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Samantha Stroud
Candidate
Geography and Environmental Studies
Department
This thesis is approved, and it is acceptable in quality and form for publication:
Approved by the Thesis Committee:
Dr. Ronda Brulotte , Chairperson
Dr. Marygold Walsh-Dilley
Dr. Chris Duvall

THE AFFECTIVE LANDSCAPES OF HERBALISM IN NEW MEXICO

by

SAMANTHA ANGELOU STROUD BACHELOR OF ARTS, UNIVERSITY OF NEW MEXICO

THESIS

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by

Samantha Angelou Stroud

B.A. in Geography, University of New Mexico, 2021

M.S. in Geography, University of New Mexico, 2023

ABSTRACT

Herbalism, or practices which use plants for medicinal purposes, is tied to traditions in several cultures of the American Southwest, including Indigenous herbal medicine, Mexican-American *curanderismo*, and Western herbal traditions. Herbalism has been steadily gaining mainstream popularity since the late 1960s, alongside counterculture, holistic health, and back-to-nature movements, introducing many newcomers to the practice. This study asks: How does herbalism create and attach meaning to plants, cultures, and place in New Mexico? What are the affective landscapes produced by herbalism in New Mexico? And, to what extent do meaningful attachments manifest in ethics and actions of care? I argue that herbalists and plants collaborate to re-animate the landscape of New Mexico. This is achieved through establishing intimate human-plant relationships based upon reciprocal practices of care. Herbalists struggle over meanings of cultural identity, ancestry, gender, and life under capitalism through their practice, creating opportunities for change in a tradition-centered space.

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CHAPTER 1: Introduction to the Research

It had been a year of fires and little rain in New Mexico when our herbalism class traveled to the northernmost reaches of the Gila Desert, in the southern part of the state. The plants we had come to see reflected that reality back to us with sad, drooping leaves and crumbling stems. The land looked thirsty.

Our instructor led us to dry-looking bush sprouting tiny, dark green leaves with two leaflets joined at the base. I had seen plants like this before in the open land surrounding the highway, but I had never looked closely. She introduced the plant as creosote, or *Larrea tridentata*. You could cut the leafy branches to make steams or harvest the leaves to make topicals and tinctures. It is anti-inflammatory, antimicrobial, and stimulating to the liver. We scribbled this information down in our notebooks, and our instructor continued.

"Creosote is a legendary medicinal plant in the Southwest. It's important to remember that here in the Gila, the Tompiro people lived and stewarded this land, but had to leave it under duress when they were chased out by colonists. These creosotes have been in relationship with humans for thousands of years," she explained. "Even this particular plant could be over one thousand years old."

At her urging, I crushed two fallen leaflets between my fingers, surprised to smell the musky, earthy scent of petrichor. Creosote smelled like the rain this land so desperately needed.

I had been taking herbalism classes for three years, but this was the first time that I felt that a plant was trying to tell me something of itself. I can't say exactly what I

learned from creosote that day, but I do know that now whenever I drive the highways across New Mexico, I look out the window hoping to find it growing alongside the road.

My experience with creosote in the Gila desert is not unique to me. Rather, this story is a single, personal example of the complex relationships herbalism can engender between humans, plants, and society. Humans and plants have been learning about each other since before the beginning of humanity; herbalism, the practice of using medicinal plants for healing, represents a large part of that history. Indeed, archaeological evidence suggests that paleolithic hominids used medicinal plants such as willow, St. John's wort, yarrow, chamomile, and others (Hardy 2012).

Herbalism is a traditional medicine—it holds various cultural, spiritual, and place-specific meanings to peoples from around the world. In New Mexico, herbalists suffered stigma and associations with witchcraft, which was often racialized and reflected colonial logics. The rise of biomedical science in the West marginalized herbalism and other folk traditions as "unscientific" and "backwards". But since the counterculture of the 1960s, herbalism has steadily regained popularity as an alternative medicine, introducing newcomers from varied cultural backgrounds and goals to the practice.

Contemporary herbalism in New Mexico finds itself at a crossroads. It holds the potential to engender close relationships between humans and plants, while also risking the commercialization and overharvesting of herbs for profit. Similarly, the mix of herbal traditions offers the opportunity to build intercultural coalitions of plant healers, while also risking reproducing colonial dynamics of power through the cultural appropriation of marginalized herbal traditions.

This study focuses on how herbalism mediates relationships between plants, humans, and society in New Mexico. Using ethnographic methods including participant observation and interviews, I explore herbalists' embodied experiences of their practice to answer the following questions:

- How does herbalism work to attach meaning to plants, cultures, and place in New Mexico?
- 2. To what extent do meaningful attachments manifest in ethics and actions of care?

Exploring the meaningful attachments created through herbalism in New Mexico is important for understanding how humans relate to nature and to one another in an era of anthropogenic climate change, and in a place that has been shaped by Spanish and American colonialism. This study illuminates the emancipatory potential of the human-environment relationships taught by herbalism, while also pointing to sociopolitical dynamics which are struggled over through the practice. Grounded in theories of affect, more-than-human agency, and political ecologies of care, this study contributes to growing scholarship on human-plant relationships and care work/ethics. It also fills key gaps in geographic research on herbalism by framing herbalism as care work involving both human and more-than-human actors.

Ultimately, I argue that herbalists and plants collaborate to re-animate the landscape of New Mexico through intimate human-plant relationships based upon reciprocal practices of care. This care ethic is mediated by sociopolitical discourse on cultural identities and ownership, gendered identities and roles, and capitalism. These discourses represent sites where herbalists struggle over the meanings of their practice, creating opportunities for change in the space.

Background: Herbalism in New Mexico

Herbalism or herbal medicine is the use of medicinal plants for healing purposes; an herbalist is someone who engages in this practice. Although many modern pharmaceutical drugs are derived from plants and plant compounds, herbalism is seen as practice distinct from modern medicine, often termed "complementary" or "alternative" medicine (Bitcon et al. 2016). Herbalism is also considered a "traditional" medicine (World Health Organization 2019). This is in contrast to modern medical science, often termed "biomedicine" or "conventional medicine". These relational terms demonstrate the superior position held by modern medicine in our current society.

While herbalism refers broadly to the use of medicinal plants, herbalism is not a single, unified practice. It contains many different schools of thought, or traditions, that have developed and evolved over time in cultures around the globe. In New Mexico, several cultures have had a hand in creating the varied herbal traditions of today, including Native Americans, Hispano-Americans, European Eclectic physicians influenced by Moorish medical knowledge, Judeo-Christian theology, Greek Humoral Medicine, Afro-Caribbean santería, Indian Ayurveda, Traditional Chinese Medicine, and others (Boke 2019; Torres & Miranda 2017; Griggs 1997). Though some practitioners identify with a certain cultural herbal tradition, others may draw from many traditions from around the globe.

Before the nascence of Western biomedical science in America, most providers of medical care could be described as herbalists. Herbalism was primarily an oral, folkloric tradition (Dunmire et al. 1995) passed down through generations of families (Thomas 2019), with herbal knowledge and practices varying between cultural groups.

In New Mexico, herbalism was sometimes used as a rationale to target specific practitioners as witches (Simmons 1980). During New Mexico's Spanish colonial period, witcheraft accusations were a tool used by imperial authorities to target Indigenous and mixed-race subjects, which were seen as a threat to the 'purity' of Spanish heritage (Gutierrez 2007). Herbal practices, most often those which concerned hallucinogenic plants such as peyote or Datura, often became a scapegoat for this racial policing of colonial society.

At the beginning of the 20th century, Western expansion of the United States and the boom in industrial biomedicine dominated the medical field (Tierra 2014; Griggs 1997). Herbalism, with its ethnic and folk traditions, was then constructed as primitive and backwards – inferior to Western biomedical science. In the US, this development was largely due to an influential report by science administrator and politician Abraham Flexner in 1910. The Flexner Report painted alternative and folk medicines including herbalism as illegitimate, unscientific, and an active threat to science writ large. Herbalists were thus relegated to the margins. In the New Mexican Territory (which received full US statehood in 1912), practitioners of Indigenous herbalism, *curanderismo* (a holistic system of Latin American folk medicine, particularly in Mexico), and Western herbalism alike fell into the shadows. However, the practice continued informally, especially in cases where communities could not afford or access medical doctors (Moore 1990).

Herbalism began a strong comeback in the United States beginning with the late 1960s counterculture (Enos 1996) and early 1970s New Age spirituality and holistic health movements (Salmon and Berliner 1979), in a phenomenon Dougherty (2013) calls

the American Herbal Renaissance. These movements were connected to a sense of "getting back to nature", the wellness movement, humanistic medicine, the feminist movement and natural birthing, the environmental movement, and 19th-century Western heterodox medical systems such as homeopathy and naturopathy (Baer 2003). The interest in herbalism was also a reaction against the high cost, reductionism, specialization, and bureaucratization of Western biomedicine (Shahvisi 2019), thus creating herbalism as part of an alternative subculture to modern society (Hetherington 2000). Also entangled in herbalism's resurgence was a renewed interest in nature-based spirituality (Greenwood 2005). In sum, herbalism's resurgence in popularity in the US was primarily a reaction against the perceived ills of modern healthcare and society at large (Sointu 2011).

This increase in mainstream popularity introduced herbalism to a more affluent, mainstream audience. Herbalism's new acolytes were mostly white and well-educated women (Hildreth and Elman 2007) who wished for a more alternative lifestyle. New herbalists operated alongside, not replacing, herbalists with family knowledge. The general eclecticism of holistic health also expanded the repertoires of heritage herbalists as they were exposed to global traditions of plant healing.

CHAPTER 2: Theoretical Framework and Literature Review

Understanding the complex attachments and practices of meaning-making that are created through herbalism in New Mexico requires critical spatial thinking. In this thesis, I engage with three bodies of literature: theories of affect, feminist political ecologies (FPE) of care, and more-than-human geographies. I use the concept of affective landscapes as a framework to spatially conceptualize the relationships between herbalists, plants, and place. Taking insights from feminist political ecologies of care, I theorize herbalism as a form of care work. This allows me to ask further questions about positionality, identity, and ethics of care amongst human and non-human actors. Finally, I find more-than-human geographies a useful frame because of the emphasis on non-human agencies, which aligns with herbalists' own reports of plants and the land taking on active roles in their practice.

Affect and affective landscapes

Affect is a concept that crosses disciplinary boundaries in the social sciences. It has been used and developed not only in geography, but also in sociology (Clough & Halley 2007), anthropology (Gregg and Seigworth 2010) psychology, and neuroscience (Tomkins & Izard 1965). Briefly, affect can trace its genealogy first to Spinoza's *Ethics*, leading to Deleuze and Guattari's (1987) eminent quote that "affects are becomings", and through the work of posthuman critical scholars such as Massumi (1995) and Thrift (2007).

In line with other non-representational theories, affect understands the world as it is made sense of through the body; it seeks to "address and examine invoked states that combine what our bodies sense and perceive with our capacities for rendering life in the

world intelligible" (O'Grady 2018). Affect emphasizes perception and encounters within a space. Studies of affect seek to examine attachments created between people, things, and places to understand how such bonds become instilled in senses of place, time, and identity.

However, it is important to note that "the body does not belong to itself" (Butler 2010). Rather, the body is one vector among sociopolitical networks, which it does not control. While the interplay of affective relations works through the body to define meaning, these relations also react to outside discourses, events, and material realities. The body remains vulnerable "to loss, violence, and other forces within this network" (Berberich et al. 2013), echoing Deleuze's (1978) reminder that bodies are segmented socially, culturally, and politically. Relations of affect are thus political in that they reveal "both our power to affect the world around us and our power to be affected by it, along with the relationship between these two powers" (Hardt 2007).

Affective landscapes focus on the spatial dimensions of affect, engaging with scholarship on place and space. Affective landscapes see place and space as theoretical constructs informed by both the physical and imaginary landscape. This aligns with De Certeau's (2002) concept of *metaphorai*. De Certeau finds that physical locations are in fact 'spaces' created by the events, memories, and emotions associated with them. This space is created by affective attachments made by humans in their interactions with the place. For example, a seemingly insignificant mountain meadow may hold a variety of histories and meanings: the physical meadow becomes also 'the meadow where I hiked as a child', 'the meadow where yarrow is plentiful', etc., to different people.

Affective landscapes thus recognize a "beyond" of "imaginary places, ideals, and real but intangible objects...that underpin and produce material places and social spaces" (Davidson et al. 2011). From this emerges an "affective cultural politics" (Berberich et al. 2013) in which people struggle over meaning and authority through complex attachments and detachments to place. This concept aligns with multi-disciplinary scholarship on place, which finds affective attachments to place important in understanding identity (Anzaldua 1981), ritual (Cajete 1999), and engagement with the natural environment (Chawla 2002).

In this thesis, through collecting herbalists' stories and participating in/observing herbalism classes, I map the 'topography' of the affective landscapes produced by herbalism in New Mexico. That is, I interrogate how and why herbalists attach meaning to places, plants, and things – what it is about those places and things that creates the affective atmosphere/attachment, how they express these meaningful attachments through their beliefs and actions – and map out sites of struggle in this landscape of 'beyond'.

I utilize 'landscape' in both in its physical and ideological connotations. First, as in relations to the physical landscape of New Mexico, conceived of as space, I ask: How and why is meaning attached to place? How does the imaginary landscape relate to the physical landscape? Second, as in a metaphorical 'landscape' of meanings produced by the practice of herbalism, I ask: Where are things, people, and ideas 'placed' in this landscape? Where is meaning contested or struggled over? What are the outside forces influencing affect in this landscape?

Feminist political ecologies of care

A second literature important to this thesis is feminist political ecologies (FPE) of care. The notion of care concerns how communities look after and provide for the needs of others. Care is about providing "what is necessary for the health, welfare, maintenance, and protection of humans and the more-than-human world" (Tronto 1998). Care is also generally thought of as tied to affective emotions, such as liking or love (Harcourt & Bauhardt 2019). A care ethic finds moral significance in "the fundamental elements of relationships and dependencies in human life" (Sander-Staudt, n.d.). Care work is the labor performed in order to provide for the needs for others or society at large, such as birthing and raising children, housework, elder care, and environmental stewardship. Care work is also termed the work of social reproduction because it ensures the continued harmonious functioning of society.

Care work, undervalued in capitalist economies worldwide (Budlender 2010), is socially considered women's work, with childrearing and domestic work being prime examples. FPE consideration of global economic care chains has also shown that on a global scale, care work is largely left to socially and racially disadvantaged women (Parreñas 2015). FPE perspectives on care thus unveil the ways in which "work in capitalism is organized hierarchically according to race and gender" (Bauhardt 2019). While this work on gender and race have been historical foci, FPE analyses have grown to include care for "the more-than-human" – plants, animals, and the environment. As Puig de la Bellacasa (2017) adroitly remarks: "Care is a human trouble, but this does not make of care a human-only matter."

Donna Haraway has been a prominent voice for care between humans and other species, also called multispecies care. Haraway (2016) theorizes the current era as the Cthulucene, which she calls a "kind of timeplace for learning to stay with the trouble of living and dying in response-ability on a damaged earth". Key to this response-ability is the practice of making kin among humans and "oddkin", who are nonhumans whose lives and deaths are also at stake in the current ecological crisis. Haraway (2003) also introduces the concept of companion species (non-human beings that are "relentlessly becoming-with" humans) in *The Companion Species Manifesto*. While humans and companion species are "significantly other to each other", they are bound together by networks of kinship, strengthened by care for one another.

Care work for plants is a small but growing site of study. It has been theorized largely through the lens of agriculture and plants-as-food. Graddy-Lovelace (2020) writes of agrarian care as a multispecies care network in which "people care for foodplants so as to fulfill broader responsibilities of care and nourishment of others". Similarly, Graham & Connell (2006) showed how Vietnamese and Greek migrant gardens nurture the gardeners' fragmented relationships to their home countries. Put simply, studies on plant care reveal reciprocal relationships in which humans care for plants, and plants care for us.

Yet, such stories of human-plant care encounter contradictions. Harcourt (2019) juxtaposes the history of the begonia as a beloved plant of Australian settlers with their massacre of Australian Indigenous peoples as they built their own kinds of relationships with the land. Looking at the pre-breeding of plant genetic resources in agriculture,

Graddy-Lovelace (2020) finds irony in surveillance technologies which acknowledge the need for tender care of crop-plants while simultaneously displacing farmers and their longtime methods of seed-saving. In Poe et al.'s (2014) study on urban foraging in Seattle, they find that foraging for urban plants and mushrooms helps foragers develop caring connections with the more-than-human inhabitants of the city while also reinforcing differences between people who related with nature and places differently, tending to exclude visible immigrants. They conclude somewhat murkily that urban foraging's caring relationality to the more-than-human "bumped up against knowledge/power networks of indigenous, settler, and other immigrant geographies in peculiar ways."

Haraway (2016) would contend that these kinds of uncomfortable contradictions are exactly the kinds of stories that need to be told. She urges us to "to stay with the trouble" of living and dying with other beings on the Earth. She offers the concept of sympoeisis, or becoming-with, as a tool for "staying with the trouble of inheriting the damages and achievements of colonial and postcolonial naturecultural histories in telling the tale of still possible recuperation". Anna Tsing (2015) similarly refers to the "art of living on a damaged planet". Harcourt (2019) calls her dissonant tale of white settler care for begonias a 'gaia story' and concludes that stories like these are critical to understand in order to build lives that care for begonias and Indigenous peoples. While stories of care may contradict themselves in complex ways, FPE scholarship concludes that in these uneasy tales lie important seeds for change.

To conclude, the care work involved in herbalism is multi-dimensional and layered. Care is not simple, and care for the more-than-human and care for other humans are not mutually assured. They may contradict or bump up against one another in uncomfortable ways. This study applies FPE theory of care ethics and care work to herbalism in New Mexico. I theorize herbalism as care work in multiple capacities: 1) caring for the sick, 2) ethics of environmental stewardship, 3) being stereotyped as 'women's work', and 4) stewarding herbal knowledge. As a practice both rooted in several traditions from around the world and existing in the settler colonial landscape of New Mexico, the care work in herbalism also 'bumps up against' racial and colonial relationships between peoples. Framing herbalism as care work allows me to probe these contradictions and analyze sites where meanings and ethics are contested.

More-than-human geographies

A final literature important to my analysis is more-than-human geographies. As previously discussed, FPE scholarship has attended to more-than-human roles in care. The more-than-human perspective also engages with affect, seeing "affective forces, connections and agential capacities as relational and distributed between the agents in human-nonhuman assemblages" (Bennett 2010). In this section, I discuss connections between herbalists and more-than-human conceptions of agency.

More-than-human scholarship has called attention to the important roles played by non-human actors in social-ecological systems. For example, Bingham (2006) explores the active role bees, butterflies, and bacteria play in their relationships with their human keepers. Similarly, Duvall (2011) shows the role of ferricrete soil in the production of colonial environmental knowledge in Africa.

In particular, the agency of plants is a growing and interdisciplinary field of interest. In geography, Hitchings (2003) explored how the physical properties of plants grown in gardens in the UK motivate human gardeners to labor in their care, through the elicitation of affective emotional responses. Argüelles and March (2022), through the development of a "vegetal political ecology of weeds", discuss how weeds' unruly materiality shapes processes such as urban development, biosecurity plans, backyard gardening, and farming. In Staddon's (2009) study on herb and mushroom gathering in rural Bulgaria, he reveals how particular mushrooms and herbs enter into relationships with foraging humans and animals to transport their seeds and spores.

This scholarship agrees with the findings of biologists and botanists who study plant intelligence and plant communication. Mancuso and Viola (2015) describe how plants use their senses to interact with other plants, insects, and animals, communicate with one another by means of chemical molecules and networks of sub-soil bacteria, and recognize their kin. Similarly, though plants lack a human brain, they problem solve and adapt to their surroundings. Plants are also increasingly being shown to display such sophisticated mental behaviors as choice and reasoning. Unlike animals, plants express this through phenotypic plasticity rather than movement (Trewavas 2003). Studies of plant intelligence and communication similarly position plants as active agents in communion with their surroundings.

Literature on herbalists indicates a worldview in which plants possess agency. In the UK, Waldstein (2020), in a study on Rastafari herbal smoking practices, explains how through smoking herbs become "plant teachers" who provide divine knowledge to 'professional' smokers. Similarly, in Dev's (2020) study of Shipibo herbalists in the Peruvian Amazon, she noted with surprise that when asked who their teachers were and how they learned, most Shipibo healers first mentioned their "plant teachers".

Despite these intersecting scholarships of plant agency, the field has yet to blossom in Western societies. Wandersee & Schussler (1998) introduced the term "plant blindness" to describe the general discounting of plants by Western culture. Plant blindness pervades academia as well as popular culture. In the field of geography, Hitchings and Jones (2004) point out that the agencies of plants, which are often performed subtly and indirectly, have gone similarly unnoticed: studies of more-than-human agency have thus tended to select more overtly "lively" more-than-human subjects such as animals. When plants are considered, it is usually in their capacities as food and other agricultural products or in gardens (Head & Atchison 2009). Herbalism, in which plants are used as medicine and attributed more agency than is the Western norm, represents new prospects for the field of plant agency.

More-than-human scholarship and herbalists take similar stances on the roles played by nonhuman actors in herbalism. Thus, I take a more-than-human perspective in my analysis and consider plants and the land as active agents in the affective landscapes produced by herbalism in New Mexico.

CHAPTER 3: Research Design and Methods

I used ethnographic methods to critically evaluate herbalists' affective attachments produced through their practice. My analysis is based on 1) participant observation in herbal medicine classes and herb walks, and 2) semi-structured interviews with herbalists of varying specialties.

Participant observation

I participated in and observed 4 herbalism courses from 2 different organizations in Albuquerque alongside students. I observed 2 courses from Albuquerque Herbalism: the Herbal Semester Series, and the Advanced Herbalist Summer Group. I observed 2 classes which were offered through UNM: the UNM Curanderismo Summer Class (inperson and remote), and UNM Continuing Education's Plant Identification and Field Herbalism.

The Herbal Semester Series is a weekly lecture class offered by Albuquerque Herbalism. I observed the last two classes of the spring semester. The class was instructed by one teacher, a white woman. About 30 students attended. Students received a handout listing herbs and respective usages which they could use to take notes. The instructor presented information alongside a slideshow with pictures of each plant in different life stages. Each class was themed; the two classes I attended were on Edible/Medicinal Weeds and Women's/Urinary Health respectively. Students learned where plants grow, how they can be identified in the field, what their known medicinal usages are, and methods of preparation. The class was augmented with the instructor's personal stories of plant connection and medicine making. The slideshow presentation

was supplemented an herb walk through the surrounding neighborhood, and by a live demonstration of how to make a salve.

The Advanced Herbalist Summer Group was made up of students who had previously taken an Albuquerque Herbalism Semester series and wanted to continue studying the topic in a smaller group. The class was instructed by one teacher, a white woman. There were 13 students, also mostly white women. There were six classes spread out over the summer. In each class, we would drive to a different ecoregion of New Mexico and go on an herb walk to observe and learn about the plant communities that grew there. Our trips took us to the Manzano Mountains, the Sandia foothills, the West Mesa, the Bosque, the Northern Gila Desert, and the Jemez.

UNM offers a yearly in-person summer Curanderismo class which brings curanderos/as and healers of various specialties together to teach traditional healing. In total, there were 31 instructors, who lectured, taught workshops, sat on panels, led herb walks and ceremonies, and demonstrated healing on students in the class. There was a core group of six instructors, three of which were from Mexico. The other 3 were a Mexican-American man and two mixed Indigenous-Mexican American healers. In total, seven instructors came from Mexico to lecture in the class. There were three white instructors, including a man who has been "adopted into families in Cheyenne, Kiowa, and Comanche tribes" (UNM Curanderismo). Four instructors came from Acoma and Laguna Pueblos, and two others were Lakota. Two Indigenous instructors came from Mexico and Peru – identifying as Mayan and Ashéninka, respectively. The remaining instructors identified themselves as Mexican American or Latino American. The class lasted two weeks, with presentations in an auditorium from 8 am-12 pm, followed by an

afternoon of optional workshops that offered more hands-on and intimate instruction. The class was offered for UNM course credit, a certificate through UNM Continuing Education, and for no-credit. Over 500 students attended, many of them from out of state. The class explored an "integrative approach to medicine" (UNM Curanderismo), featuring demonstrations of *limpias*, herbal medicine making, and various other healing techniques. It also included an opening and closing ceremony centered on four sacred directions, and a day of medicine making and plant walks at ABQ Botanical Gardens.

The Plant Identification and Field Herbalism class held five sessions in which students were taken to different plant communities around Albuquerque. The class was led by one instructor, a white woman. Our classes took us to an urban park, the Sandia foothills, a hike through Elena Gallegos Open Space, the Rio Grande Bosque, a Cedar Crest meadow, and a walk along the East Mountain Sandia Crest. The class was instructed on the basics of field botany and plant morphology, medicinal uses of plants encountered on walks, and ethics of herbal medicine.

As I participated in these classes, I wrote down observations in a notebook and on my laptop. The participant observation period of this research occurred from May-September 2022. Participant observations helped me become familiar with this section of the herbalism community in New Mexico and helped shape my questions in the semi-structured interviews.

Semi-structured interviews

While participant observation built the foundations of my research questions and conclusions, it alone does not sufficiently address the needs of the research. Fleshing out the topography of the affective landscapes of herbalism requires herbalists to narrate for

themselves their stories and how they attach meaning in their practice through semistructured interviews.

In total, I conducted 19 interviews lasting between 40 and 70 minutes. I selected participants with varying experiences with herbal medicine, including teachers, students, clinical practitioners, business owners, and casual practitioners. I define all the interviewees as "herbalists" because they all work with plants as medicine in some way; however, many would not label themselves that way.

I initially identified interviewees from herbalists I had met during the participant observation portion of my study. These were primarily teachers and students. I expanded this selection through snowball sampling: at the end of each interview, I asked participants if they knew other herbalists that they thought I could talk to. This method proved very effective in finding informal practitioners and herbalists with low online visibility. I recruited participants initially through email (or social media if email could not be obtained), following up by phone if needed. Seven potential interviewees did not respond to my email, while 1 declined to participate after reading the study consent form. All participants were anonymous, and they are referred to in this paper by pseudonyms.

Although I did not expressly collect demographic information during this study, participants expressed their identities to me throughout our conversations. The study group skewed female and white. 15 participants were female, and four were male. The cohort is a mixture of white, Mexican-American, Indigenous, and mixed identities. Nine herbalists identified as white. Three identified as Mexican-American. One was Mexican, living in the United States for school. Two identified as Indigenous – Osage and Rroma, respectively. Four herbalists identified as "mixed": two were mixed white and Mexican;

one was Polish, Hungarian, Diné, and Mexican; and one was Mexican, Diné, and Apache. I did not interview any youth for this study.

I conducted all the interviews between October and December 2022. This research went through IRB approval process, and was deemed minimal risk. As such, each interviewee was shown a consent form before interviews. I interviewed people one at a time, at a location of their choosing. 17 interviews were done in person, 1 was conducted over Zoom, and 1 was conducted over the phone. When possible, I allowed the interviewee to guide the conversation. Some interviews touched on different subjects according to the experiences, expertise, and interests of the interviewee. With consent from each interviewee, I recorded the interviews either using the iPhone Voice Memos app or the Zoom meeting recording function. After the interview, I used Rev (a free online AI transcription service) to transcribe the interviews to aid in my analysis.

I analyzed notes from participant observations and transcripts/audio recordings of interview conversations via an interpretive thematic analysis that was informed by concepts of care, more-than-human relationships, and affective landscapes. I read through my results looking for how herbalists described their affective engagements with plants, land, and practice, building my analysis iteratively. In this way, I identified major themes raised in the interviews and classes, finding the connective threads that linked the experiences of each participant. In the chapters that follow, I use direct quotes from semi-structured interviews and observations from classes to illustrate my findings.

Reflections on research design and positionality

This research was born out of both academic inquiry and out of a personal quest for understanding. I am a mixed Mexican-American and white woman who was born and

raised in New Mexico. My great-grandmother was a curandera living in Galveston, TX, something I did not learn about until I began taking herbalism classes offered in Albuquerque. I lived a story of re-finding this heritage through herbalism, a story that I was surprised to find echoed in the lives of other students in herbalism classes that I encountered. As I began a master's program in Geography, this was something that I wanted to explore. I knew I was interested in the relationships between herbalists and plants; I also knew from my personal experience that identity and heritage played important roles in this community. Engaging with literature from feminist political ecologies and more-than-human geographies, it was clear that I could best answer these questions using ethnographic methods.

My research question was built iteratively along with participant observation and interviews. The participant observation portion allowed me to ground myself in the herbal community, both by experiencing the classes myself, and also by turning a researcher's eye to how students, teachers, and plants interacted in this community. While I began this research asking questions about identity politics and human-plant relationships, my initial conversations with herbalists (in both participant observation and formal interviews) made clear that herbalism was at its heart an emotionally-driven and affective practice. This is how I arrived at my final research frame of affective landscapes.

Feminist geographers have been vital in demonstrating that any research project is influenced by the positionality of the researcher, even if unintended (Haraway 1988; Harding 1992). My positionality as a Mexican and white mixed-race woman, as a New Mexican, as a student of herbalism in New Mexico, and as a descendant of an herbalist

was an asset to me in this research. To begin, I already had basic knowledge of and had formed relationships within the New Mexico herbalism community. Re-entering this community as a student, but also as a researcher put me in a position of being at once an insider and an outsider, able to view the community from two perspectives.

My identity and story helped me to gain rapport with interviewees. In the most dramatic example, one herbal organization asked me to explain my history with herbalism and where my family was from in order to decide whether they would consent to an interview. Hearing that I was from New Mexico and had herbalism in my family, they allowed me to interview them. Similarly, many other herbalists were interested in hearing the "real" reason for my research – as in, my personal interest in talking to them beyond academics. My past herbalism classes helped me to speak intelligently with herbalists about the nitty-gritty details of their practice, and I was able to connect in interviews with other herbal students who had taken the same classes I had. I felt that older interviewees especially regarded me as a 'future generation' of herbalism in New Mexico.

It is important to reflect on the ways my positionality influenced this research not just for the purposes of disclosure, but also because my positionality allowed me to gain access to parts of a community that may have closed its doors to a different researcher. I am grateful to the New Mexican herbalism community for supporting my research interests and also for supporting me as a human eager to learn about plants.

CHAPTER 4: Narratives from Interviews and Observation

To explore meaningful attachments fostered by herbalism in New Mexico, I interviewed nineteen people from October to December 2022 who engaged in herbalism in various ways. This interview cohort includes herbalism teachers, owners of herbal shops and businesses, clinical practitioners, curanderos/as, heritage practitioners, students in herbalism classes, and hobby herbalists. Through semi-structured conversations, interviewees discussed their relationship to herbalism while describing their engagements with plants, culture, and landscape in New Mexico. The results of these interviews as well as observations from participating in herbalism classes are organized into the following categories: 1) pathways to knowing plants, 2) the herbalist-plant relationship, 3) sense of cultural identity and ancestry, 4) placing herbalism in New Mexico, and 5) sites of struggle. I include details about participants' ethnicity, gender, and age as appropriate to contextualize responses while maintaining their anonymity.

Pathways to knowing plants

Herbalists learned about plants in a myriad of ways: through apprenticeships, in group classes or plant walks, from guidebooks and online resources, from relatives, and from interacting with the plants themselves. A single herbalist tended to use multiple pathways of learning and considered themselves a student regardless of their years of experience. While many herbalists credit their parents or relatives for introducing them to herbalism or fostering in them a connection with plants, only two highlighted these relatives as their main teachers. Plant identification apps, online resources, and guidebooks were used to some extent by all herbalists but were framed as jumping-off

points for deeper learning: "I find that plant guidebooks and plant ID apps can be a helpful starting place just to get an idea of what you're working with and who the plants are. But I don't just say, 'Okay, what is this? Okay, this tree is *Ulmus pumila*. Now I'm going to Google *Ulmus pumila* medicinal uses and think that I know it" (John). Following, textual and online resources were usually more important to beginning herbal students than they were to herbalists who had been practicing for longer periods.

Classes were also an important method of learning, reflecting the fact that initial interviewees were selected from herbalists encountered during participant observation in herbal classes. Every herbalist interviewed had taken at least one herbal class, but most took several courses over years, often retaking them. Herb classes most often took the form of herb walks, in which an instructor brought students to observe medicinal plants where they grew in the wild. The instructor shared the botanical name and common names of the plant, pointed out identifying characteristics, and listed popular medicinal usages as well as their own experience making medicine with the plant. Students were encouraged to taste, smell, and feel the plant while its story was being told. Other classes were lecture-style indoors, in which the instructor presented a PowerPoint with pictures of herbs and written information about their medicinal properties.

While herbalists appreciated the amount of information they were given in lecture-style classes, they overwhelmingly preferred herb walks or medicine-making classes because of the opportunity to see the plant contextualized in its environment and to explore the plant with senses other than vision. Teodoro, a teacher and owner of an herb store, described herbalism as "one of those traits, welding or something like that, where you can learn from a book or see it on TV, but if you do it in person, you really get

a sense. Part of it is, your visual is enhanced, you can smell, and you can taste. And also intuitively, all those sensory inputs are really important in working with plants." Classes were also appreciated for the community building aspect, as many participants found it difficult to find "plant people" to connect with otherwise.

Ten herbalists had formed deep relationships with a particular mentor, which shaped their practice. The culture of apprenticeship remains strong in herbalism but is not formalized; often these mentors were encountered by chance, and the herbalists pursued them in the hopes of apprenticing in exchange for other labor. Apprenticeships were valued by herbalists because they offered experiential learning and the opportunity to steward lineages of herbal knowledge. Juliet remembers fondly her apprenticeship with an Ayurvedic practitioner:

I really wanted to do one-on-one mentorship. I felt like that was the best way to learn. And that's where you have tactile, your body starts remembering how to make the herbs or how to harvest the herbs. You remember how they smell or where they grow, how you felt when you first saw something...Basically, I kept learning from her and then I was sharing, I was passing down the knowledge that she had shared to me and then she was adding in. So, it was this really neat apprenticeship program.

Herbalists' relationships with their mentors were characterized by feelings of gratitude, nostalgia, and responsibility to share their teachings. The drive to carry on the herbal lineage of dear mentors often dictated the manner of an herbalists practice.

Herbalists also traced their knowledge of plants to a childhood spent outside. This is illustrated in Manuella's story of playing around plants as a young girl:

We'd be by the ditch bank and, you know, learning all these different plants. We didn't realize we were learning then, but they became our allies. Like, taking refuge under certain trees or knowing that certain trees fed us. And so, in some ways, it became kind of like a different world of relationship because you understood those kingdoms. You understood those people or those, you know, nations that they have as, as plant people. And so really, play is part of what helped me learn about herbs.

Replicating these childhood games now as adults, bolstered by years of study, conveyed a sense of familiarity and comfort to the actions of medicine making and wildcrafting. The curiosity and wonder felt as a child "playing in the trees, with the plants, and making weird little concoctions" (Adriana) employed actions similar to herbalists' current practices of making medicine.

Herbalists emphasized learning directly from plants as the most meaningful pathway to herbal knowledge. Plants were often referred to as teachers, allies, and collaborators in this regard. Herbalists learned directly from plants through 1) close, multisensorial observation, 2) growing plants, 3) observing plants' relationships in the landscape, and 4) plant communication.

Some form of "just sitting with the plant" (Rebecca) was by far the most common method of learning brought up in interviews. This translated to slowing down to look, touch, smell, taste (when safe), touch, feel, and intuit. For example, Allison explains her process of learning:

First, just all the sensory information. So, what is the plant? Initially you're going to get the visual cue. Do whatever you have to do to ID it. Then there's the smell of the plant. Then, how does it feel? Some plants, mullein for instance, are more soft, and some of the shrubs, juniper, you're going to know when you look at it it's juniper. And then I'm also looking at, what's around this plant? What does it look like, where the roots meet the ground? Who are its friends? Who leads out around this plant, and how does plant move in the gradual winds of the place? Then, what am I taking in about the plant's personality? Anyway, it's a blend of active and passive study and allowing the plant on whatever given day you're with it to give you that knowledge.

Paying attention to emotional as well as physical responses to the plant was also emphasized. In classes, instructors often encouraged students to journal about how plants made them feel, and to intuit uses of the plant before looking up answers. Time

investment was key in two regards: spending enough time observing the plant in one sitting, and also returning to the plant at different times over the course of its life.

In a similar way, growing plants was a method highlighted by herbalists:

When you can understand a plant from seed to the final product, then you really can have a relationship with that plant. You get the seed; do you just plant it in the ground? Do you have to nick it with some sandpaper? First you have to soak it in water? How intense or strong of a seed is it? Is it a delicate little plant or is it pretty hardy? And then as you're growing it, you really get to see the full stages of that plant until it dies off. And then to be able to harvest it yourself after growing it and then making something with it just, it feels like you're really making a real connection. (Sophia)

Growing plants allowed daily observation of plant movement and life cycles, and also how plants operate in the backyard ecosystem. For example, growing medicinal plants got Amelia "interested in growing plants for birds, bees and butterflies. To me, it's all interrelated". The act of tending to plants was particularly important, leading some herbalists to prefer hand watering to automatic drip systems. Because the plants grown were dependent on the herbalist for survival, growing plants offered not only an opportunity to attune oneself deeply to the plants' needs, but also a responsibility to care for the plant in exchange for the knowledge and medicine it provided.

Observing relationships between the plant and its environment was key for understanding the plant's actions in the human body. In herbal classes, a common example was yerba mansa, a bio-remediating plant that grows in wetland areas such as the Rio Grande Bosque. Yerba mansa works to absorb and redistribute water in the slow-moving ecosystem, while also adding anti-microbial elements that help turn cottonwood debris into healthy soil. Medicinally, it is used to dry out 'wet' cold and flu symptoms such as runny noses or inflammation of mucous membranes, and to move stuck mucous

in the lungs. So just as yerba mansa "moves vitality through the wet Bosque landscape" (Danielle), so too does it address stagnancy in wet conditions in the body. The relationship of the plant to the landscape teaches the medicinal properties held by that plant.

Many herbalists argued that medicinal plants were "generous" (Juliet) and would grow where they were needed. In this way, plants and the landscape at large became "texts" (John, Manuella, Juliet) that could be "read" to learn about human health needs. Manuella tells a story of how plants around her evolved to support humans through the COVID-19 pandemic:

Last year [2021], grindelia was everywhere. Like, I couldn't even mow any little bits of grass that I had because of all this grindelia. Well, what is it for? It's to help break up phlegm and mucus that doesn't wanna move. It's for stuck phlegm that doesn't have viscosity to it. So it helps to move that and acts as a bronchodilator—perfect medicine for COVID symptoms. I used so much of it during COVID. The plants were telling me what we needed. Well, post-covid, what ended up popping up everywhere in my yard this year and last year? Yerba de la negrita. That plant in particular is really good for moistening the lungs. It's good for repair of the lungs, a repair of the lung tissue.

Plants thus appear as wise and benevolent companions that send messages about sickness in the communities they grow near. A related way of learning was the idea that plants "reveal themselves to you" (Allison) or directly tell you how to use them. Some herbalists conceptualized this as concrete plant communication: "Plants whisper things all the time and they're like, 'Don't do that,' or, 'Hey, I think you might need me, I have an abundance to me" (Adriana). Others had less certain experiences, but tended to believe that plants were sending "subtle messages" (Dorothy) about themselves.

Regardless of the learning method, gaining deep, multifaceted knowledge about herbs evoked feelings of intimacy and connection with the plant. Learning the names,

medicinal properties, and actions of plants enlivened them and caused herbalists to relate to them as kinds of "persons" (teachers, allies, friends, etc.) rather than inert material with which to make medicine. Daphne, a beginning herbal student, spoke of how studying herbalism changed her relationship with the land. Before, she considered the plants she encountered on hikes to be "just half dead things, or maybe they were green...but now we know, and there's tarragon, there's white sage." This extended to a feeling of care for landscape at large: Lauren reported that knowing who the plants are and what they can do made her "appreciate, and made me care for the land, because I see it as a whole, well, as a bunch of precious parts." Similarly, Rebecca described her first experience connecting with plants in the desert as pivotal:

First, you're on the road and there's nothing there. Or at least that's what you think. And then when you get out, especially when you've been with a good teacher, then you're like, 'Oh my gosh, there's so much here. There's so much life, and it's living under harsh circumstances, but they're surviving, and you want to know, 'how are they surviving?'

Through studying herbalism, plants emerged from the seemingly desolate landscape as lively beings with unique stories of survival. Plants transformed from things to beings, with names and personalities; the landscape transformed from an empty background to a stage filled with a cast of individuated characters.

Herbalists travel various pathways to learning about medicinal plants, many of which intersect and taper off from one another. While studying botanical names and lists of usages was important to begin, deep learning about a plant was sensorial, experiential, emotional, and rooted in the surrounding environment. Attaining this multi-layered knowledge created an intimate attachment between the plant and the herbalist, which served to animate the plant and populate the landscape with similar lively characters

waiting to be known. Herbalists attached most meaning to the knowledge they gained through fostering relationships with plants, who at times take on active roles in the learning process. It is to the nature of these relationships that I turn to in the following theme.

The herbalist-plant relationship

Herbalists conceived of plants as persons, as in beings with rights and agency, with whom they were in a collaborative relationship. Plants were seen as "their own entities – they have a relationship with you, and they also have communication with the other plants." (Manuella) Plants were referred to as teachers, allies, friends, collaborators, children, parents, and kin. Asking an herbalist their favorite plant was akin to asking a parent their favorite child. Many herbalists preferred not to refer to plants using "it" or "what", instead using humanizing terms such as "who", "he" and "she".

Plants took on a caring role in their relationship with herbalists, evoking feelings of gratitude. Interviewees expressed gratitude towards herbs and the practice of herbalism for healing them physically and emotionally in ways that modern biomedicine could not. While modern medicine appeared as an impersonal blunt instrument that lacked the faculties to provide psychospiritual care, herbalism healed holistically, making them feel "grounded" (Adriana, John), "comforted" (Rebecca, Dorothy), and "invigorated...it just felt like life got better." (Allison) Juliet credits herbal medicine for helping her leave an unhealthy relationship:

Part of the medicine for me was when I moved to New Mexico, the relationship I was in was not very healthy. And I really struggled with being in it. But one of the biggest things I struggled with was how am I supposed to show up and learn this medicine and live this medicine if I'm doing this thing as counter to it? It helped me get out of

that relationship sooner than I would have and I feel really blessed and privileged by that.

The relationship between herbalists and plants was itself deemed to be a powerful healing force: "The more that you build a relationship and really get to know and understand each other, not only the more you can do for that plant, but the more it can help you." (John)

Becoming caretakers in a more specific sense, plants were also cast into the roles of parents, ancestors, and relatives. For example, Kimberly described her relationship with motherwort thusly: "It's like, when you wake up in the night and you don't remember a bad dream or anything in particular, but suddenly you have this fright response, something has scared you and your heart is just racing, motherwort will help you just relax and come back down from that. I describe it as a nice warm hug from a loving mother." This was especially true for herbalists who did not feel strongly connected to their own families. Speaking of the relationships she had formed with plants in New Mexico, Danielle explained:

I am not rooted in family. I'm not rooted in any place. I don't have family connections. I've lived a life of always feeling like I don't belong to anyone or to any place or anywhere. When I came here, I don't know, probably 30 years ago, I immediately and without question felt embraced in a way I had never, ever felt or even knew was possible. And it happened out on the West Mesa. That is my place of rebirth. I think of West Mesa as my parents.

Plants and the land intertwine, taking on a familial role in their relationships with herbalists. This relationship can be seen as a collaborative human-plant process of making kin.

The herbalist-plant relationship was also seen as a gateway or arbiter of an expansive feeling of "connection" to the landscape or the universe at large. This connection felt

"joyful" (Dorothy, Delia) and magical, in that it was filled with "possibility" (Rebecca, Adriana, Jocelyn). Danielle waxed poetic about her feeling of connection with plants:

The memory and the knowing of our relationship makes me feel so much more alive than I ever could in just my own body awareness. Knowing that my body doesn't end at my fingertips, that my vitality is extended to the whole network of life through my relationship with the plants, the possibilities of everything are infinite.

The feeling of connection was described as something previously elusive. Often, an herbalist vividly recalled the first moment they felt expansive connection because of a plant and consider it a pivotal moment in their life. Moments of experiencing plant communication were often key to accessing the feeling of wonder and connection.

Jocelyn illustrates this with her story of how a cottonwood gave her advice when she was feeling excluded at an aromatherapy retreat:

This cottonwood was kind of hanging down and it started telling me, 'Don't worry, you're not the only one that isn't noticed, and please know that I know where you're at and how you're feeling. And that I'm bowing down to reach.' So we had this beautiful conversation about how I was feeling and how it was feeling. And now cottonwoods are magical to me.

Plants appeared in these narratives as trusted friends who provide advice and comfort. This feeling of connection produced a strong optimism in herbalists that helped them overcome fatigue and hopelessness in their own care work; interacting with plants allowed them to "regenerate" (Teodoro) mentally and spiritually, complementing the physical healing that herbs could also provide. Thus, the herbalist-plant relationship was often said to be the most important healing offered by herbs.

Feelings of gratitude towards herbs for offering physical healing as well as expansive connection fostered an ethos of returning the favor. Respecting and honoring the plants for their medicine, functions in the ecosystem, cultural significance, and/or

companionship was deemed important by all herbalists interviewed. John explained how he strives to enter into mutually respectful relationships with plants:

If the way that we approach plants is often saying, well what is this one good for? If I met you as another human, I'm not going to say, "Oh, well what are you good for? How can I use you?" That just sounds horrible. But people don't think of that with plants. But it's a good idea to start asking, 'Who is this plant?' and get to know it instead of immediately: 'I just met you. What can I extract from you?""

Honoring plants could also take the form of rituals and ceremonies, making offerings, singing or playing music, speaking out loud and telling the plants "Thank you", making sure that the medicine made from the plants went to good use, and avoiding overharvesting. Time investment was similarly seen as an important aspect of respect because of the emphasis on creating relationship:

If we take the time to give them our attention and to quiet our monkey minds that want to think about a hundred things and just give them our full attention and lots of time...building any kind of meaningful relationship takes time. It's like, people just want to *have* a garden. They don't want to *grow* the garden, they just want to have it. It's the same thing, cultivating relationships. It takes a lot. You have to put a lot into it. A meaningful relationship isn't going to just form out of nothing instantly. No. (Danielle)

This sense of responsibility commingled with discourses on anthropogenic climate change and environmentalism. Herbalists operated from a belief that modern humans have an overwhelmingly negative and distanced relationship with the environment, in contrast to ancient humans (particularly understood as Indigenous cultures), who "stewarded the land" (Danielle) in a reciprocal relationship. Adriana remarked, "I think probably one of the biggest lessons last year for me was that human beings are a part of the ecosystem. But the way that I was brought up, I felt like humans were just a parasite poisoning the world everywhere that we went, which is true for what it looks like currently." Herbalism presented as a way of repairing this damaged relationship, by

helping modern humans re-attune themselves to nature: "Everybody who's growing food, or medicine, or anything right now has to be really aware of how dysregulated the climate is or all the things that are abnormal. I don't see how you could be an herbalist and not also be an environmentalist, or at least deeply concerned about what is happening in the environment and how that will affect literally the availability or access of plants" (Aurora). The intimacy and drive for reciprocity in herbalist-plant relationships thus drove an ethic of environmentalism.

This manifested in certain ethics of practice that were attuned to environmental issues in New Mexico. Herbalists expressed concerns and were involved in movements about local issues of water scarcity, wildfires, bark beetle infestation, and invasive plants, as well as the global carbon footprint of using non-local plants. All three classes observed highlighted local invasive medicinal plants such as salt cedar, Russian olive, and tree of heaven. Wild harvesting these plants for medicine was seen as a win-win: removing an invasive plant while also obtaining medicine. Because of local water scarcity, an ethic of 'take only what you need' was emphasized in wild harvesting. Herbalists were encouraged to listen to the plants' needs and harvest in ways that plant stands could recover from. Using local, less trendy herbs was also encouraged. For example, Juliet opted to adapt Ayurvedic formulations to local New Mexican plants: "Who am I as an herbalism practitioner to be like, 'I'm going to be a purist and you can only take these herbs that grow a bazillion miles away'. Look at the carbon footprint. How is that healing?".

Herbalists found that not only their practice, but the plants themselves operated in resistance to anthropogenic climate change. Danielle tells a story of snakeweed, a plant that has become legion in the disturbed soils created by New Mexican ranching practices:

When we exhaust the land, snakeweed is one of those plants that tells that story really loudly of, as a species, you are out of balance and you can see that imbalance in the land. The plants are characterizing that and teaching us that. And they're putting that lesson of imbalance in our faces for us to see, so we can walk out in many places in New Mexico and see fields of snake weed, which are just holding the soil down in defiance of what we've done.

Thus, herbalists saw themselves in collaboration with plants in resisting anthropogenic climate change and environmental degradation.

Herbalists overall tended to orient themselves towards service and caring roles. As discussed above, this is related to gratitude towards plants and feeling connection; however, it is important to note that herbalism did not motivate interviewees to take on caring roles for the first time. Many herbalists (especially those already retired) had previous careers or roles as care workers: parents, nurses, nannies, teachers, psychologists, social workers, and environmental activists. Once these caring roles were shed as they retired or children left the nest, herbalism was a way for these interviewees to continue practicing care. Daphne, a retired mother, explains why she got into herbalism late in life: "Earlier in my life I was busy growing my daughter, so that's where my energy was. So I think now it's just this part of my life where, if I don't have raising a child pulling me and I don't have my job pulling me, where do you put all your energy in? You have to figure out what you love." Herbalists lived experience of care work entangled with the care manifest in herbalist-plant relationships to orient the practice towards service rather than competition.

Overall, herbs took on caring roles in their relationships with herbalists, acting as teachers, parents, companions, and guides to feeling connection with the land. In turn, herbalists felt gratitude and a desire to reciprocate the care that plants gave to them. Herbalist-herb relationships were made meaningful by mutual acts of care for one another. Reacting against discourses of anthropogenic climate change and environmental degradation, herbalists sought to engage in local environmentalism and fight climate change through individual action. As caring individuals bolstered by intimate connection with plants, herbalists re-'placed' themselves in the landscape in service-oriented roles.

Sense of ancestry and cultural identity

Cultural identity and ancestors were related themes commonly brought up in participants stories with herbalism. 14 herbalists found these themes to be important influencing factors in herbal practice and relationships with plants. These herbalists were a mix of Indigenous, Mexican American/Hispanic, and white practitioners (including mixed-race individuals from these groups). 3 of these herbalists had significant connections with a recent ancestor (i.e, a parent or grandparent) who taught them herbalism; the remaining 11 felt they had reconnected or desired to reconnect to their heritage or cultural identity through herbalism. 5 herbalists did not bring up a strong influence from their ancestors and/or cultural identity. These respondents were all white women.

Herbalism appeared in many participants' narratives as a symbol of maintaining connection or reconnecting to cultural identity and ancestry. For some, this was continuing the practices of parents or grandparents, i.e. "My great grandmother taught my grandmother, my grandmother taught my mother, and she taught me" (Emilio). However,

most participants did not have such an unbroken connection of herbal tradition in their family. These herbalists often drew upon family histories of farming and/or their ancestors being "closer to the land" (Lauren). For example, Dorothy credited her interest in herbalism to both her childhood and ancestry: "I think my story starts with the fact that I was born and raised in South Dakota on a ranch. All of my ancestors were farmers, ranchers, and so they were all used to being around plants."

For these respondents, their practice was viewed as part of the re-connection process to their lost ancestry. Adriana, a budding Mexican American herbalist studying with elders in her community, explained:

I mean, I'm sure that there are people in my family who practice, but it's not something that's been passed down in my family...But my ancestors practice it and I wanna get in touch with it again, or I just feel it. I think even if we don't know, sometimes we just feel it inside of us. And that's all we need to know, that our ancestors were there before us.

As with many other respondents, herbalism was assumed to be part of everyone's heritage, even if it was not specifically known. Further, the practice was made precious because of the brokenness of the connection to the modern day. Adriana attached meaning to herbalism because of it being lost to her, something she must rediscover about herself.

There was a similar belief in "genetic memory" among respondents who had formed deep relationships with plants before discovering herbalism in their ancestry.

Jocelyn, a curandera, told a story of how reconnecting with her birth parents helped her understand her connection to plants:

I was adopted, and I was raised in an Irish Catholic family in Indiana. I always felt different, not just that I was the brown child, but that I wanted to put my hands in the dirt and nobody else in my family wanted to. Never knew why...then

I moved to New Mexico to raise my daughter in a place where people look like us. I planted these rosemarys that grew and grew and then [my birth mother] came to visit and she came out and she picked a little piece of the rosemary off and she put it right here in her bra. And so I said, 'What did you do, and why did you do that?' She said, 'My grandmother always did it. My mother always did it. So I do it.' So anyways, that's where the beginning was for me, in the genetic memory. It filled the answers to why I wanted my hands in the dirt, why I was into plants and nobody else was in my [adopted] family.

Herbalism or a connection with plants was experienced as embodied generationally, in that the body remembers the practices of one's ancestors. Connecting to ancestors through herbalism created meaning in the act beyond healing an illness. Experiencing ancestor connection in this way led to feelings of "joy, wonder, and mystery [such that] sometimes when we're doing this, it's just like, I dunno, my hands remember, my body remembers. And it's beyond me. It's beyond [Adriana] as this one small piece (Adriana)." This feeling of connection to ancestry builds off the previously discussed feeling of connection to the land and other beings on the universe—in this way, connection is extended across the axes of time as well as space.

An important outlier was John, an Osage practitioner of "North American Indigenous herbalism", who put forth a critique of the "trendiness" of ancestor journeys in the herbal community. He explained his cynicism:

I have a pretty dysfunctional family. My mom and I are good, but her parents were horribly abusive. What she learned, other than surviving her parents, the other thing she learned was learning medicine from her grandparents. So there hasn't been some unbroken line in my family... But making connections with the plants in that way is for me making relatives or refining relatives because I've kind of got a messed up family background.

Connections with plants were still important to him as part of his ancestral medicine, but he was hesitant to reify his ancestors as wise and benevolent as others might. Plants fulfilled the role of ancestors or kin instead of his human forebearers.

Cultural identities (in this cohort: Indigenous, Mexican American/Hispanic, white, and mixed identities) also influenced the nature of the relationship between herbalists and plants to varying extents. Indigeneity was portrayed by both Indigenous and non-Indigenous herbalists as a more intimate relationship with plants and medicine. In all three classes observed, much herbal information was prefaced by a speech about how Indigenous people 'stewarded the land' and had a 'close relationship with the plants' that it was implied we, the class takers, did not. Mexican American and Hispanic herbalists tended to emphasize the Indigenous part of their mixed heritage, referencing Mayan and Aztec ancestors, and characterizing Indigeneity as "getting in touch with the earth and those cycles...and getting back to what's real and important" (Adriana). Images of Indigeneity were also highlighted in the UNM Curanderismo class – certain instructors wore traditional regalia when teaching; the Aztec deity Ometeotl was invoked in chants and prayers; and ceremonies were performed using the Four Directions. Manuella, a Diné and Navajo herbalist active in a pan-Indigenous medicine community, explained the difference between Indigenous and non-Indigenous relationships with plants through the metaphor of human partners:

It's like with anything, we have relationships with people, just like if you have a spouse or a partner. Just because I want a spouse and partner doesn't mean I can go and take your spouse and partner. You've cultivated that, you've worked on that, you have that relationship. So, where I can learn from you how you interact with that partner, it's beautiful, right? But to translate that into my own life, I can observe and learn, but then it has to be reflected into my own world. I *can* share with somebody what you and your partner do in your relationship. But I'm not taking ownership of your relationship. How could I, right? Just like, if Spirit or an elder told you, okay, you're gonna take this and you're gonna leave one petal of this, you know. When you do this medicine, it was given to you as an understanding. So, if somebody else does it, there's no relationship there. There's not the same magic, there's not the same medicine behind it because it was a gift for *you*.

The cultural and spiritual context and relationship underlying Indigenous relationship with herbs thus differentiated it from others. While others could learn from this, the particular relationship could not be replicated.

Most white herbalists who valued ancestral connections found that their whiteness mediated the way they practiced herbalism. They were concerned about the effects of colonization and expressed a desire to practice "in a way that is a value to the community, and also not harmful and also respectful" (Sophia) to marginalized groups with herbal traditions. Whiteness was experienced uncomfortably, as a symbol of colonization and a part of their identity that they "wished to shed" (Danielle).

Whiteness was also experienced as a disconnection with ancestry and tradition. Notably, the five herbalists who did not find ancestry or cultural identity important in their practice were white. Of those who did find it important, the absence was tangible. Delia, a clinical Ayurvedic practitioner, remarked, "I think it's hard when you don't have that connection of, 'Oh, my grandmother did this,' or something. I'm like, oh my gosh, if I grew up learning all of this, it would be easier" (Delia). This desire led white herbalists to speak of ancestral plant connections on a more global level:

I think that plants and people, all people have made relationships with plants since the beginning of human systems. And so plant-people relationships are something that are familiar to all of us on a deep ancestral level. I don't care who we are, we know that ancient people, including non-homo sapiens, were working with plants in contexts that are hard to argue against being medicinal and spiritual. (Danielle)

While others learned different traditions or did not pursue ancestral connections, some white herbalists were motivated to dig deeper into their ethnic backgrounds. Aurora, who has Polish, Hungarian, Diné, and Mexican ancestors, felt that it was especially important

to learn about the herbal practices of her Polish ancestors precisely because she felt whiteness obscured it from her more than her North American side.

In contrast, curanderismo was presented as Mexican traditional medicine, but was not tied to Mexican identity in the same way. Although the class I observed was called 'Traditional Medicine without Borders: Curanderismo in the Southwest & Mexico' and featured various other kinds of traditional medicine, most interviewees who had taken the class referred to curanderismo as a Mexican practice. Yet in the same breath, curanderos/as tended to view their practice as inclusive and changeable. They emphasized connections with other world healing traditions such as Traditional Chinese Medicine, Ayurveda, and Native American religions. This was based on narratives of *mestizaje* (the racial mixing of cultural/ethnic groups in Latin America, particularly Mexico) and tracing the lineage of curanderismo to Judeo-Christian religions, Arabic traditional medicine, European witchcraft, Native American traditions, Western esoteric medicine, Afro-Latino religions such as *santería*. Mexican-ness was characterized by inclusion and mixture of traditions. Jocelyn brought up reiki, yoga, and Lakota sweatlodges as examples, saying:

I believe all those traditions. That's what I love about all of it is that instead of us fighting that, 'Oh, this is the right way and that's the wrong way', it's like, this is cool that all of us do so many similar things and that we can have a tapestry or this beautiful quilt that we make from everybody's traditions.

This served to construct curanderismo as a Mexican traditional medicine which anyone could connect to and practice. It also resulted in each curandero/a's practice appearing highly individualized—curanderos/as had learned certain aspects from various teachers, but adapted these to fit their own personalities and the needs of their clients. As many of this cohort have ties to the UNM Curanderismo course, the leadership and goals of this

course have also been influential in this regard. Emilio, part of the course leadership, seeks to make connections between curanderos/as and traditional medicine practitioners globally; thus, a culture of inclusivity was emphasized in curanderismo instruction.

In sum, ancestry and cultural identity worked in different ways to attach another dimension of meaning to practices of herbalism in New Mexico. Herbalism was heavily connected to ancestors and the past. Practicing herbalism became a vector of connection with a perceived lost or broken cultural identity and ancestry, which was held in the body. This added meanings of self-discovery or self-realization to the practice.

Indigeneity was constructed as a more intimate and unbroken human-plant relationship of medicine, while whiteness, as its foil, became symbolic of disconnection with ancestry. Curanderismo was connected to Mexican tradition, but was constructed as a practice accessible to all, influenced by discourses of Mexican racial mixture and the inclusive goals of the UNM Curanderismo program.

'Placing' herbalism in New Mexico

Engaging with herbalism affected interviewees' conceptions of place in New Mexico. While all the herbalists interviewed currently live in New Mexico, only 3 respondents were originally from New Mexico. 8 respondents moved from other places but had lived in New Mexico for 20 years or more. 5 respondents had lived in New Mexico for 7-10 years. 3 respondents had just moved to New Mexico within the last 3 years. Herbalists 'placed' herbalism in New Mexico in their narratives by drawing on characteristics of the climate, geography, local plants, and discourses of cultural history.

The high desert climate and seasonality of New Mexico stood out to herbalists and affected their practice. The aridity, hot summers, and cold winters produced a

landscape characterized by harshness: "The plants here, they have to take on so much. It is just so much harsher...It's pure, fully, I don't know how to explain it. It's just to the bones minimalism" (Rebecca). Many herbalists had who moved to New Mexico from wetter or more temperate climates described a steep "learning curve" (Delia, Aurora, John) in combating winter die-off and more difficult growing conditions. When Delia moved from California, she "had to learn how plants grew out here because they would just die. And I know they weren't dying, but they appeared they were dead. I was fighting against nature, and I realized we all need that rest. They actually come back more vibrant when we allow them to have that."

The ways in which medicinal plants survive in the harsh landscape evoked feelings of enchantment and awe in herbalists. John, who had been in New Mexico for 3 years, found that "just seeing how slowly in contrast plants grow in this ecosystem and also seeing how plants react to this scorching hot summer temperatures was kind of striking for me. I started getting to know creosote, and I was just so impressed by it and how slowly it grows and how old it is and all these coping mechanisms that it's developed for thriving in a really hot, really dry place." Paying attention to such coping mechanisms, New Mexican herbs were seen as more potent: "The environment is harsh here. Understanding how plants have to be super strong to grow in the environment here is similar to how the people have to be really strong. Like, a lot of the plants here are a lot stronger than other places 'cause they have to push out so many more essential oils and stuff (Sophia)."

Herbalists valued living in New Mexico because of the proximity to a variety of bioregions and 'natural' places. Accessibility to these natural places was an important

feature of New Mexico: "Here, you can be outside, you can travel an hour in any direction and be in a completely different place" (Daphne). This was taken advantage of in plant walk-based courses—students were taken to observe plant communities on mesas, in mountain foothills, cottonwood forests, arid grasslands, in urban neighborhoods, etc. with little travel time. This also gave herbalists easier opportunities to access the feeling of connection without distractions of other people: "I just feel like you can have such a connection to the land here versus somewhere else. There's so many opportunities to go out and you're, no one else is around you" (Rebecca). Living in New Mexico, herbalists were able to easily access a variety of plant communities as well as a feeling of connection to the land.

The visible Indigenous, Hispanic, and Anglo history constructed New Mexico as "ancient land" (Manuella) in herbalists' experiences. Herbalists often brought up a tricultural (Indigenous, Hispanic, Anglo) narrative of New Mexican history in this regard: "New Mexico just feels very old. With our Native American culture, how many different tribes there are, and of course the influence of the Hispanic culture, and then later on European, I think that we are a definite mix of 'old'" (Lauren). Herbalism, as the 'traditional' antithesis to modern medicine, aligned well with the ancient conception of New Mexico. Teodoro found that herbalism "fits this culture in New Mexico. It's of the tradition here...people want a little sense of what is in their roots. Not only from the local people who have been here a long, long time, but also newcomers who expect that within New Mexico." Through associations with indigeneity and tradition, herbalism and New Mexico worked to co-construct one another as ancient.

New Mexico is also home to a particularly visible herbal movement, in no small part due to the Indigenous and curandero/a presence. Although many herbalists recall difficulty they had in finding an herbal community one or two decades ago, there was a sense that herbalism was on the rise here. As Miguel explained, "the history of New Mexico has led it to a point where it has to reclaim [traditional medicine]". Herbalists cited the popularity of herbal and traditional healing classes offered through UNM and local traditional healing organizations as evidence of this.

An important legal factor in the herbal movement in New Mexico is that it is a 'free practice state'. The Unlicensed Health Care Practice Act, passed in April 2009 protects citizens' access to and practitioners' right to practice "traditional, cultural, complementary and alternative health care therapies" (NMCAAMP 2009) without a medical license, so long as they follow certain guidelines. The practices covered by the law include many iterations of what we may consider herbal medicine, such as "herbology or herbalism", "aromatherapy", "naturopathy", "folk practices", "healing practices utilizing food, dietary supplements, nutrients and the physical forces of heat, cold, water, touch and light", "homeopathy", and "culturally traditional healing practices, including practices by a curandera, sobadora, partera, medica and arbolaira, and healing traditions, including plant medicines and foods, prayer, ceremony and song" (Unlicensed Health Care Practice Act 2014).

Herbalists connected this law to the unique pre-existence of traditional healing in New Mexico: "New Mexico is protected in the sense for non-licensed practitioners, because there's so many traditional healers or licensed people here. But where I grew up in Indiana, it's not a thing. And there's other places where that's not a thing" (Allison).

This law evoked pride and served as evidence that New Mexico was "ahead of the rest of the country" (Emilio) in accepting healing traditions. Manuella, who was once told by a teacher at UNM that curanderismo was "dead", remarked that "to see how far herbalism has come in New Mexico... it brings me great joy to know that there's these pockets of places and people that are continuing our traditions of medicine."

However, others contend that the act still constrains their practice. The act is a safe harbor law, which means that practitioners are protected by the law so long as they remain in compliance with its stipulations. These stipulations include prohibitions and duties that practitioners must follow, including how they are allowed to identify themselves. Juliet protested that, "there's so many ways I have to position myself. New Mexico's a free practice state, so I have more wiggle room. But still, I can't say I'm a therapist, I can't say I'm a clergy person. I can't say I'm a doctor. Even though I do all of those things."

In sum, New Mexico appeared in herbalists' narratives as a place well-suited for practicing herbalism, evidenced by the rising herbal movement occurring here. The physical landscape and climate created a landscape of harshness, which painted its planty inhabitants as powerful survivors with potent medicine. Narratives of tricultural history and visible Indigenous and Hispanic presence undergirded the 'traditionality' of herbalism in New Mexico, which worked to construct the land as both ancient and ripe with multicultural knowledges.

Sites of struggle

Interviewees used their herbal practice to understand and react to sociopolitical dynamics. Participants' previous lived experience entangled with their intimate

relationships with plants, which worked to construct herbalism as a service-oriented practice opposed to social injustice. Gendered identities, how herbalism should function under capitalism, and cultural ownership of herbalism became sites where herbalists struggled over the meanings and ethics of their practice.

There was a common belief that herbalism did not "fit" with capitalism.

Herbalism was seen as traditional and precapitalist; capitalist reordering of society changed the social context around which herbalism and other traditional medicines were built. This posed problems to herbalists. For example, in many herbal traditions it was customary to not charge money for healing:

Back in time before capitalism, you wouldn't just go and say, 'Hey, I'm sick, heal me.' You would give them something in return. If you know how to make clothing, you would make clothing for them. If you know how to hunt or fish, you would provide some kind of food for them. But it's not just this one-way kind of transaction people expect it to be now (John).

In herbalists' eyes, capitalist monetary transactions cheapened their service and made the relationship between them and their clients shallower because it was based on monetary value rather than an exchange of services or gifts. But in the end, interviewees felt compelled to charge money: "My landlord doesn't accept trade" (John). These practitioners struggled with guilt and perceived disdain from other people in their community. Juliet felt that "people love to shame people who are practitioners and they're like, 'You charge too much'...for me, I had to do the work personally to basically be like, okay, I have to value myself, I have to know that they should pay me. It was just weird cause I felt uncomfortable with it and I'm still moving with that."

Interviewees were similarly disdainful of the mass production/harvesting of herbs through capitalist commodity chains. While these herbs may still complete the physical

healing they were intended for, the relationship between herbalist and plant was lost. Juliet found such "factory herbalism" to be "deeply problematic. You can learn an herb, order it online, and never know what it looks like or how it grows. Never even see the plant!". However, many herbalists interviewed did utilize online herbal stores, so long as they believed they were harvesting ethically, to get particular herbs that were out of season or unavailable where they lived. Especially, aging herbalists who found wildcrafting hikes or gardening to be physically taxing relied more on stores.

Herbalists often framed their own practice as a form of "health justice" (Aurora) in a capitalist world where many cannot afford modern healthcare. Emilio explained, "the reality is that especially the immigrant population is not insured and they don't go to a doctor unless they're really, really sick. We can work with them and teach 'em how to grow their own gardens and use their own medicine for minor illnesses." Herbal health justice emphasized empowering others to make their own medicine rather than becoming dependent on costly modern healthcare for healing. Overall, the meaning of herbal practice was struggled over in the context of capitalism. Framing herbalism as health justice opposed it to capitalism, yet compelled herbalists to lower prices or work for free. Constructing the practice as precapitalist worked to frame herbalism as old and traditional, while at the same time herbalists felt bound to adapt to capitalist society and find capitalist ways of "honoring their practice" (Jocelyn) through money.

Gendered identities were another site of struggle in the herbal community.

Women far outnumbered men in every herbalism class observed. Yet, as many female herbalists noted, men were better represented in leadership roles. Female herbalists commented on this phenomenon with cynical disdain, as well as expressing the belief that

this was changing in the coming generations of herbalists. Allison recalls a recent "online symposium conference, the American Herbal Skills Symposium, [where] a lot of the people giving talks were men. And a lot of the people who run and own schools are men. So it's another one of those things where a lot of the people who are in practice are women, but a lot of the people who are speaking – the power, the face – are men." It was difficult to find practicing male herbalists in Albuquerque, and the ones I did find held more traditional male roles of leadership, such as coordinating or leading herbalism courses and owning herbal businesses. In these ways, the herbal community reproduced traditional gender roles of women as carers and men as leaders or directors.

Two of the participants interviewed identified as queer and offered their perspective on queerness and herbalism. The tendency to label medicines as "women's medicine" or "men's medicine" and to segregate ceremonies by gender produced discomfort for queer participants. John found the gendering of plants and medicines to be limiting:

I understand where the urge to gender things comes from, but also I think that even if somebody is straight and cis, it can limit which plants we think we can work with. *Artemesia frigida*, a lot of people call that a women's medicine because it can help induce labor if somebody is pregnant and pass their due date. But also, it's a really amazing cold medicine if you're trying to not get a cold. And I met so many men who don't know that and don't think they're supposed to touch it because it's a 'women's medicine'.

The gender binary was very present in the UNM curanderismo class; one class member complained about the separation into men's and women's temazcal ceremonies. Another class member argued that gendered temazcal ceremonies were traditional, and should not be changed. Aurora offered the following perspective: "I think there's always been the 'in-between' individuals and communities between the binary, and I think it's just 'cause

of colonization and Christianity and all that. We've forgotten those excuses. So when people are like, oh, that's traditional, I always have a question mark in my mind." Aurora noted that instead of trying to change traditional spaces in which they felt unwelcome, she and other queer herbalists opted for "more intentionality on creating queer centered spaces or in all kinds of healing, definitely in herbalism." Thus, herbalism emerged as a site of struggle over the meaning of gender in the context of tradition.

Ownership of herbal medicine was contested by herbalists in different ways. Most herbalists interviewed tended to believe that "herbal medicine is everyone's medicine" (Lauren) and that herbal knowledge needed to be shared, albeit respectfully. 'Respect' in this context could mean not using sacred herbs of another culture (ex. Yucca, sacred to many Indigenous groups in the Southwest), highlighting the cultural roots of herbal knowledge in classes or on packaging, and not harvesting on designated tribal lands. However, many also had stories of other herbalists who felt otherwise. For example, Jocelyn recalled how her teacher protected herbal knowledge after moving houses:

She moved from Los Lunas where she had a temazcal and had it torn down. She just didn't want the medicine left there. She took out all her rosemary plants, all of that. She felt it was strong, strong medicine, and didn't want it into the hands of somebody else that she didn't know who that person was going to be and just felt like, yeah, it's not something to be left behind for a child to play with.

Some herbalists interviewed also felt strongly about protecting herbal knowledge from appropriation:

We're really intentional about who we share this information with and who we learn this information from. In that, it is well known that people, especially white people, steal and appropriate this knowledge, this medicine, and then sell it back not only to us, but to others for so much money. It's just, one, completely unaffordable, and two, why would I wanna learn about my culture and my traditions from someone that isn't from my culture and traditions? (Adriana)

Jocelyn's teacher and Adriana both felt the herbal medicine that they practiced was owned by their culture, and thus their responsibility to protect. For others, there was a sense that it was okay for cultural outsiders to use the medicine for healing, but not to profit off the medicine by selling remedies or knowledge without giving back in a meaningful way. Juliet, an Indigenous Rroma herbalist, argued "if you're taking an art form that we've curated and then you're not acknowledging it's of us, you're not maybe giving a small percentage of your profits to an organization that affects us in a positive way or giving anybody any real information about who we are, you're kind of spreading misinformation by just letting us remain invisible at best." Predictably, those herbalists with a more tenuous cultural connection to herbalism were more likely to be in the "everyone's medicine" camp, while those more culturally connected herbalists felt a stronger responsibility to protect. However, all herbalists agreed that there were ways for herbal traditions to be shared respectfully, though what 'respect' connotated was sometimes left ambiguous.

Overall, the affective landscape of herbalism in New Mexico was punctuated with sites of struggle over the meanings of tradition, equity, and inclusion. Herbalism was associated with tradition and resistance to capitalism – yet this produced dilemmas for herbalists without other means of income living in a capitalist society. Can herbal health justice for the poor and uninsured equitably honor the skills and time given by herbalists? While herbalism is a largely female space, the outer face and leadership positions are often held by men. The gender binary and gendered roles were similarly ascribed to tradition, often leaving queer herbalists to create their own spaces. Herbalists felt opposing responsibilities to protect their cultural traditions of herbalism and share the

medicine for those who might need healing. In sum, gendered identities, herbalism under capitalism, and cultural ownership became areas where the ethics and meanings of practicing herbalism were contested, producing a tradition-oriented space that is in many places hungry for equitable change.

CHAPTER 5: Discussion and Conclusion

This study produced complex narratives of how herbalism works to attach meaning to places, peoples, and plants in New Mexico, and how these meaningful attachments manifest in ethics and actions of care. In this final section, I give a summary description of the affective landscapes of herbalism in New Mexico and discuss the limitations, potential expansions, and greater significance of these findings.

Of loss and love: Affective landscapes of herbalism in New Mexico

The land called New Mexico is a physical and ideological space well-situated for its budding herbal movement. New Mexico is made ancient by associations with Indigeneity and by narratives of a tri-cultural history, which foregrounds Indigenous, Spanish, and American contributions to the state, while also obscuring those of other racial and ethnic groups. New Mexico's physical landscape (arid climate, seasonality, varied bioregions, proximity of urban and wild spaces) constructs local plants as wise survivors and allows easy access to an expansive feeling of connection to nature.

The relationships between herbalists and medicinal plants are landmark in the affective landscapes of herbalism in New Mexico. Herbalists, as care workers, feel strong gratitude towards plants that care for them unselfishly. For herbalists, attaining deep, multilayered knowledge about plants, whether this is through reading scientific studies and guidebooks or learning spiritually from the plant itself, creates an intimate and ultimately loving relationship that characterizes the landscape. This relationship represents a collaboration between herbalists and plants which works to reanimate plants and the land as lively beings. Like herbalists, plants also engage in care work, enacting physical and emotional healing in the bodies and minds of herbalists and their clients, and

guiding herbalists as their teachers, companions, kin, and allies towards re-finding a feeling of connection to the land. The coming together of herbalists and plants, who are significantly Other to one another, is fostered by an ethos of reciprocal care.

Ancestors are also reanimated through practicing herbalism, a process that is experienced bodily as genetic memory. Practicing herbalism becomes a vessel of self-discovery, finding family, and rediscovering identity as understood through ancestry. The ability to re-access ancestral and cultural practices of herbalism is precious in light of the racist and colonial forces which continue to denigrate and erase it. In this regard, herbalism is a practice fueled by a sense of loss. It is this feeling of loss of culture, ancestry, and identity that makes learning and carrying on herbal traditions so important to interviewees.

Conceived of as a precapitalist tradition and associated with ancestors, herbalism ideologically locates in the past. Practicing herbalism allows herbalists to metaphorically time travel to a precapitalist space defined by reciprocity, relationship, and healing in collaboration with plants and ancestors. Existing in this space allows them to conceive of a future of herbal health justice where these values are central. Yet, herbalism is enacted in the present, capitalist society, which poses moral and practical dilemmas for herbal health justice. And on the other hand, associations with tradition also work to reinforce the gender binary and gendered roles for men and women. These discourses are contested by female herbalists who wish for greater visibility, and queer herbalists who question both the utility and the traditionality of the gender binary in herbalism. Herbalism appears as a tradition-centered space at the same time eager for equitable and inclusive change.

Herbalism is also a space where cultural identity is made and performed. Indigeneity

is reified as a particular intimate connection with plants and the land; Mexican-American and Hispanic identity is characterized by inclusivity and mixing traditions of healing; whiteness is experienced as a distance from ancestry and culture and an uncomfortable reminder of colonization. While herbalists place themselves in the landscape as stewards of both land and herbal tradition, cultural identity and ownership of the medicine complicate this narrative. If herbalism is simply 'everyone's medicine', then histories of colonial persecution of Indigenous and Hispanic herbalists are erased. The finding that relationships with plants are informed by cultural identity and ancestry offers a lesson in learning respectfully, but not replicating the traditions of another. As an ancestor-centered space, herbalism in New Mexico also offers an opportunity for herbalists to delve into their own identity and discover the herbal traditions of their own ancestors rather than enter traditional spaces for which they lack cultural context.

What ultimately unfolds from herbalists' narratives is an affective landscape of love and loss: love for the land and the plants that care for them, for ancestors who are remembered in their bodies, and loss of the traditions, identities, and plants that feel like they are slipping away due to capitalism, climate change, and racist, colonial regimes of power. Love and loss commingle in these landscapes to produce sites of struggle over what it really means to practice herbalism in New Mexico.

Limitations and expansions/future directions

There are limitations to the findings of this qualitative study. Primarily, most herbalists interviewed had ties to Albuquerque Herbalism and the UNM Curanderismo course because of the snowball sampling method – given more time and resources, the sample could be expanded to find herbalists operating outside these two related

communities. For example, though some herbalists interviewed had studied Ayurveda, non-North American traditions of herbalism (notably, Traditional Chinese Medicine) and identities were not a focus in this study. Chinese medicine is visibly present in New Mexico in clinics, herb shops, and schools. Afro-descendant herbal traditions were also not explored. Following, the identities discussed were limited to Indigenous, Mexican-American, white, and mixed identities, — I did not speak to any Black, Asian, or otherwise identifying herbalists. This perhaps worked to solidify the controversial "tricultural narrative" of New Mexican history in this research, which leaves out the long histories and contributions of Black and Asian communities to the state of New Mexico. Thus, these directions represent fruitful future expansions of this research.

The 'business side' of herbalism was also an underrepresented perspective. While some interviewees operated small herbal businesses, I did not interview staff at larger and more commercialized companies. Given that herbalists interviewed mentioned these companies as the antithesis of what their practice was about (i.e. commercialization, disconnection with nature and tradition, focus on profit), this would be a useful perspective to add to this narrative.

Finally, there are inherent limitations to any study looking at traditional knowledges of plants, which in many cultures are sacred and protected knowledges. Such plant knowledge may have been withheld or kept secret by interviewees, as is their prerogative. Furthermore, as a researcher and outsider committed to maintaining ethical relationships with the researched community, it is my responsibility to not pry into these secret knowledges and reveal them for research's sake. As such, this research speaks to what interviewees were willing to share with me about their relationships with plants, which at

times touched on spirituality and sacredness, but necessarily did not reach the full scope of these relationships.

Significance and conclusion

Let us briefly return to the theories discussed at the beginning of this research (affective landscapes, more-than-human relationships, and care) and evaluate the contributions the research makes to theory. And, following: What can we learn more generally from the experiences of herbalists in New Mexico?

This study looked at affective landscapes both as affective attachments to the physical landscape, and as the production of space through the practice of herbalism. Who produces these affective landscapes? While herbalists were foci in this account as interviewees and class members, their narratives highlighted the numerous active roles played by plants. Indeed, plants often take the lead as teachers, parents, and guides. Thus, we must look at herbalism as a collaborative space-making practice that is performed by both humans and plants. In this way, plants are also producers of space.

In a similar vein, I began this study by drawing on feminist political ecologies of care, considering herbalism as care work performed by herbalists towards humans, cultures, and plants. The experiences of herbalists in New Mexico reveal that plants also engage in care work in several dimensions. As medicinal plants, medical health-care is inscribed within their chemistry. There is also emotive caring labor that plants perform for herbalists: emotional healing, guiding them to feel a connection to nature, linking them to their human ancestors and cultural identities, and offering the potential for healing ancestral wounds. Yet, like human care workers, whose work is undervalued, and who are most often individuals marginalized by gender and race, plants are similarly

overlooked and unappreciated. As non-animal beings with significantly different forms, communication, and survival strategies, plants are Othered in the human imagination. Considered to be natural resources, they are a marginalized class of being. Even within more-than-human geographies, a field which aims to address anthropocentrism, plants are far less represented than more overtly lively animal subjects. Herbalism in New Mexico is a unique space which recognizes and values the care work performed by plants, both in words and in actions.

Further, the collaborative care work and space-making practices of herbalism in New Mexico have created radical potentialities in herbalists. Forming relationships with plants through herbalism made herbalists relate to the landscape differently – plants were no longer things, or even material used to make medicine, but persons with agency and rights. This evoked a feeling of joyful connection that expanded to include the entire landscape and other beings that reside there. Because of their gratitude for how plants cared for them, herbalists made conscious decisions to re-place themselves in this landscape they now felt connected with as land stewards. As humans living in the United States, considered to be a global superpower of capitalist modernity, this is a radical reconceptualization of human-environment relations. The herbalism that is learned in New Mexico represents a pedagogical model for fostering intimacy and care with more-than-human beings on a damaged Earth.

However, the story of humans and plants in New Mexico remains 'troubled', as Haraway (2016) writes. Anthropogenic climate change, environmental degradation, racist and colonial violence, cultural appropriation, heteronormativity, and sexism are living ghosts that haunt the human-plant relationships of today. Telling this troubled story is a critical first step towards creating communities that build caring relationships for plants

and between human Others. It also reminds us of the time, humility, and respect that creating these healing spaces will require.

As I discussed briefly in the introduction to this thesis, contemporary herbalism in New Mexico (and indeed, the world) finds itself at a crossroad. As an alternative medicine, herbalism has grown in popularity as part of the ever-growing wellness industry. Like yoga, meditation, and other alternative health practices, herbalism will likely find itself in the wellness regimens of many modern people as it becomes more mainstream. New clinical studies on herb efficacy appear daily, which makes herbal remedies easier for governments to regulate. The herbal industry is also growing exponentially: Fortune Business Insights (2022) projected the global herbal medicine market to increase from USD 230.03 billion in 2021 to USD 430.05 billion in 2028. These are all troubling trends towards commodification and cultural/environmental extractivism. However, the herbalists interviewed for this study represent a cohort that is determined to maintain the 'heart' of their practice in spite of these trends. Spending the last two years alongside these herbalists and medicinal plants, I have found herbalism to be ultimately about creating relationships, and about seeking all kinds of healing. I am ultimately hopeful that increased mainstream exposure to herbalism will 'open the door' to individuals willing to form deep, caring relationships with plants and their medicine.

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APPENDIX A

Interview Prompts (Basic questions used to guide interviews when appropriate)

- How did you first hear of/became interested in herbalism? How did that lead you to where you are now (i.e. owning an herb store, teaching an herb class, making medicine for family and friends, etc.)? What is your 'story' with herbalism?
- What would you say is your herbal "practice"? Ex. How do you keep learning, do you grow plants, what resources do you use to learn, do you treat others?)
- Is there a plant (or plants) that you have a special connection with? Why?

 How did you get to know said plant?
- What role do the plants play in your practice?
- What is your relationship with New Mexico as an herbalist?

APPENDIX B

Table 1: Interviewees Relationships with Herbalism:

The following table provides a general idea each interviewee's (referred to with a pseudonym) engagements with herbalism.

Interviewee Pseudonym	Teaches herbal medicine	Treats clients with herbal medicine	Sells herbal products	Uses herbal medicine primarily for themselves, friends, family	Student of herbal medicine
Danielle				-	
Kimberly					
Delia					
Jocelyn					
Aurora					
Dorothy					
Allison					
Adriana					
Manuella					
Rebecca					
Miguel					
John					
Juliette					
Emilio					
Daphne					
Sophia					
Lauren					
Amelia					
Teodoro					