). At these moments, the work is elevated past mere “physical labor” on the landscape to something much more sacred and meaningful. Similar to what I mentioned earlier about liminality, these circles of intention create a sense of liminal space, changing the site from a mere “restoration site” to a sacred, cultural space.

Volunteers are later brought to the front of Kawainui Marsh to hear about the mo‘olelo of these places. Staff explain to the volunteers that Kawainui Marsh was actually Hawai‘i’s second largest fishpond before it became overgrown with invasive weeds, and that there are mo‘olelo describing lepo ‘ai, or edible mud, that was able to feed Kamehameha’s crew of warriors when they came to conquer O‘ahu. They also share another story about a boy named Kahinihiniula who helped to clear Kawainui fishpond during a series of workdays. As a gesture of thanks to community members for keeping the fishpond clean, each person was given fish to bring home at the end of the day. Kahinihiniula, however, would always forget to bring fish back home for himself and his grandmother. On the third day of doing this, his grandmother gave him a magical stick that lured all the fish out of their pond and followed him up to Maunawili where they lived. These stories not only enhance the significance of Ulupō Nui as an important historical site, but also enables volunteers to reimagine the overgrown wetland of Kawainui as an abundant fishpond that was clean enough for people to ingest a mud-like substance from its depths. It also frames the work being done there today as part of a kuleana that was taken on in those ancient

times as well, when people gathered as a community to clear the fishpond and were in turn given fish for their work.

When it is time to work, volunteers are no longer just weeding lo‘i or mulching ‘uala patches; they are becoming characters of these mo‘olelo of Ulupō as they slowly work to restore Kawainui back to the abundant loko i‘a it once was.

Results

Both the quantitative and qualitative data collected reveal that biocultural restoration experiences do indeed have the potential to foster values of biocultural citizenship, though instilling commitment and consistent behavioral change was not as common. Two main themes gathered from the survey and interview data were motivations and values that helped restore pilina to nature, place, and people, as well as aspects of volunteer experiences that helped to empower them as biocultural citizens. Structural and ideological challenges to fostering biocultural citizenship through biocultural restoration experiences were also discovered.

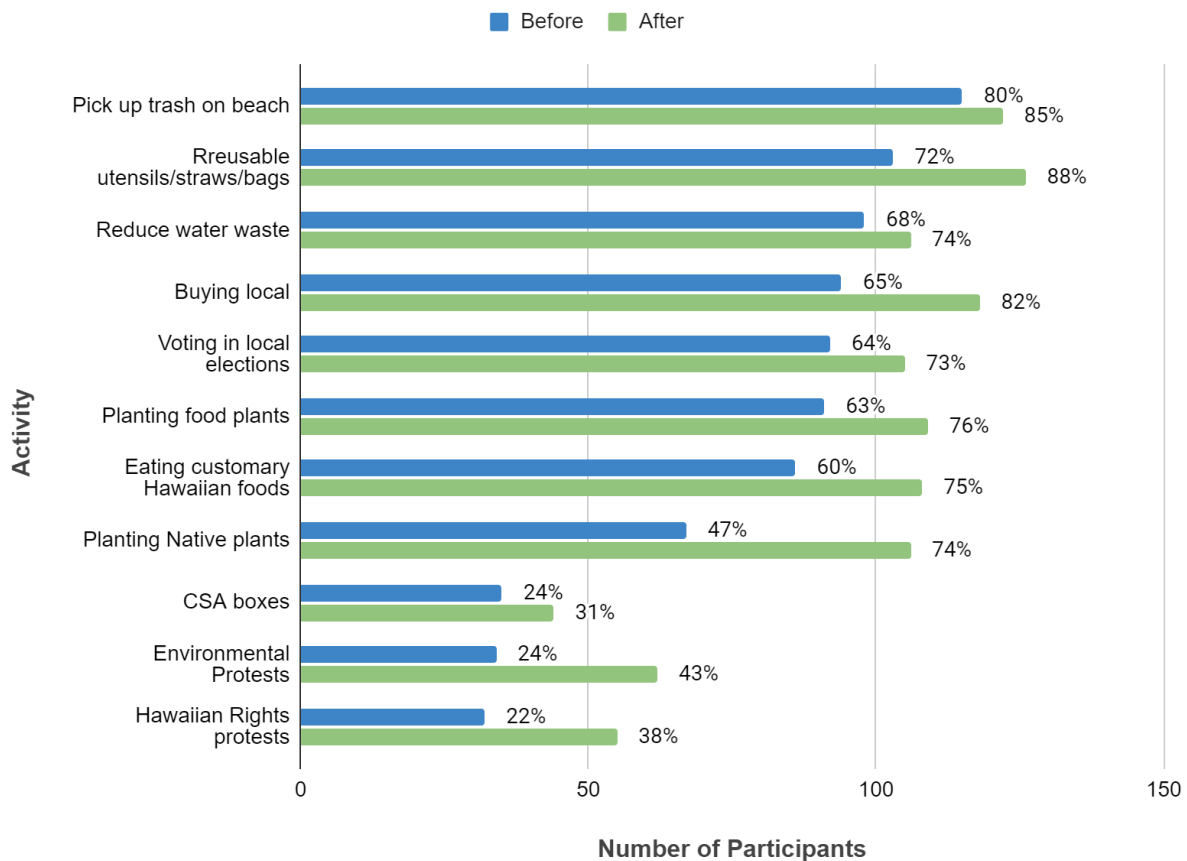


Table 1: Number of participants that took part in various biocultural citizenship activities before and after participating in biocultural restoration work (n=144).

The survey findings revealed mixed results about the impacts of biocultural restoration on citizenship. On the one hand, all biocultural citizenship activities listed in the survey showed an increase in participation after experiencing biocultural restoration work (Table 1). When comparing how many biocultural citizenship activities respondents took part in before and after biocultural restoration according to each individual's account, 63% of participants reported an increase in biocultural citizenship activities. Similarly, most participants reported either experiencing a significant or somewhat significant change in their perspectives and behaviors on the biocultural spectrum (Table 2). On the other hand, there was little change in the number of individuals that selected environmental, cultural, or environmental *and* cultural motivations for participating in biocultural restoration. This indicates that peoples' core values often remained the same, with many passionate biocultural restoration participants already formerly being interested in ecological and/or cultural efforts. The top three impacts that respondents indicated had changed "very much" after participating in biocultural restoration refer to perspective and value changes (selected by 72%-80% of respondents), while the other impacts were all behavioral changes. This indicates that value changes were more common than actual behavioral changes among participants, which could be due in large part to some of the ideological and structural constraints that I will go over in the later sections.

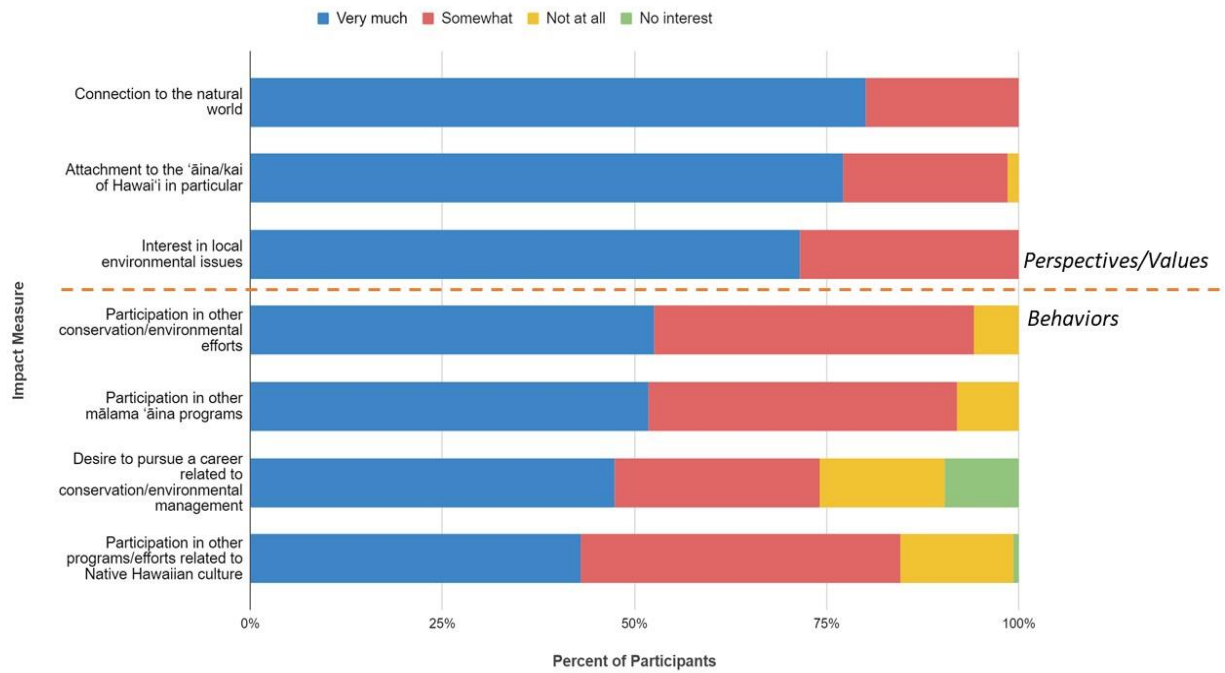


Table 2: Effect of biocultural restoration experiences on various respondent values, participation, and career goals counted per respondent (n=137).

Restoring Pilina to Nature, Place, and People

One major theme from the interviews was the desire to connect, whether that be to food systems, nature, culture, or people. As mentioned before, this stems in large part from the desire to have embodied and authentic experiences in a modern society that is often alienated from nature and a sense of community. At biocultural restoration sites, people are given the opportunity to create pilina (relationships) with nature, with the place, and with the people working there, in turn becoming more invested in biocultural citizenship.

Embodied, Liminal Experience

The search for embodied, authentic experiences in the face of alienation both from ‘āina and from the ‘āi (food) that it provides was a theme mentioned frequently by research participants. As food security has become a major issue in Hawai‘i due to high import-dependency and the erosion of the ahupua‘a system, the disconnect from local food systems has also fostered alienation from the means of food production in the islands. This disconnect from food systems, coupled with feelings of disconnect with nature in general, led many participants to crave embodied experiences with nature and food. This not only reflects a broader hunger for authenticity and reconnection to land and food that manifest in various back to the land initiatives like volunteer farm tourism (Mostafanezhad et al., 2015), but also in increased calls for food sovereignty amongst Indigenous peoples (Figueroa-Helland et al., 2018; Gupta, 2013).

Embodied experiences with food were therefore highly valued by volunteers and interns. One participant who had never had fresh poi before harvesting and pounding the kalo at Ulupō spoke of this significant experience:

“I pounded it and ate it right there that second. That's the first time I'd ever done that. And then the taste? I can't even eat bag poi anymore. Like, that bag poi is commercially farmed. They have machines that regulate temperature, regulate water, machines that do a majority of

the work that humans would do. And it's just the taste and the feeling, like the amount of love that you put into it."

Thus, harvesting taro, pounding it into poi, and eating it became more than merely physical actions of food production, instead presenting an intimate experience with land and food that could be found nowhere else in the supermarket.

Echoing this sentiment, Keoki, a volunteer-turned-intern at Ulupō, described how having personal connections to the people planting one's food also makes eating it a more authentic experience: "We're eating food that someone has personally planted and put actual love into it. And you can taste it! It just tastes so much different than anything you could buy in the store." A Kupu intern similarly remarked, "Setting up the imu (underground oven) and harvesting was one of my favorite parts because it went full circle. I got to produce the food and I know where it came from." Again, these embodied experiences with the process of planting as well as harvesting, preparing, and eating food directly from the 'āina carries much greater value than the food "commodities" one can buy at the store. These sentiments convey feelings of disconnect from the means of food production that stem from Hawai'i's participation in the global capitalist food system, making the embodied experiences of planting and harvesting food at Ulupō and other biocultural restoration sites much more meaningful to volunteers. Furthermore, the emphasis on the "personal" experience of food production puts a face to the people planting the food crops, contrasting from the faceless agro-industrial complex from which a majority of Hawai'i's food originates.

Embodied experiences with food do not just reveal a desire to connect back to where one's food comes from, but also the deep cultural knowledge infused in food plants. Adya, an ethnic studies lecturer, talked about how her embodied experience with planting and eating kalo helped her to not only learn but experience Hawaiian knowledge and cultural practice first hand:

“I know the history. I know the bayonet constitution, the overthrow; all these dates and events. But there is something that gets evacuated in that scholarship: *everyday cultural persistence, resistance and practice* [emphasis added]. For me, that is where mālama ‘āina has become so important. Helping to pound poi and seeing all the different colors because of all these different varieties, and how they taste so different for example. I think it is a different scale of Hawaiian knowledge, history and cultural practice to be able to see how it is able to persist through this cycle of planting and growing.”

In this case, Adya’s embodied experiences with preparing and eating kalo served as a reminder of the continuation of Hawaiian cultural practices today in what Cornassel (2012) calls “everyday acts of resurgence”. Instead of being limited to a conceptual understanding of Hawaiian culture and history, these embodied experiences doing biocultural restoration provided a means of experiencing this more intimate scale of human-environment relationship and care.

Having these embodied connections to ‘āina and the food it provides put participants in a more positive, intimate mindset when preparing food. Keoki described how, after starting to volunteer at Ulupō, he became much more aware of his state of mind when making the pickled ‘ōpae (shrimp) he sells on the street: “After I started making ‘ōpae and going to Ulupō, I started playing Hawaiian music when I’m making it, being real nani (good; beautiful) around the food, thinking only positive thoughts. Some customers told me, ‘oh my God, I want to cry it’s so good.’ That’s literally putting all that mana into the food that I’m preparing.” Keoki’s participation in biocultural restoration work changed his mindset and behavior regarding how he prepared his ‘ōpae, making it an almost spiritual experience of passing positive mana to others rather than merely selling food on the side of the road. His experiences at Ulupō instilled a level of sacredness into the food which had not occurred to him before. This exemplifies a reversal in the food commodification process, as shrimp and vegetables purchased as commodities in the grocery store become enlivened as more-than-commodity through Keoki’s care for its preparation and the relationships he builds through that direct exchange with customers. This sense of the sacredness of ‘āi resonates with the Hawaiian belief that ‘āina is a family member

requiring sacred care and respect. This also resonates with the intimate connections to land shared by Indigenous peoples more broadly, as an Indigenous worldview often incorporates sacredness, respect, and reciprocity into human-environment relations (Kimmerer, 2013). Therefore, in this case, food surpasses its utility as something meant for eating alone, and instead takes on a sacred, spiritual essence stemming from the sacredness of the ‘āina from which it originates.

Experiencing the embodied interconnectedness of things—like how food is always intrinsically connected to the land on which it grows—provided participants with a more mindful perspective about what is pono from a holistic perspective. Kelsey, an undergraduate student in Natural Resources and Environmental Management, explained that, after experiencing the interconnected nature of biocultural restoration and aloha ‘āina, the value of aloha ‘āina became a moral guide to her actions. She referenced an 1895 Hawaiian newspaper article called Ke Aloha ‘Āina; He Aha Ia? (Aloha ‘Āina; What is it?): “[The article] talks about aloha ‘āina being the magnet that pulls and directs your heart. And that's what guides kanaka (people) of Hawai‘i. So I think aloha ‘āina encompasses mālama ‘āina, but it's so much more. It's your guiding compass. It tells you what is right and wrong, what's pono and what's hewa (wrong), and what you should be doing to better the lāhui (Hawaiian nation).” The internalization of aloha ‘āina as a moral compass makes it far more significant than a singular cultural value, instead representing a mindset and way of life as well. This encapsulates the whole of the biocultural citizenship spectrum, as Kelsey refers to both pro-environmental behaviors like mālama ‘āina as well as behaviors that “better the lāhui” to be aspects of this holistic aloha ‘āina mindset. Thus, embodied and holistic experiences with ‘āina help foster aloha ‘āina understandings of intrinsically interconnected human-environment relationships, in turn encouraging biocultural

citizenship to nurture those relationships.

Participants expressed positive experiences from the holistic process of not only food production but the embodied production of any item made from the ‘āina. Like Keoki’s first experience with poi, which was much more meaningful to him due to his experience of the whole cycle from planting to harvest and preparation, this sentiment was also shared by Kelsey in the case of lauhala (hala leaf) weaving. She described how her teacher had given her a hala plant to plant on her own, while also teaching her how to harvest and prepare the leaves for weaving: ”I think being able to see it from start to finish is also another aspect of aloha ‘āina. Like the line: “Ke aloha ‘āina a hiki ke hope loa” — "until the very last [aloha ‘āina] is done". It reminds me that you cannot just stop and then half ass it, you have to see it all the way through and give your very best in every aspect.” While Kelsey did not learn how to make lauhala hats and other crafts *at* the biocultural restoration site where she volunteered and later worked, she continued that holistic connection to the hala tree by working among them, mulching ‘uala beds with their leaves, and teaching school groups how to do simple lauhala crafts. The appreciation that arises from taking part in this entire embodied process further reflects participants’ desires to be in touch rather than alienated from the processes of preparing food and other things from nature. This also exemplifies how aloha ‘āina values help to inform how participants perceive and internalize the work they do.

The physical work on the land was another embodied aspect of the experience that participants considered valuable. Grace, a college student who first volunteered in biocultural restoration during high school, explained the simple joy of embodied physical work: “I just genuinely enjoy the physical aspect of it. I like being outside, and going to a workday is a way to be active outside.” Kira, a long-term intern at Ulupō, also mentioned enjoying the physical

aspect of biocultural restoration work, considering it an efficient way of combining altruism and bodily health:

“The work is very demanding and I get really tired. But there’s a term, ‘makaluhi’, which means tired eyes. It’s that kind of tired where you look at what you did with tired eyes, and you feel proud of what you did; not that draining tired from a job that you don’t like. I’ve done office jobs and felt that other tired feeling, so I definitely prefer the physical labor. And I’m like, homies, I don’t gotta pay for a gym membership. I work out all the time just working here. So you’re giving back to something and also doing something that’s good for your health in one go.”

That sense of makaluhi is a prime example of the more-than-monetary values of participating in biocultural restoration work; not only are volunteers giving back to something they believe in, but in doing so participants can maintain their own physical and mental well-being as well. This once again demonstrates the reciprocal human-environment relationships on which this work thrives, and the embodied feelings of physical satisfaction that results.

The combination of doing physical labor on the landscape and eating food grown from the same place provides a deeper, more embodied connection to ‘āina. Makana, a long-time volunteer at Ulupō, talked about how this coupling of strenuous labor and eating off the land increased his connection to the site: “I feel really connected to that place because I literally put blood and sweat into it, and it’s fed my family.” Putting “blood and sweat” into working the land and also being able to eat from it thus created an embodied, physical bond between the volunteer and the land itself, enabling an active rather than passive interaction with place. Also, just as ‘āina simultaneously means “land” as well as “that which feeds”, so had participants continually conflated the importance of working on the ‘āina with the ability to eat from it as well. This indicates that participants have fostered a more reciprocal rather than one-sided relationship with nature, as physical labor is exchanged for the food and intimate experience that the ‘āina provides.

Many participants voiced that the knowledge they gained through embodied experiences on the landscape was much more effective than any learning they did from a textbook. One Kupu intern said, “I feel like I learned more here in two weeks than I ever learned anything from school”. Another Kupu intern made a remarkably similar statement: “I learned more about Hawai‘i in the last two weeks than the last two years that I lived here”. Especially for younger volunteers and interns like these two, learning from embodied experiences on the land really helped not only to strengthen what they learned but also made what they learned seem relevant and meaningful. Instead of learning about phenomena that happen in places far away, such as snow in the winter, they learn about how kalo grows in muddy terraces that they themselves stepped into and helped to plant and harvest. This place-based knowledge gained through embodied interaction with the environment is much more relevant for people to learn than abstract facts that don’t pertain to one’s local area or experience. These learning experiences also establish a deeper connection to the place and ‘āina of Hawai‘i compared to place-less facts taught in a classroom.

Participants also enjoyed the liminal experiences that their connection to biocultural restoration sites provided them. In other words, they enjoyed how out-of-the-ordinary these experiences were. Grace described the novelty of her experience in a lo‘i for the first time: “I liked the lo‘i because it was a really novel experience; I had never done any work in a lo‘i before. You get so muddy, and it’s really beautiful there too.” The excess of muddy experiences and natural beauty made working at biocultural restoration sites a unique experience that contrasts from everyday life. A Kupu intern expressed the appeal of the beauty at these sites as well: “The place is so enchanting, so far away from everything.” Ken, a member of the Protect Kaho‘olawe ‘Ohana, also spoke about how the quiet liminality of Kaua‘i made him feel more

connected and invested in caring for the place: “I never experienced the potency or the spirit of a place so strongly than when I’d go to sites in Kaua‘i. It's not that O‘ahu doesn't have that vibrant spirit, too, but there's just so many people and so much activity and commercialism that a lot of it gets diluted. So it's a lot about what's there, but really the experience is a lot about what's *not* there. And that allows people to really deeply connect.” To Ken, the the liminality of these special places stemmed in large part from the intimacy and lack of distractions that enabled deeper connection to ‘āina.

Rein, a staff member at Ulupō, mentioned being practically tricked into enjoying biocultural work because it was an excuse to get out of the classroom in highschool:

“We did this [biocultural] stuff for an elective class. It was really fun because we felt like we were skipping school just to go Kahana, but really we were still learning. To be like, “oh, we're gonna skip school to go to the beach and help the community hukilau,” ho, that was a dream! And then we ended up catching a bunch of fish and seeing it shared amongst the people and everyone that came out to help. That was a good time.”

After taking part in that hukilau (large net fishing) in Kahana, Rein continued to go back every week to help out with the lo‘i and the fishpond there in addition to his current work at Ulupō. What started as an excuse to get out of class became a life-long dedication to continue volunteering and working at biocultural restoration sites. This again sheds light on the power of liminal experiences in catalyzing continued participation.

These positive sentiments toward embodiment and liminality reinforce the notion that participants are searching for authentic experiences at biocultural restoration sites, echoing theories from tourism studies. Wang (1999) describes the “otherness” of novel tourist experiences as a form of “existential authenticity,” which refers to the subjective feeling of the authentic self when one is not constrained to the confines of the “everyday”. According to Wang, this is the type of authenticity that tourists look for because, unlike the alienating, restricting, rational nature of their everyday lives in modern society, the liminal experiences of “other”

places allow them a space to reconnect with their true selves. In a similar vein, biocultural restoration sites provide a liminal space for participants to explore themselves in a unique, embodied context that feels more authentic than their day to day habits and responsibilities.

Connecting to Nature Through Culture (and Vice Versa)

Considering the “biocultural” aspect of biocultural restoration, it comes as no surprise that the lines between the “cultural” and “ecological” blur at these sites. When initially searching for themes from participant interviews, the themes of connecting to nature and culture were prominent. Yet, during the analysis, I realized that these themes could not be teased apart, because respondents often did not mention one without the other. That’s when it hit me: most participants at these sites are not driven purely by “cultural” or “ecological” motivations. Instead, they connect with nature through cultural values and practices, and they conversely connect to culture through embodied interactions with nature. As Cronon says about our subjective understandings of nature, “Ideas of nature never exist outside a cultural context, and the meanings we assign to nature cannot help reflecting that context” (Cronon, 1996, p.15). We understand, interact, and make sense of nature *through* culture. Thus, our understandings of nature are always culturally founded, and there is nothing like exposure to alternative cultural views to destabilize dominant views of nature in favor of more reciprocal and integrated human-environment relationships.

This not only reinforces the “biocultural” in “biocultural restoration”, but also reveals that this biocultural take on restoration can in turn foster more holistic and nuanced relationships with nature that are infused with cultural values, practices, and worldviews as well. This in turn provides the opportunity for pro-environmental cultural values like aloha ‘āina to become internalized by participants, as these two sides of the biocultural spectrum are really inseparable.

When caring for the ‘āina of Hawai‘i through “ecological” restoration, we also aloha ‘āina by protecting and recreating abundance in culturally-significant places. Likewise, when perpetuating cultural values like aloha ‘āina and mālama ‘āina, we also reinforce the need to restore ecosystems through the kuleana that these values imbue in participants.

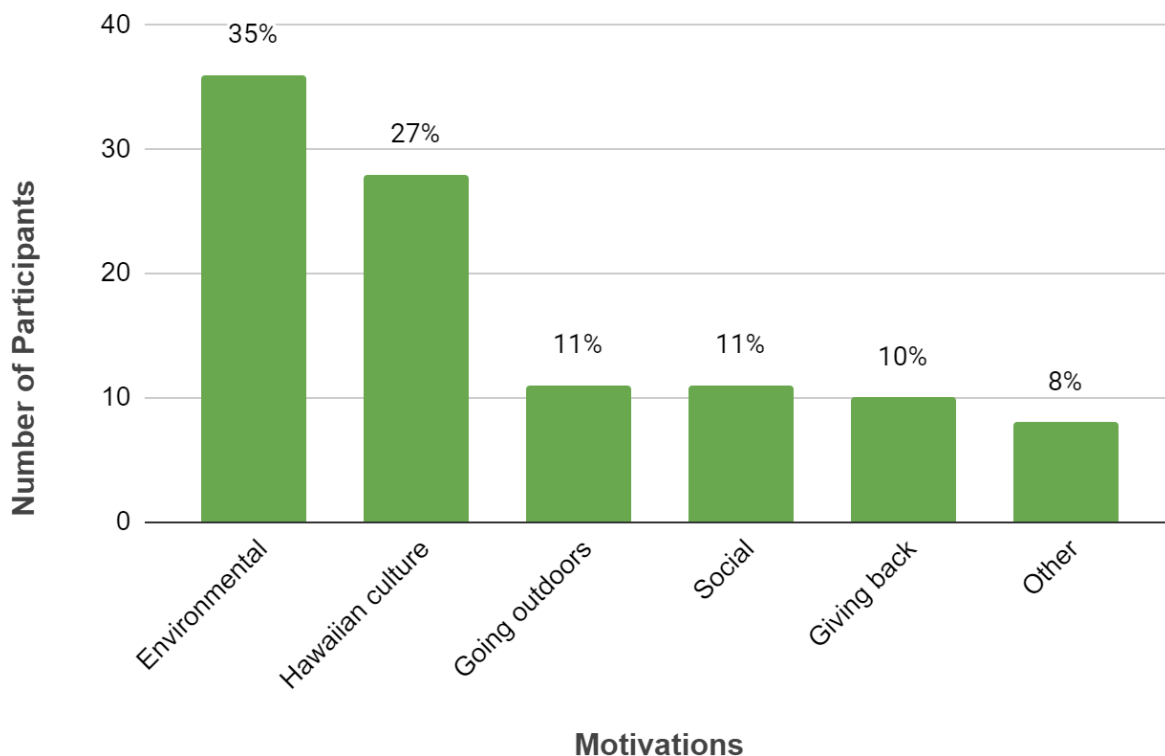


Table 3: Motivations to continue participating in biocultural restoration when respondents were asked to select one primary motivation (n=104).

The survey data reflects the significance of nature and culture as well (Table 3). When asked about their primary motivations for participating in biocultural restoration work, biocultural values of environmental (35%) and cultural (27%) motivations were chosen by most respondents, reinforcing that the opportunity to connect with nature and culture was indeed a significant aspect of respondents’ biocultural restoration experiences.

Connecting to Nature

Learning more about Hawaiian place-based knowledge and understandings of nature made respondents feel more connected to nature. Grace mentioned how learning about the cultural components of the landscape made her feel more connected to nature: “I enjoy being out in nature in Hawai‘i and knowing more about the impact that Native Hawaiian culture has left on it; it makes me feel more connected to nature. I also find the ahupua‘a system really interesting, so learning about how that relates to the ridges and the divisions and the lo‘i and all of that is pretty cool.” Ian had a similar experience with place-based, cultural knowledge: “When I volunteered at the valley, one of the folks there told us that if a word is repeated, it adds an emphasis to it, like saying “very”. So from that, I could explain that the name for the Wiliwili tree means not just “twisted”, but “very twisted”. And that just helps me feel a little bit more connected and have more understanding of the people and environment I'm around culturally.” Both Grace and Ian learned more cultural and place-based knowledge about the areas they were restoring, which gave them a stronger connection not only to nature, but the particular ‘āina and culture of Hawai‘i.

Many respondents came to understand nature as not a distinct, wild nature apart from humans, but rather as an environment in which humans reciprocate the care that the ‘āina provides us. Kayla discussed the large role that people and cultural practice play in enlivening the landscape:

“Hilo is really just this industry town for a lot of people. But once Merry Monarch season comes around, it feels like the land itself comes alive. It’s very cultural, that feeling of just the ‘āina itself being imbued with all of this mana. That’s what it was like on Maunakea too; the place came alive. And that was because the people were putting their mana back into the land.”

According to Kayla, humans take an active role in not only interacting with but also imbuing spiritual and cultural energy into the landscape. This idea of humans making the ‘āina

“come alive” exemplifies a very cultural understanding of nature and place: places where people gather and interact with nature become the places full of life and abundance. It is thus the meaning that *people* with their cultural practices infuse into the landscape that make these *places* special. After all, when we talk about “place” in geography, we refer to “a particular location that has acquired a set of meanings and attachments” (Cresswell, 2009, p.1); in other words, a sense of place, which is often subjective and culturally understood. In the case of biocultural restoration sites, these sites become imbued with meanings of aloha ‘āina, connection to nature, and cultural resurgence through the work and relationships forged on the landscape. This convergence of biocultural elements in turn establishes more intimate relationships between participants and nature.

Learning more about Hawaiian knowledge of nature also imbued a deeper appreciation of Hawaiian culture in some participants. Adya, an ethnic studies graduate student and lecturer, described how learning more about kalo revealed to her just how intimate and familial a relationship Hawaiians have to kalo:

“At the last workday I went to, I learned that, when you’re planting kalo, you’re not supposed to hold the shoot that comes out of the corm because it’s called the neck. It’s like you’re literally squeezing the heart out of the kalo if you hold on to that part. And I was like, wow. That says so much, not just about the care behind the planting, but also this kind of family relationship to kalo. Thinking literally about the breath of the plant is such a different way of thinking about a plant than a Western scientist would, you know?”

In this case, the cultural view of not squeezing the “neck” of the kalo not only demonstrated place-based knowledge that the “neck” is a vital area of the kalo necessary to keep in-tact for re-planting, but also showed how this cultural view personifies kalo as indeed a sibling of the Hawaiian people. Besides emphasizing the need to be gentle with the kalo stem for the purpose of replanting, understanding kalo as having a “neck” and “breath” reveals a more familial, sacred mindset when interacting with the plant. This again exemplifies how cultural

knowledge and values help to inform more intimate relationships with ‘āina, in this case imbuing it with sacredness.

The reciprocal relationships with ‘āina which define many Indigenous cultures was another theme that participants mentioned. Kelsey mentioned how both these sentiments of sacredness and reciprocity come together in her experience with kalo:

“We have deep connections to plants like kalo. Like Hāloa (the first kalo plant) is our older brother, and we know that when we take care of Hāloa, he'll take care of us. When we plant the food, when we weed the lo'i, when we pull the corms, we're taking part in that kalo and it's going to provide us sustenance.”

Thus, kalo transforms from a mere plant and food-source to a family member who will reciprocate when he is cared for, demonstrating how this sacred genealogical tie to ‘āina is a significant aspect of volunteer motivations to continue biocultural restoration work. This reinforces the idea that cultural perspectives can instill stronger ties to nature.

These spiritual and familial connections to ‘āina thus made participants emphasize the importance of respect and reverence for nature as well. Peet, a Maori volunteer at Ulupō, said that, when he builds rock walls, with “every pōhaku (stone) I place, I say a mahalo.” Once again, rather than just being a strenuous activity of lifting heavy rocks to build a wall, this act of working with ancient stones becomes a spiritual act worthy of great appreciation and reverence. This shows yet another example of how internalizing a deep cultural connection to ‘āina manifests in pro-environmental behaviors like continued participation in biocultural restoration, demonstrating how biocultural values translate into actual acts of citizenship on the ground. Through cultural values and awareness, participants become more connected and invested in nature, and hence become biocultural citizens.

Connecting to Culture

Just as cultural knowledge helped participants feel closer to nature, embodied interaction with nature in turn brought people closer to cultural values, knowledge, and practice as well. For participants of Native Hawaiian ancestry, working at biocultural restoration sites played a major role in their sense of connection to their cultural roots, and provided a place in which cultural values and skills could be shared and learned. Keoki described how culture was a main initial motivator for him to volunteer:

“I've always wanted to get more connected to the ‘āina. And I've always wanted to get more knowledge on my Hawaiian culture because it's just been kind of washed away through Western education and Western practices, and just Western ways of life actually. So I wanted to reconnect.”

Makana shared this feeling of cultural disconnect as well, being a diaspora Hawaiian who had grown up mostly on the continental US. After explaining his disconnect from all things Hawaiian before discovering Ulupō, he voiced his appreciation for learning the customary skill of building rock walls from there: “Now I know how to build rock wall. I've kind of revitalized that for my family...And now I just have to give that to my kids so they can perpetuate that.” Thus, the revitalization of cultural skills and practices not only occurred on the individual level of fostering one's own cultural identity, but also translated into ensuring cultural perpetuation to children as well. This desire for connection to one's cultural roots reveals the broader theme that participants desire connection in an alienated society ravaged by the legacies of land and cultural dispossession.

Passing down cultural knowledge and values was a very prominent theme, especially for the sake of the next generation. Makana emphasized the need for cultural perpetuation in places like Ulupō: “I have hope for the future of these kind of places, but it's kind of out of our hands once we're gone. So we're going to ensure that the values that we are learning about that were

from our ancestors, that we know them well enough, and that we're passing them down, and they're part of everyday life for our kids. That they're just going to keep doing it because humans are creatures of habit and because that's what they know.” Thus, by gaining new cultural knowledge and skills for oneself, volunteering at Ulupō provides the opportunity to nurture these skills to be passed down to the next generation as well. Ulupō then becomes a place of not only current cultural learning and mālama ‘āina work but also the setting for the next generation of people to commit to mālama ‘āina and connect to their cultural roots. Makali‘i emphasized how biocultural restoration work does not just end at the physical results of restoration, but rather the discursive work that it does as well: “It's not only trying to take care of Kailua for yourself or myself, but also trying to help others to understand what that is and to cultivate kind of that deeper meaning to place.” Ulupō therefore becomes a place where not only the physical landscape is being restored through the hands-on work of volunteers, but where the geographical imaginary of the cultural landscape is also being rendered and perpetuated through discursive practices while volunteering. In these cases, cultural practice becomes the vehicle through which participants are driven to interact with and care for ‘āina.

Even the act of biocultural restoration itself was imbued with cultural emphasis. Instead of merely considering Hawai‘i’s native biodiversity as the most in need of restoration, most participants blurred the distinction between native plants and culturally-significant plants like kalo, which are actually Polynesian-introduced. In fact, most considered the replanting of culturally-significant plants, especially food plants, as equally important to restoring native plants. This indicates a shared perspective of ‘āina representing its literal translation: that which feeds. Kawela described his close relationship to both canoe (Polynesian introduced) plants and native plants:

“The Kumulipo has all these stories of other plants that we consider canoe plants that were “brought here”, but are regarded as some of our siblings, our ancestors and our elder brother. So today, it's easy for us to say ‘this is Indigenous and endemic’, and ‘this is a canoe plant’ and they're different. But is there not actually a difference? They are all the same. They're all related and they all belong in this place. And their importance to the connection of people to place in the work that we do relies heavily on these food plants that are considered canoe plants.”

None of the interviewees considered either plant type more or less important. This demonstrates how the ecological importance of native plants were considered equal to the cultural importance of canoe plants. Thus, participants demonstrated a more holistic view of the natural environment as being an interdependent, socio-ecological system rather than a more preservationist view of “pristine” nature. Rather than internalizing purely ecocentric sentiments of protecting a pristine, non-human environment, participants instead demonstrated a much more holistic and biocultural understanding of caring for land that reciprocates in caring for us.

Biocultural restoration work therefore provided a space in which various elements of culture and ecology could not be separated completely. Peet describes these various facets as separate organs to the same organism: “It's often separated yeah? Language, culture and aloha ‘āina. But [when you think of it] as an organism, which organ would you lose? Which one would you remove to make it better? None of them. They're all important. There's not one that would survive alone without the others, at least not to its best capacity.” All of the research participants shared similar sentiments of this blur between the physical work, cultural identity, and language speaking that all come into play when volunteering at Ulupō. While these different elements appealed to participants in varying degrees, the indistinct division between them reflects the interconnected human-nature relationship that Indigenous peoples often share. This demonstrates the shared internalization of a biocultural awareness among participants, as they all considered neither culture nor the environment to be the main focus of restoration, but rather this socioecologically-fused concept of its interconnected nature-culture.

Social Connection and Building Community

Along with connection to food systems, nature, and culture, participants also emphasized social connection as a major motivation for continued participation at biocultural restoration sites. In fact, social connection was by far the most prominent theme that arose from the interviews. In today's modern society of alienation from the means of food and other commodity production, disconnect from lands through privatization and the need for wage labor, and disconnect from culture through cultural dispossession and assimilation, many also feel the absence of authentic social connection and a real sense of community. Because of this, the connection between like-minded individuals doing restoration work together was a major motivator for continued participation; it made respondents feel a part of a larger community.

Seeing people come together to care for a place was inspiring for a lot of participants. Rein mentioned how the sense of community that biocultural restoration work brings was the main reason that he continued doing this work both voluntarily and professionally: "It's all about bringing community together to care for a place. That to me is the most important. Doesn't matter what the task is, it could be weeding a lo'i, cleaning a loko i'a; whatever it is. When you see people coming to work together, it's just inspiring. It really fills you with hope. Cuz you know, if you're gonna solve community problems, it's gonna take a community to solve." Albert also mentioned how the Limu Hui in Waimanalo was an especially impactful site for him because most of the people that came out to help were part of the surrounding community neighborhood: "A lot of the [biocultural restoration sites] are community based, but people don't usually have time to go because they're kind of far out of reach for people who are working and stuff. But working with the Limu Hui, a lot of people are just community, just coming out from their houses and going there on a Saturday or Sunday morning like they would do anyways, and

just working there. So the biggest thing was that connection”. Taking part in the work at a site that was truly “community” based with neighbors working side by side on the weekends really made Albert feel a part of a much more intimate group connected deeply to their particular place. Participants were thus inspired by the deep sense of community that biocultural restoration work could bring to a place, and enjoyed feeling a part of that.

The inclusivity of biocultural restoration sites was also an important factor for participants. Julie pointed out the importance of the simple kindness of the staff she worked with: “Everybody that I have ever worked with at Ulupō has been kind. And that's important...it was just knowing that we had a place there, you know?” Maka‘ala also felt much more empowered to participate because of the inclusive atmosphere, which she said differed from her usual experience of seeming too ‘light-skinned’ to be Hawaiian: “The way they do things is just super loving, it's very open, it's very inclusive. It's not super high makamaka, it's not judgy.” The inclusive, kind social atmosphere that many biocultural restoration sites have made participants feel safe, included, and eager to come back. Inclusivity enabled volunteers to feel free to learn rather than “feel shame” about not knowing certain skills or being fluent in Hawaiian. As most of the participants desired to connect to their native roots or to the culture of their island home, this inclusive environment was much more conducive to learning. While this would seem to be an issue especially apparent amongst non-Indigenous and non-Hawaiian volunteers, this element of inclusiveness proved effective for nourishing relationships and motivating continued participation among both those with and without Hawaiian blood.

The social draw of volunteering at Ulupō was based on not only shared personal values toward the environment and Hawaiian culture, but also on the camaraderie of being part of a larger political movement. Indigenous and settler ally participants in this largely emphasized

political efforts toward a particular “aloha ‘āina movement” which has become a new incarnation of the modern Hawaiian Movement from the 1970s. Since aloha ‘āina encompasses many facets of environmentalism involving intimate human-environment relationships and the kuleana to take care of ‘āina, the cultural significance of place-based relationships with ‘āina, along with Native Hawaiian political struggles for resurgence and sovereignty (Silva et al., 2004; Silva & Thiong'o, 2017), many of the values and practices in line with these various elements take on a political edge when contextualized within the particular political ecology of Hawai‘i’s change in land-use, land-tenure, and politics over time. With the awareness of this sociopolitical context of Indigenous dispossession and land degradation along with the intergenerational erasure of various aloha ‘āina practices, seemingly apolitical actions like farming kalo and eradicating invasive plants become “everyday acts of resurgence” (Corn tassel, 2012) that restore not only ‘āina but the cultural values and sovereignty that to many Native Hawaiians are inextricably intertwined with it.

Because of the disparity between various levels of ‘āina-based upbringing and the erasure of both cultural and land-based connections, even the inclusive social dynamic described by volunteers took on more political weight with some. Maka‘ala described how inclusiveness was not only an important social dynamic on its own, but represented the ideal way in which to pursue Hawaiian sovereignty: “How do you strengthen the lāhui (Hawaiian nation)? By being inclusive, by being understanding, by being patient...If the Hawaiian community is going to put off that vibe and definition that only Hawaiian, only brown-skinned people, or only locals can do this work, then you are actually not making any sense with what you're trying to normalize, because we need all the allies that we can get to make it normal. You need the buy-in from everybody.” When considering the political implications of this inclusivity, Maka‘ala made the

point that attempting to be a “purist” by othering those that do not fit the ideal image of “Hawaiian-ness” stratifies rather than strengthens the aloha ‘āina movement. This is especially the case in a place where many Native Hawaiians themselves have lost connection with customary lifeways and knowledge through Hawai‘i’s history of cultural and land dispossession. Thus, the inclusive social dynamics of biocultural learning and practice at Ulupō served not only as a mechanism which motivated participants to continue volunteering along lines of social belonging and like-minded company, but it also served as a gateway for many of them to participate in this revitalization movement where they might otherwise feel less welcome or incompetent. This indicates the importance of not only inclusiveness among participants with varying levels of cultural capital and knowledge, but also among participants of various backgrounds, races, and cultural identities.

Being around passionate people was another key social aspect that inspired participants to keep doing the work. A Kupu intern mentioned how passionate staff inspired them to consider doing this type of work: “Honestly, it was just meeting the people that did this kind of work. How inspired they are, how passionate they were. Knowing I could probably do that work too.” The infectious enthusiasm of passionate staff at these sites was able to hype up participants to become more enthusiastic about the work. In doing so, they also created role models that made biocultural restoration work seem a viable and even enjoyable livelihood. Kamuela mentioned how meeting Walter Ritte, a famous local activist, changed the trajectory of his career path:

“I got to meet Uncle Walter Ritte there. He was just sharing with us all the different things that him, his community, and his family went through and what they continue to do. Like how he went to Kaho’olawe when they were fighting the whole protect Kaho’olawe stuff, and the bombings and things like that. So he was a big component of my early adult life in figuring out what I want to do.”

Meeting Walter Ritte inspired Kamuela to continue taking part in biocultural restoration and other acts of biocultural citizenship related to perpetuating Hawaiian culture, language, and

practices. Being able to meet someone who dedicated his life to this type of aloha ‘āina work made that path not only inspirational but also confirmed that one could indeed commit themselves to this work.

Feelings of hope stemmed from being a part of a group activity where everybody is passionate and willing to help, empowering participants to continue coming back. Albert talked about how the types of people he would meet doing biocultural restoration work made him more hopeful about the movement: “I’ve met so many beautiful minds and souls doing this work, and it’s really life affirming. It’s like, ‘Oh, maybe this sh*t is worth it. Maybe these people are worth it.’ I don’t get so nihilistic.” Participating in workdays around people like these thus makes socio-environmental issues seem not so much an existential threat as a responsibility that can be overcome with enough good people involved. Providing hope in these often hopeless-seeming efforts to restore degraded landscapes and reinvigorate Hawaiian cultural practices empowers participants to keep doing the work rather than give up. Kelvin also mentioned how his professors were a huge inspiration that kept him going: “My professors were a huge motivator as well. They’ve always stayed very happy and upbeat about these things. So I got inspired to do this because of them; their passion shines through the work despite the challenges involved.” Again, being around people who are driven to do biocultural restoration work *despite* the difficulties involved provided hope that empowered participants to keep going.

Being surrounded by like-minded people who had the same biocultural convictions was a major motivation for participants to continue doing biocultural restoration work. Makana described the importance of that sense of shared values at Ulupō: “I just like to be around people that have the same values that I have. A number of them value the language, they value mālama ‘āina, they value even overall health...so working and maintaining relationships with those

people, I think is how you can really revitalize bits and pieces of culture.” Thus, the people at Ulupō become the vessels for cultural learning and revitalization through continuing relationships with them and actively participating in cultural practices together. Ulupō therefore comes to represent a place where these people can come together to take part in these practices, making connection to place and people inseparable. Furthermore, just sharing the value of a healthy lifestyle through pono practices of exercise rather than drinking or doing drugs, as well as eating healthy foods from the ‘āina, was a significant builder of relationships amongst participants. This made Ulupō a safe space where participants could not only partake in cultural practices but also just spend time with pono people that reinforce each others’ healthy lifestyles.

Keoki shared how the type of environmentally-conscious people that surrounded him at biocultural restoration sites were the main reason he kept coming back: “What changed me was the kind of people that I was surrounded by when I went there. That's what really got me loving mālama ‘āina work. I just love the way that everyone that I've worked with...loves ‘āina work, and how everyone brings more sustainable packaging. Everyone brings their own lunch in nice little reusable containers and is really conscious about single-use plastic.” Here, mālama ‘āina goes beyond physically tending to the earth through biocultural restoration practices, instead also including other acts of biocultural citizenship that spill into daily lifestyle choices such as using reusable containers. The camaraderie and sense of community that these shared environmental values entail provide volunteers with a sense of social belonging and a desire to continue surrounding themselves with like-minded individuals. Thus, getting to participate in the work of existing communities like Limu Hui as well as creating communities of like-minded people at other sites both helped participants feel a part of a greater social collective. This also reveals how the community building done at these sites can promote certain norms of biocultural citizenship

such as using reusable packaging.

Being surrounded by pono people at biocultural restoration sites was especially important when participants had been brought up in low-income communities surrounded by drug-use and other damaging behaviors. Makana described his own experience of this: “I’ve grown up not in the most wealthy neighborhood, and not with the most opportunities...But since July [when I started volunteering], I’ve learned to teach my old friends to get into the ‘āina more, because they see what I’m doing now and they’re doing the same things that I used to do: drinking, partying, doing drugs and spending all this money, not saving anything.” In low-income neighborhoods in urban Honolulu, substance abuse and other issues have disconnected many Native Hawaiians and others from their cultural, place-based roots. So biocultural restoration sites provide a space where these individuals can surround themselves with people who have healthier habits, and where Native Hawaiians and other ethnic minorities can connect to their place and culture when they were formerly not given the opportunity to do so. In turn, people like Makana have also become driven to bring their own friends with them to socially facilitate more pono practices like mālama ‘āina among their peers.

Social facilitation was a vital component that kept individuals who were not as driven by ideals involved in this sort of work. Ian mentioned how he was always somewhat into plants, but that he became more involved when he moved to Hawai‘i because of his desire to connect with other people.

“I always wanted to plant stuff, and I made myself a garden when I was younger, but I never really put a lot of time into reading the garden or anything. Then during high school, I just lost interest in it. But when I came to Hawai‘i, I became more interested in getting involved with plants again. Part of it was just because it got me out of my house doing something with other people, especially because it was during COVID. I was just trying to connect with people.”

While not being around people who liked plants led him to lose interest in them in the past, working with others who were interested in plants later on solidified his interest in them. Thus, the desire to connect with people reinvigorated an earlier desire to work with plants through social facilitation. This indicates the importance of social norms in promoting citizenship, as being surrounded by people who normalize plant restoration is a much stronger motivator for continued participation than a solitary interest that was not socially reinforced.

Ellickson (1991) also contends that the simple mechanism of social norms can be an extremely powerful means of keeping ‘order’ among various stakeholders, exemplified in the case of rural Shasta County, California. In his case study, Shasta County residents are able to resolve conflicts among ranchers and farmers by conforming to norms of being ‘good neighbors’. Because the residents of Shasta County are few enough that they all must see each other on a frequent basis, having a positive neighborly reputation among fellow residents is considered important, and acts as a self-checking mechanism that in most cases eliminates the need for legal intervention. Furthermore, neither the residents nor local law enforcement personnel in Shasta had a complete working knowledge of the relevant animal trespass laws that pertained to their county. This discounts the necessity of ‘law’ for maintaining ‘order’, since the Shasta County residents were able to maintain their own order without utilizing nor even being fully aware of the laws that could have been at their disposal. Ellickson’s (1991) case study shows us that Ostrom’s theory of collective action is indeed correct: people can indeed care for a collective common resource without outside coercion.

Momo’s participation in biocultural restoration was similarly induced through social facilitation, though in her case, it was not a strong enough factor to incite continued participation.

“I’m a social person. So if I were in an environment where everyone did these things and I was exposed to a lot more of the issues that are present right now and things like that, that

would inspire me more than just going to a single event. So if you were to say, ‘Oh, there's another workday coming up. You want to come?’ I would definitely be a lot more eager to go, but I wouldn't go out on my own to look for projects like that.”

Momo’s account here sheds light on the potential and limits of fostering biocultural citizenship among participants who are not as driven by moralistic ideals. On the one hand, social facilitation is an easy way to get these social types to go to workdays, but on the other hand, it will not necessarily cement biocultural values into the psyche unless these participants surround themselves with people more passionate about biocultural restoration work. This points to the limits of neoliberal ideals of individual social responsibility, as different people internalize the importance of biocultural restoration in different ways; some consider it a moral obligation, others consider it something merely fun and inspirational to do with friends. Regardless, this demonstrates the important role of the social at these biocultural spaces, as well as the need for more participation at these sites to establish more mainstream social norms of participation.

This power of social norms on behavior change resonates with Ellickson’s (1991) study on the role of social norms in keeping ‘order’ among various stakeholders in rural Shasta County, California. In his case study, Shasta County residents are able to resolve conflicts among ranchers and farmers by conforming to norms of being ‘good neighbors’. Because the residents of Shasta County are few enough that they all must see each other on a frequent basis, having a positive neighborly reputation among fellow residents is considered important, and acts as a self-checking mechanism that in most cases eliminates the need for legal intervention. Furthermore, neither the residents nor local law enforcement personnel in Shasta had a complete working knowledge of the relevant animal trespass laws that pertained to their county. This discounts the necessity of ‘law’ for maintaining ‘order’, since the Shasta County residents were able to maintain their own order without utilizing nor even being fully aware of the laws that could have been at their disposal. Ellickson’s (1991) case study shows us that Ostrom’s theory of collective

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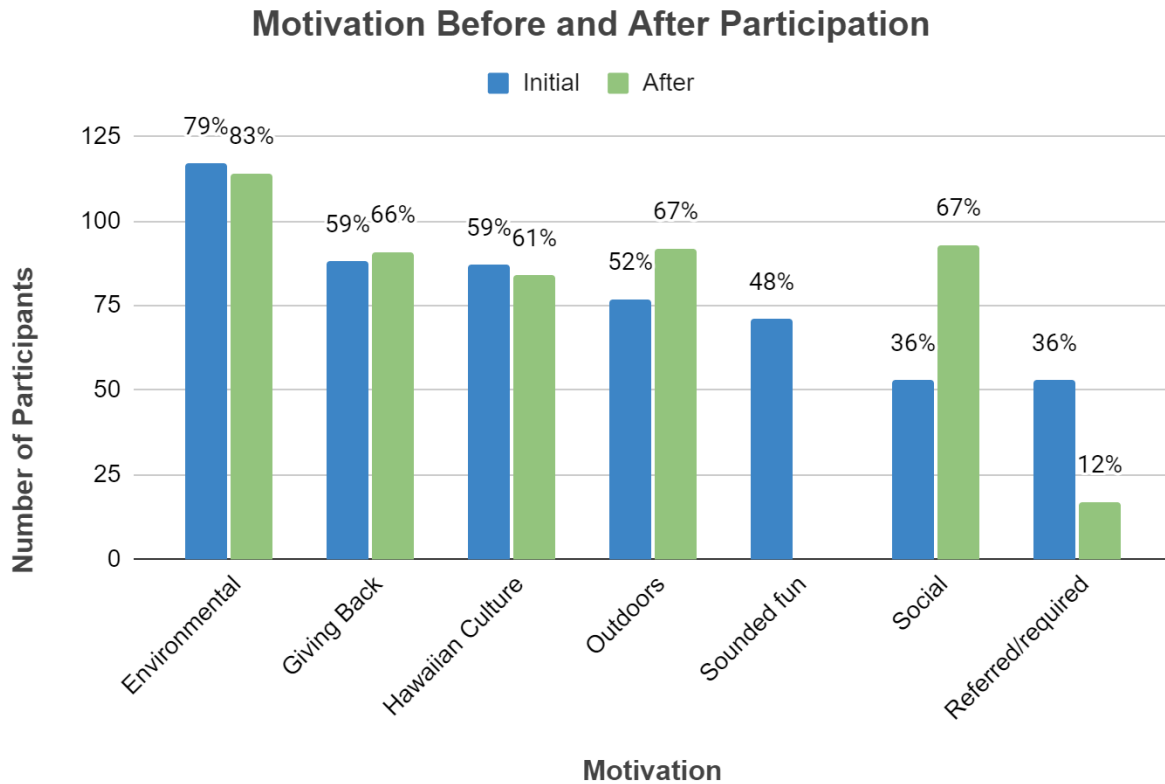


Table 4: Difference between initial and continued motivations to participate in biocultural restoration when asked to select all that apply.

The significance of social connection is reflected in the survey data as well (Table 4). When comparing respondents’ initial and continued motivations for participating in biocultural restoration, it was found that biocultural and altruistic motivations such as the desire to contribute to environmental and Hawaiian cultural efforts did not change significantly before and after volunteering. This indicates that most participants do not experience much change in their fundamental value-based motivations for participating in biocultural restoration. Yet 40 (35%) more participants selected working with friends, family, and like-minded people as a motivation to continue after participating, compared to those who listed these social aspects as initial

motivations. This provides quantitative evidence that reflects the significant impact of social connection on volunteers and interns.

Ultimately, fostering a community around shared biocultural values was the most prominent mechanism for continued participation in biocultural restoration. This is not to say that the social dynamics of volunteering outweighed the environmental or cultural values that biocultural restoration represents, but rather that the social act of sharing these other values and knowledge amongst a like-minded community was what stood out the most to participants. Thus, this social facet of the volunteer experience reflects a cumulation of all these other positive elements shared among a group of people who understand each others' values and encourage growth. Maka'ala described how these elements converged in this sense of community at Ulupō: "The most significant reason why I keep coming back to Ulupō is the people. So, yes, it is cultural. Yes, it's environmental. Yes, it's actually all the things that we mentioned, but it's really the people. The people who caretake this place, they're the ones who structure the way it is managed and they also create the culture there." When thinking about what drives continued participation in biocultural restoration, it is therefore not only the act of educating volunteers or getting their hands dirty, but rather fostering a particular organizational culture of shared values, and passionate people that really encourages returning volunteers.

Empowering Biocultural Citizens

Coming back to my original question of what fosters biocultural citizenship, the previous themes I presented showed us the aspects, the non-monetary values, of these mālama ‘āina experiences that keep participants coming back to biocultural restoration sites. These non-monetary values of participation, almost all related to forging relationships with land or people, provide insight into what drives people to contribute time and energy to these sites with little to no monetary compensation. However, in this section, I will be honing in on the particular aspects that changed participant perspectives and empowered them to become biocultural citizens through their experiences on-site.

Making Impact, Seeing Impact

In a world full of socio-environmental issues ranging from sea level rise floods to the Great Pacific garbage patch, many people feel that today’s large-scale problems are too large to be able to deal with. Even in the context of community-based restoration and resource management, the bureaucracy involved and common acts of tokenism rather than meaningful participation often lead community members to become “powerless spectators” rather than “adaptive managers” (Fabricius et al., 2007). This issue of feeling powerless stifles any potential to enact change; thus, citizen empowerment is vital to the cultivation of biocultural citizens who actively enact pro-environmental, aloha ‘āina-oriented behaviors.

Enacting physical changes on the landscape was a major aspect of biocultural restoration that empowered participants. Ken mentioned how the tangible achievement of restoring the physical landscape was empowering for the students he worked with: “It may not be much but it’s something; it’s a tangible achievement. And for a lot of kids, especially high schoolers, that’s something that you need.” Grace also talked about the rewarding physical impact of her work:

“When you’re weeding, if you're working hard for a couple of hours, you can really see the results after you've finished. So it's rewarding to see the work that you've put in make some impact.” By seeing the impact of their work, participants felt empowered that they were able to make a difference, even if it was from a single workday.

Participants enjoyed actually getting things done as well. Ian mentioned how contributing to something through exerting himself was much more rewarding than empty exercise: “I started trying to exercise a lot more in the last couple years; walking especially. But it's nice to do something other than that, especially if I can do something that contributes to something.” Yun-Jae voiced enjoying the impact of the work: “I'm not the type that really enjoys physical work. But I actually liked [doing biocultural restoration work]. It made me feel like I was doing something, compared to other physical activities like just running; with mālama ‘āina there's a sense of doing something and actually getting somewhere that I like. It was really fun.” This provides a key insight into why participants are willing to take part in strenuous labor for little to no monetary compensation. For many participants, being able to see the fruits of their handiwork on the landscape was enough to make the exertion worth it; even enjoyable.

Seeing the longer term impacts of restoration was also impactful for participants who continue coming to the same site. Makali‘i mentioned how seeing the impact that himself and others have made on the landscape overtime was well worth the lack of monetary compensation for labor:

“It makes me feel really, really fulfilled. It’s volunteer work, so you're not getting any material payback, no money or anything like that. But four years ago when I saw what the site looked like and then when I have gone back...the kind of change that the landscape has taken because of how much more people have gone there to help, whether it's cutting grass, cutting down trees, or building more lo‘i, [made it worth it].”

This demonstrates the high non-monetary value associated with biocultural restoration work, which surpasses the need for monetary compensation to motivate volunteers to continue

participating. Furthermore, seeing the large-scale change that occurred over years of restoration was even more empowering for Makali‘i, since he became a part of a larger effort with larger impact.

Participants also mentioned how the impact they were able to make on the landscape made them feel more connected to the plants and the land they worked on. Barbara mentioned how her love for weeding fostered a closer relationship with the plants: “My specialty is basically weeding, which nobody else likes too much. But it's so meditative. I love it. And before and after, there is a big difference. And you do something useful and you get to know the plants.” Kelvin also described how seeing the effects of his own work on the landscape made him feel more connected to the land itself: “Seeing the products of your work, doing it in person, and getting down and dirty was really interesting. And seeing that coming to fruition was rewarding. So that experience helped me become more attuned with the land.” Thus, leaving a physical imprint of one’s labor on the land creates a more reciprocal and intimate experience with the environment one works in, as participants see how they were indeed able to make a tangible change.

Seeing one’s physical impact on the land not only gave people a sense of reward but also a sense of empowerment, as they began to understand that an individual can indeed render visible change on the landscape. Ken described how much more empowered he felt to enact change after he participated in biocultural restoration work: “Humans are the cause of most of these problems, but I can see that we also have the keys to success. So we can just not do anything and be cynical, or we can just do something and make the world a better place because we kind of messed it up.” Ken’s newfound conviction that people can indeed make a difference shows how biocultural restoration can be an avenue for that empowerment by making participants aware of

their ability to enact change. By witnessing these small-scale changes, participants become open to a politics of possibility that in turn drives many of them to enact varying levels of biocultural citizenship.

Unsettling the Settler-Colonial Through Narrative

As I began to show in the mo‘olelo at the beginning of this chapter, the narrative framings of the work done at biocultural restoration sites is a significant aspect that helps determine how participants internalize the experience. This does not only refer to culturally significant mo‘olelo like that of Hi‘iaka, but even the more mundane stories of the degradation of these areas and what is being done to rejuvenate them again. In the context of Ulupō, learning that the area around Kawainui was once abundant with fish, food plants, and ceremony, only to become a site for cattle grazing and illegal dumping, helps to frame the restoration work being done as part of a larger vision to reinvigorate the cultural and ecological landscape once more. As Ottinger (2010) argued when discussing the empowering potential of community-based environmental surveillance, “Empowerment...is constructed in the process of making surveillance data meaningful, and its nature varies depending on the contexts chosen for interpretation” (p.222). This reaffirms Lawrence’s (2006) argument that even initially instrumental participation can become transformative, depending on how the experience was processed and internalized by participants. Thus, the seemingly menial tasks of weeding, mulching, and planting begin to hold seeds of transformation when these actions are framed in a broader, more meaningful context like restoring an ancient fishpond to feed the community and reassert Hawaiian sovereignty over recently degraded landscapes.

The work being done at a workday today thus becomes a continuation to the work of reciprocal ‘āina relationships that was done there for thousands of years. As one Kupu intern

said, “Seeing the work that you’ve done is really rewarding. It makes me think how, in the future, we are gonna be part of the future mo’olelo.” Feeling like part of a continuing mo’olelo of that place made the work seem much more significant. Another intern said, “the mo’olelo shows us the vision of this place, and that helps to inspire us in the work we’re doing.” No longer was a day’s work just clearing a lo’i of weeds; within the context of these mo’olelo, it becomes part of a greater long-term effort to restore the area to the bountiful fishpond and food-giving ‘āina it once was.

This alternate geographical imaginary of these places promotes an altered subjectivity in participants, who may find themselves more in line, aware, and perhaps even committed to more restoration and resurgence efforts. The empowered biocultural citizens that result resonate with what Williams et al. (2003) describes in his study of empowering migrant women in New Zealand. He contends that storytelling “enables the conscious reconnection to and reconstitution of people’s identities. Newly found subject positions that are more enabling of agency and building community are conducive to the exercise of individual and group power that can challenge institutional power and dominant social discourses and structures” (p.39). In a similar vein, narratives of biocultural restoration sites and their significance in the broader aloha ‘āina movement render participants as “subjects” of that counter-hegemonic effort against dominant structures of settler-colonial capitalism.

When the mo’olelo of Hi‘iaka and the two mo‘o was shared at Ulupō, we had a group of Kupu interns with us for the week. When I asked one of them what they liked best about their experience at Ulupō, one of them said “I learned how to see through a Hi‘iaka lens. Now when I look at Kawainui, I don’t see a swamp; I see a fishpond.” At that moment, I realized that the physical work that we were doing there was more than just changing the physical landscape; the

telling and retelling of these mo‘olelo was enabling these interns to envision an alternate geographical imaginary of Kawainui and Kailua as a place not of over-development, crowds, and swamps but of abundant fishponds and ‘āina: land that feeds. Thus, it wasn’t just plants, lo‘i, or even a wetland that was being restored; we were being asked to see Kawainui, Ulupō, and Kailua as places where ‘āina could thrive once again and feed those that care for it. These mo‘olelo destabilize settler-colonial imaginaries of “Kailua-fornia”, instead representing the ahupua’a of Kailua as a place for cultural resurgence and restoration.

Makali‘i also referred to the importance of mo‘olelo in shaping his perception of his work at Ulupō. He also considered the story of Hi‘iaka as an example of “looking through a Hi‘iaka lens”. He said: “Looking through a Hi‘iaka lens and being able to pull out these deeper meanings of not only mo‘olelo, but of things that you see too...How do we see Kawainui through a Hi‘iaka lens, to see through all these bushes and invasive plants and to see what it could be or what it was, and how we as people can be involved in its restoration.” This further demonstrates how particular cultural narratives of place foster a culturally-embedded geographical imaginary of biocultural restoration sites as kīpuka for cultural resurgence, which makes participants more invested in its potential for restoration.

Yun-Je mentioned how understanding the past as well as the future vision of biocultural restoration sites made the work more inspiring and meaningful: “One of the staff at the He‘eia fishpond told us something like, ‘we’re not just restoring this fishpond to get fish right now, we want this place to feed us for the next eight hundred years.’ So that sustainability that they are looking for was really inspiring.” Thus, the work that Yun-Je took part in at Paepae O He‘eia was framed as part of a greater effort of restoration, the impact of which should last for hundreds of years. This again makes participants much more inspired to do the work when they understand

it as one small contribution to a grander vision of restoration and resurgence.

The narratives circulated by biocultural restoration programs through particular stories of their sociocultural and historical context create an alternative imaginary of these sites as places for local food production, cultural revitalization, and resurgence. Describing how he takes his canoe club to Ulupō, Makali‘i showed how sharing knowledge of the cultural significance and historical context of place is an important part of doing volunteer work at Ulupō: “I try to expose them to the background and history of Kailua that's not necessarily something that they learn about at Target Kailua, or what they grew up learning in school. There's a deeper sense of meaning to this place.” Narratives shared at Ulupō thus enliven the landscape as a place of cultural revitalization rather than as merely another gentrified area of Hawai‘i that Native Hawaiians have lost to settler-colonial forces. This promotes further volunteering to continue this revitalization process, empowering individuals to participate in this reclaiming of place rather than leaving it as a place too “long gone” to be restored.

Many participants emphasized the importance of introducing non-locals and tourists to these places as well in order to contest their settler-colonial imaginaries of Hawai‘i as a mere touristic paradise. Makana described how introducing the “real Hawai‘i” to his brother from the continental US had been a significant moment for him. While his brother used to go to various tourist traps when visiting Hawai‘i, Makana described the importance of being able to take him to Ulupō and teach him how to build rock walls there:

“I could take my older brother, who had even less experiences and opportunities to do those sorts of [mālama ‘āina] things, and was able to usher him in a little bit and show him that when you come back and visit, this is something better that we can do together. Let's give back to the place that we love so much and build experiences that are closer to traditional practices. Instead of thinking, ‘what can I take back with me?’, what can you give instead?”

This provided a moment where outsiders could be included in mālama ‘āina spaces, and taught to take care of the place they are visiting rather than merely being excluded. Maka‘ala

also acknowledged the importance of raising awareness amongst tourists and new residents regarding the land they are occupying:

“If you are on this land, period, you're breathing this air, you're using this water, you have a responsibility to this land. And that is what it is to be aloha ‘āina. So I extend that kuleana to everybody. It doesn't matter if you're local and you're not Hawaiian, doesn't matter if you are a transplant and you just moved here, it doesn't matter if you're a tourist. I hold that accountability to everybody because you're on this land.”

In this case, mālama ‘āina becomes a tool for instilling kuleana to mālama ‘āina into both locals and non-locals alike. This once again emphasizes the significance of challenging settler-colonial discourses around a paradisaical Hawai‘i, and instead instill locals and visitors alike with the “kuleana to mālama ‘āina”.

Even outside of Ulupō, participants mentioned how learning counter-hegemonic narratives helped them become more aware and invested in biocultural citizenship. Momo discussed how her experience at another biocultural restoration site helped her realize that the history of the overthrow of the Hawaiian Kingdom was not just a fact of history but something that continues to fuel aloha ‘āina struggles today:

“Before, I perceived Hawaiian history and Hawaiian culture as something that we need to know, but isn’t really relevant today. And I think back in Elementary, we had a Kupuna in school, but I never really actually had any other exposure to Hawaiian people, so I didn't know too much about Hawaiian sovereignty and things like that. We learned about the overthrow, but I used to just think that, ‘Oh, that's history. And now we're part of the US, so that's it, right?’ But now it's different when I’m learning from people who are passionate about it and make it relevant to us today. So it was kind of an eye opener for me.”

These school-taught histories of an antiquated Hawaiian culture and a seemingly self-evident history of settler-colonial dominance are destabilized at biocultural restoration sites by modern Hawaiians restoring living cultural landscapes.

This issue of being only exposed to settler-colonial narratives of place in schools was shared by most participants. While some participants were lucky enough to have been brought up around Hawaiian culture or biocultural restoration in some way, most respondents only became

aware of these opportunities in college. Kamuela mentioned how he was not aware of aloha ‘āina until college despite being Native Hawaiian himself: “I never felt connected enough to Hawaiian culture to own my identity as a “Hawaiian”. It was only in college that I became aware of these types of mālama ‘āina places where I was able to really connect”. This exemplifies how cultural erasure and the dominance of settler-colonial narratives have made many people, Native Hawaiians included, unaware of the reciprocal relationships to ‘āina that come with biocultural restoration. Yun-Je and many others mentioned how she had only been exposed to mālama ‘āina once in Elementary school:

“My first experience was in elementary school. I think it was a field trip that we had in third or fourth grade. We went to this taro patch, but we basically just got in the mud and got super muddy walking inside the patch. I think that's how you prep the soil before you do the taro planting. So we did that, but we didn't do anything else besides that one time.”

Similar to how Momo assumed that historical injustices to ‘āina and the Hawaiian people were just a “history” to be accepted rather than challenged, so too do these singular field trips to lo‘i in elementary school serve to showcase, “other”, and in turn exoticize these biocultural spaces as something that ancient Hawaiians once did. This reveals hints of representing Hawaiians and other Indigenous groups as the “noble savages” of before, rather than as active political subjects of today. Only presenting these experiences to kids at a one-time fun excursion outside of the classroom frames biocultural restoration sites as not part of everyday life, working against normalizing these practices among youth in Hawai‘i.

On the other hand, Kamuela mentioned how his new job as an elementary school teacher has given him the chance to change these settler-colonial legacies of knowledge:

“When I teach them about water, I tell them how water feeds lo‘i in an ahupua‘a system. And we planted twenty four huli in pots during Māhealani, full moon. Just trying to make it relevant for these kids so they can relate it to Hawai‘i. I tell them, ‘this is all science guys. This is all stuff our kupuna did that was science.’ So I'm trying to instill in them that these things are normal and let them apply these things in their lives.”

By teaching place-based and culturally-relevant knowledge to students from a young age, Kamuela refuses to perpetuate narratives and knowledge circulated by an Americanized, settler-colonial school system, instead engaging kids in relevant knowledge about their own ‘āina. And he chose to tell these alternative narratives of Hawai‘i based on what he learned when interning and later working at a biocultural restoration site himself, thus passing on the torch of biocultural citizenship to the next generation.

Being in a place where these narratives are being challenged and rewritten, and alternative narratives are normalized among staff and volunteers, creates a powerful space that enables participants to question their own perspectives. Momo spoke to this point: “By just being in a space where we're constantly challenged to remember that we do live on occupied lands, and that Hawai‘i was illegally overthrown, as well as doing community events where we learn about Hawaiian history and culture, I think it made me a lot more aware.” Whereas Momo is usually surrounded by people who do not challenge settler-colonial narratives of Hawai‘i, being placed somewhere where these counter-hegemonic narratives are dominant unsettles her preexistent sense of place in Hawai‘i. Thus, biocultural restoration sites provide liminal spaces in which participants are challenged to question their settler-colonial perspectives of place and internalize alternate narratives of resurgence, restoration, and possibility.

The counter-hegemonic elements of biocultural restoration work boil down to not only the resistance of current settler-colonial structures, but also the Indigenous resurgence that comes from those acts of resistance and mālama ‘āina. By creating a space in which an alternative economy of gift giving and volunteer labor works through shared work on the land, biocultural restoration sites make way for challenging the hegemony of capitalism in Hawai‘i, while simultaneously creating alternatives to both capitalist and settler-colonial systems that have

pervaded but not fully engulfed the islands. Peehi described the revitalizing potential of these biocultural restorative spaces:

“When you remove people from their ‘āina and then remove their language and cultural practices, we already know the devastation. So what would it look like today if you were able to give all of that back? We believe as Indigenous people that through our cultural practices, we can make things right. And unfortunately, in this day and age, we are always forced to prove that. It's the default of the current system and Western ideologies, and it's tough to resist that. I would like to see us create a space where, if you were to reverse-engineer everything that created deficit for our people, could we actually reverse the trauma, the pain, the land degeneration? And could we actually bring ola (life) back? That's the ultimate goal for me, for aloha ‘āina”

Thus, biocultural restoration sites can be considered here as kīpuka aloha ‘āina (Peralto, 2018), small oases of resurgence where people can reconnect to ‘āina, like-minded people in the aloha ‘āina movement, as well as their own cultural values and practices. Just as seeds spread from a forest kīpuka within a lava flow, so do these changes in values and behavior amongst volunteers at biocultural restoration sites show the potential for them to take those values with them elsewhere as well, spreading these alternative lifestyles into other spaces.

Affecting Urgency

One theme that came up over and over with participants when they described becoming more in-line with biocultural citizenship was how their experiences at biocultural restoration sites imbued a sense of urgency in them. Rather than socio-environmental issues being an abstract problem “out-there”, at these sites, histories of land and cultural dispossession and land degradation become tangible, real, and in great need of change. At these sites, participants are placed at the front lines of where these issues converge, and meeting people who are focused on and driven to commit to that kuleana to aloha ‘āina.

But where does this urgency come from? For many participants, there was a shift in consciousness that came about when they experienced something that made them feel a certain way or understand something much differently. When their current identity and method of

carrying themselves became destabilized in some way. I came to understand this as a moment of affect, a sensation of intensity that precedes emotional response. Demos and Tomkins (1995) described affect as similar to a pain response:

“If we cut our hand, saw it bleeding, but had no innate pain receptors, we would know we had done something which needed repair, but there would be no urgency to it. Like our automobile which needs a tune-up, we might well let it go until next week when we had more time. But the pain mechanism, like the affect mechanism, so amplifies our awareness of the injury which activates it that we are forced to be concerned, and concerned immediately” (p.88).

In a similar way, affective experiences that participants have at biocultural restoration sites can sometimes catalyze a perceptual shift in consciousness that leads to a transformed—or at the very least, altered—sense of moral responsibility. By taking part in embodied experiences, connecting with nature and culture, connecting with fellow passionate individuals, and hearing alternative histories of a place you thought you knew; all of these elements can combine in an affective moment that jolts the participant out of their normal disposition, and instills a sense of urgency in caring for these kīpuka.

Ken described how he was greatly affected by his experience in a service-trip to Kaho‘olawe. A large part of it stemmed from the liminal and affective experience of feeling the need to survive and be totally vulnerable on the remote island. That little bit of discomfort, he argued, is what made him understand his kuleana:

“Human consciousness kind of goes towards what's comfortable a lot of times. That's natural. But the need has to feel imperative for people to awaken. Sometimes we need to get pushed out of the comfort zone; there's nothing like survival to spark that. And then once we get through it, you see the wisdom in it. But in order to make that leap, sometimes us humans need a little encouragement, a little struggle.”

Describing the strenuous physical exertion of taking a boat and swimming the rest of the way to the island, and then camping outside for multiple nights, the sense of survival to Ken helped produce an affective moment that jolted him out of his “comfort zone”. After that experience on

Kaho‘olawe, Ken dedicated himself to go back every Makahiki season, join the PKO, and bring his middle school students on access trips to the island. Like the pain receptors that Demos and Tomkins (1995) talked about, this survival-like experience helped to “activate” Ken’s consciousness toward the Hawaiian cultural revitalization movement and aloha ‘āina, and he was thus “forced to be concerned, and concerned immediately” (p.88).

Albert also experienced an affective moment on Kaho‘olawe, though what affected him was not the survival aspect of the experience but the potency of the people and place around him:

“I was blessed with the opportunity to go to Kaho‘olawe. And that was life changing. Just going to the island and seeing people’s perspectives change in real time. And just feeling so spiritually tuned in. It’s just like, wow. That’s the effect that sovereign places can have on people, and *should* have on people. Everything from that moment on was kind of like, how do I recreate this in different places, for different people, for my family, your family?”

Again, this affective experience of deep connection and realization among a group of people and situated in a liminal space like Kaho‘olawe activated Albert’s sense of urgency that this type of sacred connection must be recreated and proliferated elsewhere. These accounts suggest that scintillating experiences on the land are able to shift peoples’ consciousness in the direction of biocultural citizenship.

Moments of affect also arose from more conceptual moments of shocking realization. Kelvin described the moment when he became convinced of the importance of conservation:

“We went to a snail enclosure and it was the only population of endemic Hawaiian land snails in the whole entire world. So if that thing failed, then millions of years of snail evolution and lineages were gone. That struck me because those small creatures could fit in the palm of your hand. And that’s the only amount of those animals left in the whole entire world. So that made me realize that, okay, this is serious stuff we need to be working on.”

In Kelvin’s case, he was affected with a strong sense of urgency when seeing these tiny snails and realizing that they were the only ones left of their species. To Kelvin, this became a symbol of the urgency to protect Hawai‘i’s biodiversity, and helped to drive him to continue this type of work through policy. These moments of affect thus shift these experiences from moments

of learning and awareness to catalysts of action and changed behaviors.

Some participants were just touched by the pure simplicity, beauty, and pono-nature of these sites. Kamuela touched on this when describing a loko i‘a on Moloka‘i: “I remember standing and looking at the fishpond and thinking: this is how it's supposed to be. This is how we're supposed to live sustainably and take care of ourselves; this is how my ancestors did it. So why don't we today? And I told myself at that moment that I want to be in this type of work for the rest of my life.” This affective moment of realization was marked by Kamuela’s discovery of the beautiful simplicity of reciprocal care for the environment and ourselves; when one mālamas the ‘āina, one mālamas oneself through sustaining a food source, a sacred space, and a gathering place all at once.

Identity Articulation, Indigeneity, and Feelings of Belonging

Biocultural restoration sites have become a hub in which many participants realign themselves with particular social groups and identities. This does not happen with all participants, and is more a long-term effect of participation, but the embodied experiences and social interactions enacted on the landscape nonetheless enable participants to more thoroughly articulate their own identities in relation to their kuleana to the ‘āina and culture of Hawai‘i. As I mentioned in the introduction, Stuart Hall’s theory of articulation helps to inform these findings, referring to “the process of rendering a collective identity, position, or set of interests explicit” and in turn “conjoining (articulating) that position to definite political subjects” (Li, 2000, p.152). Important to note here is not just the act of explicitly defining one’s identity, but how that process in turn positions individuals to be political subjects of a particular collective identity. This indicates both the potential of identity articulation to divide certain groups if their identities diverge, but also holds the possibility of bringing individuals of different positionalities together

in aligned identities of care.

In the case of biocultural restoration work, I would argue that, while not all participants have become more in-line with biocultural citizen identities, no respondents articulated themselves against these efforts either. This is important to keep in mind, as biocultural restoration programs will never completely “convert” all participants to become full-fledged biocultural citizens on its own, but the citizenship that they do foster outweighs any dangers of group division and exclusion. After all, unlike the impassioned front lines of political difference that arise during political protests, biocultural restoration sites focus more on inclusivity and bringing people of different backgrounds together to mālama ‘āina, therefore holding more potential for solidarity over division.

Most participants of Native Hawaiian ancestry spoke about how their biocultural restoration experiences helped them to own their Hawaiian identity despite their disconnection from the culture in their upbringing. Maka‘ala mentioned how the cultural dispossession that her family experienced made her unsure of how to identify herself as a Hawaiian before becoming rooted in mālama ‘āina work: “Being Hawaiian but having a lot of erasure in my family history has taken me this very long journey of self and identity. Like what does it mean to be Hawaiian? What does being Hawaiian look like? And just really trying to figure out what it means to be tied to a place.” Kira also mentioned this identity struggle:

“If you look at me, I don't look Hawaiian. And that was always an insecurity of mine, people making me feel like I wasn't Hawaiian enough. But sometimes when you feel that way, I think you kind of over commit to it because you want to prove that you're Hawaiian or that you are valuable to the community. And at this point, I do feel enough. Because it's about what your intentions are. And if I'm living aloha 'āina, if I'm caring about the community, I am valid enough as a Hawaiian.”

In both cases, the uncertainty around one's Hawaiian identity stemmed in large part from a disconnection to culture and land. Despite their culturally disconnected past, Maka‘ala and Kira

both felt that they can now own their Hawaiian identities because biocultural restoration work had fostered in them that reciprocal connection and kuleana to the ‘āina and people of Hawai‘i. Thus, having that rooted connection to place through working the land and being invested in the community enabled participants of Native Hawaiian ancestry to articulate and reclaim their Indigenous identities in the face of legacies of cultural and land dispossession.

This politically-charged aspect of mālama ‘āina that participants have shared therefore transforms the act of volunteering at biocultural restoration sites into acts of resistance as well as resurgence. To Peet, taking part in aloha ‘āina work such as biocultural restoration was considered a challenge to the hegemonic social structures of a settler-colonial, capitalistic society: “I believe when you commit to aloha ‘āina, you can't help but pick at scabs of the overthrow and the loss of language and the loss of culture. When you choose to aloha ‘āina in modern society, you make that commitment that you're against the system that we live in.” Thus, aloha ‘āina comes to represent not only cultural or environmental values, but also a political stance through acts of resurgence that defy the current hegemonic structures of the islands. Peet’s biocultural restoration experiences thus resubjectified him as part of the aloha ‘āina ideology.

Kamuela similarly described his struggle to connect to his cultural roots and to the land itself as a contemporary Hawaiian in a industrial, urbanized landscape:

“I knew that three generations ago was the last full Hawaiian in my family, but I never really knew what it was to be a Hawaiian myself, especially in this contemporary society. What does it mean to be a Hawaiian? The times are always changing. Three generations ago, my family was farming, but now we're in the hustle and bustle of this industrial kind of city. The focus was farming back then. Now it's business. So what do I connect to now? So once I had the opportunity to just go in and walk that path for myself doing mālama ‘āina, it was very enriching.”

This again sheds light on the desire for connection to one’s cultural roots in the face of cultural assimilation and dispossession, as well as the more primal desire for connection with nature that presents itself in today’s modern, often alienated society. These desires for

connection drove Kamuela to take part in biocultural restoration, and in the process it helped him identify with his own Hawaiian heritage and the broader aloha ‘āina movement. This demonstrates how many Native Hawaiians who did not feel completely in line with their Indigenous identities were able to feel a part of that larger collective identity through the articulation of Hawaiian cultural values and practices that are enacted on the landscape.

This sense of belonging was increased among non-Hawaiian respondents as well. Julia recalled a significant moment from her time volunteering at Ulupō when she was restoring a section of Ulupō heiau:

“I remember this man who I hadn’t seen before was coming down and he was starting to yell at me because that’s what people usually say: “get off the heiau”. But then the supervisor came forward and [said] ‘she’s ok.’ So that was a changing point for me. I had been on this land enough, and I was ok to be up there because my intentions were right. I was kama‘āina to that place by now.”

Being a volunteer who regularly participated in biocultural restoration work at Ulupō therefore gave her the right to walk on top of the heiau to restore it, and the reinforcement of a site supervisor granting her that right gave her a strong sense of belonging to that place.

Yun-Je, a volunteer who returned to Hawai‘i from Korea years after she once lived here as a little girl, also expressed similar feelings of belonging: “I sometimes wonder, if I went back to Hawai‘i, would I be considered a local? I would feel like a local, like I have affiliations with the island. But, what does it mean to be local? Either way, I definitely feel a stronger sense of belonging to Hawai‘i than when I was young after doing those activities.” Yun-Je’s unique situation living in Korea but spending 3 years of her early childhood in Hawai‘i had made her uncertain of her identity in relation to the islands. While she remained somewhat unresolved, taking part in biocultural restoration activities nonetheless helped her feel a stronger sense of belonging to Hawai‘i today. Physically working on the land thus made participants feel a greater sense of belonging and a deeper kuleana to Hawai‘i and the particular sites where they worked.

Biocultural restoration sites also became places where people with no prior connection to Hawai‘i could find some sense of common ground and belonging. Ian, a new Hawai‘i resident who began volunteering to connect with local community members, described how the oli chanted on biocultural restoration workdays really resonated with him: “I was raised Jewish, and Jewish prayers are often chanted. So the chanting they did there actually really resonated with me. I actually really enjoyed it.” Even in a completely new place, context, and culture, Ian’s search for community at a workday event enabled him to realize similarities between his own heritage and the culture of this place, allowing him to align himself in respect to the host culture and feel a little less of an outsider in the process.

The feeling of belonging as part of an “in-group” with exclusive access to special places was another aspect that participants valued. Grace described how volunteering helped her gain access to more secluded restoration areas: “I get access to areas I wouldn’t normally be able to get to when I do this kind of work. Like on the Waimea Valley workday where we went up on the ridge, you’re not normally allowed to go on the ridge. So that was kind of another draw for me.” Maka‘ala, also spoke of getting invited by a staff member to volunteer at another place where biocultural restoration was being done, though this was a place that only those invited to volunteer could access. While she was already interning at Ulupō five days a week, the invigoration of mālama ‘āina work drove her to accept the invitation: “So I’ve been doing six days straight of lo‘i [work]. Feels super good but also super tiring...But even that is a huge, freaking epic opportunity because it’s a family lo‘i that not everybody is privileged to know about or go to.” While the physical work is strenuous, these participants considered it worth it to continue pursuing due to the feeling of belonging that comes with being invited to touch the ‘āina in secluded restoration areas. Thus, participants were more driven to continue participating

in biocultural restoration work due to feeling accepted as part of the mālama ‘āina community. Furthermore, while both of these participants grew up in Hawai‘i as locals, this extra element of exclusivity as part of a mālama ‘āina ‘ohana made them feel a deeper sense of belonging to their island home.

For other locals, the experience at biocultural restoration sites actually unsettled their sense of belonging. One Kupu HYCC member mentioned her guilt that she knew so little about Hawai‘i despite living there her entire life: “It just made me realize how little I know about my home. I wish I had had more opportunities to learn about the culture, the language, and the place.” Another Kupu member mentioned how her experience made her very aware and self-conscious about her whiteness: “After learning all this, I feel like being white is my fault, and I have to make up for it. I want to see what it was like pre-colonization and help restore it back to how it was.” She started crying as she said this, demonstrating the deeply affective nature of her experience doing biocultural restoration work. In these cases, the experience helped these interns realign themselves as both outsiders with their lack of cultural capital and knowledge, as well as a part of the movement in their commitment to learning more and giving back to the place that provided for them their whole life.

Native Hawaiians, new residents, and locals alike thus experienced some form of identity negotiation and articulation in the process of doing biocultural restoration work, whether that be through “owning” their Hawaiian identities, feeling more connected and responsible to care for this place, or even through feelings of guilt in need of rectifying by giving back. In all of these cases, these identity negotiations stem from people just looking for a way to connect—whether to culture, community, or nature—and feel that they belong. By re-positioning themselves and feeling a sense of belonging within a particular collective group identity in-line with biocultural

citizenship, participants are taking the first steps towards building community through a shared dedication to aloha 'āina. Aligning themselves as part of a greater collective identity in turn empowers participants to continue behaving in line with this new identity, promoting continued biocultural citizenship. It also holds the potential for collective action by harnessing not merely individuals with transformed values, but collectives of people that identify with each other's values and convictions.

Challenges

While volunteers and interns did indeed show varying degrees of value and behavior transformation through these mechanisms of pilina and empowerment, it is important to keep in mind that biocultural restoration programs are by no means a one-stop-shop for fostering biocultural citizenship. Indeed, ideological and structural constraints pose significant challenges to both individual- and society-scale transformations.

The Issue of Supply: Contradictory Needs and Norms

Going back to the idea of aloha ‘āina or biocultural citizenship being an ideology unto itself, alignment with such a socio-ecological ethic stems in large part from the subjectification process: to what degree participants have interpolated or aligned themselves within this particular ideology, therefore inducing behaviors in-line with its fundamental values. As mentioned in the last section, identity articulation is a prominent aspect of the biocultural restoration experience, as many participants who indeed took on more biocultural-oriented behaviors and views did so while aligning themselves more closely within collective identities that promoted pono biocultural practices. On the other hand, participants who were not as motivated by a desire for community or cultural connection and did not find biocultural restoration relevant to their particular identities and social circles were much less likely to align themselves with the principles of aloha ‘āina promoted at these sites.

This brings us back to Ostrom’s (1990) issue of supply as well—that the overwhelming amount of demand for collective action on CPR issues is often not met with a large enough supply of individuals willing to cooperate. In Hawai‘i, this issue is starkly apparent: tourists and locals alike are able to enjoy the sensuous beauty of Hawai‘i’s beaches, forests, and waterfalls without ever being required to contribute to their preservation and restoration. When free riding

is an easy given, the temptation of complacency often wins out over the hard work of participation. The few interviewees (3) who voiced critical views of biocultural restoration, or at least were not driven to continue participating, revealed the truth in this issue of supply. And what fueled this complacency? Social norms of inaction rather than participation.

Momo spoke to this point when she admitted the real reason why she does not continue to participate in biocultural restoration or related activities: “I realize I should care more about Hawaiian culture and the land that we're occupying. But for me, it's kind of like environmentalism where if I'm reminded by people, if I'm around people who are constantly practicing it, then I'm more motivated to do it myself. But if not, it's not something that I'll actively seek out to do.” Thus, Momo would have been more driven to participate in biocultural restoration and other similar efforts if her family or friends were more involved in those circles. In Momo's case, she indeed recognized the importance of biocultural citizenship, but noted that such actions were not easy to commit to on her own without social facilitation. This points once again to the importance of social norms in shaping peoples' behaviors. Unlike in Ellickson's (1991) case study where the community of Shasta County depended on social sanctions to incentivize collaborative behaviors, Momo's particular situation reminds us that the nuanced and stratified communities throughout Hawai'i present too much heterogeneity for there to be a meaningful sense of social sanctioning to contribute to restoration work. So long as Momo's particular social groups are indifferent to biocultural efforts, she will not feel the social pressure needed to take action in these activities.

Keoki also discussed this phenomenon when he complained about street vendors next to his own food stand urging him to use plastic containers:

“They're like, ah, f*ck 'em, just use [the plastic containers]. But I'm like, no, I can't because I'm not going to be contributing to that landfill. At the rate that we're buying stuff and

throwing stuff away, they're going to have to either make another landfill or expand the landfill they have right now. And that's the only one on the island, but only people on the west side know about that because that's their neighborhood. When you drive on the west side, you see [signs reading] "a'ole (no) PVT", saying no to the dump that they have in Nanakuli. So it's a geographic thing, this mālama 'āina stuff and aloha 'āina. It all depends on where you live, who you're surrounded by."

This sheds light once again on the fact that biocultural restoration work lies within a broader collective action issue in which only some participants continue to care for and fight to protect 'āina while others free ride on these individuals' efforts without being driven to help care for the land they, too, depend on. This reinforces Ostrom's (2000b, p.34) argument that dependency on a resource is a vital aspect of instigating collective action and mutual cooperation. When environmental degradation is occurring in one's backyard, one is much more likely to participate in stopping it than someone who lives in a place unaffected by these things. And if one's unaffected community does not consider biocultural citizenship to be important, individuals are often socially facilitated to continue ignoring the problem when it does not directly feel like *their* problem.

Chase also shed light on this issue of social norms backfiring against, rather than in favor of, active participation in the case of his own environmental consulting job: "You don't understand until you're in the adult world of work. That's when you realize that people don't care and try to do as little work as possible. I used to think people would be a lot more passionate about this stuff, too, coming out of college. But that's just not what the real world is like." In this case, surrounding himself with coworkers and peers who did not value the environmental work being done and doing the bare minimum in the workplace made Chase unwilling to work harder than anybody else. Unlike the social norms that reinforce biocultural citizenship behaviors as mentioned in the earlier results, it was also found that people surrounded by apathetic or disillusioned individuals were also influenced by those norms of inaction. As Ostrom (1990)

contends: “In a setting in which few individuals share norms about the impropriety of breaking promises, refusing to do one’s share, shirking, or taking other opportunistic actions, each appropriator must expect all other appropriators to act opportunistically whenever they have the chance” (p.36). Chase’s unwillingness to “pick up the slack” of those who did not wish to contribute thus echoes fears of becoming a “sucker” to free-riding individuals.

Even participants passionate about mālama ‘āina are sometimes doubtful about the longer term impact of these experiences due to the lack of mainstream interest in these efforts: “I want to have faith, but honestly I don't think enough people care to the point where genuine social or political change will come from mālama ‘āina sites.” This poses a danger of disempowerment among even passionate biocultural citizens, as witnessing the hegemonic disregard for restoring socio-ecological systems can make these individuals discouraged to persist in their own acts of citizenship. Ostrom’s (2000) work on the effect of social norms on collective action sheds light on this phenomenon. She contends that willing collaborators can later become disappointed and unwilling to cooperate due to broken trust with free-riding individuals:

“...some are easily disappointed if others do not contribute, so they begin to reduce their own contributions. As they reduce their contributions, they discourage other conditional cooperators from further contributions. Without communication or institutional mechanisms to stop the downward cascade, eventually only the most determined conditional cooperators continue to make positive contributions in the final rounds” (p.142)

This “downward cascade” leads to the current disparity that lies between passionate biocultural citizens and those who are not driven enough to continue participating in socio-ecologically beneficial behaviors.

While these dangers of apathetic and disillusioned social norms are real, it is important to keep in mind that biocultural restoration sites themselves create their own social norms as well that participants are affected by through continual exposure. The liminal space of biocultural restoration sites make them places in which norms of restoration, aloha ‘āina, and Indigenous

resurgence can be enacted in the midst of settler-colonial hegemony. These biocultural kīpuka provide spaces where peoples' habitual perspectives and assumptions about their relationship to 'āina and Hawai'i are destabilized and reworked through sociocultural and embodied connections to place, counter-hegemonic narratives, and affective experiences. Thus, while biocultural restoration sites do not serve as a panacea for fostering biocultural citizenship, they do provide an opportunity to catalyze the "uncomfortable" and embodied experiences often necessary for awakening and empowering biocultural citizens.

Structural Constraints of Neoliberalism and Capitalism

Besides conflicts in social norms and cultures of care, structural constraints of neoliberalism and capitalism posed another challenge to fostering biocultural citizenship. In fact, the issue of social norms as it relates to communities not directly affected by environmental degradation is indeed a symptom of the switch from a communal, subsistence ahupua'a system to private land tenure and wage-based labor, as well as Hawai'i's entrance into the global food supply chain. After all, previous to these changes in land tenure and economic exchange, the subsistence ahupua'a system required everyone to have kuleana to mālama their particular ancestral 'āina, cultivate abundance in the form of food crops, fish, or other harvested materials, and exchange them in a sharing economy. Thus, there was no room for free-riders, as those who did not contribute to the work of cultivating the ahupua'a would in turn not have access to the food and other resources that it provides. No Matson boat would come to the rescue to deliver food in exchange for money, providing goods that were dependent not upon the abundance of Hawai'i's 'āina but instead upon the abundance of lands thousands of miles away. No urban center existed to enable people to escape nature and become unaware of the state of the environment "out there" when the ahupua'a itself was its very own reciprocal, socio-ecological system. Note that

this tableau I now create is not meant to romanticize the past; but it does provide us with some clues as to what processes have alienated people from ‘āina to the point of making them no longer driven to contribute to its cultivation and restoration. The legacies of this historic disconnection to ‘āina and food systems, as well as the consequential erasure of reciprocal cultural values and place-based knowledge, has brought us to our current predicament of free-riding and lack of citizenship participation, the main focus of this thesis.

Along with these more geographic and ideological underpinnings of the issue also lie the current economic and institutional constraints that such historic processes have left us with. The need for wage labor to survive in Hawai‘i today leaves people with little options to dedicate their time to biocultural restoration: either they volunteer during their limited time away from work, or they struggle to find a paid position that is often short term, low paying, or hard to find due to the lack of organizational funding. Makali‘i mentioned how, while he wanted to volunteer more, it was hard for him to make time for it: “I don't have a whole lot of time to volunteer down there as much as I would like to. Just regular life and work things get in the way.” Makana also described how, while going to Ulupō had changed certain aspects of his lifestyle such as eating more culturally-significant foods, his day to day life remains constrained by his need for a regular paycheck: “Some of them are doing it seven days a week and I only get to go there once in a while because I have to [work]. You know, the world is different now. I can't farm and fish all day. But I get to spend just a few moments there, a few hours and be able to connect.” While biocultural restoration sites provide a space for cultural, social, and spiritual re-centering in ‘āina, the current settler-colonial and capitalist system currently makes it difficult for these spaces to become normalized in most peoples’ lives. The imposition of capitalist relations has deemed the nonmonetary exchanges of subsistence and gift economies “unrealistic”, as the need for

monetary compensation often outweighs peoples' ability to regularly participate in biocultural restoration as well.

Kamuela also spoke of the financial struggles of trying to do work that he is passionate about in the face of economic difficulties:

"I just applied for a second job so I can make enough to pay for the new apartment me and my girlfriend are renting. It says you've got to be able to work nights and weekends. So I think if I can leave this job and then get there, I'm available from three to like whenever. So whenever my job here is done, I can just let them know that I'm pretty flexible to work after those hours. My dad's generation, they're used to doing things they don't necessarily feel passionate about to sacrifice and make ends meet. So, I'm lucky that I still have one job where I work with kids and am progressing in a field that I'm passionate about, even though it can be stressful."

Kamuela's optimistic account on how he needs to work days, nights, and weekends with little time to actually spend in the apartment he is paying for exhibits the "hustle" that many young workers have to deal with in these low-paying 'āina jobs, especially in the face of Hawai'i's skyrocketing property values. The fact that Kamuela later ended up quitting his job at a biocultural restoration site because of worker burn-out further exemplifies the struggle of working at these sites when there is limited staff and funding to provide employees.

Maka'ala spoke about her previous desire to do mālama 'āina work, but how her financial needs always prevented her from doing so:

"I was always on the grind and working two jobs, three jobs trying to financially make it and support myself. So I never had time to volunteer. I could not sacrifice the money for volunteer stuff. And so when COVID happened and everything got shut down, my job hours got cut in half and there was actually no outlet to just pick up another job. So I was like, well, this is my opportunity."

Keoki had a similar experience:

"The sequence of events that actually brought me to Ulupō was basically getting laid off during COVID and then thinking that I needed to change my career path because I noticed that I wasn't making as much money serving tables anymore. So I just figured it's time to get out of the restaurant industry altogether, and I reached out to [one of the staff at Ulupō]."

Thus, while mālama ‘āina work had seemed impractical to participate in previously due to financial constraints, the break in the status quo brought about by the onset of COVID-19 provided the unlikely opportunity to volunteer at Ulupō. This reflects sentiments of the pandemic being a disruption in the hegemonic capitalistic structures that require wage labor, instead providing an opportunity for participation in a more subsistence-based, voluntary exchange. However, it also sheds light on how, under normal economic conditions, it is extremely hard even for people who *want* to volunteer to actually make the time to participate.

Low funding was not the only financial issue shared among biocultural restoration organizations; the inconsistency of grant-based funding and the consequential lack of workforce capacity made organizations often dependent on unstable volunteer labor and low-paid interns. Maka‘ala mentioned how this became very apparent to her after she interned at Ulupō for 11 months: “Being in the thick of it helped me see how strugglesome it is for these organizations to constantly be applying for grants, the lack of funds to pay for staff, and the turnovers because you're basing your work on interns and volunteers. How does the organization balance that with the actual work that you have to do on the ‘āina?” Kahele also spoke about the struggle of hosting lots of volunteer groups with few long-term workers, while needing to train and mentor new interns simultaneously:

“The peak was during Kupu ‘āina corps, as far as workforce, then that ended in December. Then two new interns came on so there was me, one other full time, and another part time. Then summer came and everybody was kind of split with different programing. So there were two full time interns working with me, but not really because I had to prep the imu, and the others were down here with the summer program. So I didn’t really have time to mentor them. And now we have the smallest crew in the past year, and it's hard.”

Not only do organizations have to deal with limited staffing, but the interns and volunteers that they gain to supplement that often come with their own needs for training, mentorship, and guidance, which puts further pressures on limited staff members. Thus, while the dependence of

these organizations on unpaid volunteer labor coupled with low-paid intern labor on the one hand exhibits a case study of more-than-monetary values that intrinsically drive these forms of participation, on the other hand it brings our attention to the struggles to fulfill organizational goals and needs with the high labor turnover involved.

The limited capacity of these organizations also means that they must limit their energies toward particular priorities that they are capable of focusing on. To Kate, this posed an issue when organizations had to choose between community-centered and ecosystem-centered work: “A lot of times, these places that focus on infusing cultural practices don't focus on speeding up the conservation work. They kind of just want more participation. Like, they do it as a community, and I get that. But it's not something that I could see myself doing. I'm more focused on immediate results and closer timelines.” This sheds light on not only the limited capacity of these organizations to address both community and conservation goals in a timely manner, but it also reveals the problematic human-nature divide that people like Kate have retained in their minds. To Kate, forging relationships between ‘āina and the community is inefficient in the face of timely conservation needs; yet she is not considering how these less efficient sociocultural priorities may actually pay off more in the future by fostering biocultural citizens dedicated to mālama ‘āina.

This dissonance between short term efficiency and long-term vision echoes Ostrom's (1990) contention that, oftentimes, “Individuals attribute less value to benefits that they expect to receive in the distant future, and more value to those expected in the immediate future” (p.34). However, this preference varies in different contexts with varied timelines of dependency on a CPR. In the case of fisheries, “The time horizons of the local fishers, in relation to the yield of the inshore fishery, extend far into the future. They hope that their children and their children's

children can make a living in the same location. More mobile fishers, on the other hand, can go on to other fishing grounds when local fish are no longer available” (p.34-35). This relates to Yun-Jae’s account on how He’eia fishpond was being restored not for immediate fish consumption, but because they want that place to be able to “feed us for the next eight hundred years.” Thus, intergenerational connection and dependency on a resource in turn fosters a longer-term kuleana to continue that relationship, rather than a desire to only address short term needs or goals. Yet, in the neoliberal context of these organizations, the delegation of restoration responsibilities on non-profits through conditional grant funding often forces them to split their focus between their own priorities and the priorities of the state.

Top-down delegation of conservation responsibilities was also made apparent in the context of Manu, a new restoration site near Ulupō that Kauluakalana was recently given access to. Manu is a large wetland bird restoration area just down the road from Ulupō Nui. While it was intended to be a habitat for native waterbirds, no native birds were to be seen at this site prior to Kauluakalana’s involvement. When state agencies noticed that native water birds like ‘Alae ‘Ula were returning to Ulupō as they restored lo‘i kalo, they decided that the same could be done to attract native birds to the Manu site as well. Because of this, Kauluakalana came to an agreement with the state to create lo‘i kalo at Manu in order to attract birds to the area, while in turn gaining access to more land and being able to plant more kalo. While this seems at first to be a fair agreement, and an exciting one in the sense that it demonstrates a non-monetary exchange of labor for land access, it was easier said than done. With the already overwhelming workload at Ulupō Nui and limited staffing, splitting the time between work at Ulupō Nui and Manu became an added stressor for the organization. While the state was willing to provide access to Manu, they were not able to supplement this agreement with any funding to assist with the increased

workload. This echoes Ribot & Peluso's (2003) argument about delegating rights to local communities: "Rather than enfranchising local populations with rights over resources, states often manage local people as subjects to whom privileges, rather than rights, are delegated" (p.163). This portrays the current neoliberal tendency for state agencies to delegate "privileges" over genuine "rights" for private organizations like Kauluakalana to do their conservation work for them.

As aforementioned, the stress that arose from low pay, low staff numbers, and more volunteer groups to host often resulted in worker burnout. In the context of Kauluakalana, this also resulted in institutional conflict between some interns, staff, and administrators. Some of the interns and staff that I worked with during my internship mentioned how they felt that the organization was taking on too much for its limited capacity, and that when they tried to ask for a change in organizational operations, their views were often disregarded. This led to 2 staff leaving the organization during my time working there. This points to a failure to hold up two of Ostrom's (1990) eight principles for long-enduring CPR institutions: collective-choice arrangements and conflict-resolution mechanisms. It also reveals a lack of adaptive capacity, as on-the-ground workers were unable to have a say in making changes to the organization, thus preventing organizational learning and the resilience that would result. Thus, the lack of funding and capacity for mālama 'āina work today, which was once vital for a subsistence ahupua'a economy, can now push workers to the point of leaving the organization for other means of wage labor should internal institutional conflicts be left unresolved.

Besides funding and capacity issues, it is also important to note that the underlying logics of neoliberalism remain an issue in the context of biocultural restoration volunteering as well. While the volunteering that continues to happen at biocultural restoration sites exhibits a politics

of possibility in that individuals are driven to contribute to restoration for more-than-monetary values, at the same time, the “voluntary” nature of volunteering in the context of a broader settler-colonial capitalist society makes commitment an issue. Pe‘ehi spoke to this struggle to foster commitment to aloha ‘āina: “It’s a challenge to make that investment in aloha ‘āina as it is today, because the odds are not in our favor. I guess that's what makes the people that *do* commit to that seem cut from a different cloth; that have had different life experiences that make them understand and see the importance as well as we do.” As Pe‘ehi said, commitment to these efforts is difficult in a society that does not align with aloha ‘āina values and lifeways.

Kahele also touched on the struggle for real commitment. When asked what were the greatest challenges faced in their efforts at Ulupō, Kahele laughed and said:

“You talking about the American government? That’s a big one. Nah, I guess you could go down the rabbit hole, but really it comes down to people. People not showing up and not enough people because of economic situations and perceptions of things. People coming to do the work and later getting stuck with other things, not able to do the work. Maybe they want to, but they’re stuck. Everything else—water, bugs, ong choy—that’s all minor.”

Kahele’s tongue-in-cheek comment about the American government being the real problem was not completely unfounded; the drastic changes that were made on the landscape and culture of Hawai‘i that prompted the need for biocultural restoration in the first place indeed were historically put in motion by the American government. He then touches on the aforementioned struggle to retain volunteers in the midst of a system that makes people “stuck” in their other jobs and responsibilities and unable to continue participating. This “people” problem stems in large part from the fact that volunteering is a completely optional activity that people can go to when they feel like it but not have any commitment to, thus making it hard to solidify participation and incite collective action. The casual nature of volunteering in this regard echoes the neoliberal logic of individual responsibility; that the state can rely on voluntary citizenship to take on the socioecological work of biocultural restoration, without the need for much state

intervention or support. However, this arrangement disregards the fact that dedicated volunteerism is dependent in large part on peoples' economic situation, which is in turn constrained by capitalistic rather than reciprocal relations.

No matter how exciting these biocultural restoration sites seem as counter-hegemonic spaces of reciprocal human-nature relationships, resurgence, and economies of care, the structural constraints of capitalism and neoliberalism indeed limit the potentialities of these places. As we have seen, the non-monetary values that motivate volunteers and low-paid interns to participate at these sites come hand-in-hand with issues of wage labor dependency, a lack of “free” time to volunteer, and limited positions and funds at these sites. These limits to organizational capacity add institutional stressors that can lead to worker burnout, inability to attain holistic goals, and inter-institutional conflict.

While these structural constraints are undeniable, we would be wrong to completely write off the transformative and performative potential of these sites. When looking at these phenomena through a diverse economies lens, we are asked to focus not on these capitalistic limitations, but rather on the politics of possibility that arise *despite* and *in the midst of* those structural constraints. Not only do biocultural restoration sites act as biocultural kīpuka or “other worlds” of economic difference through embodied interactions with ‘āina, food, and people, but they also act as affective hubs for the performative power of biocultural citizenship. These places thus become alternative sites in which people can build community and solidarity, re-position their identities in alignment with biocultural citizenship, and in-turn potentially plant the seeds for collective action through “resubjectivation”; defined by Gibson-Graham (2006) as “the mobilization and transformation of desires, the cultivation of capacities, and the making of new identifications” (p.xxxvi) in line with new, alternative economic possibilities. While

acknowledging that this process of “resubjection” implies an individualized focus of transformation, I contend that the resubjection of groups and communities of biocultural citizens still holds the potential for greater collective action.

The Power of Subjectivity

Touching on Lawrence’s (2006) argument once again, any form of participation, whether merely instrumental or transformative in nature, can have transformative results. The question is, what is it that determines whether those initially instrumental volunteer experiences do indeed become transformative in the end? I provided some insight into this in the last few sections: Embodied, liminal experiences can produce affect that catalyze changes in perspective and create a sense of urgency; Participants can become empowered to do more through seeing the impact of their work, understanding its significance as part of a larger-scale effort, and connecting with a community of like-minded individuals; Alternative geographical imaginaries and narratives of place and history provide a fresh perspective with which some participants change and align themselves. These are all moving gears to the overall machine that makes these biocultural restoration sites continue to tick. But these insights still leave us wondering: if these experiences are so effective in creating biocultural citizens through these various methods *sometimes*, why are there still volunteers and interns who do *not* become biocultural citizens? Where is the gap in these experiences that these particular participants fall through, choosing to continue living as cynical*³ subjects of a settler colonial, capitalist society rather than choosing to do their part to

³ *The cynical subject is referred to by Žižek (1989) as one who recognizes an ideology and the interests behind it, but still chooses to operate within that ideology. Expanding on Marx’s description of ideology as a “false consciousness”, Žižek points out that, in many cases, people are not necessarily unaware of the ideology in which they live, but instead “know very well what they are doing, but still,

enact biocultural change where they can?

The simple answer: *It depends.*

The complex answer: While biocultural restoration sites hold the *potential* of transforming participants into biocultural citizens, participant values can only really be transformed if their particular subjectivities allow it. What does this mean? It means that volunteer and intern experiences at biocultural restoration sites plant the seed of biocultural citizenship in participants but, depending on the particular person's upbringing, personality type, and friend/family demographics, that seed may or may not end up sprouting into a more substantial form of citizenship. Peoples' particular subjectivities and positionalities affected by these aforementioned factors provide the breeding ground for these experiences to become either transformative or merely instrumental. As Basso (1996) contends when describing sense of place: "the self-conscious experience of place is inevitably a product and expression of the self whose experience it is, and therefore, unavoidably, the nature of that experience (its intentional thrust, its substantive content, its affective tones and colorings) is shaped at every turn by the personal and social biography of the one who sustains it" (p.55). The self-conscious experience of biocultural restoration sites is shaped in large part by the personal biography with which participants enter that place. This also relates to Ostrom's claim that individual behaviors are indeed informed by a "rational" choice, but only when we consider that "rationale" as informed by a person's

they are doing it" (p.29). This gives rise to an enlightened false consciousness, in which "one knows the falsehood very well, one is well aware of a particular interest hidden behind an ideological universality, but still one does not renounce it" (p.29). Zizek argues that this cynicism becomes a form of ideology unto itself, since choosing to remain in ideology even with the knowledge of its true nature maintains the hierarchical status quo.

particular subjectivities: “An individual’s choice of behavior in any particular situation will depend on how the individual learns about, views, and weighs the benefits and costs of actions and their perceived linkage to outcomes that also involve a mixture of benefits and costs” (Ostrom, 1990, p.33). Thus, the behavior of individuals in collective action problems like that of biocultural restoration is dependent on a range of factors that inform their subjective “rational” behavioral choices.

Most participants who were very driven to continue doing biocultural citizenship behaviors were predisposed in some way from their particular upbringing and positionality. Many had a previous liking for “the outdoors”, often being avid or amateur hikers, fishers, paddlers, or gardeners. Kira spoke about how “my mom said I was always a dirty kid, so I was always playing in mud even then”. Others had childhood memories of being close to nature which helped prime their future inclination toward caring for the environment. Bernice described her childhood of reciprocal relationships with plants:

“We did not have much money, which meant that we had to grow our own food. And we had a small house with a large garden around with lots of edible stuff in it. My parents grew tomatoes and vegetables, and lots of berries and fruit trees and ornamental stuff too. We didn't have a lawn. That was a waste. Everything was covered with something more useful.”

By depending on and tending to a garden in her youth, Bernice came to understand the inseparability and interdependency of humans and nature. A lawn would be a waste because it would be for mere aesthetic appeal, with no real ecological or subsistence benefits that would feed into more intimate human-nature relationships. The fact that these participants had upbringings already oriented towards “getting dirty” in nature made biocultural restoration work an easy addition to their preexistent inclination toward the outdoors.

Other participants were similarly brought up with a deeper understanding of Hawaiian culture and the principles of aloha ‘āina. Kelsey talked about how her ‘āina-based upbringing is a

major reason why she continues to volunteer at Ulupō:

“I think that it just has to do with my upbringing. I was very fortunate to have the family structure that I had. My grandpa is a paniolo who for the longest time worked for Parker ranch, so he has a couple of horses in our backyard. And then my grandma would go to Waipi‘o all the time. So I got to visit the lo‘i down there while I was living on the island. So it was kind of something that was just ingrained into my life.”

Peet mentioned being connected to his own Maori culture, but that ‘āina was his missing link: “My initial move into aloha ‘āina work was the gap between me having been lucky to be raised in my language and my culture in New Zealand but not having been connected the ‘āina aspect. And so, for me, that was the missing piece of the puzzle.” In both cases, biocultural restoration gained its importance in these participants’ minds based on their past experiences that already valued the cultural aspect of these biocultural efforts, making them more inclined to align themselves with such work.

Having an upbringing in which one grows to crave a sense of community was another aspect that some participants stated prompted their interest in biocultural restoration. Albert shared about how being brought up in a military family made him feel rootless: “Being a military brat, and then constantly moving... I guess that does leave a little hole in my heart. I’m really desperate for a community. So if somebody’s like, hey, come kick it with us at the lo‘i, I’m like hell yeah. And a lot of these spaces are really inclusive community spaces.” Thus, the social appeal of biocultural restoration and the sense of community those experiences build are much more impactful to individuals who felt unconnected to any community themselves.

Meanwhile, as mentioned earlier, those who were brought up or surrounded by people who normalize complacency rather than political action often were less likely to be transformed by these experiences. It was discovered that this was often due to these individuals being surrounded by social norms that were not in-line with biocultural citizenship, which often was the case when individuals lived among communities that were privileged enough to be

unaffected by the socioecological issues at hand. Chase spoke candidly on this point: “It’s not that I don’t think it’s important. I just have other stuff I want to do.” These cases exemplify the unfortunate fact that people who are privileged enough to be comfortable with the current settler-colonial situation, living in communities not directly affected by environmental issues, over-development, or cultural dispossession, are not as driven to solve them. In these cases, individuals are often not unaware of the issues at hand, but rather are too comfortable free-riding at the expense of less fortunate communities to be inclined to act collectively. These individuals are perfect examples of Žižek’s (1989) cynical subject, as they continue to operate within the hegemony of settler-colonial capitalism despite their understanding of its negative impacts on other socio-ecological communities. This also ties into what Ken mentioned before: that people often need to experience some degree of discomfort before they are driven to commit to these types of movements. If they are too comfortable with the current status quo, it is much more bothersome to make the effort of trying to change it.

Those who were directly affected by settler-colonial struggles of development and cultural dispossession, on the other hand, were much more primed to internalize biocultural values. Kelvin mentioned how his dedication to aloha ‘āina began simply because he wanted to protect his local surf break: “Those days it was because we were surfers and, you know, really young kids not knowing very much. But, you know, it's like our surf spots were being kind of threatened and then it kind of connected us with activism. So that opened the door for me.” This reinforces the notion that having a stake in what is being protected is a much stronger driver for participation than abstract morals, which are easier to ignore by individuals who are not directly impacted by socio-ecological issues.

It is important to note that subjective past experiences, as well as personality type, can make someone more or less conducive to cultivating biocultural citizenship. Bernice explained that, while her upbringing surrounded by nature made her love plants, her twin sister did not internalize her upbringing in the same way:

“We had a good life. We had no car in the family. That meant we went for long, long walks all the time, especially Sundays. My mother would pack a picnic, and the eight of us would go out foraging for wild mushrooms or berries in the woods, and always bring back buckets of edible stuff. Looking back, I'm very happy that we had a childhood like that; without much money, but with a lot of interesting facts and nature. But my twin sister is not that interested in [nature]. She lives in a penthouse place in her town. She has a few boxed plants, but that's all she wants. She doesn't want to take care of a garden.”

The fact that these two women were twins with the same upbringing and different eventual inclinations toward nature further exemplifies the complexity of subjectivities that enable or stifle affective moments of transformation. This reaffirms Rose (1990) and Ostrom's (2000) claims that personality type affects behaviors in collective action problems.

What does all this mean? On the one hand, it does indeed indicate that there is probably no way to really foster biocultural citizenship in *all* volunteers and interns at these sites. While this may seem less than ideal, these findings also point to something a bit more hopeful: that biocultural citizenship can be a boundary concept between people of various positionalities. In other words, people interested in the outdoors, in environmentalism, in Hawaiian cultural practices, and in socializing with passionate people, as well as people looking for connection with nature and community—all of these various types of people have the potential to be drawn into biocultural restoration work and become biocultural citizens as prompted by their own subjective experiences and perspectives.

To sum up this section, the results of this research indicate that:

- Restoring pilina through embodied experiences with food, nature, and other people motivated individuals to continue doing biocultural restoration work.
- Witnessing one's direct impact on the landscape helped to empower biocultural citizens.
- Sharing decolonized, place-based mo'olelo and perspectives helps to unsettle settler-colonial narrative and make people open to resurgent possibilities.
- Affective, liminal experiences help to jolt participants out of their comfort zone and acknowledge the urgency of biocultural issues.
- The realignment toward biocultural-oriented collective identities helps to better align participants with biocultural citizenship behaviors.
- Challenges to biocultural citizenship include:
 - Those who are not directly affected by biocultural issues, or who are not sanctioned by social norms in favor of biocultural citizenship, are less driven to take part in citizenship behaviors.
 - Neoliberal constraints limit the capacity and efficacy of biocultural restoration organizations.

Recommendations

So the answer to all the questions I posed at the start of this thesis is that “it depends”. Helpful, right? But in all seriousness, the findings from this research do indeed provide rich insights that can help us determine best practices for improving biocultural citizenship in Hawai‘i and beyond. Note that the following recommendations are not an exact and exhaustive prescription of next steps, but rather act as food-for-thought for potential avenues of action this research could take.

To address the challenge of social norms of inaction and the free-riding that results, we must consider the root of the problem; that for many, the dominance of settler-colonial discourses and neoliberal logics have blinded them from a politics of possibility for alternative ways of being. As we have seen that subjectivities based on upbringing, personality, and surrounding social norms play a significant role in the effect of biocultural restoration experiences on volunteers and interns, providing opportunities for decolonizing peoples’ perspectives and forging closer human-environment relationships from an early age may prime them to be more citizenship inclined. While the majority of interviewees described being brought up without much or any exposure to mālama ‘āina besides a single field trip in elementary or high school, I recommend that ‘āina based learning become a more frequent experience for youth. Embodied ‘āina experiences are not only more conducive to place-based learning, but also may help to normalize aloha ‘āina and biocultural values and perspectives among youth who have otherwise been unexposed to these counter-hegemonic relationships to place. Normalizing these practices and perspectives through continual participation via school field trips and projects may in turn make these biocultural values much easier to internalize when people are exposed to them at an early age, instead of having to deal with the cognitive dissonance of preexistent perspectives and

norms. By frequenting biocultural restoration sites over time, the experiences and relationships forged may instill alternative social norms of care and citizenship. Furthermore, not only could incorporating biocultural restoration in regular curriculum throughout a child's K-12 education help to normalize these practices and perspectives for the children themselves, but it also may help build capacity for organizational staff as teachers and school staff would be familiar enough with site protocols and activities to be able to help lead groups and make them less burdensome to host in large numbers.

Another means of addressing the challenge of social norms and citizenship behaviors among adults could be improving the institutional culture at schools, biocultural restoration sites, and other environmentally-oriented workplaces. If a workplace only rewards working the bare minimum needed to get paid for the week, for example, workers would not want to be deemed "suckers" to the general culture of free-riding at their workplace, and thus become driven to do as little as possible as well. Like in Chase's case, this lack of drive to produce meaningful environmental work led him to lose faith in biocultural citizenship, as he became convinced that the apathetic attitude of his coworkers reflected that of society at large. Who would want to do extra participatory work in a society full of free riders that render you a "sucker" for taking biocultural action? When people are convinced that nobody wants to contribute, they are much less likely to want to make their own contributions to the greater socio-ecological community. Thus, fostering an institutional culture in which commitment and participation in biocultural citizenship activities are encouraged and even rewarded may motivate more citizenship among coworkers, enacting a social norm of participation rather than inaction. By creating institutional norms through incentives and rewards, we may be able to better harness the power of social norms for fostering rather than stifling biocultural citizenship behaviors.

Furthermore, on an organizational level, providing meaningful worker participation, conflict-resolution mechanisms, and debriefs are vital for promoting adaptive management and organizational resilience. As Ostrom (1990) pointed out with her eight principles, matching governance rules with local conditions, allowing appropriators to modify rules, and having mechanisms for conflict-resolution are some of the vital aspects of successful CPR institutions. These become especially apparent when we look at the inter-organizational issues that were voiced by many long-term interns and staff. Providing meaningful means of participation among employees at these organizations, not to mention volunteers, is vital for on-the-ground workers to feel heard, respected, and in turn contribute to the adaptive management of site operations. Creating organizational spaces of respect and conflict-resolution helps to reinforce the key relationships of trust, reciprocity, and reputation that Ostrom (1998) argues is key for collective action arrangements.

While the current state of volunteerism, citizenship, and individual social responsibility show promise for the re-subjection of biocultural citizens, this transformative work alone does not work for everyone. Like in the case of CPR institutions, rules have to be put in place in order to ensure cooperation among passionate and disinclined cooperators alike. If we are to prioritize biocultural citizenship as a society, rules and incentives must be established in order to foster more participation among the less convinced. Tax incentives for volunteer hours could be one avenue of incentivizing bioculturally beneficial behaviors. Another method could be that volunteer time off (VTO) become more commonplace. VTO, practiced by Starbucks and an increasing number of businesses, allows workers to be paid the same amount per hour of volunteering as they would per hour of working (for a limited number of hours). These sorts of programs could in turn be provided with state subsidies to incentivize firms to participate. These

are just a few of the innovative ways in which we need to switch the narrative from citizenship being something voluntary and optional to something that is a kuleana of each citizen of this ‘āina and society. Rather than merely depending on the “pure” romanticized idea of citizenship, we must acknowledge that many people are not driven enough to go out of their way to volunteer, and even those that are motivated have been found to struggle to make time while struggling with their own financial situations. Thus, providing incentives and opportunities to participate in the midst of a system dependent on wage-labor may make broader participation more likely.

As the structural constraints of neoliberalism and capitalism posed a core challenge to fostering biocultural citizenship, not only can these structural constraints be lessened in the short-term by the aforementioned in-work opportunities, but larger-scale changes in governance and fund allocation will also be essential. The neoliberal tendencies of shrinking government involvement need to be reversed through bringing back “big government” as Lake (2002) presents it. Lake’s interpretation of “big government” does not involve giving *more* power to the government; the capital-driven powers of privatized governance through corporate subsidies and financial safeguards demonstrate that the government has merely privatized rather than completely removed itself from influencing power. Instead, Lake calls for the redirection of government power and resources into purposes that are more aligned with social justice; in this case, biocultural restoration organizations. By focusing on providing more stable funding to these organizations rather than providing subsidies “to corporate sectors ranging from agriculture to mineral extraction, pharmaceutical research and software development” (p.821), biocultural restoration organizations may be able to gain capacity to broaden their efforts without issues of worker burnout, lack of labor, and grant dependency.

To sum up this section, recommendations from this research include:

- Normalizing and institutionalizing ‘āina-based learning through school collaborations.
- Changing institutional culture of the workplace to prioritize biocultural citizenship.
- Improved worker participation and effective conflict-resolution mechanisms in place at biocultural restoration sites.
- Government support of biocultural restoration (ie., through tax incentives, subsidies, VTO).

By working on both sides of the issue—fostering participation on an individual level as well as building support for sustained biocultural restoration organizations—we may just be able to foster a more biocultural-focused society that prioritizes socio-ecological well-being over capital gain. In the meantime, it is important to remember that, in the midst of these broader ideological and structural constraints of settler-colonialism, neoliberalism, and capitalism, biocultural restoration sites nonetheless provide kīpuka from which seeds of aloha ‘āina and biocultural citizenship have already begun to grow on their own.

While this thesis reveals the potential and constraints of biocultural citizenship, it only scratches the surface. Further studies could be done to get more into the nitty-gritty details that determine particular subjectivities that are more likely (or not) to translate into biocultural citizenship. While this study did look into how past experiences had an impact on future interests and behaviors, longitudinal studies may be more informative for revealing real levels of transformation that would not be subject to hindsight bias. For future surveys, I would recommend adding more options that would help differentiate and compare collective versus individual citizenship behaviors, as well as value-change versus behavioral-change. Comparative studies among various organizations, regarding their successes as well as challenges, could also be helpful for teasing out broader organizational issues that need to be addressed.

Conclusion

Biocultural restoration sites are places in which Indigenous resurgence, ecological restoration, re-connection with nature, food systems, and people all converge. They are places where people are driven by non-capitalistic, more-than-monetary values of social, spiritual, and embodied connection to give back to the ‘āina and community through the manual labor of restoration. They are kīpuka aloha ‘āina where participants become aware and empowered to contribute to greater collective movements of aloha ‘āina, environmentalism, and Hawaiian sovereignty. They are also simply places that serve as pu‘uhonua (sanctuaries) from the everyday alienation of modernity, providing space for connecting back to nature and other people on a very basic, authentic level.

Despite these sweeping praises of biocultural restoration sites, we must not forget to keep one foot on the harsh ground of structural realities while the other flaunts playfully on the sands of possibility. The discursive and material work that has been enacted overtime on Hawai‘i’s physical and sociocultural landscapes to define Hawai‘i as a settler-colonial paradise “[where] the Native Hawaiians, speaking in past tense, used to believe...” (Mei-Singh, 2016, p.713) constrain but also necessitate the “everyday acts of resurgence” (Corntassel, 2012) that are enacted at biocultural restoration sites. Furthermore, the capitalistic need for wage labor and organizational funding over reciprocal economies of shared abundance presents a significant challenge to biocultural citizenship; but the fact that these biocultural restoration sites continue to operate with limited staff, short-term interns, and volunteer labor also sheds light on the potential for community economies of care *despite* these very real structural constraints.

Clearly, inciting care for ‘āina as a common pool resource is complex; not only must we consider the problem between rational, self-interested individuals and their more collaborative

counterparts, but in most cases the question of whether or not one becomes a biocultural citizen is often due in large part to a war of ideas and discourses. Individuals determine whether ‘āina is an important enough CPR to help to restore and maintain, whether it is *worth* it or even *possible*. Some do not think it possible even if it does seem worth it. Therefore, providing spaces for empowerment like biocultural restoration sites, even on the individual scale, is vital for cultivating the next generation of dedicated environmentalists, cultural practitioners, and aloha ‘āina warriors. Biocultural citizenship clearly comes with its own neoliberal caveats of individual responsibility; but the empowerment that comes from aligning oneself with a broader collective identity of biocultural citizenship and aloha ‘āina may not only can have performative effects between individuals, but could indeed also be the first step to inciting other forms of collective action for restoring and re-enlivening Hawai‘i’s physical and cultural landscapes.

I end this thesis with a quote from my supervisor at Ulupō, who helped open my eyes both to the harsh realities and possibilities of these efforts:

“Native forests had very low success rates. One in a million of every seed that landed caught. In order for things to grow, they need to be cared for just like a plant with wai, with water and soil; it just needs the right environment to thrive. So I can be patient. And one day it’ll click, one day it’ll catch. I’m just trying to throw out seeds all day.”

Appendix A: Working Questions Sheet

Research Question: What are the processes that instill biocultural citizenship in volunteers?

Working Questions	Tangible Observations/ Questions	Source of Data	Interview Talking Points
In what ways do particular conditions and/or past experiences contextualize and affect the impact of volunteer experiences?	<ul style="list-style-type: none"> - What are the various social/academic/cultural backgrounds of participants, and how do these shape their perception of biocultural restoration work (scientific background, Hawaiian ancestry, etc.) - Managers: How do the past experiences of project managers prompt their drive to further biocultural restoration efforts as a profession? 	<ul style="list-style-type: none"> - Interviews with program managers/staff - Interviews with volunteers - Online surveys 	<ul style="list-style-type: none"> - Demographics: How many years on island, self identification? - A little background first, what got you into mālama ‘āina work in the first place? - What brought you to Ulupō? First mālama ‘āina experience? - How connected were you to Hawaiian culture prior to participating in mālama ‘āina work? - Were you a part of any environmental/ cultural programs or efforts prior to getting involved in mālama ‘āina work? If so, what? - Managers: What past experiences brought you to your current position in [organization name]?
What are the mechanisms (ie., experiences, narratives, activities) implemented by biocultural restoration programs that have affected and potentially altered volunteer perspectives/values?	<ul style="list-style-type: none"> - If recurring: What particular activities/aspects of their experience at Ulupō drive participants to continue doing mālama ‘āina work? - If not recurring: Were they unable/unwilling to come back? What particular activities/aspects of their experience at Ulupō made them unable/unwilling to 	<ul style="list-style-type: none"> - Secondary data from program websites - Participant observation - Interviews with program managers/staff - Interviews with volunteers - Online surveys 	<ul style="list-style-type: none"> - What particular experiences or stories stand out from your time at Ulupō? How did they affect you? - What do you feel is the most significant aspect of the work being done at Ulupō? Biocultural restoration work in general? (ie., Cultural revival, food sovereignty, restoration) - How does your experience of Ulupō differ/relate to other biocultural restoration sites? - How has your connection with fellow volunteers/ interns influenced the impact that your volunteer experience doing mālama ‘āina work? - Managers:

	<p>continue working there?</p> <ul style="list-style-type: none"> - What perspectives of mālama ‘āina have various volunteers internalized? - How do the various programs (Kupu, MINA, Kauluakalana) frame the significance of biocultural restoration work? - How do particular framings by various biocultural restoration programs alter how participants internalize their volunteer experiences? 		<ul style="list-style-type: none"> - How does [your organization] frame the importance of mālama ‘āina work? - What activities are incorporated into the programs that reflect this?
<p>What perspectives and elements of biocultural citizenship have volunteers internalized (or not)? How have these manifested in their lives outside of volunteering? (Esp. for long-term participants)</p>	<ul style="list-style-type: none"> - How do volunteers perceive the work they are doing at Ulupō? How is it perceived as part of a larger movement? (ie., sovereignty, environmental, cultural resurgence, back-to-land, etc.) - How do participants value various things along the biological-cultural spectrum? How have these values been altered post-volunteering? 	<ul style="list-style-type: none"> - Interviews with program managers/staff - Interviews with volunteers - Online surveys 	<ul style="list-style-type: none"> - What did you think about the physical work?(ie., Was it tiring? Rewarding?) - How do you feel about native Hawaiian plants? Ohi‘a lehua for example? Canoe plants like kalo? - How has your connection to the place of Ulupō changed after working the land there? - Have you come back to Ulupō after your initial experience there? If so, what made you continue to come back to Ulupō? <ul style="list-style-type: none"> - If not: what has kept you from going back? - Have you become involved in similar work to what you did at Ulupō after volunteering there? If so, what? - Does your experience at Ulupō feel like a fun experience in the

			<p>past, or did it change your lifestyle in any way?</p> <ul style="list-style-type: none">- Do you vote?- Do you take part in any other forms of environmental or cultural advocacy/efforts that were I did not mention?
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Appendix B: Mālama ‘Āina Volunteer/Intern Experience Survey

Aloha kākou!

My name is Jocelyn Grandinetti, a Master’s student of Geography and Environment, UH Mānoa. You are invited to take part in my research study: “Restoring People and Place: Building Biocultural Citizenship Through Grassroots Restoration” to explore the ways that volunteering or interning with place-based mālama ‘āina/environmental organizations in Hawai‘i have affected (or not) your values, lifestyle, and career path. Unless you explicitly reveal your identity, this survey is completely anonymous.

Mahalo for participating!

1. Informed Consent: This online survey will take about 5-7 minutes. Your participation in this project is completely voluntary. Do you give permission to participate in this research project?

- ☐ Yes, I give consent to participate.
- ☐ No, I do not give consent.

2. What is your age?

- ☐ Under 18 years
- ☐ 18-25 years
- ☐ 26-45 years
- ☐ 46-65 years
- ☐ Over 65 years

3. How do you identify yourself in relation to Hawai‘i?

- ☐ Local (not Native Hawaiian)
- ☐ Native Hawaiian
- ☐ Foreigner/Visitor
- ☐ Out of state/country student
- ☐ New resident (under 10 years)
- ☐ Other _____
- ☐ Prefer not to say

4. What type of mālama ‘āina (taking care of the land) have you participated in? Select all that apply.

- ☐ Native species restoration
- ☐ Invasive species eradication
- ☐ Traditional Hawaiian Agriculture/Aquaculture (ie., lo‘i kalo, loko i‘a, māla)
- ☐ Infrastructure building/maintenance (ie., fencing)
- ☐ Trail creation/maintenance
- ☐ Cultural site restoration/maintenance
- ☐ Beach cleanup
- ☐ Other _____
- ☐ I have never participated in mālama ‘āina activities/volunteering

4a. What were your most prominent motivations for taking part in mālama ‘āina work in the first place? Select all that apply.

- ☐ Sounded fun
- ☐ Referred to by friend/teacher/etc.
- ☐ Wanted to get my hands dirty/go outside
- ☐ Wanted to connect to (my) Hawaiian culture/ learn the culture of this place
- ☐ Wanted to give back
- ☐ Wanted to help with environmental conservation efforts
- ☐ Wanted to do volunteer work with friends/family
- ☐ Other _____

5. About how many times have you volunteered/interned at a mālama ‘āina site?

- ☐ 1 time
- ☐ 2-5 times
- ☐ 6-10 times
- ☐ 11-20 times
- ☐ 20+ times

5a. What keeps you from volunteering/interning in mālama ‘āina work more than once?

- ☐ I do not like the outdoors/doing physical labor
- ☐ I was just curious to try it out
- ☐ It was a one-time activity/workday I participated in as part of a group/for extra credit/etc.
- ☐ I don't have the time/transportation needed to continue volunteering/interning
- ☐ I am new to this and hope to continue participating
- ☐ I plan to continue, but do not know how to find other opportunities
- ☐ Other _____

5b. What drives you to continue volunteering/interning at mālama ‘āina sites? Select all that apply.

- ☐ I love going outdoors
- ☐ I enjoy giving back
- ☐ I want to keep learning about (my) Hawaiian culture
- ☐ I am inspired to help with environmental conservation efforts
- ☐ I enjoy working together with friends/family/like-minded people
- ☐ I am required to continue as part of a group/for extra credit/etc.
- ☐ Other _____

6. Of the reasons you chose above, which is the most prominent motivation for continuing participation?

- ☐ I love going outdoors
- ☐ I enjoy giving back
- ☐ I want to keep learning about (my) Hawaiian culture
- ☐ I am inspired to help with environmental conservation efforts
- ☐ I enjoy working together with friends/family/like-minded people
- ☐ Other _____

7. Did your mālama ‘āina experience(s) increase your knowledge and/or practice of Hawaiian culture?

- ☐ Yes
- ☐ No
- ☐ I was already brought up with Hawaiian culture.
- ☐ Other _____

8. Please check all the activities you have taken part in before participating in mālama ‘āina work.

- ☐ Using reusable utensils/straws/bags
- ☐ Participating in Community Supported Agriculture (CSA) boxes or other local food subscriptions
- ☐ Buying local produce/products at the store regularly
- ☐ Voting in local elections
- ☐ Taking measures to reduce water waste ie., less toilet flushing; shorter showers
- ☐ Taking greener transportation measures ie., biking, public transport, etc.
- ☐ Picking up trash you see on the beach
- ☐ Participating in local environmental protests
- ☐ Participating in Hawaiian sovereignty/rights protests

- ☐ Planting native plants
- ☐ Planting food plants/gardening
- ☐ Eating customary Hawaiian foods ie., Poi / 'Ulu

9. Check all the activities you took part in after participating in mālama 'āina work (please include choices from the previous question if you still participate in them).

- ☐ Using reusable utensils/straws/bags
- ☐ Participating in Community Supported Agriculture (CSA) boxes or other local food subscriptions
- ☐ Buying local produce/products at the store regularly
- ☐ Voting in local elections
- ☐ Taking measures to reduce water waste ie., less toilet flushing; shorter showers
- ☐ Taking greener transportation measures ie., biking, public transport, etc.
- ☐ Picking up trash you see on the beach
- ☐ Participating in local environmental protests
- ☐ Participating in Hawaiian sovereignty/rights protests
- ☐ Planting native plants
- ☐ Planting food plants/gardening
- ☐ Eating customary Hawaiian foods ie., Poi / 'Ulu

9a. Is the reason that you either did not vote previously or still do not vote in local elections due to being ineligible to vote?

- ☐ Yes
- ☐ No

10. To what extent did your participation in mālama 'āina..

	Very much	Somewhat	Not at all	I have no interest in this
Increase your feeling of connection to the natural world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase your attachment to the 'āina/kai of Hawai'i in particular	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase your interest in local environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Increase your participation in other mālama ‘āina programs	o	o	o	o
Increase your participation in other conservation/ environmental efforts	o	o	o	o
Increase your participation in other programs/efforts related to Native Hawaiian culture	o	o	o	o
Increase your desire to pursue a career related to conservation/ environmental management	o	o	o	o

11. Please rank the following items by importance according to your personal viewpoint.

Click and drag your choices up or down to change the ranking order, with 1 being most important and 4 being least important.

- _____ Perpetuating Hawaiian culture/practices/values
- _____ Restoring native ecosystems
- _____ Food security/sovereignty
- _____ Sustainable resource management

12. Did you experience any other lifestyle/behavioral changes after participating in mālama ‘āina work? If so, please list them.

13. What is your current occupation/career path? Was this at all influenced by your mālama ‘āina experience?

14. What aspects of your mālama ‘āina experience have been most impactful to you? Select all that apply.

- ☐ Learning mo‘olelo (stories) about the place
- ☐ Doing the work and getting things done
- ☐ Getting to eat the food that was grown on site
- ☐ Being around like-minded people
- ☐ Other _____

15 How do you envision the future of mālama ‘āina sites? Select all that apply.

- ☐ They are neat, but will not last long-term
- ☐ They are fun educational opportunities for children
- ☐ They will upscale to meet the food-security needs of the islands
- ☐ They will grow as a movement toward more pono (righteous/balanced) resource management
- ☐ They will grow to normalize Hawaiian practices on the landscape
- ☐ Other _____

Mahalo nui for participating in this study. If you are willing to participate in a follow up interview, you will be entered into a raffle to receive a \$30 gift card. If so, please provide your email and gift card preference here. Winners will receive a gift card for either Foodland, Times, or Kaulumaika.

- o Email _____
- o Gift card preference _____

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