

University of Arkansas, Fayetteville ScholarWorks@UARK

Theses and Dissertations

12-2017

Our Land Is Not Just Soil: Knowing, Feeling, and Doing Environmental Activism in the Arkansas Ozarks

Ramey Arlen Moore
University of Arkansas, Fayetteville

Follow this and additional works at: <http://scholarworks.uark.edu/etd>

 Part of the [Biological and Physical Anthropology Commons](#), [Environmental Studies Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Moore, Ramey Arlen, "Our Land Is Not Just Soil: Knowing, Feeling, and Doing Environmental Activism in the Arkansas Ozarks" (2017). *Theses and Dissertations*. 2560.
<http://scholarworks.uark.edu/etd/2560>

This Dissertation is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.

Our Land is Not Just Soil: Knowing, Feeling, and Doing Environmental Activism in the
Arkansas Ozarks

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Anthropology

by

Ramey Moore
University of Arkansas
Bachelor of Arts in Political Science and Middle Eastern Studies, 2005
University of Texas
Master of Arts in Middle Eastern Studies, 2009

December 2017
University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

Dr. Justin M. Nolan
Dissertation Director

Dr. Kirstin Erickson
Committee Member

Dr. George Sabo
Committee Member

Abstract

The Ozarks is a holey place, an ancient plateau formed from ancient rocks and the sediment of millions of years of living things. The Ozarks is also, from another perspective a place made from a mesh of overlapping lines, lines of migration, lines of living things, lines of water movement over and through the land. This dissertation engages with the practice of conservation and environmentalism as it is performed and lived by Ozarkers and Arkansawyers, natives and transplants. Based on more than a year of ethnographic fieldwork conducted with the Buffalo River Watershed Alliance, Save the Ozarks, Arkansas Master Naturalists, and with Hobbs State Park-Conservation Area, this dissertation examines how emotion, affect, enacted knowledge through performance, and strategic reinterpretations of the nature of political engagement are all part of a local system of conservation. In this dissertation, I seek to analyze links between individual emotion, social performance of expertise, political organization, and conceptual understandings of the physiogeography of the land.

© 2017 by Ramey Moore
All Rights Reserved

Acknowledgements

I must first thank my long-suffering family, Laine Gates and Arlen Gates-Moore, for making it possible for me to conduct this research and complete this dissertation. It would have been impossible to reach this point without their active assistance and forbearance.

It is also necessary to thank my dissertation director Dr. Justin M. Nolan. It was only through his engagement and support that I have become the scholar that I am today. I must thank him for being a good friend, and occasionally a sounding board for ideas both good and ill-advised.

A special thanks to Dr. Kirstin Erickson and Dr. George Sabo who I hope can both see the enormous influence that they have had on this research. Their support was essential, and I am grateful for their patience.

Also, I must recognize the support of the department, particularly Dr. JoAnn D'Alisera, the Director of Graduate Studies, and Dr. Ted Swedenburg. I have been fortunate to have two distinguished and supportive mentors in these scholars. I owe them more than I can convey.

I would also like to thank the University of Arkansas staff, in the department and generally. Support and assistance from Shannan Kaye Freeman was instrumental in completing my program of study.

I would also like to thank the University of Arkansas Graduate School for the financial support provided through the Doctoral Academy Fellowship of which I was a recipient.

Finally, I must express my thanks to Dr. Mary Jo Schneider and Dr. William Schneider whose enthusiasm and support was the deciding factor that put me on the path that has led to this point.

Table of Contents

I.	Introduction.....	1
II.	Where From and To Where?: A Review of Relevant Literature	37
III.	Ozarkmentalities: Environmentalities of the Ozarks in Performance for Aldo Leopold Day 76	
IV.	Returning to the Natural State: Power, Race, and Landscape in the Ozarks	98
V.	Activism Subverting Boundaries: Karst-thought and Water-language in the Ozarks	136
VI.	Concluding Lines: Traces of Where We Have Been and Living Trajectories	157
	Bibliography	167

I. Introduction

“Land, then, is not merely soil; it is a fountain of energy flowing through a circuit of soils, plants, and animals. food chains are the living channels which conduct energy up ward; death and decay return it to the soil. The circuit is not closed; some energy is dissipated in decay, some is added by absorption from the air, some is stored in soils, peats, and long-lived forests; but it is a sustained circuit, like a slowly augmented revolving fund of life.”

-Aldo Leopold from *The Sand County Almanac*

A sound of stones crunching against the tires, my car slides slightly as I pull to a stop in the gravel lot next to the Buffalo Outdoor Center in the small unincorporated hamlet (village, town) of Ponca, Arkansas. A slight trepidation moves through me; I’m about to head out with members of the Buffalo River Foundation (BRF) leadership including Mike Mills, and the then-Director Rayne Davidson, a gregarious and outgoing woman who is also a local real estate agent. The BRF is a local version of organizations like the Nature Conservancy (see Compton 1992) whose mandate involves environmental easements on privately owned land. The BRF has worked in the area for more than a decade. Today’s work is another chance to experience the boots-on-the-ground work that the BRF engages in. It is also my chance to learn some of the basics to generating the necessary reporting required to filing the easements that result in the long-term conservation of historical, cultural, and/or environmental resources on private land. The piece that we’ll be walking and documenting today is a triangular piece that makes up part of the Gossett hollow just up the road from the BOC and the greater metropolitan city center of Ponca proper. I have packed some food, water, a bag with my tools (chief among these is the inexpensive Garmin GPS unit that I am still learning the ins-and-outs of).

John¹ is an engaging person whose sun-darkened face is often split with a grin in spite of recent heart surgery. John is a long-time resident of Harrison who is a former Professor of Geology at the University of Michigan. To work he is dressed in a wide-brimmed hat, his comfortable work clothes, broken-in brown hiking boots, and customary smile. He has also built his own kind of equipment holder that clips together with his backpack straps where it covers most of his torso. Packed in to its rigid wooden storage compartments are an aluminum clipboard, compass, flagging tape, GPS unit, pens, and probably a few other things that are tucked away for the right occasion. He has, today, graciously let me tag along to see how he goes about producing this technical document necessary to both the tax benefits of the easement, but also key to the protection of the land (theoretically) in perpetuity.

John and I have already had a few conversations about the nature of “in perpetuity.” For John’s purposes the specific and detailed descriptions of property lines, inclusion of relevant photographs of boundary lines, key features, and viewsheds were necessary to ensure a broad utility for the reports that he would file. Ostensibly these reports, referred to as baseline reports, would serve as the standard by which the environmental easement was judged. The threat of losing the tax benefits of the easement were used as the means of enforcing the environmental restrictions outlined by the landowner. At the same time, John acknowledged that “these reports aren’t a way of preventing damage,” but that their role is more about enforcing good behavior through highlighting the consequences of ignoring the easement’s regulations of activity on a given parcel of land. This *ex post facto* punishment, according to John, requires a mix of good monitoring and a clearly written baseline report that has enough information to allow later

¹ In general, I have changed names, combined individuals, and made other attempts to obscure the identities of the people with whom I worked. I have used real names where the individual concerned is a public figure, or holds a public-facing position in an environmental group.

evaluations to immediately recognize changes in the property. For John, more so than for other members of the BRF (and several members of the Nature Conservancy of Arkansas with whom I spoke), he acknowledged that it's likely that in the future there will be issues and problems that cannot be addressed ahead of time, such as how to deal with damage caused outside the control of a property owner. "What about in the case of a massive ice storm, like the one a few years ago?"² I asked. John's reply is telling. He noted, "Well, it might be very difficult to tell what might be damage from a storm that has been cleared and what might have been done for other reasons."

John is taking me out with him on this first outing since his heart attack and is presently coping with his wife's ongoing illness as well. I doubt he knows how grateful I am to be accompanying him. John's connection to the area, and general political leanings, remind me strongly of environmentalists that Neil Compton describes in his *Battle for the Buffalo* (1992). Incorporating a deep academic knowledge that is part of what ties him to advocacy, a connection to the Buffalo that drew him to the area many years ago, and a precarious position as a relative newcomer compared to the older families whose conceptions of local identity are often strategically exclusive of activists like John.

Our task today is to mark the major features that the landowner has identified; this might include assemblages of local plants, culturally relevant and historically important features (the most often mentioned of these are Native peoples' cave shelters and the art or archaeological features with an at least equal focus on the dwellings of White settlers in the area or Civil War era sites), and other less tangible and subjectively important features like landscape views (both

² Referring to a large ice storm that caused damage throughout the Ozarks in January 2009. The storm caused a huge amount of damage around the area, with many thousands of trees left damaged beyond repair. When I began my fieldwork one of the staff members at HSP-CA mentioned that there were still thousands of trees across the park that had yet to be dealt with more than 6 years after the storm.

as a place that can be seen from protected areas, as well as the ability to see into protected areas).³ These “viewsheds” are understood as an integral part, and goal, of conservation efforts conducted in the area. Save the Ozarks’ campaign against high-capacity electrical transmission lines is based upon a similar conception of ‘seeing’ the Ozarks as untouched, or relatively so.

Today we are heading out to some land recently acquired by Mike Mills that adjoins a larger section he owns on Gossett Hollow. This piece of land includes a defunct zinc mine, a small creek, and a difficult topography that is typical of the area. To give a sense of what I mean by the mild euphemism “difficult topography,” this piece of property is folded like a piece of paper with a slope that I calculated runs higher than 14% at places, with the last 10 feet being nearly 45%. Scrambling up and down required a fair amount of concentration and coordination, scrambling on hands, knees, and the seat of the pants, and a helping hand every now and then. Except for the height of the ridges, the roads can be as nasty to navigate as any road I have personally seen in the Rockies.

John and I ended up getting abandoned by the higher ups whose interest in the property did not include the scrambling up and down 420’ of vertical height required to catalog the property boundaries for our report. John’s health made the last hour and a half of this ascent moderately nerve-wracking, particularly as this part of the Ozarks still has some of the lingering disconnection with the outside world--this time in the form of a topography that ensures that I never have cell service within at least 20 miles of Ponca in any direction. Sometimes even on the

³ Dr. Smith has a short disquisition on ugly houses that have been built on bluff lines that overlook the River. One of which he called “Castle Ernst,” called Cloudland by its owner, this imposing edifice was built by local hiking/canoeing aficionado, publisher of hiking and canoeing guides, and generally well-known local personality Tim Ernst. His diatribe denounces these “ugly” homes which are visible from the National River. I first heard this discussed by a group of BRF and Nature Conservancy connected activists as being something that their advocacy would seek to control or eliminate.

ridge lines that surround the hollows, (lost) valleys, and deeply cut stream channels that characterize these Ozark plateaus that we call Mountains.

A few minutes ago my car was rolling through bottom land near Boxley Valley and Ponca, iconic names for Buffalo River lovers. The winding road drops off the ridgelines, snaking its way down to the kind of near-perpetually damp land that is some of the only good farmable land in the Ozarks.

Today I'm in a hurry, having left Fayetteville well after I should have, not to mention the detour to grab a few snacks just in case this land survey takes longer than expected. With a slight slide on the hot gravel next the Buffalo Outdoor Center, a Ponca fixture, I grab my 'work bag' full of my new GPS unit, sunglasses, bright yellow vest (for visibility if I fall in a sinkhole, slide off a bluff, or just get so tangled in cat briar and green briar that I have to be evacuated with a mule team), a trowel, a pair of secateurs (to maybe avoid the aforementioned death by a thousand thorns), a few worn plant guides, and whatever other trash, debris, and random odds and ends have ended up in there over the course of the last few months.

I make my way into the building, and up the back stairs to the 'private' area of the Center where Mike Mills and Rayne Davidson are waiting for me. John Cutler, the Buffalo River Foundation's baseline surveying guru, is there as well. The heavy logs that are used throughout the building give one the impression that you're in a log cabin, albeit an expensively finished one. The downstairs area is devoted to selling snacks, camping supplies, travel and trail guides, and the other sundry items that a tourist wanting to float the Buffalo River might need. Upstairs, however, are a handful of offices, one belonging to Mike, and several that seem to be infrequently used as meeting rooms, although on this visit there are quite a few cardboard boxes being stored in most of the nooks and crannies.

Mike and Rayne are standing by a framed topo map of the area. Pointing to the one of the shaded areas on the southeast side of the map Mike says, “This is, I think, where we’ll be heading today, am I right John?” Even though Mike has lived, worked, and prospered in the area since the ‘70s he (and pretty much everyone else) tends to defer to John’s expertise. This might be because John, as he tells it, “in another life got a PhD in geology,” in a way that makes it seem quite simple. John seems to find this air of competence and self-assuredness natural, perhaps due to the recent heart attack that had him laid out for several months on doctor’s orders. John, for his part, talks about it in the same way that he does everything else, with humor, wit, and good-natured indifference.

The map itself, however, is wrong, as John points out. He shuffles through the papers in a large aluminum clipboard (which he digs out of the hand-made wooden kangaroo-style holder on a harness that he will wear all afternoon, despite the heat). He pulls out a small sheaf of maps from the clipboard, all of which he’s made using a program he wrote that takes topo maps, runs them through AutoCAD and overlays grid lines. A small cut-out or notch that runs along the road heading roughly North of Ponca is proved by John to be shown in the legal description to be a part of this parcel, but absent in the handsomely framed map. This dickering back and forth only takes a few minutes, but ultimately Mike seems unconvinced. Expertise seems to matter a lot here, even in friendly competition such as this.

A few minutes later we are out on the airy front porch of the BOC, and our small group is split between John’s little car and Mike’s larger work truck. As I pull myself up into the cab of Mike’s new truck, I can’t help but note how being an environmentalist doesn’t often look like the images that are circulated in national and international media. There, of course, are members of the organizations that I discuss that look and act like “angry hippies,” as one environmentalist,

who wished to remain anonymous, described them. I haven't met yet met any local environmentalists who 'roll coal'⁴ in their trucks, but many of my informants are just as likely to drive up to the city council meeting, public hearing, trail maintenance day, or march in a shiny Dodge Ram or F-250 as they are a small hybrid or dusty Subaru. As I settle into the cushioned seats, Mike fires up the engine with a muted rumble, throws it into drive and we're off.

The ride isn't far, just far enough and up enough elevation to merit taking the vehicles up the relatively steep road out of town. During the ride, luckily, I am privy to a conversation that still leaves me reeling. Rayne, continuing presumably from a conversation that happened earlier in the day, says, "It's only a .22, but it will work if we come up on any feral hogs." I already know she's talking about a pistol, but I am surprised that I hadn't already noticed the bulky belt holster that she pats as she's talking. After a few minutes about stopping power, choice of handgun, the necessity to go into the woods armed in case of bears, hogs, or, jokingly, 'boggy creek' creatures. Rayne turns to me, "I hope you don't mind, Ramey, I've never used it, but I always go armed, just in case." I'm not overly fond of guns, outside of shooting ranges, display cases, or gun safes, but I am also trying to both preserve my anthropological persona and to not get into an overly political discussion at the beginning of a multiple hour project with a well-connected (and pleasantly personable) informant. My reply is not necessarily an answer: "well, feral pigs can be very nasty, particularly if their piglets are around, or if you surprise a boar." This seems to satisfy Rayne.

"I had a problem with a herd of hogs a while back," Mike says. "They were rooting up part of my runway." Mike, who was well-positioned during the early lean years of the "Battle for

⁴ Rolling coal is a reference to a rural practice of modifying a truck to produce large clouds of black smoke, usually from 'smoke stack' exhaust pipes that resemble those on 16-wheelers. For more on rolling coal see Hiroko Tabuchi's *New York Times* article "Rolling Coal' in Diesel Trucks, to Rebel and Provoke" (Sept. 4, 2016).

the Buffalo” and the subsequent rising tide of recreational floating on the Buffalo River, is also a pilot who flies a small airplane and a personal airstrip, which he has told me he feels is well-earned having had about a decade of paying himself around \$10,000. “Now these hogs had moved into the area,” he continues, “and so I had gotten a few guys out and they had set up snares, bait, and I don’t know what all, but I decided to go up to [the airstrip] about dusk and get the grader and tractor and the other equipment turned on, with their floods on, and positioned around the edge of the strip just to maybe scare those hogs off. Now, as I was driving up, I saw the group of them, probably 20 or 30 pigs, just standing there. So, I grabbed my .45 from my console and stuck my arm out of the window, and I gunned it as I started shooting. I caught at least one just straight through the neck, and one in the head, and I plowed through them. I got maybe 10 with the truck, most were dead, but then I had to go back through and put the rest out of their misery. They haven’t come back since.” Delivered as a mostly humorous anecdote, the story is a relatively light-hearted one for Ozarkers and among conservationists, who universally hate feral hogs for the incredible amount of destruction they cause to environments, crops, and occasionally people.

My reaction was neutral, I asked about the meat, which is often where stories of hunting or killing feral hogs lead. Rayne seconded my question, “Yeah, that’s a lot of meat.” The response, “No, I loaded them in the bucket of the front-end loader, and went and dumped them in the ravine.” While many Ozarkers might nod appreciatively, as many have when I have narrated this story for them, it is likely that not every environmentalist would listen to this story with approval or understanding. When I have told this story to Fayetteville-based activists, who live in town and make day and weekend trips to parks, trails, and camp sites, but don’t live in areas plagued by herds of feral hogs, they tend to be horrified. Mike’s response to feral hog incursions

on his property is one place that we can see how “stakeholder” models of communities can become problematic in use since they cannot cope with “complexity—or much dissent” (Fortun 2001: 11). Through this one story we can see that there are stark differences in orientations to natural kinds and to strategies for eliminating plant and animal threats to ecosystems. I follow Kim Fortun’s suggestion of avoiding a ‘stakeholder’ model and instead using the concept enunciatory communities (2001: 11). Fortun focuses on the ways that the overt strategic or tactical statements and positions taken within activist groups are also imbricated with the covert and unconscious enunciations that create differences within the larger groups which policy and stakeholder analyses focus on. In narrating this story to Rayne and I, Mike is including us discursively in the context of an environmental activism of a certain kind. I’m certain that Mike, whether purposefully or unconsciously, would not tell this story for every possible environmentalist audience, nor in every given social setting. In a few ways, this story situates Mills’s activism as being in solidarity with other kinds of Ozarker identities where swapping stories of encounters with feral hogs is not contextualized as combatting a damaging invasive species.

A Word on Hogs

When an Arkansawyer or Ozarker talks about hogs it is important to make some distinctions. The mascot of the University of Arkansas is the Razorback, and colloquially we call the Hogs or are Hogs fans, named after the feared feral hogs that roamed the Ozarks during the period of white settlement that serves as the de fact beginning of cultural history in the area. Hogs are a companion to local white, settler-colonial culture. As with the pigeon, the hog is a species of empire (Haraway 2016). What similarities can we see in this story of real pigs versus the symbolic Hogs that tie together many local identities? In some ways the Hog here follows the

trajectory of the humble pigeon, of which it has been said the “cosmopolitical pigeons...incite human love and hatred in extravagant measure” (2016: 15). In similar fashion an informant told me that “whenever I see a pig when I’m driving I’m always tempted to run it down” On another occasion I was driving a work van when a fellow volunteer urged me to speed up to hit a group of feral hogs that were crossing a rural highway. Although, the expressions of Haraway’s “human love” for pigs seems limited to the rhetorical, symbolic, and mythopoetic Hogs whose tameness is assured, or their unruliness is at least directed outwards against an opposing team.

To complicate this we have the Buffalo River Watershed Alliance’s multi-year campaign against the concentrated animal feeding operation (CAFO), which raises hogs. This CAFO was permitted through the Arkansas Department of Environmental Quality (ADEQ) for operation within the Buffalo watershed. Some of the earliest protests came with concern for the animals whose physical plight when confined in the CAFO facility was often related to me as one of extended suffering and cruelty.

If hogs, then, are “creatures of empire,” which are the “animals who went with European colonists and conquerors all over the world...transforming ecologies and politics for everybody in ways that still ramify through multispecies flesh and contested landscapes,” then what can be made of efforts to eliminate the on-the-ground destructive, teeming, and dangerous real hog, which is occurring concurrently with the process of myth-making for the symbolic hog (2016: 15)? How do these creatures, “infamous for ecological damage and biosocial upheaval” become the beloved mascot for the local University, whose original Cardinal mascot seems far less fraught with meaning (Haraway 2016: 15)? What features in symbol become terrifying, disgusting, and deserving of hate when encountered in real life? It is possible that this process resembles local place-making strategies and tactics that elides the violent dispossession of native

peoples. The actual effects on the people and the land is covered over with the safe, controllable symbolic and mythic.

By deploying the hog as the symbolic self of locals, they are investing the symbol with the positive characteristics of the feral pig. This process also leaves the real hogs rooting through hollers as the embodiment of all of the negative consequences of settlement. This cultural alchemy makes the positive characteristics adhere to local Ozarks culture, but this symbolic transference lets us focus on the safe history of hogs completely separated from the details of the introduction of hogs into the Ozarks. Literally the real hogs are an eruption of consequences to actions and histories that are difficult to weave into the settler-colonial narrative. Hog-as-symbol is safe, even as hog-as-reality remains a dangerous threat to life, limb, and ecosystem. Just as the symbolic Arkansas that Brooks Blevins explores becomes unmoored from the lived reality of Arkansas residents, the idea of the hogs takes on a life of its own (2009: ix).⁵

As anthropologists and folklorists both are quick to note, “the customs and beliefs of a group” often become represented through a symbol “through which community is maintained” (McNeil and Clements 1992: 156). Accordingly, of course, the hog and its storied precursor the razorback are polyvocal with shades of the “hogs in the bottom acreage” being “the proverbial horn of plenty” as various sources can attest (McNeil and Clements 1992: 156; see also Botkin 1977, and LaPin, Guida, and Patillo 1982 among others). The historic distinction between a hog-gone-feral and the mytho-historic wild hog, a difference between a “rooter and a razorback” is not one that I encountered in the course of fieldwork. In fact, all ‘wild’ hogs were considered

⁵ Perhaps, building on this idea there is room for an exploration of the commodity fetishism that occurs with the late capitalist merchandising and commodification of the University of Arkansas and its mascot. What does the fetishistic hog do as a symbol? How does it change now that it is *animated* by the labor of faceless textiles workers in a variety of countries?

nuisance animals and generally shot (at) on sight, and for the purposes of ecosystem conservationists this destruction is extreme.

The official position of the Arkansas Game and Fish Commission (AGFC) gives a brief overview that was often repeated with slight variations, sometimes nearly verbatim, but always with a similar tone by informants ranging from the professional conservationists and parks employees at HSP-CA, as well as casual volunteers at various events I attended. According to the AGFC website,

Feral hogs are not native to the United States. They are an invasive species, a public nuisance and a threat to Arkansas. They compete for food resources, destroy habitat by rooting and wallowing and will eat ground-nesting birds, eggs, fawns and young domestic livestock. They also carry up to 45 bacteria, diseases and parasites, including Trichinellosis, Brucellosis and swine herpes virus. Hunting and shooting feral pigs has been implemented for the last few decades. It can chase feral hogs away from crops or food plots temporarily, but they soon return or become a problem for a neighboring landowner. Studies show at least 66 percent of a hog population must be removed each year just to prevent it from growing. Hunting has shown to reduce hog populations by only 8 to 50 percent. (<https://www.agfc.com/en/hunting/feral-hogs/>)

This description can be given the bookend about the potential threat to people that unpredictable hogs, particularly sows with piglets, can potentially be, as attested to by Rayne's .22. It is interesting to note the way that the teeming uncontrolled mass of hogflesh is even a threat to the political and social reality of Arkansas. This calls to minds the ways that human fears about the natural world and natural systems is often formulates these as *existential* threats to humanity. We might also cast our mind to visions of feral hogs arrayed in neat lines across the prairie from an opposing line of soldiers and their accoutrements. This is a tragic picture of our relationship with hogs more than the comic image that it might appear. Farce has always been the hallmark of social commentary.

At the same time, we adopt the *dramatis persona* of the razorback as the vicious mascot for the University of Arkansas. Razorbacks have retained their mythic powers as the toughest animal that “ever ran on four legs,” which may “lack the speed of the wolf, the fighting equipment of a wildcat, the strength of a bear” but even the smaller, tamer rooters can still “rip a hound to pieces” when cornered (McNeil and Clements 1992, Botkin 1977: 130). The carrying of a pistol when going on a walk is still a normal practice in places, the viciousness of a threatened pig is well-known even if I can’t remember a time when I met someone who had been hurt by one.

The “gaunt, savage beasts” that inspired the “bristle-backed emblem of the University of Arkansas” may not have ever existed, but in the Ozarks we can see the uneasy co-existence of many kinds of Hogs (Botkin 1977: 615). An Ozarks version of a hog is one that teems, Hogs (and the feral pigs that inspired them) slip out of and between and across the land, leaving destruction in their wake the very characteristics that make them the stuff of legend, their “ferocity...[and] speed,” along with their self-sufficiency as the barely-domesticated co-dwellers in fertile bottom-land made them desirable for the kinds of hard-scrabble subsistence farming that was the norm in historic settled Arkansas and the mytho-poetic *Arkansaw* (McNeil and Clements 1992: 157, Botkin 1977; for more on Arkansas/Arkansaw see Blevins 2009a).

The lines woven by feral hogs, just as much a critter of empire as the humble pigeon, are much like our own (Haraway 2016). Humans and these animals of empire live lines in interwoven teeming, sometimes the animals precede the arrival of empire and settler-colonialism, even as we draw these animals along with us as empire has moved across and become asserted over new territories and built dwellings there. We dwell in an Ozarks that is rooted up, altered, and sometimes sickened by the practices of human beings, the hate for feral

pigs (and their attendant valorization in symbol form) is part and parcel of the human systems that make up other parts of the meshwork of Ozarks life and identities (Ingold 2011). This essential ambiguity which narrates a heroic hog who is tenacious, driven, vicious, scrappy, and prone to taking on larger opponents, is also the teeming ontologically threatening feral pig that conservationists, hunters, and residents despise and kill with nary a second thought. Our compatriots within the Ozarks are part and parcel of the land, as we seek to combat the rooting of hogs we live in a place that we are rooting up, we're throwing down our own roots into, that we have also burned routes across (Clifford 1997). The dark side of the hog is the dark side of our own practice, even as our positive "identification with the hog is no aberration" (McNeil and Clements 1992: 156). As with any diasporic population, following the thread of Clifford's argument, is that rootedness and movement are both quantities that become integral in orienting subjects. This orientation occurs at the level of discourse, as subject positions within systems, historically, and geographically. The routes of hogs as they, pun intended, root across the landscape calls us to expand our definition of 'rootedness' when we think through the 'real' and the 'virtual' and the discursive *Hog*.

We might even turn this idea on its head, what might this picture of the ravenous, never-full, destructive, and violent Hog say about our xenophobic perspective on outsiders arriving to dispossess us of our land, at least, now that we are talking about ourselves and our society as being *natives*. This existential threat to dwelling, the hog, is also the picture that we might be loath to confront as the heirs of settlers and colonizers whose skill and subtlety in wielding *dispossession* we will discuss in Chapter 3. How, in retrospect, can we discuss the historical rooting that occurred when white settlers logged the Ozarks' old timber, effectively re-setting one of the physical repositories of natural history (Smith 1986, Blevins 2002a)? This is rooting in

both of our hog-implicated senses, both a way of digging down roots through the re-shaping of landscape, and a rooting in terms of a destructive practice that is life-sustaining for the group engaged in this practice. The timber wealth, such as is on display at War Eagle Mill, or the Van Winkel property at HSP-CA, and numerous other similar histories, is part of a system of roots defined by and growing from the rooting of the natural world through hand and tool.

This story is one that brings up issues. First, it's important to remember that we cannot rest within a belief in the homogeneity in environmentalist subjectivities and discourse. This story speaks to the diversity of Ozarks environmentalisms, one hates the hogs in the field and cheers for the Hogs in the stadium. Second, the environmentalisms are inflected by the other subject positions that exist in the complex environment of local subjectivities that are "contingent and precarious, temporarily fixed at the intersection" of someone's "subject positions" and dependent on what forms of identification are relevant to deploy at any given time (Mouffe 1992: 28). In this case there are ways of relating to nature as a property-owner, a native Ozarker, and an environmentalist that combine, overlap, and shift in surprising ways. Even as a native Ozarker, I was constantly surprised by the ways that subject positions were enacted and performed.

Contradictions are productive: they make us who we are, and they're clearly a part of what makes the diverse group of activists, impassioned amateurs, dedicated professionals, and emotionally-involved volunteers that I work with so consistently interesting. Being all of these things at once is both possible and impossible. As Mouffe argues, we strategically deploy these positions and 'truths' based upon context, choice, and the necessities of a given moment. Of course, we seldom see that the contradictions that make up the context of our social, political, and economic lives and actions are there at all. Kim Fortun in her exploration of the double binds

of disaster activism, *Activism After Bhopal*, points out that the productive site for her activists was navigating actions whose moral and ethical underpinnings are confusing, at best, or directly contradictory (2001).

Describing the Fieldwork Actors

Definitions of where, and with whom, an anthropologist works are a hallmark of ethnographic practice, and rightly so. When I ask questions of ontological and epistemological import about something called “The Ozarks,” and of the people who may be called “Ozarkers,” it is necessary to explicitly define the focus of this study to emphasize the particularities and details that make up the social and geophysical worlds that are being described here. The Ozarks is an iconic American region that has been represented time and again in American popular culture from films to newsreels to songs to comics to novels. Unlike Blevins, our focus here is not on the way the region is represented (2009a). Instead, I emphasize the way that complex processes (social, representational, political) impact the way that environmental activism is performed and how beliefs and knowledge affect social organization.

The respondents whose words and actions appear in these pages are often difficult to categorize in simple ways, a truth which is seemingly integral to understandings of human systems (Moran 1990). The Ozarkers with whom I worked were often deeply involved with a specific activist/environmentalist organization, although this was frequently in informal capacities. At the same time, many of my respondents would be involved, on some level, with several other groups. This involvement would often map to changes in a given issue (a new ruling by the Arkansas Department of Environmental Quality (ADEQ), the cancellation of a Southwestern Electric Power Company (SWEPCO) high voltage transmission line, or the announcement of a windfarm in a nearby community). As might be expected, these volunteers

spent the coin of their time in ways that integrated activism and volunteering into the rhythm of their everyday lives.

Meeting and choosing respondents over the course of the fieldwork was accomplished through opportunistic means. This sampling strategy, referred to as chain sampling, snowball sampling, referral sampling, and in other ways, utilizes the currently existing social networks experienced by respondents. This sampling strategy has been often utilized by researchers whose projects are “labor-intensive” and involve “in-depth studies of a few cases” (Bernard 2011: 143). By following recommendations, I could pursue specialist knowledge, expert perspectives, and prestigious local perspectives. Fieldwork conversations would often include statements like this one, collected from a conservation professional, “Oh, but I don’t know all that much about native plants, really. You know who you should REALLY talk to is...” The protestation of a lack of expertise followed by the recommendation of special knowledge or information led me to many of my key respondents.

Overwhelmingly my respondents were white, from middle-class backgrounds (particularly possessing middle-class forms of cultural capital). These men and women had deep involvement with the Ozarks as a place, occasionally they would be lifelong residents, or would have long family histories that drew them back to the Ozarks. Often as not, I worked with recent transplants⁶ whose personal narratives of the Ozarks were incredibly recent, sometimes only months between their first experience of the area and when I would interview them during the course of their volunteering. Equally unexpected were the age ranges of volunteers that I worked with. The vast majority of my key respondents were self-described as being in middle-age, and a number were already retired at the time of my fieldwork.

⁶ Pun very much intended.

Based on my interviews with volunteers and activists my own age and younger, it seems that financial pressures limited their involvement to occasional volunteering for big events and on “major issues,” as one young woman described to me as we stuffed envelopes for the Buffalo River Watershed Alliance in a pizza place on the Fayetteville Square, in downtown Fayetteville, “I wish that I could do more, but I can’t travel much around work and school.” Lacking the financial security and free time of activists in their parents’ generation seems to be a constraint on the kinds of involvement that put me into direct contact with volunteers long enough to build rapport and a longer-term working relationship. The primary exception to this is the handful of younger activists who came from wealthy backgrounds, and younger people who found employment with activist organizations as volunteer coordinators, media and social media coordinators, and other mid-level jobs that were not often entrusted to volunteers. Another exception to the general age range being 50s and above was in the context of the Arkansas Master Naturalist (AMN) program which attracted a fair number of women and men in their late teens and early twenties, although the most consistent attendees of AMN events tended to be older and retired.

There were several groups whose volunteers I worked with most closely; their basic missions and history help contextualize much of the later discussion. Save the Ozarks (StO) is a group, formed in April of 2013, that began as a single-issue advocacy group opposing a proposed SWEPCO high-voltage (345,000-volt) transmission line from a substation on Shipe Road in west Bentonville to a proposed substation on the “Kings River between Eureka Springs and Berryville in Carroll County” (“Quick Facts” 2017). Their style of advocacy is one of legal and official engagement with the permitting process through the Arkansas Public Service Commission, and involved, originally, 35 landowners and groups of landowners in partnership with the StO board

of three (“Quick Facts” 2017). Much of their strategy, unsurprisingly, draws on Founder and Director Pat Costner’s experience as an advocacy scientist for Greenpeace and in other national and international contexts. This deep access to expertise, experience with organizing advocacy based on technical and legal arguments, and a wide social network based on her roots in and around Eureka Springs are all aspects of the organization’s success, according to Pat.

I also worked closely with the Buffalo River Foundation (BRF), a group based in and around Ponca, an unincorporated town that serves as a major hub for tourism on the Buffalo National River (BNR). The BRF follows the Nature Conservancy model of building large units of ‘protected’ areas, which is accomplished through (a) acquiring land owned by the organization, and (b) helping local landowners through obtaining tax breaks by enacting ‘environmental easements’ that conserve various biotic, abiotic, and cultural features on a piece of property.

Many activists that I worked with were also affiliated with, had been affiliated with, or were interested in partnering with the Buffalo River Watershed Alliance (BRWA) whose founding occurred in direct response to the permitting of a Confined Animal Feeding Operation (CAFO) on Big Creek (a Buffalo River tributary) in 2013. This non-profit has engaged in a mission to preserve and protect the water quality, scenic beauty, and tourist industry of the Buffalo National River. With much crossover with the Buffalo National River Partners (BNRP), the BRWA has adopted a social media, grassroots activist, and scientific form of activism that has relied on highlighting the political processes involved in the permitting process through the Arkansas Department of Environmental Quality (ADEQ), as well as through public education efforts that often attempt to explain the complex hydrogeology of karst systems in the Ozarks.

I also spent time working with the Hobbs State Park-Conservation Area (HSP-CA) which is the largest and most-visited state park in Arkansas. This “natural” designated park is over 12,000 acres and is jointly managed by the Arkansas State Parks, the Arkansas Natural Heritage Commission, and the Arkansas Game and Fish Commission. The park itself is highly diverse, including numerous streams, micro-environments and riparian systems, and cultural elements (such as the remnants of Peter Van Winkle’s home, slave quarters, and steam-driven saw mill). The narrative of the Ozarks presented at the park is analyzed at depth in chapter IV. The park serves as a locus for activists, nature lovers, and others who take advantage of the numerous programs, recreational opportunities, and other advantages of the park.

The Field

The Ozarks, and this may be true of every ‘region’ that we belong to, is holey, porous, and things slip through. To be from here, to become from here, is like sifting an underground stream, you’ll pick things up, you’ll find things, or look up from something like it’s been a great secret. But, there really aren’t any secrets to being an Ozarker, nor an Arkansawyer, neither. Those of us from here often think that we have an authoritative view of where we’re from, but of course, that’s just smoke and mirrors (the inertia of identity), what we have is experience and the sense that that lets us speak for other Ozarkers and Arkansawyers about the ‘true’ experience of our place. Those of us who know better know that it’s better to carry along your ideas of what it means to be from here and realize that you are just one experience of here, and that other competing experiences both don’t negate your own, just as they are exactly as important.

The Ozarks is, from one perspective, part of a series of lines, lines of migration being an obvious one (Ingold 2011: 70, 83; see also Deleuze and Guattari 2004: 224-225). The movement of humans, their bodies and their cultures, include the recent significant colonial one from

Europe, and then from the eastern U.S. under the sickly light of manifest destiny; a new series of migrations from Mexico, the Pacific; and before any of these there were the indigenous migrations into and out of the area (involving among others, the Osage, Caddo, Quapaw, Cherokee). These lines also include trade routes, or the new movements of global capital into and out of the region. Based on the Arkansawyer image (see Blevins 2009 for an account of that image's own peculiar life story), one might wonder how it was that the movements of this global capital came to get snarled up in and around a formerly sleepy Bentonville community that was more pasture than people not too long ago, but the fact of it can't be denied that the fact of the Ozarks' inclusion into a global market regime is as much a fact of this place as anything else. But, the movements of global capital, and the effects of capitalism on the region plays a significant role, as we'll come to see later.

These lines are also the natural lines of the earth, the shapes of the landscape, the curves of meandering streams and cricks, lines of sight, travel routes and environmental assay lines (like those of Thomas Nuttall in 1819, the survey markers and blaze lines that are used to mark terrain in spite of the general unfitness of the practice for some of our most intractable topography), lines of water moving through that hole-filled karst, shore-lines, trade routes, family lines and lines of descent, property lines that are respected only by those subject to laws but invisible to plants and animals who only know that certain places are better or worse for finding food, hiding, and avoiding humans and other dangers.

Running through this work is a river, rather many rivers, streams, creeks, cricks, springs, sinking streams, and swimming holes. Hydrologically watersheds are defined as all of the area that drains to a given stream or river, and this nested approach acknowledges that each smaller watercourse (the stream order) can be considered a part of the larger river that it is a tributary to.

We can almost say, then, that we are actually discussing only a single “a river” in that every river has a stream order that makes it part of a larger water system, even the ‘mighty Mississippi’ has her stream order designation in this scheme. Hills, hollows, dark caves exhaling into the afternoon heat, all of them the obverse side of a flow of water, what it runs off, runs through and down, or has carved surreptitiously into the old rocks. The Illinois watershed, where I currently sit, is out there, underneath is water flowing, and on the surface, it remains a machine for collecting and moving water along through a sure knowledge of how water moves. Keep in mind that this knowledge isn’t the kinds of knowing that is often spoken of in academic discourse, especially in anthropology whose most overt topic is people. This is a knowing that is indistinguishable from experience, it’s the realm of forms and process. (see Bergson 1960).

These are the kinds of systems that humans seem especially apt to either attribute to the agency of gods, or to other humans, or to turn the land into a thinking actor like we are. Of course, as many have pointed out the thinking that forests and mountains do, as becomings-landscapes, is the same kind of thinking that you can see when a kinesin ‘walks’ along microtubules inside cells, following the dictates of electromagnetics and other impersonal cosmic and sub-cosmic forces. There needs to be no intentionality to act for there to be action.

People sometimes misattribute agency, because agency is such a deep part of the cultural forms that we seem to have to carefully build lines of flight to sneak our way out of these kinds of mental lodestones, they draw us down until we circle the same problems infinitely (see Deleuze and Guattari 2004: 323). I’m not even sure that here I am escaping, or if underneath the table is the magnet drawing the iron nail around the table as if by magic. Some of us wonder at it, some of us scoff to know that it is a ‘trick.’ I have here tried to treat it as part of an important picture, magnet, nail, and even the table are part of the story, the hand that holds the magnet, the

impersonal but importantly directed force of its pull. At the same time, I don't want to get stuck in magnet-ness, (object)-ness, or even in table-ness. Ingold argues that to understand the existence of the natural world, and to avoid the problems of post-Cartesian dualism that just as easily separates beings from their environments as it does the body and the mind of humans, we must see things *as their* relations to the world (Ingold 2011: 70). The environment in this scenario is the interwoven inhabitation of rock, water, trees, hogs, beetles, bats, cows, sun, moon, humans, and all of the other multitudes. Not these 'things' as classes of beings, but these 'things' as individuals that cross with more and less similar 'things,' their "meshwork" to use Ingold's term (2011: 71). This idea fits with ongoing explorations of anthropologies that take into account the fundamentally more-than-human nature of both social systems and natural systems that has been called the 'ontological turn.' Works in this theoretical mode, like Eduardo Kohn's *How Forests Think*, take on the idea that humans are not the only beings whose understandings of the world matter and have effects on one another (2014: 1). Kohn argues that "encounters with other kinds of beings force us to recognize the fact that seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs" (2014: 1). This analytical engagement of the limits of human exceptionalism in theory have deep roots in ecological methodologies.

Gregory Bateson's classic discussion of the limits of an individual prompted by a cane serves as a direct precursor to the current explorations of where the limits of a 'self' occurs, what Bateson calls the 'cybernetic system' (1972: 466). A blind man's stick, a woodsman's ax, or an anthropologist's computer are all part of the "mental system" that is not bounded by the individual's skin (1972: 466). This is the logic of inversion through which humans are reduced to those limits, placing "occupation before habitation, movement across before movement through, surface before medium" (Ingold 2011: 73). This forces us into questions of cognition and its

location. Cognition does not occur in the safe limits of our skull, at least outside of the sensory deprivation chamber. Cognition is arguably always about *something*, according to phenomenological interpretations since Maurice's Merleau-Ponty's *Phenomenology of Perception*, which implies that cognition is as dependent upon its means of sensation (aural, visual, tactile, olfactory, gustatory) and the systems through which we move through the world (2015 [1945]). This inextricability of cognition from perception happens along the same routes as the process of feeling emotions, as will be discussed at greater length in chapters 3 and 4. Sara Ahmed notes that there is an "aboutness" of emotions, which implies that emotions are always "about something" and "involve a stance on the world, or a way of apprehending the world" (2004b: 7). Emotions travel across, over, and through bodies, just as cognition does, in other words, and is part of the apparatus for constructing and understanding our world.

One of my informants, in describing watersheds like the Illinois, the White, or the Buffalo, said that maps of water show us the artificiality of our boundary lines, and in a perfect world that these natural processes should draw us into discussions of mutuality and cooperation. He said that keeping our water clean would be easier if people would pay attention to where their water goes when it passes over and past them, or even underneath them. I hope to direct my analysis in ways that both acknowledges and calls into question the realities of those boundaries, those map-drawn lines and the societal machines that keep them propped up into an ontologically potent force. Magnet, nail, table.

The Ozarks is a special Arkansas, one which has captured imaginations for the American colonial and national project, both as an internal other (the hillbillies, shotguns in the crooks of their arms, ramshackle clapboard homes clinging to the sides of Ozark hills, springhouses or caves built into natural refrigerators). Corncob pipes and ragged hats, overalls, gingham dresses

and calloused hands, ramshackle stills and fierce independence coupled with a healthy skepticism of outsiders), as well as the repository of an imagined and romanticized treasure trove of the ‘lost’ parts of an American culture firmly colonized by value-forms and the ideologies of capitalisms.

Throughout this dissertation I will use two demonyms for the people who live in this place, and intentionally I will not call them locals except in a general sense. I refer to the people who currently reside in Arkansas as Arkansawyers, in addition to whatever other identities that they might profess and possess. I refer to the people who live in the Ozarks as Ozarkers. While the use of Ozarker is instrumental, despite it being less commonly used in everyday speech due to the use of political groupings as the primary demonym (for example Oklahoman or Missourian). There are differences in practice between people who might describe themselves as Ozarkers and those who might be called Arkansawyers. These rest, I think, on equal measure personal preference, family history in the area, and the political expediency of identifying with the largest locally-relevant political entity.

The currently used demonym for a resident of Arkansas is Arkansan, but I choose not to use that term here for several reasons. One of the primary reasons is historical precedence and an appeal to a historicized referent. John Gould Fletcher in the opening pages of his history of Arkansas, simply titled *Arkansas* (1947) identifies the appropriate demonym as “arkansawyers” for reasons linguistic and practical. Fletcher is not alone, many writers such as Vance Randolph, Otto Ernest Rayburn, and Donald Harington have also made arguments for the use of Arkansawyer over the original (externally-generated) Arkansian and the later Arkansan. As an Ozarker and an Arkansawyer, I am embroiled in the contestation over identities local, translocal, and global. As a tool for rooting or routing my analysis through the complexities of the

discussion ahead (with apologies to James Clifford) I find that the term Arkansawyer has served a key purpose in keeping cognizant of the history of white settlement of the region, its well-documented histories of displaced native peoples, and the way that these histories inform our futures, and the futures of non-human systems in ways that are beyond, even, the scope of our present discussion.

These unifying approaches have arisen slowly over the course of my project. The most important of which is the *oursness* of the Ozarks, that is, the discursively constructed owned quality of Ozarks landscapes. Whether it was a Save The Ozarks (StO) board member who called the area through which a high voltage transmission line was to run “everyone’s backyard,” or activists fighting a concentrated-animal feeding operation hog farm in the Buffalo watershed who see the inherent danger of hog waste to the ‘pure’ water of the Buffalo National River, each of these activists seemed to assume that the Ozarks was to its core an “owned space.” Much of what makes Ozarks environmentalism appear confusing is when national discourses of market and environment are lifted from a wider national context. Ozarkers that appear in these pages might argue that there is a primary contestation over the concept of ‘Who owns it?’ and ‘How should those owners act to and in it?’

Regional, national, and international discourse on markets, free enterprise, ecology, and environmentalism are present here, but the uses to which my informants put these terms resembles more closely Arjun Appadurai’s conception of the transnational where these flows aren’t simply the movement of terms, but their re-contextualization into localized cultural spaces. Unsurprisingly this phenomenon is not limited to faraway places, filled with Others, but is just as applicable in the context of former colonizers, in places that are the repository of internal Otherness, and bear the legacy of older colonial projects.

I argue that this *oursness* is not grappling with the “radical *otherness* of nature” (Cronon 1996: 52). The *oursness* of the Ozarks is an ontology of the natural world, at times a peculiarly capitalist, that can have the power of silencing as well as one of enunciating. This *oursness* of nature builds fences, it erases, it reduces, it cuts history short by beginning with the arrival of the right kinds of White settler-colonists (as all but a few histories of Arkansas do, which will be discussed in greater depth later). The creation of fences is not the only outgrowth of this *oursness*, luckily. Gilles Deleuze and Felix Guattari argue that structuring forces (arborescent/hierarchical) are always potentially shifting towards the horizontally de-structuring forces that create solidarity but not solidity within societies (rhizomatic/de-hierarchizing) (2014).

Tightly bound up with environmentalist subjectivities and affects in the Ozarks are tools for place-making, tools and techniques of power that make bodies a part of the land, and the land sculpted into bodies. Inscribing and describing the land is brimful with conceptions of self.

William Cronon observed in *Uncommon Ground: Rethinking the Human Place in Nature* that

people in Western culture use the word “nature” to describe a universal reality, thereby implying that it is and must be common to all people...they also pour into that word all their most personal and culturally specific values: the essence of who they think they are, how and where they should live, what they believe to be good and beautiful, why people should act in certain way. (1996: 51)

For this work, I focus on one more narrow aspect of this statement. I intend to describe how conceptions of self are tied into environmental activism, both discourse and praxis. For many, notably some of my key informants cut across the grain of this, knowing about the Ozarks is both a way of being, and the director of environmental action.

Over the course of this project I tried a number of approaches to deepen my connections to my respondents. I attended town hall meetings, rallies, trail clean-ups, but I also became certified as a Arkansas Master Naturalist. The class itself was composed of a relatively varied

group, ranging in age from young college students to a feisty woman in her 80s whose knowledge of plants often rivalled the well-educated among us (instructors included). One aspect that I was surprised to discover is that this group of individuals included an inordinately large number of people who had only lived in the area for a short time, sometimes as short as a few months. The value, as I would come to discover, was a kind of orientation, to the deepest natural, if not the cultural, history of the area. Many of them were quite knowledgeable about the environments, plants, animals, ecosystems, and/or hydrogeology of the places that they lived before.

It is *work* to be from somewhere. When I say work, though, I do not mean that this effort is exclusively conscious, but that all of the activity of who we are and how we act is implicated in *being*. When anthropologists have referred to the ways that selves are constructed, gender is constructed, emotion is constructed, and etc., what people *do* works on many levels, serves many social needs, and positions us in these multi-layered ways. Erving Goffman's acknowledgement that the presentation of our 'self' in the social context is not a taken-for-granted or determinative process, but one that involves high-level choices, tacit culturally-mediated behaviors and signs, and a complex system of sign-interpreting utilized to interpret these explicit and implicit activities, behaviors, and performances (1972: 1-3). This is the kind of *work* that I am gesturing towards, not that which is distinguished by the dyad of work:play or work:leisure. Instead, I am looking towards the way that both work:play are both actively engaged in at various times.

This kind of work is necessary for my respondents. One of many environmentalist transplants⁷ noted that he just "felt that it was appropriate" to take classes on his new home

⁷ The first of many times that I will use terms with biological or botanical overtones, the roots of the living world twine in and out of our language in ways that I may occasionally take note of. These linguistic botanies are a part of the parallel botanies that comprise all of the languages of living things that we move across boundaries. Much like

environment, re-making himself with newly acquired knowledge of the natural world in a radically different ecosystem. Paul⁸ and I had a few conversations about this concept, out of which he concluded that feeling at home involves knowing your home, feeling comfortable in it. For Paul, home environments have an affect that comes over people who dwell there. The connection of learning is tinged by an emotional connection indistinguishable from the collection of learning and the comprehension of its nuances, systems, and complexities. Paul's sense of self, his place in his world, was at least partially dependent on his relationship to his dwelling place and the overt work of linking himself to systems of knowing and feeling that are part of the 'dwelling in' that characterize a relationship to places. Ingold draws on Heidegger when he notes that "the space of dwelling is one that the inhabitant has formed around himself by clearing the clutter that would otherwise threaten to overwhelm [their] existence" (2011: 82).

In this work, I draw on Sara Ahmed's discussion of the ways that bodies are surfaced through the use and attribution of affects in my description of how environmental agency and subjectivities experienced and constructed by Ozarks environmentalists (2004). Ahmed argues that bodily activity and capability are understood through the medium of affect, we limit bodies by understanding how they affect the world and how they are affected by it (Ahmed 2004). This requires us to expand our understanding of the scope of the body, but also to comprehend subjects in the context of the new materialisms of the ontological turn and related theory (Coole and Frost 2014). It is easy to equate the body's surface with its culturally apparent limits at the level of the skin. While I do not intend to argue that the skin is not an important surface, work on the ways that bodies are inscribed, described, disciplined, and culturally bound at the level of the

the Nature that won't behave (such as Cronon's snails or our rooting Hogs) not forgetting the contemporary prototype of mis-behaving nature, the "invasive").

⁸ All names have been changed, except in the case of public figures or publicly available statements.

skin does not contradict the point that I seek to make here. As biocultural beings, human systems do not start with an easily bounded human body, our bodies are enmeshed within overlapping biological, ecological, and social systems where individuals become agents as a product of these systems, as much as the systems are a product of individual agents (Frost 2016; Ahmed 2016). Work by Ingold and Bateson, mentioned above, points to the philosophical and cognitive implications of Ahmed's work on the social functions of emotion, both in feeling and attributing to others.

Emotions here are understood as one way that meaning is made at the level of both appearances, and at the level of appropriate action, that is, at the level of environmental ethics. The body of my environmentalist informants extends to the space/place making practices in which they engage. I seek to understand the ways that comfort and knowledge are bound tightly together, in a way that the body's surface becomes the de/re-territorialized trails' edge, the spaces through which hiking boots tramp. Ownership of these spaces, their *oursness*, is a form of work and a space of ethical action. It is also a felt space that is emotional and experiential. Beyond this, *oursness* is also a performative category that has its own frames, its own conceptual and practical rehearsals and performances, and its own poetics (see Goffman 1971: 21-39 and Bauman 2011).

I feel confident in venturing into these discussions of emotion and affect, not because my informants are necessarily comfortable in speaking of their emotions in the context of conservation, ecology, or the environment. In fact, for many people with whom I spoke, broaching the topic of what they feel about the environment would virtually end the conversation. The more scientific their subjective understanding of the environment, the more that questions along these lines served to disrupt or prevent the building of rapport. In fact, in the

very earliest stages of this project, I made several attempts to engage local environmental organizations in research about the emotional components of their work. The implication seems to be that in the realm of practice, the questions of how one feels, or how one engages emotionality, is at odds with questions of knowing, reason, and scientific inquiry. This practical state of affairs in Ozarks environmentalist circles begs the question: if, in spite of their protests, Ozarks environmentalists do engage emotionality, then what threat does emotion pose to their activism? What is at stake here? And, finally, how is emotion and affect actually engaged in the practice of environmentalism, that is elided, obscured, and even overtly denied?

Here is the full text of my request:

Hello,

My name is Ramey Moore and I am a current PhD candidate in the Department of Anthropology at the University of Arkansas, and I am conducting research into plant and ecological knowledge and emotion concerning the Ozarks.

I think that [this group's] program is an excellent resource of nature lovers and environmentalists alike, and I was wondering if it might be possible to distribute a 2 page survey (either via e-mail or in person at a [group] event, or both possibly).

If you think that contributing to my research might be of interest to [your group], please let me know. If you have any questions, concerns, or issues I would be happy to discuss my research with you at greater length either by email (redacted) or by phone (redacted).

Best,

Ramey Moore
PhD student
Department of Anthropology
University of Arkansas - Fayetteville

My initial contacts were excited by the prospect of the research, consisting at that stage of the simple qualitative survey and free-listing tasks mentioned in the email. I was asked to clarify what the object and goal of the research would be, and I included a description of my own

volunteering and environmental advocacy experiences. I focused on the deep love for the environment and for the Ozarks engendered while volunteering. I closed with my current attempts to understand the relationships between plant knowledge (and ecological knowledge generally), feelings about local environments, plants, and invasive species, and how these both relate to activism generally.

Of course, as with many non-profits, final approval through the executive board was necessary to even distribute the surveys at one of their events. After an email exchange, a short reply returned. “We are sorry, but we will not be able to cooperate with your research. Thank you for your interest.”

I was heartbroken. I read the email with a mix of fear, frustration, and sadness. I composed a brief follow-up, hoping to either rehabilitate my connection with the group, or to learn from the experience, at least. I comforted myself with a litany of anthropologists whose work has become classic because of seemingly intractable problems, such as Jean Briggs (1970). I also tried to situate myself within Kamela Visweswaran’s conception of anthropological work where the failures of ethnography are one of the goals of ethnographic practice (1994). While this may not have fully replaced my unproductive despair, it did much to keep me focused on the project.

The experience is now recalled without pain. I was sitting in the office of my advisor, Justin Nolan. At that moment, I was shivering slightly, whether from nerves, frustration that felt like anger, or a healthier than necessary surge of stuttering fear. I typed out that reply in the hopes that I might gain an opportunity to reflect on the tone and interpretation of my original note. I might also gain some insight into how *not* to describe my project. I wasn’t ready to change my project from gathering data on how emotionality and affect work within the context

of Ozarks environmental activism, but I was open to the idea that how I was presenting my project could potentially limit my ability to engage with my target groups.

I did finally receive a reply about the board's decision. According to my contact, the board of the organization did not "feel that my research was consistent" with the goals and purpose of their organization. However, as Kay Milton notes in her exploration of emotion and environmental action *Loving Nature* there is an integral relationship between the way one feels about the land and its inhabitants and the practical engagements that are authorized from that position (2006). Similarly, Eugene Anderson observes there is no way of acting in the world that is not intimately tied about how we feel about that on which we act (1996). We can look to the concept of the imaginary, such as in the work of Appadurai and West, and make the argument that the way that the imaginary authorizes our ways of acting, realizing that which we imagine for others, is part of this same continuum (1996; 2006). Fredric Jameson notes that our nostalgia directs (or is implicated directly in) engagement with the overwhelming tide of presents and futures (1991). These nascent moments are engaged in a process of commodification and the world-systems of capital. Jameson's analysis shows a clear role for emotion in the praxis of contemporary rational political and economic action (1991).

With all of this said, the primary goal of this dissertation is to engage with the practice of conservation and environmentalism as it is performed and lived by Ozarkers and Arkansawyers, natives and transplants. I will trace a thread of knowing, doing, and being and examine how emotion, affect, enacted knowledge through performance, and strategic reinterpretations of the nature of political engagement are all part of a local system of conservation. This dissertation analyzes links between individual emotion, social performance of expertise, political organization, and conceptual understandings of the physiogeography of the land.

In Chapter 2 I trace the taproots of environmental and ecological anthropologies, theories and methods, as they pertain to this project. The overarching goal is to draw together research along several axes. First, I situate the project within a historical focus on human-environmental issues. Second, I discuss the way that *oursness* functions in conceptions of place in the Ozarks, and the ways that the Ozarks have been approached in literature. Third, I trace research that deals with how cognition, emotion, and subjectivities are conceptualized in the literature, and how these ideas are operationalized in understanding Ozarks environmentalism.

Chapter 3, “Ozarkmentalities: Environmentalities of the Ozarks in Performance for Aldo Leopold Day,” concerns the social performance of environmental subjectivities are constructed, but how these constructions occur within the context of political systems, governmentalized and governable locales, and how emotional performance is conducted and interpreted within events like HSP-CA. This chapter also discusses other ways that emotion is mobilized within culturally-relevant concepts, such as ecological restoration and the native:invasive dichotomy. I argue that affective terms such as *invasive* become sticky with local meanings that reinforce the environmentalities of the Ozarks.

In chapter 4 “Returning to the Natural State: Power Race and Landscape in the Ozarks,” I turn to the ways that categorizations and knowledge systems are used in complex ways to construct subjectivities, shape ways of seeing and experiencing the Ozarks, and in developing forms of ethical environmental praxis among environmentalist circles in the region. In this chapter I also turn to the ways that certain forms of environmental praxis can be problematic in the ways that discourses, such as those on native versus invasive species, are linked to ways of conceptualizing and conserving the Ozarks that are the current form of settler-colonial political narratives that obscure, erase, and remove indigenous peoples (particularly the Osage) from

narratives of place and social belonging. This chapter does not merely critique concepts of natives and invasives, or of projects of ecological restoration, but instead I shape and direct my critique into generating a series of recommendations that address and counteract the problems that I identify. I don't think that it is a controversial opinion to accept the basic premise of environmentalism and conservation that conscious social and political actions can have positive effects on the quality of human and non-human lives. At the same time, when we are acting in the world, it is possible to engage in a reflexive and critical environmentalism that demands environmental and social justice be integral to our goals. William Cronon in his seminal exploration of the wilderness myth argues that only self-conscious and critical engagement with the world, and its messy systems, do we "get on with the unending task of struggling to live rightly in the world—not just in the garden, not just in the wilderness, but in the home that encompasses them both" (1995: 20). In the introduction to the text Cronon notes that it is through a reflexive, historically and culturally grounded critical stance that can create a "renewed environmentalism" that will be more capable of "protecting the natural world by helping people live more responsibly in it" (1995: 26).

Chapter 5 moves from this discussion to my discussion of the terms *karst-thought* and *water-language* which are concepts that I have developed to understand the specific ways that environmentalism in the Ozarks has adopted aspects of ecological and hydrological terminology and moved it from one context to the level of popular conceptualization of landscape and ecological systems. Karst-thought becomes a way of thinking through problems where previously held claims of stability and reality are understood to be not so solid. Like a karst formation (like much of the Ozarks) there are spaces through which water moves. Just as political systems, organizing structures, and the actions of multi-national corporations can seem

immovable from the perspective of an individual, karst-thinking has been applied to find the weak points, the lines of movement through these larger-than-life entities that allow for locals to re-assert their control over local affairs by turning the tools of statecraft to their own counter-hegemonic advantage. Water-language, at the same time, becomes the means through which karst-thinking is spread across the activist and environmentalist community. In this chapter, I show how the *watershed* as an organizing principle and conceptual unit is communicated to cut across contemporary ‘realities’ of political engagement. I describe how instead of a Ponca environmental group, the same core of individuals can build a multi-sited and mobile set of activist structures that follow the flow of water down ridgelines and into the Buffalo National River.

The final chapter serves as a conclusion, I highlight how the meshwork of the Ozarks serves as a central actor in the myriad conversations, dramas, and quotidian details that appear throughout this dissertation. In this conclusion I draw together the disparate, wide-ranging concepts and ideas that are covered here, and highlight how the ways of speaking and acting as an environmentalist in the Ozarks are part of a larger system of Ozarksness. This concluding section points to the links between the various pieces of this project, the cognitive, social, emotional, social, performative, and political all moving together. These are all part of a specific and locatable social practice in the Ozarks: environmental activism. This chapter situates this material within the meshwork of institutions, ecologies, and constructed (and protected) spaces. Finally, I discuss the possible trajectories that this research points to for future research and a longer-term engagement with local environmental practices, whether in the Ozarks or elsewhere.

II. Where From and To Where?: A Review of Relevant Literature

In this section I seek to outline several bodies of literature that form the backdrop for this research. First, it is necessary to understand the literature that pertains to the regional focus for this research. This work concerns a geographical (and conceptual) region that is collectively called the Ozarks. At the same time, my focus has always concerned an area of the Ozarks that is sometimes treated as an addendum to the bulk of the region which exists within the bounds of Missouri. From the outset we must cope with the messy overlap of regional and local identities. The task that is before us is one of specificity in the context of conceptual ambiguity. I move, at times, between the imaginative Ozarks and the physiographical Ozarks, all the time trying to stay tied to the cultural Ozarks that is part of the experiences of local conservationists and environmentalists. I tack back and forth between a discursive and imaginative Ozarks and the real, messy, inhabited Ozarks, which is full of travelers, settlers, and locals. With this I follow the lead of Brooks Blevins whose historical work has often dealt with what it has meant to be an Arkansawyer/Arkansan, or a hillbilly from the Ozarks (2009; 2002).

This project is multi-faceted and has required the use of a wide breadth of literature that ranges from psychology, ethnohistory, cognitive science, and other of approaches to studying human relations with the natural world, social theory (from the structural to the post-structural and beyond). It is necessary, however, to work through the complexities of drawing together these methodologically and conceptually disparate lines of research together into a cohesive whole.

Conceptually this section resembles a root system and the substantive work to follow is the visible part of the living structure. Each 'root' is a set of distinct literature on a given topic, with its associated approaches. At the same time, the deeper structure is actually one of

interconnection, I will attempt to point to ways that seemingly diverse literatures have become interconnected in my approach and in my analysis in ways that I could not have predicted at the beginning of the project. At the same time the utility of this review is dependent on its brevity, and I assume that my reader will begin to see the ways that my conclusions draw deeply on this eclectic approach.

As a way of organizing these various approaches, I propose to follow Arun Agrawal's concept of environmentalities as an overarching tool that organizes the psychological, emotional, practical, and structural elements of my informants' lived experience. This concept of an environmentality is drawn directly from Michel Foucault's writing on governmentality and power systems (Agrawal 2006).

I will first begin with the most basic aspect of an environmentality, the relation between humans and nature, humans and non-human systems, and the complexities of how these are understood.

Taproots

First, as an anthropologist focused on human-environmental relations I engage with questions of how nature is constructed, generally, for my informants. At the same time, I pursue a description of how the natural world is known, experienced, and felt, what are the social systems and social practices that generate and sustain these systems of knowing, doing, and feeling? How is knowing the Ozarks a way of creating places and the attachments to places, as well as a way of dwelling in and inhabiting spaces and places?

Second, I must emphasize how places are veined through with histories, cultural and ecological, and it is necessary to place the "Ozarks" within a social, historical, and ecological context. I focus on the ways that the Ozarks has been understood, studied, and described. Some

of this will touch on related topics, most importantly for my informants the concept and reality of the “Arkansas” place and its specific political reality will arise at various points. This section will strive to understand the literature that contributes to my understanding of the Ozarks as a lived reality for environmentalists and activists in the region. What is the relationship of Ozarkers to landscape? What are the processes by which Ozarks environmentalists and conservationists construct and understand the natural world? How are plants, animals, ecological processes, physiographic features, the history of human intervention and management understood, communicated, and negotiated, and to what use are these constructions put? From these questions I create a comprehensive account of Ozarks environmentalism that arises from fieldwork encounters with conservation actors in the region, ranging from career environmentalists to passionate volunteers to scientists to long-term ‘native’ Ozarkers to recent transplants to the region and many more kinds and styles of engagement that happened over the course of my fieldwork.

There are a number of theoretical lenses that I have used to analyze the complexities of life for my informants. As with any place it is important to understand the context and reality of space-making and place-making. I argue that the processes that generate place and space are necessary components for comprehending the complexities of an actual Ozarks and its multi-vocal constructions as found in events, gestures, phrases, political orientations, social linkages, and spatial practices. At the same time, I rely on more than the concept of place-making to understand the social and political praxis of my informants. Just as every problem looks like a nail when you’re holding a hammer, I have felt the need to add complexity to my analysis by working on the affective work of activism, and of everyday political and social actions as part of

the space- and place-making activities engaged in by the community of environmentalists, conservationists, and activists in the Ozarks.

This ethnography is a branch growing out of the ethnographic practice of those who came before me, and it is important to recognize that the production of ethnography is neither easy nor simple. This ethnography is nurtured by these connections, even as I hope that I present new solutions to old problems, as well as illustrate new problems that arise as old tools are applied to contemporary social and political systems.

Finally, this chapter will address some of my theoretical devices that draw on the above discussions and theories, but represent my attempts to draw together diverse threads in ways that make sense thematically and analytically to a comprehension of what I have observed. These theoretical suggestions also are important to understand this project not as an end-point, nor as an application of earlier theoretical and anthropological work, but as an attempt to push these theoretical conceptions past their current boundaries, to put these theories into conversation in ways that may result in theoretical positions that are more than the sum of their parts. My hope is that this tentative section may be taken not as the fully-formed theoretical offerings that have proved their usefulness and applicability across contexts, but as an attempt to take the specifics of my fieldwork and then to propose some ways that my insights may prove useful to others. This is particularly important due to the fact that my use of the existing literature shows that this former work is useful analytically, but also that this scholarship has its limits and does not accurately describe or encapsulate the unique and interesting aspects of my informants' lives and work. My goal, then, is to argue by example for an engagement with theory as "a kind of tool-box" which can be "[rummaged] through" to find the right analytical mode to explain a given practice, discourse, social structure, story, or political stance (Foucault 1974: 523-524,

translation by the author). I must note that my earlier discussion of cognitive systems serves to inform my understanding of how knowledge about a topic is necessarily interwoven with associated feelings, just as knowing is heavily affected by the kinds of performance and performance contexts that I seek to outline below. It cannot be emphasized enough that the process of acquiring and deploying knowledge is part of the cognitive whole, an ecology of mind, that is not ontologically distinct from the kinds of emotion and affect that I describe elsewhere (Bateson 1972).

Performance, negotiation, and positioning are key for my analysis of the expression and communication of affect and emotion. Performance I take to be the culturally comprehensible actions and speech that make up the visible dance of life for social actors. To paraphrase symbolic anthropologist Clifford Geertz, all performance is social performance, even when these performances may most closely resemble the kinds of “shadow dialogues” that Vincent Crapanzano describes as being a part of all dialogic exchange (see 1992 and 2015). For Crapanzano this becomes a way of highlighting the role of memory, experience, and subtle internal processes, even when dealing with the immediacy of face-to-face encounters between social actors (1992). Each actor engaging in the dialogue is simultaneously engaging in an internal dialogue as past experiences, speech, memories, and imagined interlocutors among others rise up to inform, explain, and shape ongoing experience. Paige West discusses the way that understanding this process shapes fieldwork and analytical processes in her ethnography of conservation in Crater Mountain Wildlife Management Area in Papua New Guinea (2006). What is important to take away from contextualizing performance in this way is that performance involves both the social externally facing behavior that is collected through the ethnographic methods that I employ, but also that performance (and its polysemic interpretations) are also

interpellated with internal states that are not directly accessible to social actors except through internal processes and direct social engagement. My focus on performance, then, becomes a way of using interviews as a heuristic to approach, or at least acknowledge aspects of internal experience. This was productive during fieldwork encounters as social actors must grapple with interpretation as an ongoing process that occurs during, and importantly, after the performative event (Briggs 1986).

The Environment and Ecology in Anthropology

As a discipline, anthropology has often concerned the ways in which humans relate to the environments in which they live. This preoccupation with the natural world of various cultures is evident even from the earliest anthropological studies of the 19th century. Over the course of anthropological research there have been a wide variety of approaches, methods used to gather data, and numerous research agendas, not to mention the myriad sub-disciplines that have arisen over the course of the contemporary anthropological project. To make sense of this diversity I will present a concise overview that references seminal works in the field, with special attention to the specific works that are key to the perspectives of the current research.

There are five major chronological periods in the study of human-environmental interactions. It is important to note that while these periods are intended to reflect the general character of the research conducted, this is by no means exhaustive of all of the research conducted during these periods. It has been a key feature of contemporary research to agenda hop, as noted by Roy D'Andrade (1995: 3-4). Not because a given approach or perspective has been abandoned, but because the methods or analytical frame no longer produce exciting or interesting conclusions (D'Andrade 1995: 3-4). What this may mean is that older analytical modes that were assumed to be no longer engaging for researchers can become revitalized with

the application of new methods, theoretical engagements, political pressures, or cross-disciplinary pollination and engagement. With that propensity noted, I propose the following five periods within human-environmental research: (a) early ethnobotany and ethnoecology; (b) human ecology and environmentally deterministic approaches; (c) cognitive ethnobiology; (d) new ecological anthropology; (e) contemporary environmental and ecological approaches, aka the engagement with the socio-political (i.e. the anthropology of conservation and development, ethnoecological and ethnobiological approaches, political ecology, TEK, spiritual ecology, cultural conservation, political ecology). Literature from each of these paradigms is part of the nourishing structure that supports my project.

As Paul E. Minnis observes, “there is no obvious point in time at which we can say ethnobotany began, because all peoples have noted with some interest how members of their own culture, as well as other peoples, relate to the natural world” (2000: 6). We often make a distinction between scientific and biological classification of living kinds and the wide array of folk-biological systems of classification that are often studied, which neglects the fact that Carolus Linnaeus, often cited as the father of binomial scientific classification, drew not only on several folk systems, for example using vernacular names from Roman sources, e.g. *Allium ursinum*, but also drawing on emerging trends amongst European biologists, and on European folk traditions of classification (Stearn 1959). At the same time, many of my informants engage in practices that highlight the permeability of the scientific/folk taxonomic boundary. Through my fieldwork I came across many instances that put me face-to-face with educated laypersons as they navigated the historical and ethnobiological complexity of Ozarker folk names, while they created their own links between folk usages and the latinate binomial scientific names of interesting plants is worthy of further fine-grained study.

The 1950s marked a sea change in the practice of anthropology, and had a huge effect on the focus of research on human-environmental relations. The ‘cognitive turn,’ as it is called, arose from the cross-pollination of anthropology with new research conducted by linguists, notably Noam Chomsky, and advances in the understanding of the human brain that were occurring within psychology and medicine. The shifting focus towards how thought is conducted, the conditions (physical, mental, social) under which thought occurs, and the wider social meanings of *thinking* are all critically important threads to understanding how environmentalists engage with the world.

Anthropologists recognized that paradigms of culture and of cultural change were inadequate for understanding the diversity of cultures. One direction that became productive involved developing some of the key ideas of the Prague Circle’s insight into the role of “structure” in language, here meaning that the units of language are comprehensible in their relation to other units, “and in defining each other, the parts make a structure” (D’Andrade 1995).

The zeitgeist of the mid-century emphasized the structural qualities of life, drawing together these disparate influences ranging from the responses to behaviorism within linguistic and psychological research, to the new synthesis in evolution announced by Julian Huxley (1943) that analyzed the hidden structure of cytosine, guanine, adenine, and thymine and their effects on the appearance and relation of living things. Arising out of this foment, Claude Levi-Strauss published his first work in a new anthropological mode, that of structuralism.

At the same time, anthropologists such as Ward Goodenough (1956a, 1956b), Harold Conklin (1954), Floyd Lounsbury (1956) engaged with the ways that social structures themselves were related to human thought. For Goodenough and others in the nascent study of

human cognition, the implicit defining characteristics of cultures were the kinds, types, and structures of knowledge.

As other scholars have noted, this period of engagement with human-environmental relations involved a shift from cultures and their physiographic context (as with the approaches of Steward and Carl O. Sauer) towards an engagement with communities and cultures as ecological populations and the role of the brain in the underlying nature of understanding and thinking about the environment. It would be impossible to understand the emotional engagement with the environment, the prolonged social and affective labor, and the discursive strategies involved in practicing environmentalism in the Ozarks if we neglect the cognitive processes involved in seeing and being engaged with the natural world.

The cognitive turn was not without its critics, famously Geertz argued against the “cognitivist fallacy” (1973: 12). Geertz wrote that the cognitive turn is “as destructive of an effective use of the concept as are the behaviorist and idealist fallacies to which it is a misdrawn correction,” and he continues that “perhaps, as its errors are more sophisticated and its distortions subtler, it is even more” dangerous than that which it sought to correct (1973: 12). Pierre Bourdieu, working at that time on his classic texts on Kabyle culture, presents a unified critique of the cognitivist and structuralist modes. Bourdieu writes that

the arguments that have developed as much among anthropologists... around classifications and classificatory systems have one thing in common: they forget that these instruments of cognition fulfil [sic] as such functions other than those of pure cognition. Practice always implies a cognitive operation, a practical operation of construction which sets to work, by reference to practical functions, systems of classification (taxonomies) which organize perception and structure practice...[cannot] be adequately treated by ‘structural,’ ‘componential,’ or any other form of strictly internal analysis which, in artificially wrenching them from their conditions of production and use, inevitably fails to understand their social functions. 1977: 97

Bourdieu here argues that the cognitive anthropological investigations of the 1950s through the 1970s over-determine the role of merely a single aspect of social experience, and that the systems “of classifying schemes which [organize] all practices” are related to, but cannot be simply reduced to, “the linguistic schemes” that are (1977: 124).

I appreciate Bourdieu’s critique that explorations of cognition in anthropological research must ground the research in the lived messiness of everyday lives, which are both cognized, as well as felt, as well as social, as well as political. I have taken this critique to imply that this research must acknowledge the cognitive, while providing an integrated view of social events that recognizes the role of social performance in thought. In Chapter 2, I analyze the social performance of emotion within the context of Aldo Leopold Day events at HSP-CA in a manner that emphasizes the “conditions of production and use” of thinking and feeling.

Work in cognitive anthropology has continued to have a place within contemporary anthropological praxis, with recent work by Scott Atran (as in his work with Douglas Medin, 2008), Roy D’Andrade (1995), Virginia D. Nazarea (2006) and others draws on the groundwork of Conklin, Berlin, and Brown, amongst others. These studies are often still occupied with the relationships between the specific organizations, patterns, and cultural forms that arise from the apparent consistency of the organization of semantic categories in knowledge systems. As Atran and Medin argue in *Native Mind and the Cultural Construction of Nature* (2008) a focus on biological cognition makes sense in the context of contemporary research as “much of human history has been spent (and is being spent) in intimate contact with plants and animals, and it is difficult to imagine that human cognition would not be molded by that fact” (2008: 3). This basic assumption undergirds much of the research, often with the assumption being justified after the fact by the consistency of cross-cultural data on research topics.

There are numerous contemporary examples of research that arises out of the cognitive research agenda and linked methodologies. Contemporary topics include semantic categories and color perception (for example Berlin and Kay 1969; Conklin 1955), folk biological taxonomy (Berlin 1992; Medin and Atran 1999; Cozzo 2002), knowledge as expertise and methods for understanding the role of consensus on categorical contents and reasoning using these categories (for example Lynch, Coley, and Medin 2000; Bailenson et al. 2002; Mueller and Veinott 2008). While there are a number of disciplines that have drawn on cognitivist research, such as cultural psychology (see Stigler, Shweder, and Herdt 1999), contemporary ethnobiology is one of the key parts of this scholarly lineage.

Throughout my fieldwork I deployed various methodological techniques developed and elaborated upon in contemporary ethnobiological research, ranging from free-listing to versions of ecological reasoning techniques. Ethnobiological techniques were used to (a) engage conservation professionals in ways that emphasized their expertise, and (b) to indicate new directions in ongoing fieldwork relationships between me and my respondents. Adopting these techniques both places this research within the scholarly lineage described above, but also allowed me flexibility in building a more complete picture of the world that is perceived and cognized by my respondents. I engage with environmental cognition, but in a way that foregrounds the social rather than the cognitive.

As mentioned above, ethnobiological literature has been heavily influenced by research into the nature of cognition. Contemporary ethnobiological research spans a wide array of research focuses, and uses a wide variety of methods, and multi-disciplinary and applied research is drawing ethnobiological literature closer to the kinds of engaged research conducted under the rubric of political ecology (Wolverton, Nolan, and Ahmed 2015).

What concerns us here is primarily the way that this work has consistently, in spite of what D'Andrade calls 'agenda hopping,' engaged with a detailed exploration of experience, thought, and social systems of knowing (1995). At the same time we see that these existential and ontologically relevant systems relate to both the experience of the natural world, as well as environmental praxis and the systems of (re)shaping the world around us.

Ethnoecological research brings together "the concept of the ecosystem" and human communities in ways that embed human-environmental relations within the biotic and abiotic contexts of societies (Ford 2011). Early work in the field focused on ecological concepts such as equilibrium systems, climax communities, systems theory, and concepts of negative feedback (Kottak 1999; Abel and Stepp 2003). Ecologically minded research in the 1960s and 1970s, epitomized by classic work by Roy Rappaport (1968) was heavily critiqued for its overly environmentally deterministic focus and the misuse of ecological concepts when applied to human systems (Vayda and McCay 1975; Ellen 1982; Smith 1984; Abel and Stepp 2003).

New ethnoecological research incorporates more contemporary and dynamic ecosystemic concepts in ways that are attendant to "political awareness and policy concerns," while using ecology as a theoretical lens to study the "pervasive linkages and concomitant flows of people, technology, images, and information" and the "impact of differential power and status" on many communities (Kottak 1999: 41-42). Utilizing these perspectives, contemporary ethnoecological research is attendant to the ways that "landscape [is] perceived and imagined by the people who live in it, the land seen, used, and occupied by the members of a local community" (Johnson and Hunn 2010:1). This trend in ethnoecological research presents a view of "people's knowledge of and interactions with landscape" which incorporates ecological systems, the role of climate, physiographic features, biotic and abiotic assemblages, as well as the cultural perceptions and

symbolic interpretations of landscape (Johnson and Hunn 2010: 1). This perspective is a necessary precursor to my own research, and provides a major resource for understanding the ways that Ozarkers perceive and construct their enviro-social engagements.

The cross-pollination of concepts from political ecology is clear. Focus on the specifics of cultural perceptions of environments and ecological systems must include an understanding of the social, cultural, political, and economic systems that co-exist with the ethnoecological. Political ecology, then, is another important foundational research program for the current research. Much of the political ecology of the contemporary moment owes much to the research, historical and anthropological, that grew alongside the burgeoning environmental movements of the 1970s and 1980s. Political ecology as a conceptual tool was revitalized by Eric R. Wolf in “Ownership and Political Ecology,” which marks the resurgence of scholarship which links systems-based thought, environmental dynamics, and analysis of the wide-ranging effects of unequal distributions of power (1972).

We find anthropological perspectives, such as Vassos Argyrou’s (2005) analysis of the logic of transnational environmental discourse and policies, as well as Kim Fortun’s (2001) multi-site ethnography that discusses environmentalism in the face of chemical disasters, that adopt variations on the engaged methods and focus on political power. Contemporary work by Kay Milton is another such anthropological engagement with environmentalism that deals explicitly with the intricate ways that the contemporary political engagement of environmentalism engages with anthropological practice, and vice versa (2003). These ties are dealt with in a number of sub-disciplines and are interpellated into studies of specific concerns, such as food security (see Wolverton, Nolan, and Ahmed 2014 and Nolan and Pieroni 2014 for

examples of sub-disciplinary engagement and engagement within specific anthropological research concerns, respectively).

My own engagement with the politically and socially relevant environmental groups of the Ozarks has benefitted from the direct focus on how political systems articulate with environmentalism, and how modalities of governance are experienced, created, and adapted within the context of those environmentalisms of the Ozarks.

One of the most exciting (and contested) contemporary research directions has been termed the ‘ontological turn.’ The ontological turn is a diverse engagement with social and ecological systems that moves to understand how these systems create, alter, and structure systems of ‘objects,’ of which humans and our perceptual experiences are one such, but not the only valuable set of such objects (Marres 2009). This “commitment to recalibrate the level at which analysis takes place” is one that places non-Western and non-human understandings of the world on equal theoretical and analytical ground with the Western (Course 2010, as quoted in Pedersen 2012). Eduardo Kohn’s multispecies ethnographic “anthropology of life,” which engages equally with his Quechua (Quichua) collaborators and with the forest and animals, *How Forests Think* is a key text within this theoretical paradigm (2013). Other touchstones of the ontological turn are many, but Phillippe Descola’s *Beyond Nature and Culture* and *The Ecology of Others* stands out as two of the primary re-configurations of anthropological epistemologies that underpins the ontological turn (2014; 2013). My current research program does not rely heavily on this literature, however, to understand complex relationships and epistemologies of ecology and place the ontological turn offers a way of re-conceptualizing the Ozarks as the site of multiple agencies who constantly move to shape it in competing ways.

Critical Regionalism and Conserving Place

In my work, I describe the complicated way that the Ozarks as a place and as a space are constructed as (a) exceptional, for good and for ill, and (b) as a site for the conservation of ‘nature,’ and cultural ‘heritage.’ To that end, it is necessary to put several sets of ideas drawn from architecture, politicized discussions of cultural heritage and conservation, and from the post-modern and post-structural reappraisals of these topics within social sciences, such as anthropology. It is clear that we must take the perspectives of ‘locals’ as a social and cultural fact, even as we must interpret these identities as both dynamic and constructed. While Ozarker identities do not emanate from the earth, springing fully formed into the minds of locals, I often encountered ways of speaking and acting which assume this kind of autochthony and exceptionalism as being as much a fact as “water running downstream,” or “the sun rising every morning,” as one informant would have it. In fact, there was a fair amount of surprise at his having been asked if the Ozarks was truly that different from other places.

Arising from the early post-modernisms in the discipline of architecture critical regionalism can be understood as a critical praxis and engagement with regions (whatever their relevant size and features) as inherently dynamic, traversable, fluid, and permeable (Tzonis and Lefaivre 2001). Alexander Tzonis and Liane Lefaivre are credited with originating the term ‘critical regionalism’ and with articulating its role within architectural theory and practice, although they acknowledge a deep debt to the work of Lewis Mumford whose architectural work was involved deeply with concepts of the ecological. Of course, the concept of “critical” as a theoretical marker puts this defense of reflexive construction of locale within the tradition of European philosophy, drawn from Kant and into the engaged politicized writings of the

Frankfurt School, most specifically the work of Jurgen Habermas (Tzonis and Lefaivre 2001: 488).

This emphasis on regions as experiences of localizing global practice seems to resurface in a number of contemporary authors, but might be most easily seen in the work of the scholars of transnationalism and globalization, such as Arjun Appadurai (1996), Gregory J. Ashworth and John E. Tunbridge (in Lew, Hall, and Williams 2004), or Jannis Androutsopoulos (2010). For the Ozarks there is a clear and consistent set of discourses that arose during the earliest period of American colonization, which will be explained in greater depth below.

The localizations of identities that is noted within critical regionalist scholarship is important to contextualize within the kinds of legibility-producing discourses and statecraft practices that are described by James Scott (1998). The Ozarkers that I work with live within the national context of statecraft that builds and maintains local legibilities, Statecrafts that dismantle localizations (at least prospectively), breaks down dialectical differences⁹, and may endanger or co-opt local knowledge systems. Statecraft, as with any application of power, is not unidirectional, and these tools can be and are used to create local ways of being and knowing. I address some specific ways that the legibility-producing techniques of statecraft can be used as a means of re-assuming control of local identities, even as they may serve the needs of state legibility.

This allows us to interrogate how the Ozarks are constructed as a system (social, political, and economic), a set of ideas and discourses, as well as the biotic and abiotic systems that

⁹ The gradual loss of Ozark English dialects may possibly be attributed to the social and political forces that create localities which are ever more legible to state power (see Christian, Wolfram, and Dube 1988 for a description of the Ozark dialect; and Rafferty 1980: 240). The loss of local dialects may also be seen as part of the nationalist project which is heavily dependent on homogenizing discourses and social practice (See Anderson 2006 for further information on the role of language homogenization within nationalist social and political projects).

interpenetrate the former. Even as the borders fade, shift, map to political boundaries, or follow ridges and hollows. I call this flowing solidity the water-language of place, briefly this is the way that we discuss the movement of water here in the Ozarks where it hits the solid hills, but moves in, under, and through (in secret, often, but found again trickling down the sides of sheer bluffs, or flowing at times in the course of a sinking (or losing) streams. Our karst terrain is characterized by the limestone that makes up much of the underlying bones of the Ozarks, which has been wormed through by water made slightly acidic by its journey into the bedrock (Monroe 1970). This rock is now full of empty spaces, streams and springs abound, sinkholes and caves form under the solid ground, and throughout water flows onto, into, and out of the area. The solid is both dependent on the liquid, defined by this dependence, but this solidity is uncertain. As one informant joked, “well, you can either build on top of a bluff, or at the bottom of it, but watch out because often as not you’ll end up at the bottom whether you mean to or not.” I will explore the implications of this water-language as both a kind of geo-ethics and as a place-making strategy at length later.

Water-language, as can be seen above, needs a kind of bedrock through which to wind its way. To talk water is to talk both the substance at hand, but also to conceptualize the world around us differently. For organizations as diverse as Save the Ozarks and the Buffalo River Watershed Alliance, the reliance on water-language is predicated on the conceptual nature of karst-thought. Activists are beginning to think through water, with its messy and flowing complications. This thinking is not limited to the internalized, individual brain cognition, but is part of the distributed and social nature of cognitive activity. The cognitive activity that I have seen at work is networked across (as well as within) individuals, where it is contested and confronted by numerous competing and perspectival conceptions. The nature of this ‘karst-

thought' is that of bedrock, ground, and backdrop, and of engaged and essential actor who can 'relate' both in terms of creating solidarity, but also in 'relating' the story of that solidarity. There are some clear parallels to Tim Ingold's "Cree hunter" who "can *tell*...in two ways" in both knowing and narrating (2011).

These links between natural form and cultural form are firmly articulated by critical regional scholars such as Kenneth Frampton. In Frampton's "Toward a Critical Regionalism: Six Points for an Architecture of Resistance" he argues that assessments of cultural forms (such as architecture) we must acknowledge the ways that topographies, climate, and other contexts of human activity that engage communities directly and indirectly, actively and passively (1993: 275-277).

This constructivist thread of critical regionalism is also seen in the kinds of re-assessments of the ontology of concepts like "nature" as seen in the scholarship on human-environmental relations such as William Cronon's edited volume *Uncommon Ground: Rethinking the Human Place in Nature* which argues for an understanding of "nature" as a category that is a "profoundly human construction," an idea drawing on the Marxist critical work of Raymond Williams (1996: 25; see Williams 1980). Other concepts have also been subjected to this critical analysis, such as Roderick Nash's focus on a related term, "wilderness" (1982). Nash interrogates the etymology and American cultural context of the term 'wilderness,' which as a concept is an integral one in American and global discourses of the natural world and environmental conservation. For Nash, exploration of the cultural construction of wilderness is linked both to post-Enlightenment Western thought and to the practical ways that the definition creates social praxis in the use, protection, and exploitation of wilderness areas (Nash 1982: 1-7).

Critical regional studies is related to other threads in contemporary scholarship, such as the form of ‘regional studies’ described in the work of Barbara Allen Bogart and Thomas J. Schlereth (1990), Mary Hufford (1994), and others. For Bogart, a “sense of place...is a fundamental human experience” that is the nexus of direct engagement with “one’s physical surroundings” and the social, artistic, cultural, and political experiences of the peoples who live there (1990: 1). Bogart’s work is aligned more closely with folklore and ethnographic engagements with local communities, although, as with Erika Brady’s contribution to Hufford’s *Cultural Conservation: a New Discourse of Heritage*, there is a clear relationship between local culture and large-scale flows of culture that cut across political borders, particularly on contentious issues where local standards regarding trapping do not mesh with national policies, such as the case of National Park Service conservation policy (1994: 138-151).

There are some examples of the application of these methods to Arkansas and the Ozarks. Brady’s work on the use of Ozarks waterways, mentioned above, is an example of the role that local uses of natural resources come into conflict with national discourses and policies of conservation. For Brady the complex relationship between the land use practices of local communities cannot easily be resolved when confronted with national discourses of conservation (see also Rikoon and Albee 1998). Brady’s informants saw that enforcing a ban on small-scale local trappers was “the latest of many impositions of outsiders’ values on local activities to accommodate the values of urban visitors flocking to the Riverways each summer” (1990: 139). Now we are seeing how the watershed concept is being used to bring together enunciatory communities across the area based on the ways that watersheds allow Ozarkers to think through water, and along its secret movement through karst topographies. The rise of the “watershed

alliance” as the environmentalist engagement in the Ozarks is clear evidence of the rising power of this socio-cultural strategy.

Dealing with many of the same issues, we can also look to Blevins’s cultural histories of both Arkansas and the Ozarks to see the kinds of issues inherent in understanding the cultural and social facts of regional identities. Blevins’ work is key to my discussions of the current state of Ozarker and Arkansawyer identities that are important in understanding contemporary place-making in environmentalist circles. Blevins focuses on the histories of identities constructed by Ozarkers and Arkansawyers, as well as the ways that wider cultural and social trends have impacted the construction of identity by outsiders (2002, 2009). Blevins’ distinction between Arkansaw, “the state’s image and...the mythical place conjured by the various stereotypes and caricatures,” and Arkansas, a “real” place, is a distinction that disentangles the nested and localized identities that complicate any clear and simple picture of environmental activism in the Ozarks (2009: 5).

Space and Place in the Ozarks

Continuing a focus on a critically examined set of regional identities and sub-identities, the ‘nodes’ that are formed from the linked, overlapping identities that make up the reality of everyday life, I also draw on the ways that space and place have been discussed within the context of anthropology (Mouffe 1995: 370-373). To this end, I deploy a conception of how spaces and places are constructed, given meaning, and dwelled-in that is based strongly on Henri Lefebvre’s seminal *The Production of Space* (1991 [1974]). Where and how is an “Ozarks” created must be answered by attending to the ways that spatial practices, representations of space, and representational spaces are constructed and inter-related. Lefebvre argues that

“(social) space is a (social) product” that both conceals, abstracts, and concretizes the social relations necessary to create it (1991 [1974]: 26-27)..

Lefebvrian conceptions of space thus make up a three-legged stool. One leg is the way that space is abstracted and represented, an obvious example of this might be the maps, pictures, and visual representations of a given space, this is Lefebvre’s “representations of space” (1991: 38). Paige West highlights how this functions in a post-colonial and transnational world in her ethnography of a ‘Gimi’ ethnolinguistic community in the highlands of Papua New Guinea. West highlights that the existence of a ‘Maimafu village,’ and Crater Mountain, which lends its name to the conservation area which surrounds Maimafu, are partially the product of Australian colonial simplification and abstraction. The mapping of the highlands under Australian rule, West argues, is a “part of a larger project of social simplification meant to make the Highlands ‘legible’ to the colonial government” (2006: 12). We can see the proliferation of maps of the various watersheds of the Ozarks as one specifically environmental example of representations of Ozarks space.

This representation of colonized space is both unrepresentative of local constructions of meaningful spaces, such as areas owned and controlled by key lineages, garden plots owned by a given woman, or other socially meaningful areas, but has continued under the neo-liberal conservationist gaze as a necessary abstraction for garnering large grants necessary to the operation of the Crater Mountain Wildlife Management Area and its associated NGOs. Of note, is the way that the ‘Gimi,’ an ethnolinguistic designation that is produced by anthropology and linguistic researchers, manipulate Maimafu village, and ownership over Maimafu-ness, to disrupt the outside discourses and systems that profit from Maimafu, much as I will show occurring in later chapters with Ozarker identities and their disruptive capacities. As West notes “the people

who live in these hamlets use the name Maimafu for ease of communication when talking to outsiders, they do not use it when talking among themselves” (2006: 12).

Space in the Ozarks is also a product of a second ‘leg,’ that of concrete social interactions. This is the everyday social and relational level at which humans and other social actors, like the feral hog or state and corporate entities, engage one another. This “spatial practice” is how the Ozarks is lived as the set of “social transactions and relations between people and between people and the ‘environment’ (here including the physiographic as well as the biotic) (West 2006: 229). As with Venice, the representational spaces and the representations of space are “mutually reinforcing” with the spatial practices that produce Ozarks space, and are equally important in the analysis of the Ozarks as produced (Lefebvre 1991: 74).

The representational spaces that comprise the third leg of our theoretical tool are the perceptual and living spaces that are directly perceived by the Ozarkers that “relate” to it, as I mentioned above. This is the space of the trail, the plant walk, the Aldo Leopold Day celebration at parks and “natural” spaces all around the Ozarks. These places, the products of the specific social, historical, and geographic forces that result in a “park” at Mount Kessler in Fayetteville or the protected area of the HSP-CA, are built of the “meshwork” of these systems and individual agents and actors that pass over, through, and across them (Ingold 2012: 76-88). Perhaps this is also the site at which the whole theoretical architecture of the production of space can be liberated from its more schematic applications into becoming more similar to the *haecceity* of Deleuze and Guattari or the *Umwelt* of Uexküll that Ingold synthesizes into a concept of the fuzzy relations between and among living things (Ingold 2012: 76-88).

It is important to note, following Orlove and Brush (1996), that the concept of conservation, and the reservation of geographical areas for preservation or specific, limited use,

is not a Western invention. What becomes a vitally important process in the creation of protected environmentally valuable areas, it is only in the context of late capitalism that the stakes of this process have become elevated to the level of the existential. Much of the contemporary research tends to be firmly based within the specific construction of conservation, preservation, and environmentalism that is specific to the social, political, and economic context of the US and Europe. It makes sense then, that the agendas of academics studying human-environmental relations would be influenced by the study of ecosystems and the rise of a global Westernized environmental movement. As Orlove notes, “hazards created by development have been necessary conditions for the emergence of new perceptions of the environment” (2006 [1999]: 43).

Based on these theoretical concerns, I pursue an analytical program that integrates the Lefebvrian with the insights of contemporary political ecology into the ways that social and political power are brought to bear, contested, re-purposed, and lived in the process of navigating the ‘natural’ Ozarks

Power/Knowledge, Discourses, and Environmentalities

To understand how Nature is constructed, not just as a discursive category with all of its diverse features and locally-relevant social uses, but also how the Ozarks is understood as a ‘place’ we must turn to the ways that power and discourses function with the context of governing peoples and environments. In this project, I interrogate how conceptions of the natural world are contested within the networks of engaged environmental activists with whom I work, as well as between environmentalists and other members of Ozarker, Arkansawyer, and national social spheres.

In following this question of how conceptions of the natural world are both produced and contested I use the work of Henri Lefebvre who highlights the role of imagination, both as a social and individual engagement (1991: 43). The concept of imagination has been an important one within anthropological scholarship on space and place, as well as research concerning the transnational and post-colonial experience (Lefebvre 1991: 41; Bhabha 1994: 97 and Appadurai 1996: 145). As West notes, however, it is important to define how we can usefully explore the concept and social uses of imagination. According to West, and following Crapanzano, “the imagination is an individual process which...may or may not contribute to the social imaginary” (2006: 150; see also Crapanzano 2004: 6). West further argues that the “imaginary,” which is “the collective vision of a group,” is a “historical artifact that merges the individual processes of imagining with the image-making ability of politics and history” (2006: 150). For my purposes I use imagination and imaginary interchangeably to refer to this messy process wherein the individual and their thoughts and feelings are in constant articulation with social, historical, and political forces and networks. In the Ozarks, a misty morning in Lost Valley with a herd of elk grazing placidly at the edge of the tree-line is part of both individual narratives of self and place, but also part of collective social action. This particular image has become socially and politically important with on-going efforts to fight an epidemic of Chronic Wasting Disease (CWD) affecting Cervidae (members of the deer family, which also includes elk) in 5 counties in Arkansas, most of which are located in the Ozarks (McPeake, Tomeček, and White 2016).

Second, I use Foucault’s theories concerning the role and movements of power through social systems to discuss how ways of being, knowing, and feeling are interpenetrated by frameworks and systems that regulate subjects’ relations to, or expectations of their relations to, the biotic and abiotic parts of the environment. This environmentality, sometimes also referred to

as ecogovernmentality to more closely link the concept to Foucauldian conceptions of governmentality, is also part of the moral and ethical universe of Ozarks activism. Arun Agrawal defines this approach as the study of “a framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned about the environment” (2005: 166).

Foucault’s oeuvre will also be useful in discussing the complex discursive worlding that is conducted by Ozarks environmentalists and activists. One of the ways that local cultural systems seem to function is through individual social actors re-purposing large-scale discursive assemblages through the quotidian expressions of perspective and self that occur throughout the course of our everyday lives. The local constructs the translocal through communications among the varieties of localities, and the various forms and structures of communication that cross the seeming geographical and temporal boundaries that dominate conceptions of place and region that I discuss above. Providing a link between these two linked Foucauldian focuses is Timothy W. Luke’s 1995 article “On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism” which argues that discourses of nature (including ecology, environment, ecosystem, etc.) discipline bodies, but also generate control over non-human biotic and abiotic systems that are linked to control over contemporary economy and society (57).

As implied by Luke, we must discuss what Foucault might refer to as the microphysics of power, because it is at the site of the individual that the subject is formed. And it is at this site where distinct experiences of social economies of power and knowledge play out. Systems of orientation, social relations, and the kinds of ethical-moral praxis found in the Ozarks environmental community are discussed often in the context of several theoretical lenses. First,

affect as an organizing principle has been productive in discussing two related concerns: (a) the effects of cognitive systems on environmental behaviors, and (b) on the social performance, negotiation, and positioning of emotions.

Extending the research questions that I present above, this assemblage of Foucauldian approaches lead me to discussions of how these constructions of Nature and of living kinds and their geophysical contexts have implications for individual thought and action. These constructions are also *de facto* arguments for the “proper” organization of society, and sometimes critiques of how power is (unevenly) distributed throughout Ozarker society. These systems have wide-ranging effects throughout the region, even outside of the specific environmentalist and conservationist contexts that I have focused on.

In order to bring these disparate threads together, I follow the lead of Arun Agrawal who deploys ‘environmentality’ as a concept that addresses social complexity, power, and individual experience together into a more complete picture of social and political life within communities. According to Agrawal this approach “takes seriously the conceptual building blocks of power/knowledges, institutions, and subjectivities” which offers “productive possibilities” for researchers on the environment (2005: 8).

This approach draws heavily on Foucault’s conception of governmentality, which he briefly defines as the “conduct of conduct,” but we might more easily discuss as the ways that space is regulated and governed as “natural,” and the ways that these regulations create ethical praxis in these regulated spaces. Agrawal presents a conception of environmentality as the means by which governmentalized localities are created and interact with other state and state-like actors. These governmentalized localities are filled with new (or shifting) regulatory spaces “where social interactions around the environment” take form (Agrawal 2005: 7). In turn, these

localities and contextually generated regulatory communities are the site at which “people...come to think and act in new ways in relation to the environmental domain being governed” (Agrawal 2005: 7).

Environmentalities tend thus to be discussed beginning at the scale of large systems, systems that encompass spaces within given localities, and the relations between these and larger national and global frameworks. They may often work down to the level of individual subjectivities, although much of the work on governmentalities and environmentalities pays short shrift to the means by which “governments [actually] shape subjects” and “how one is to explain variations in transformations of subjects” (Agrawal 2005: 12 emphasis in original; see Baistow 1995, O’Malley 1992, Cruikshank 1994 for governmentalities; see Moore 1998, Sivaramakrishnan 1999, Worby 2000 for environmentalities).

I seek to address this problem from the opposite direction through the ways that these subjectivities are created and maintained. I begin my account with a focus on the social habitus of environmentality (Bourdieu 1977). Bourdieu argues that the means through which culture is felt and practiced as a series of structuring strategies for navigating physical and social spaces in ways that are comprehensible within a given cultural context. The theory of habitus thus takes us to the point at which practices are visible as the outgrowth of cultural systems. On the relation of practice to culture we find echoes throughout anthropology, not least in Clifford Geertz’s admonition that “culture is public because meaning is” in his now-classic explication of ‘thick description’ (1973: 12).

The habitus offers us a way, following Judith Butler’s work on the performativity of identities, to discuss the experiential way that ways of being, moving, and acting are the result of processes of normalization and habituation. As Butler argues in *Gender Trouble*, the “repetition

and ritual” of bodily performance creates the cause of which it seems to be the effect, when it is actually the identity arising from the social that creates the naturalized identity that it appears to presuppose (2010: xv). At the same time this outside-in movement for the creation of environmental subjectivities also mirrors some of the concerns that we will address below at the meeting-point between social systems and human internal life, one key point of articulation is emotional life and expression (see Ahmed 2004: 9).

Emotions and the study of culture

Key to understanding how environmentalities function at the level of the individual is to understand how it feels to be governed (whether self-governed or subject to external positive and negative forms of power). Feelings, emotions, and affects are a small but consistent part of research on humans. There is a long history of works on emotion that range from the classical work by Aristotle and Plato, to 18th and 19th century continental natural philosophers (see the work of David Hume, for example), to contemporary 20th century meditations on the role of emotion in human existence and society (Deleuze and Guattari 1987, Bergson 1977, Bateson 1963, 1979). With the advent of Enlightenment era rationalism and empiricism, there also began a move to understand the biological and evolutionary nature of emotions and feelings (as in Darwin 1965 [1896]). There are a number of psychological works that tackle the ontology, expression, and internal experience of emotion (James 2007). Not to mention the ways that anthropologists have made moves towards understanding emotions in their social and cultural contexts, the role of emotions as discourses and social performances, and as a means for organizing and facilitating the flow of power within contemporary society (Ahmed 2004, Rosaldo 1989; Rosaldo 1980, 1984).

It is necessary to understand some of the major groupings to provide context for my working definition of emotions, feelings, and affects. While the diversity of approaches to emotion can be imposing, I will simplify these approaches into three large-scale groupings. First, there are the biological approaches, of which Charles Darwin is one of the earliest proponents. These approaches emphasize emotions as a biological process, but also tend towards understanding emotions within the context of human evolution. Second, there are psychological approaches that emphasize the internal experiences of emotions, although there are a number of contemporary researchers whose research draws on a mixture of these two approaches in discussing both an autonomic and body response to emotion, but also include a neuropsychological focus that emphasizes the experience of emotions as a species-level phenomena that is localized within individual bodies. Finally, there are the socio-cultural approaches, such as social constructionism and post-structural affect theory, which often discuss emotion, feelings, and affect as cultural and performative practices. Also included within this basic trend are researchers on human-environmental relationships who have identified concepts such as “biophilia” and “topophilia,” which emphasize both the construction of the natural world, but also the ways that cultures invest emotional meanings (along with others) onto the world and land around them.

I will briefly sketch the sources and some of the exemplary works in the biological and the psychological approaches to emotion for two reasons. First, unlike some of the “strong constructionists,” I acknowledge that there are physical states that represent part of our evolutionary heritage as animals, and there are a number of insights that have been offered by neurocognitive and neurobiological researchers that could be useful in grounding the social within the inescapable contexts of human biology, neurochemistry, and the subtle effects of

evolutionary adaptations. At the same time, there are a number of theories that take emotions to be capable of being reduced to the latter biologically-dependent approaches which I find problematic, ethnocentric, or otherwise not borne out by my ethnographic data. In providing a short critique of some of these theories, I hope to better argue in favor of my own approach to emotions, feelings, and affects.

Darwin serves as one of the quintessential examples of research that accounts for emotions as part of a general theory of autonomous biological reactions to stimuli (Harre 1986: 3; Darwin 1872). Darwin, arguing from examples drawn from research on humans and other animals, states a “theory of emotions...based upon primitive states of physiological arousal involving innate instinctual drives such as self-preservation and pain-avoidance, and manifested in specific behavioural routines” (Harre 1986: 3).

Much of the positivist biological research uses a reductionist approach to emotion that stresses the “close relation between physiological responses and ethological displays” (Harre 1986: 3). With the clear correlation drawn by Ahmed that “evolutionary thinking has been crucial to how emotions are understood: emotions get narrated as a sign of ‘our’ prehistory, and as a sign of how the primitive persists in the present” (Ahmed 2004: 3). While contemporary research has moved towards an integrated view of emotions as integral to cognition (with rationality being described as one type of affect among many) (following the example of D’Andrade 1981), the positivist and reductionist tendencies in contemporary scientific research often implies and reproduces the common cultural dichotomy of reason/rationality and emotions/feelings/affects. D’Andrade sums up this tendency in Western cultures as the view that “reason and emotion are in opposition, and that feelings and emotions interfere with efficient problem solving” (1981: 190). Kay Milton’s investigation of how direct experience relates to the

sociobiological and neurological phenomena of emotion provides one means through which contemporary research may crosscut this theoretical division (2002).

Many researchers within the psychological approach to emotion have moved toward a neuro-biological view of emotions. Highlighting the persuasive character of stimulus-response accounts of emotions, the psychological research of Robert B. Zajonc argues for a view of affect and emotion in his research that describes emotion as both a response to a given stimulus, and as a ‘motive’ for observed behavior (see Zajonc 1980). As Harre notes, Zajonc’s emphasis on the immediacy of “affective reactions to stimuli” in organisms as proof of “our evolutionary continuity with other species and the fundamental nature of affect” falls in line with the early reductionist accounts of scholars like Charles Bell (as quoted in Harre 1986: 3). Within the psychological approach, however, there are still a number of clearly defined trends in contemporary research that have their origins in early psychological research by William James, Sigmund Freud, and other early psychologists.

Sharing the emphasis on reductionism with the biological and evolutionary researchers, is the theory of “primary emotions,” or as I term it the “color wheel model of emotion” (Harre 1986: 3; see Plutchik 1980, Tomkins and Demos 1995, Ekman 2005, Izard 1991). This color wheel model has recently gone mainstream with the 2015 release of the animated film *Inside Out* which dramatizes and anthropomorphizes the color-mixing metaphor. Over the course of my fieldwork I have found emotional engagement to be complex and irreducible to a series of easily separated emotional and affective states. Seeing emotions as fundamentally separable from context denies the fundamental ability of emotions to slide and metamorphose. I have found the color wheel model to carry little analytical force in either incorporating emotion and cognition, or in linking individuals’ emotional and affective labor to larger social and cultural systems for

my informants. I am in basic agreement with Harre's early estimation that "no simple combinatory theory is empirically plausible" (1986: 3).

Sharing in my rejection of the reductionist trend in psychological approaches, social scientists have generated a robust body of literature that has dealt with emotion and affect as a nuanced, contextual, and integral aspect of human life. Gregory Bateson's seminal *Steps to an Ecology of Mind*, originally published in 1972, is one such example of this approach. Bateson's cybernetic approach highlighted a need for understanding whole individuals as more than merely cognition, or emotions, or biology (1972). During this same period, Raymond Williams was developing his theory that socially relevant ways of feeling are emergent from changing economic, social, and political systems, referring to this experience as structures of feeling (1977). Williams asserts that we can often feel these changes in circumstance and relation prior to building a coherent and articulate account of dynamic social and economic experiences. Williams and Bateson differ in many ways in their approaches to emotional life, but they share a focus on the role of emotion as being both individually and socially relevant, and they both recognize that emotion is not capable of being analytically divided from its various contexts. It is this broader approach that presages much of the affective turn literature and the use of emotions within post-Marxist research. Gilles Deleuze and Felix Guattari were also integral in developing a new body of approaches within cultural studies and social science based on a view of 'affect' that emphasizes the embodied nature of social experience. Deleuze and Guattari follow the work of Baruch Spinoza and Henri Bergson in understanding affect (related to but distinct from limited conceptions of personal feelings) as a body capacity that either augments our capacity to act or diminishes this capacity (Bergson, Paul, and Palmer 1988: xvi). This embodied and

socially contextualized understanding of movements, sensations, and cultural systems has repercussions within cultural theory and within cognitive science (see Massumi 2002).

Another related trend is the integration of studies of emotionality and feeling within environmental writing. Eugene Anderson's *Ecologies of the Heart: Emotion, Belief, and the Environment* (1996) is one example of this shift among some environmental anthropologists, which Anderson re-iterates more forcefully in his 2014 return to the subject, *Caring For Place: Ecology, Ideology, and Emotion in Traditional Landscape Management*. We also find related strategies for analyzing human responses to the natural world under within descriptions of "topophilia" and "biophilia" (for topophilia see Gonzalez 2005; for biophilia see Ulrich 1993, Wilson 2007). Often these terms are discussed not in terms of overt emotion, feeling, or affect, but in terms of "affinities" and "interest" (Ulrich 1993). I would argue that in spite of these lacunae that these terms refer to something that is as imbricated with emotion as any other social, cultural, and cognitive processes.

-Philia comes to English as a suffix that refers specifically to love, liking, or affinity. Of course, etymologically speaking, philia is a term well-known to the Western world as one of the Greek words for love presented by Plato, meant in his context to refer to brotherly love. There is, I think, no accident here in the coining of these terms. Whether all scholars have pursued the integration of feeling is to the way that we dwell in and act on our landscapes, there is the latent fact of the felt world and the way that it affects humans, societies, and cultures present in the literature.

The practice of politics for environmentalists in the Ozarks is inherently an emotional and affective process. Eugene Anderson argues that all human environmental action is "highly emotional" and that "we cannot sever scientific issues of ecological management from issues of

human emotion and motivation” (Anderson 1996: 5). It is impossible for me to recall a trip to the woods, a meeting, or a friendly meal that didn’t result in impassioned discourse, emotional outbursts (whether of anger, happiness, or other less-easily-identified affective states), and the physical and outward expressions of emotional states. Even the most innocuous of meetings might be derailed by something as simple as, “Can you believe what’s going on up in Alaska?” Although you could just as easily insert American consumptive practices, the sale of invasive species at big box stores, or the latest salvo in fracking headlines and the outcome would be the same. Head-shaking in disbelief, emotional rants critical of some political position or other, expressions of loss and sadness might all be interpellated with the next 30 minutes of conversation. The feeling and thinking about the environment for my informants is not just part of a “believing about the world, but with a condition of being in it” (Ingold 2011: 66).

For my purposes, I hold that to understand emotions is to link emotions to the larger socio-cultural processes in which they become meaningful. To borrow from Geertz’s famous statement, emotions are public because meaning is. This view of emotions as socially constructed is not intended to obscure the biological/physiological and evolutionary nature of emotions. At the same time, the complexity of my informants’ emotional lives, the multiple overlapping purposes of emotional performance, and the clear utility of emotion talk in creating and consolidating communities and praxes cannot be adequately answered by neurophysiological, pure cognitive, or evolutionary psychological research. I follow Harre when he argues that “cultural diversity and cognitive differentiation” points to the efficacy of a social constructionist account of human emotion (Harre 1986: 3).

The social constructionist perspective on emotions holds that “most of our emotions occur in the context of social interactions and relationships” and that this requires that we take

note of how these social “contexts constitute, shape, and define emotions” (Boiger and Mesquita 2012: 221; see also Parkinson, Fischer, and Manstead 2005, Averill 1980, Harre 1986, and Lutz 1988). Emotions then have components of (a) enculturation which creates a performative habitus of socially appropriate emotional reactions, and (b) a social immanence (Boiger and Mesquita 2012).

Sara Ahmed describes a commonly repeated philosophical thought experiment that is used to demonstrate a conception of emotions as “simple, involuntary, and purely affective states,” which later biological and even cognitive views of emotion take for granted (Harre 1986: 2). This thought experiment involves a young child wandering alone in a forest. She encounters a bear, which she reacts to fearfully. Of course, the experiment itself is highly flawed, with the child acting as a *tabula rasa* of humanity, having neither culture nor prior experience of bears, and thus serving as proof of the pre-cultural and instinctive nature of emotional reactions. Ahmed’s response to the child-bear thought experiment is that at its beginning it assumes a pre-subjective child whose responses are somehow unconditioned. That is to say, that the child is key to the experiment in that children are assumed to be free of the burden of socialized and cultural preconceptions. At the same time, Ahmed questions the accuracy of this assumption, she asks “why is the child afraid of the bear?” Her argument is that “the child must ‘already know’ the bear is fearsome” even if she has not personally encountered a bear because “we have an image of the bear as an animal to be feared...[because it is] an image that is shaped by cultural histories and memories” (Ahmed 2004: 7). This pre-conditioning is so clearly a key aspect of human being-in-the-world that a whole body of social constructionist theory has impacted not just emotion research, but also research on psychology, sociology, anthropology, and other social and human sciences (see Lock and Strong 2010; Harre 1986).

While constructivism is integral to my understanding of emotional and affective economies within environmentalist praxis, I assert that emotion and knowledge are not merely features of social systems. I agree with N. Katherine Hayles' caution that strong constructivism can be counter-productive, particularly for researchers, such as myself, whose goal is a world that is not under threat from ecological collapse, menaced by the myth of infinite economic growth, and made monochromatic through the destruction and loss of diversity within the ethnosphere and the biosphere (1995). There is a "there" there, our world is not divided into nature and culture, instead both are intimately intertwined (Descola 1996: 84-93; Ingold 2011, 2012). Perhaps this is a hazard of being both a researcher and an activist, but if a more environmentally and socially just world is the product, I feel that this is a justifiable perspective.

Even if our knowledge and understanding of the world is always culturally positioned, dynamic, and immanent from the interactions between human, biotic, and abiotic systems, we must find a way to live in this world that we have built and co-exist with, as a species there must be a push to stay with the problematic, the messy, the dangerous, and the other compost of the world (see Haraway 2016). This is, perhaps, similar to the meshwork that Tim Ingold describes. Our world is built of these lines of "movement and growth", some of which are made, some are observed through a human interpretive lens, and yet these lines also become the points of contact between living kinds (2011: 63). As Ingold has it "this is the world we inhabit...a meshwork of interwoven lines" and these lines, this mesh made of the collection of lines of flight, lines of living and moving, lines of dwelling are impossible to escape, to imagine futures without (2011: 63).

As with Ahmed's use of the concept of how emotions create surfaces, meshwork highlights the ways that movement, growth, water filtering through limestone karst, the striving

of trees for sunlight, amongst other things, creates the sensation of a nature that is separable from human systems. At the same time, this is not a simple dichotomy that is a stable and long-term feature of Ozarks environmentalism. As I will show, the systems of environmental praxis that I have observed tack back and forth between arborescence and a more rhizomic structure (see Deleuze and Guattari 1987: 3-25). This is to say, Ozarks environmental praxes include language and practices that both reinforce the ontology of human and environmental systems as separate and often opposed, but at the same time include ways of speaking and acting that can cut across the ontologically suspect removal of man from nature. I specifically address these issues in Chapter 4 when I discuss the karst language that is a common feature of environmental speech in the region.

Emotion and the Environment

As mentioned above, emotion has been included in some accounts of human relations with non-human biotic and abiotic systems, physiographic features, and landscapes. Yi-Fu Tuan is credited with coining the term *topophilia* which is the sum of “all of the human being’s affective ties with the material environment” (1974: 93). Subsequent research has spanned regional contexts and research focuses, ranging from the moral *topophilia* in a genre of collectible Indian oleographs (Pinney 1992), linking affect with measurable ecosystem services (Ogunseitan 2005), and exploration of the links between film and urban space-making (Castro 2010) among other examples.

The concept of *topophilia* is one way of incorporating the breadth of human environments with the complexity of humanity’s social and cultural systems. For Yuan and other researchers using *topophilia* as an explanatory concept, human relations with the world around us is inherently one, whether evolutionarily or socially, in which strong feeling about plants,

animals, landforms, etc. have clearly defined benefits. Much in the same way that worldview shapes and directs praxis towards, topophilia is one way that we might further describe the role of emotion in environmentalities.

I discuss the role of emotion in Ozarks environmentalism in Chapter 3, but it is clear that the emotional and cognitive reaction of the most committed environmentalists is a strong one. Much of the advertising, social media presence, formal and informal discussions about the environment that occurs in environmentalist circles assumes that the low tree-covered hills, exposed bluffs overlooking cool running streams, and the dark exhaling cave entrances are felt as much as seen, and known as much as experienced.

What is clear from the above discussions is that dwelling in and experiencing the world is a complex and multi-valent process. For my Ozarker informants, the process through which the construct, work in, and come to know the natural world is one where socio-political systems, cultural flows, knowledges, and emotions all come together in producing both the places in the Ozarks, but also the political orientations and communal activities of those who are experiencing them. This complex environmentality, then, is at the meeting point of social systems, local, national, and international, and direct experience of the world around us. This complex environmentality is constructed out of ways of knowing, speaking, feeling, and acting, which are in turn productive of large-scale systems of power, politics, and meaning.

The environmentalities that I describe above are part of the surface of social imaginaries that connect places, peoples, and ecosystems into the meshwork of this planet-wide system. The experience, for my informants is both one of deep inter-connection, but also of deeply personal struggles and experiences that are inevitably understood as unique to this place and these people, but within a genre of living. Some of my informants would cite the environmentalist and

ecologist Aldo Leopold's 'land ethic' as one way of describing this complex way of being, knowing, feeling, and acting. I explore the effects of this discourse for my informants the next chapter where I analyze the 2013 Aldo Leopold Day events at Hobbs State Park-Conservation Area. I develop the idea that this event exemplifies the immanence of a felt and performed environmentalism in the Ozarks, in ways that represent one aspect of a diverse environmentalist praxis found among my informants.

III. Ozarkmentalities: Environmentalities of the Ozarks in Performance for Aldo Leopold Day

“In those days we had never heard of passing up a chance to kill a wolf.” Which is just like me as a boy, we killed every hawk that we saw when I was growing up, from a blood-thirsty belief that they would come and take chickens. They were just *bad*.

-John Rule, quote from Aldo Leopold’s *Sand County Almanac*

In this chapter, we turn to the ways that environmental subjectivities and environmentalities are constructed. As I have already discussed a number of scholars of environmentalities focus on large-scale government systems, governmentalized localities and spaces, and state and state-like actors. This can have the unintended consequence of missing the detailed processes by which subject positions are formed, negotiated, and how environmentalities are continuously in the progress of change within social contexts. It is my goal in this chapter to maintain a perspective that keeps the microcosm of these processes within the frame. To pursue this, I will highlight the ways that social performances, of emotion and knowledge/expertise, and subject-formation work in the small-scale and quotidian aspects of local environmental engagements in the Ozarks. This chapter takes as its focus a single fieldwork encounter, an Aldo Leopold Day (ALD) celebration held at Hobbs State Park-Conservation Area (HSP-CA).

There are several reasons for using this event as the centerpiece for this discussion. First, ALD occurs within the context of governmentalized localities, the Arkansas state park system. Thus, we will see some of the overlap with governmentalized techniques for the formation of subjects, with complex social and political speech and performance. Second, since this ALD event is an open event, widely attended (my estimate was that more than 100 people attended some part of the day’s events at the park), which gives us a sense of a wide variety of

experiences and performances (ranging from those of park staff, members of an Americorps work crew living and working at the park, volunteers, and local Ozarkers) that seem key to the ways that subjectivities are actually experienced directly by those who become subject to environmentalities. Even the “imagined interactions” that occur as part of the event “shape us and transform our knowledge,” thus even when acting in conversation with imagined others (whose orientation towards the environment is one of casual or active opposition to conservation) becomes part of a picture of Ozarks environmental subjectivities (Anderson 2014: 25). Finally, this event serves as a synecdoche of various conservation-centric educational events hosted by various governmental and non-governmental social actors.

To understand the complexity of the topic at hand it will be necessary to first understand what is precisely meant by ‘environmentality’ beyond its purely theoretical level. Specifically, it is important to grasp what exactly serves as evidence of the workings of environmentalities, as well as what data shows about the micro-politics of environmental subject-formation.

Another key aspect of subjectification, one of the driving machines of environmentalities, is that subjects are agents within the structures of subjectification. Ozarkers would often navigate complicated issues of praxis and ideology even in the midst of conversations on every topic but what was actually being discussed, even as it is true that “subjected people are also subordinated” the kinds of living engaged in by the Ozarker environmentalists I know is one that is ‘ornery’¹⁰ and is both tactically, and when necessary strategically, complex (Agrawal 2005: 165). It must remain in the foreground that subordination is not a lack of agency, and ongoing

¹⁰ Being ornery is a concept that is perfectly clear to many Ozarkers, it involves making trouble (but not too much), being dramatic (sometimes too much), and a heaping helping of incorrigibility that can make a room full of Ozarkers impossible to govern, let alone discipline. At a town hall discussing a proposed windfarm in Elm Springs, the hot, stuffy room was packed full of just the kind of ornery Ozarkers that I mean. It took firm, and clearly serious, threats to end the town hall early before the crowd would stop interjecting, “bullshit!” every time an objectionable statement was made. It made no difference to these organic activists whether that person was on their side, the other side, or some unclear side that might incorporate both the ‘for’ and ‘against’ that they had come in to fight about.

subordination may *require* our active participation in this process. When groups of activists come together at a town hall, or a public hearing, or meet and plan strategies, in short whenever the Ozarks is discussed in the context of environment and advocacy, activists are collaborating on their own subjectivities as environmental subjects. While the “thread of state power” is still integral to this collaborative subjectivity creation, it is also true that state power is not the only form of power involved in this process (Agrawal 2005: 15). I would argue that some of the discursive and imaginative processes at work here at the level of localities, activist groups, and individuals could easily function without the “regulatory communities” and the underlying arboreal structure of state bureaucratic and political power.

Deleuze and Guattari point out that conceptual structures, and the actual social facts of political organization at any given time, can never be wholly static (2014). For Deleuze and Guattari, arborescence is constantly, at least in potential, slipping into rhizome. This means that the rigid structures that seemingly place us within static hierarchies, with mapped out roles that are independent of our individualities/subjectivities are always possible to undercut with horizontality, meanings that make connections across and through hierarchy, and even with the possibility of deconstructing and completely changing the nature of structure and hierarchy itself within a given context. It is possible to note the ways that activists within the Ozarks have strategized and acted themselves into and across political hierarchies in ways that are clearly rhizomatic, and create social and political connections that seem impossible given a simplistic view of state power as monolithic, or state power as supreme legalistic hierarchy. From the genesis of an environmentalism-centric social praxis in the Ozarks, one such beginning is Neil Compton’s Ozark Society, we can see that Ozarkers, in similar fashion to the Kumaonis

described by Agrawal, move from “being situated primarily as victims and opponents of control” to being “active participants in processes of environmental management” (2005: 21).

Numerous times throughout my fieldwork with StO both within governmental conservation contexts as well as non-governmental activist groups such as StO, I would have conversations with informants who would re-state some of the key arguments of their campaign. One of these positions is that “the 60 million dollar tourism industry in the Ozarks” is threatened by the pollution of the river, or the destruction of its “pristine” ecosystems. Often, though, I encountered disagreements about why this argument was used. Many times I would hear that “we [activists] shouldn’t have to argue about the economic value of the Buffalo or King’s [Rivers], but it’s all that they [at SWEPCO] understand.” Clearly there is conflict within the ideological apparatus of the subjectification process where several competing environmentalist narratives create a double bind that is the point at which a given strategy becomes meaningful, possible, and actionable. For my informants some of these complex discourses include the romantic view of a wilderness that is valuable in itself (one of the historical discourses surrounding the concept of “wilderness” in an American context, see Nash 1982), which contrasts strongly with the natural capital and ecosystem services version of the ‘value’ of the environment. Agrawal notes that becoming involved in these systems of regulation and advocacy contributes to “shifts in environmental practices as well as beliefs” (2005: 163). Becoming subject to these discourses is a process that for many of my informants begins as a recreation and ends as a deeply-felt vocation, which seems to partially answer the question of “what distinguishes [environmental subjects] from those who still do not care or act in relation to the environment?” (Agrawal 2005: 165).

Many of the volunteers and employees of the various environmental groups with which I spent my time intuitively understood that “depending on the degree to which individuals care about the environment, the ease with which they will agree to contribute to environmental protection may be greater and the costs of enforcing new environmental regulations may be lower” (Agrawal 2005: 166). Thus the machine of advocacy can be understood as a set of reflexive strategies that run on a pool of collective experiences, and the success of a given campaign may hinge on a given organization’s capabilities to create through education and experience a set of core practices and orienting strategies that engender and develop subjectification processes in collaboration with potential volunteers (See Agrawal 2005 for another example of this process occurring in the context of Indian conservation projects).

My conclusions lend credence to Agrawal’s supposition that “answers about variations between subject positions and the making of subjects are likely to hinge on explanations that systematically connect policy to perceptions, government to subjectivity, and institutions to identities” (2005: 167). The rest of this chapter will be devoted to drawing out the ways that, first, policy and perception are linked. Second, we will turn to the ways that governance and subjectivity seem to be entangled for my informants. Finally, we will discuss the ways that institutions and identities form a complex and dynamic system.

Policy is a loaded term that is often used in work on environmentalities without a firm definition of what practices and structures are implicated when the term is invoked. I take a relatively broad view of what policy is. Policy is an umbrella for both macro-policies and micro-policies that affect the everyday lives as well as the effects of these policies on the social, economic, and political systems that connect individuals’ quotidian lives together. Macro-policies are most easily represented by the politics-as-normal actions of government and quasi-

governmental actors, the passage of a new law, decisions made in court cases, and state park policies concerning the everyday management of park visitors. Micro-politics is a concept that I draw from the micro-mechanisms of power described by Foucault and the micro-politics described by William Connolly in his *Neuropolitics* (1980: 99; 2002). Micro-politics are the productive means through which individual perceptions are created and modified. Connolly provides some examples of the sites of micro-politics which include the sum of the associations, media forms, kinds of education, and other social processes that are aspects of human social life (2002).

During my fieldwork, it is clear that events like Aldo Leopold day celebrations (and other official ‘conservation’ celebrating events, Arkansas Master Naturalist training events, collective work days, and other volunteering activities concerning environmental advocacy) are points at which micro-politics come into play. These micro-politics are in a multiply linked (and rhizomatic, and entangled) relationship with other sites of micro-political processes, as well as the many on-going macro-political events. Often discussions of the latest news of fracking, local controversies concerning a proposed wind-farm, or the fate of legal and political challenges to the confined-animal feeding operation in the Buffalo River Watershed are undertaken, and in my experience part of the function of these is the creation of ideological and practical consensus on issues, on appropriate praxis, and on basic theoretical constructions such as ‘nature,’ ‘wilderness,’ ‘native/invasive dichotomies,’ with all of the attendant affective meanings and expressions that is an integral part of the consensus on these issues.

Within these policy contexts, ways of knowing and feeling are understood as appropriate ways of perceiving the world for “those of us who care for the world around us,” as one of my informants stated, a sentiment that was echoed during many of the preambles to Leopold

passages over the course of Aldo Leopold day celebrations at HSP-CA. This linkage is particularly clear when we consider the ways that discourses of environment and ecology can be directly harnessed to both emotion, knowledge, and practice, as in the designation of purity and danger that comes from “native plants” which are threatened by the pollution of “invasive plants.” A full discussion of the native vs. invasive dichotomy is unnecessary here as I am interested primarily in the process of linkages between policies and perceptions of the world more generally. In short, though, we can see that the designation of invasive carries with it a perceptual change in the way that plants and animals are perceived, as well as creating a kind of affective threat to the stability and security of native ecosystems.

This change to the affective landscape begins for a given environmental subject with the propagation of knowledge on a given invasive species. Daisy, one of my informants, was particularly involved in the propagation of knowledge and resources on invasive species. She would move through a room of activists distributing pictures of common invasives, such as Japanese Honeysuckle (*Lonicera japonica*), Spotted Knapweed (*Centaurea Stoebe*, *Centaurea maculosa*, and related species), or Lespedeza (*Lespedeza cuneata* and *Lespedeza bicolor*), and would give advice on removal in landscaping areas, and would often have bags of seeds collected from in and around her home. At a StO celebratory gathering following the success of their organizing campaign Daisy and I had a long conversation which mirrored many of the conversations that I overheard subsequently. In the course of this conversation Daisy would often reiterate how much she “hated” invasives, or that she “regretted that most of the landscaping around [her] home, and in [her neighborhood], is all just invasive species bought at [big box home improvement stores].” The journey to this point of environmental subjectification

included a move among many positions, gardener, professional activist, and mother among others.

The stickiness of environmental affect around discursive categories, such as “invasive” or “runoff,” is the point at which policies and perceptual experience of the world articulate (Ahmed 2004). For many activists, it seems that larger political structures become knowable and capable of being acted upon because of the ways that they experience the world around them affected by these large scale policy actions. It is the unintended consequence of the governmentalized locale, a given area that is defined by its ability to be defined in whole and in part by governmental power and policy, that the emotional and local experience of regulation makes these same policies and corporate agents of power capable of being acted upon by activists. As in the case of the BRWA, the move to grant a permit to “the hog farm” makes the agency a locus for activism, the site at which the experience of the Buffalo River becomes something that is, at least potentially, under the control of those who love it and want to protect it.

In this we can see the second side of the three-sided figure of environmental subjectivity: governance, both as part of the generative structures of environmental subjectivities, as well as being capable of being affected by the subjects that it is partly responsible for generating. For Ozarkers this is part of the means through which we create environmentally-charged ethics, the “land ethics” of Aldo Leopold discussed and modelled at the ALD celebrations held at HSP-CA (among hundreds of other sites for ALD events).

The role of institutions within this is another key aspect of the creation of socially-relevant environmentalities. While there are potentially as many individual differences in how one thinks about and relates to the Ozarks as there are people to do the thinking and the relating, there are clear solidarities and similarities that mark certain organizations and presuppose or

define a given activist praxis. The role of the activist group in defining aspects of the environmentally acceptable action is clear, creating a socio-ethical node for engaging politics, localities, and even other members of one's community. The down-river focus of watershed activists defines certain types of actions and organizing principles, and the kinds of environmental education that is produced by these groups interacts with other institutions' discursive figures, such as the view-shed, or the focus on protecting or restoring native ecosystems. Each group retains its own individual focus, directs social action, and generates part of the nodal map of environmentally conscious praxis within activist circles. Conversations at a Master Naturalist training session are replete with discourses on these topics, as is the same with StO meetings that I attended. At the same time, each organization coalesces around a specific node of environmental subjectivity. As with Mouffe's observations about the lack of homogenous cohesiveness of identity itself, the subject positions within a given group define a given priority for the performance of environmental action, but not the limits of environmental subjectivities as experienced and collaborated upon by activists themselves (1997: 371-372).

Essentially, I argue that the readings, activities and performances, such as those at the 2014 Aldo Leopold Day celebration held at HSP-CA, are a key way that policy, governance, and institutions become perceptions, subjectivities, and then become integrated into the series of overlapping subjectivities and positions that comprise identities as a whole. This requires many elements, including social systems, imagination, and the creation of governable and well-defined localities.

The social systems experienced, constructed, and navigated by my informants are complex ones that merge and intersect among localities, activist networks, digital communities (which gain in importance in the age of Facebook activism, each group detailed in this

dissertation maintain robust digital presences), and other related systems. Key among these related systems is the emotionscape that ties together ideologically related performances. A Facebook status update from the Buffalo River Watershed Partners may be the topic of conversation at a HSP-CA dutch oven demonstration, during the course of which a stream clean-up sign-up sheet may spur further practical engagement with activism and conservation. This is not a theoretical movement, but one that with slight variations I repeatedly witnessed over the course of my fieldwork.

By emotionscape I propose to bring together concepts of emotion and affect that I describe in Chapter 1. The emotionscape is not a realm of pure emotionality, actually the reverse. The emotionscape is the textured landscape of mediated perception, activated knowledge, and praxis that partially gains intelligibility and meaning through being linked to emotions, affective states, and the ways of thinking that are inevitably intertwined with feelings that provide part of the impetus and motivation for acting. This conception owes much to Arjun Appadurai's theories concerning transnational cultural flows (1990). Appadurai focuses on a set of 5 –scapes which he describes as a set of relations that is not “objectively given” but instead the “deeply perspectival constructs, inflected...by the historical, linguistic, and political situatedness of different sorts of actors: nation-states, multinationals, diasporic communities, as well as sub-national groupings and movements (whether religious, political, or economic), and even intimate face-to-face groups, such as villages, neighborhoods, and families” (1990: 296). These perspectives in their wide expanse across social groupings and physical space become “the building blocks of what...I would like to call ‘imagined worlds’” (1990: 296). The emotionscape, then, is the way that landforms, spaces, social groupings, and biotic assemblages, among other things, become invested with emotions. It is important to note that these emotionscapes are inherently dynamic

and arise out of overlapping social networks, embodied experiences of the world around us, and other ecological and human contexts.

I propose this term for several reasons. First, emotionscape highlights the perspectival relationship between an individual and the fellow dwellers in the space under discussion.

Johnson and Davidson-Hunt note concerning the related concept of landscape that “landscapes are thus sites of contested terrain and identity formation; representation and meaning are dynamic and processual” (2011: 269). For Ozarker environmentalists the affect of the land is absolutely essential to understanding motivations to engage in conservation and environmental activism. Ken Smith exhorted the audience that “if you love [the Ozarks] then get out there and do something, [dang] it” during his turn at the podium during the ALD event, which provides a simple summary of the way that individual engagement and motivation are tied directly to the landscape and its function in affecting an individual directly.

My use of the emotionscape is also intended to denote the multi-scalar involvements of local environmentalities (the ways that the Ozarks is posited as a space separate from but involved with other such environmental spaces, such as Aldo Leopold’s Sand County or Muir’s Yosemite) and the large-scale social and emotional imaginaries that modulate, color, and motivate knowledges, emotions, and practical engagements. These engagements occur at the level of an individual or household level, but tend to range as far as motivating engagement on national and international levels. Once an individual is committed to action in tearing out the *Ligustrum spp.* in your front yard and replacing them with locally-grown cultivars of native plants, it is almost assured that that person will begin contributing to environmental campaigns in other areas around the country, such as fighting drilling for oil in Alaska, or engaging with on-going Native American protests against the Dakota Access Pipeline. This trajectory is not

hypothetical, but one that would appear with variations time and again when I would ask my informants about how they became an environmentalist. Where someone began their engagement was variable, but over time many activists with whom I spoke ended up in similar sets of engagements, even as someone may have their particular passion focus on a specific issue (for example, native plant cultivation, watershed issues, solar energy, or trail-building).

In discussing this way that emotion is invested in landscape, and how that landscape then begins to affect bodies, thoughts and knowledge, and social networks, I also argue that the creation and contestation of the emotionscapes of the Ozarks are ‘surfaced,’ to borrow Sara Ahmed’s use of this term (2004). Ahmed argues that the way that we determine the limits of bodies, and the limits of experience, are through the use of affect, both as a defining characteristic of women’s bodies (as affectable), but also of the experience of the world around us, in discursive and experiential ways.

The emotionscape is one means through which the world becomes intelligibly peopled and filled with actors and agents. The emotionscape is part of the social and individual process through which hydrogeological principles concerning the formation and nature of karst becomes a socially-motivating organizing principle for activism combatting the permitting of a large-scale concentrated-animal farm project near a Buffalo River tributary.

Aldo Leopold Day

In this section I will describe a single fieldwork encounter which highlights a number of these issues in clear ways. Aldo Leopold Day is an annual event created and supported by the Aldo Leopold Foundation (ALF), the purpose of which is to educate and encourage Leopold’s famous “land ethic.” The program followed at the 2014 Aldo Leopold Day event I attended was almost identical to that described on the ALF website.

In order to contextualize the event, it is important to understand HSP-CA's place in the Ozarks. At 12,056 acres, it is the largest land-holding state park in Arkansas, and is just east of Rogers and Bentonville, literally minutes from the site of the multinational Wal-Mart. The park is located on Beaver Lake, one of the primary sources of drinking water for the area. The park is the locus for a number of institutional, quasi-official, and local conservation and environmental groups, as well as a historical site that folds together official accounts of Native American habitation (although this often, for Park staff, is expressed in several idealized/mythologized accounts of Native American inhabitants, as seen in the inexplicable pursuit of "Cherokee Tie Trees" on the park), White settlement and homesteading, local forestry and related industries (especially in the form of high tech, for the 19th century, sawmills).

The park practices several different forms of conservation, including ecological restoration and cultural conservation as the two primary forms. This is accomplished through park staffs' direct interaction with park users, but also through the carefully crafted narratives disseminated through its park literature. There is a clear investment in ecological 'restoration' in ways that emphasize white settler accounts of the Ozarks, and include native-invasive remediation with a heavy emphasis on key narrative plants like the Ozark Chinquapin (*Castanea ozarkensis*). Cultural conservation is practiced through the history of the Van Winkel home and sawmill site, and its associated archaeological investigations. Archaeologists at the University of Arkansas, such as Jamie Brandon (as in 2004; 2005; 2008), have used the park to study and describe some of the complex racial interactions in the area before, during, and after the Civil War. The park hosts numerous events over the course of the year, many of which are focused on native ecology, local history (ranging from the history of Granny Women, to slave histories, to

histories of railroads in the area), or centered on various activities (such as the annual Secchi day citizen-scientist involvement in assessing the health of Beaver Lake, or eagle viewing tours, etc.)

Aldo Leopold Day-2014

The day dawns cold, with high clouds. I'm awake just as dawn is breaking, and the sun begins to burn off some of the mist covering the cemetery across from my house. This morning I'm already ready to go, and in spite of the chill in the morning air, I'm packing a small bag with my fieldwork kit. Notebooks, pens, worn plant identification guides, a water bottle, and a few other odds and ends complete that task, and now it's time to fidget and fuss.

My anxiety is high today, I am invited to ride to HSP-CA with Sarah Moore, a friend and local media artist and documentarian, her grandfather John Rule, notable Ozarker poet, and Dr. Kenneth L. Smith, probably the most famous environmental activist of the Ozarks who is still living. I clutch my cup of coffee and watch the dawn, and the road for Sarah's car. The crunch of gravel tells me that my wait is at an end. Yelling a short goodbye to my wife and son, I head towards the car.

Once I'm ensconced in the back seat with Ken Smith, Sarah starts the car and begins our three quarters of an hour drive to HSP-CA where we will all be involved in some part of the Aldo Leopold Day activities. HSP-CA has a yearly celebration of the life and work of one of the pantheon of conservation 'gods' Aldo Leopold. The Aldo Leopold Foundation is a well-known organization among institutional conservation actors, as they provide significant programmatic support for environmental education programs throughout the country. Many state and national parks host Aldo Leopold-themed events based on the materials that they provide, common programs include readings from Leopold's classic *Sand County Almanac* (2000 [1949]), as well as screenings of *Green Fire: Aldo Leopold and a Land Ethic for Our Time* (2011), a full length

documentary on Leopold distributed by the Aldo Leopold Foundation. Both of these are on the schedule for the morning's activities, although there are notable additions such as a dutch oven demonstration and tasting, a "native plants" walk, and nature journaling walks, the nature journaling would be at the last minute given to me and Sarah to lead, such is the nature of being known to volunteers and staff at the park.

Sarah provides introductions, this is my first time meeting Ken and John, but I know much of them by reputation. John Rule is a locally-respected poet and activist whose life and work are shown in Sarah's documentary about him, *Witch Hazel Advent*. Ken Smith is one of the best-known activists and environmentalists in the Ozarks. His multi-decade history of activism begins with his association with Dr. Neil Compton and the campaign to fight an Army Corps of Engineers' plan to Dam the Buffalo River. The success of that campaign is key in understanding the ongoing conflicts in the Buffalo River National River watershed. Ken is also involved as a board member with one of the organizations with whom I worked, the Buffalo River Foundation (BRF). He still spends much of his time doing trailwork in addition to this.

I'm nervous in my explanation of my research project, but after a few pointed questions it seems that I've satisfied John and Ken that I'm neither a crank nor an idiot. As a native Ozarker, I often use my Ozark-ness to help place me during fieldwork encounters. As with many rural places, questions of where your people are from are important in negotiating authority and in generating a place within the social landscape. "So, you mentioned you're from the Ozarks? Where about?" Ken asks, "who are your people?" I respond, "Well, my parents are from outside of Harrison, from Western Grove and Marshall, originally." Ken continues, "Ah, well I may know some of your people," which seems to make him feel satisfaction. I'm scrambling to remember every scrap of knowledge about family relations, maiden names of great-grandparents,

second cousins, and cousins by marriage that still live in the area. This is not made much easier by the fact that my parents and all of their siblings had all taken the first opportunity to move away from Marshall and Western Grove, and I'm left with my rather imperfect memory of relations that I know only from their appearance on the margins of other family histories.

Within a few minutes of hopping into Sarah's car, we're already well out of town. As the trees begin to fill in, Ken's avid questions about my family, and my questions about his ongoing trail work on the Buffalo begin to get lost in the scenery. In the last ten minutes of the ride to HSP-CA we've all become lost in looking at the trees and hillsides. Almost a decade before, in 2007, the Ozarks was hit with a massive ice storm that caused huge amounts of damage. I am quick to notice that even here by the road to the park, there are still many fallen trees that can probably be attributed to that event. I can't speak for John, Ken, or Sarah, but such were my thoughts, scribbled hastily into my field notebook as Sarah pulled into a parking space near the entrance to the still-new-looking Hobbs' Visitors' Center.

Our reveries' broken, we lug our bags into the building. Once inside we see some of the park staff, who point us to one of the rooms used for lectures, classes, and various meetings. Ken and John are well-known enough to be engaged in conversation several times before we make it into the room. I pick up one of the complimentary copies of Sand County Almanac being distributed as part of the event. Sarah and I end up chatting with the Assistant Superintendent of the park, another of the scheduled readers, and the then-current head of the Friends of the park volunteer organization. Sarah and I become pressed into service rather quickly, we agree to direct a nature journaling walk and workshop. Such is the nature of volunteer work, if you are present you're working.

Jay Schneider, assistant superintendent, and then-superintendent Steve Chyrchel both make some opening comments at a lectern on one end of the multipurpose meeting room. Schneider discusses the importance of the land ethic, sketches the basic outline of Leopold's importance to contemporary conservation and parks, and performs an impassioned plea to return to the "cathedrals of nature" as a form of integral human experience, a sentiment that borrows heavily from the kinds of Romantic conceptions of Nature that form the genealogical bedrock for state and national parks in the U.S. and abroad. His focus on Leopold as one of the Prophets of modern environmentalism, he cites the holiness of Nature as one of the motivating factors for environmental action. Schneider ends by gesturing towards the windows on the north side of the building, exhorting us to "get out there" and experience it for ourself.

Assistant Superintendent Jay Schneider's appeal to treat the Ozarks with the kind of reverence that early conservationists, like the inimitable John Muir, treated Yosemite and the redwood forests of the Pacific Northwest presented a performative frame that gave the audience a way of understanding the performances that would follow. Schneider directly constructed this performative frame through how the event was described and explained and through the activation of implicit cultural codes that define readings and multi-speaker events. Thus, the implicit and explicit function of the event was unified within a performative poetics incorporating event structure and affecting the meanings and function of the event as a whole, including how it was intended to be experienced.

The concept of 'framing' is useful here to understand how performance can be used to construct public meanings and emplace social relation across multiple scales of discursive and emotional assemblages. According to Richard Bauman a frame is a concept that arises from the work of Gregory Bateson (1972 [1956/7]) and from Erving Goffman (1974). According to

Bauman the “transformation of the basic referential...uses of language” that happens during performance is signalled and modelled through the deployment of a ‘frame’ (1975: 292). Frames serve to define a performance within an “interpretive context” which “[provides] guidelines for discriminating between orders of message” (Bauman 1977: 292).

The HSP-CA room encodes, through the spatial organization of chairs, lectern, etc., part of the performative frame that is deployed here, but also requires official introduction in order to signal what kinds of performative competence are expected of the readers of passages from Aldo Leopold’s *Sand County Almanac* (2000 [1949]) and the ways that audience competence should work. Schneider’s request for the audience to pay special attention to Leopold’s words, and particularly how they relate to the social practice of conservation in Northwest Arkansas gives the audience a means through which to interpret the performances to follow.

Throughout the readings, and the rest of the day’s events, the word ‘ethic’ re-occurs numerous times. Not just in quotes about Leopold’s “land ethic,” but over and over as those attending the event, readers, park staff, and volunteers discuss conservation topics. It is important for understanding the way that performance framing accomplishes two disparate, but related, social effects. First, as with many frames, this repetition marks the space as one closely related to the practice of environmental ethics. Based on my discussions, casual and formal, that followed the event, the role of the park and its meaning as a locus for my respondents’ conservation practice is emphasized, thus Leopold’s land ethic is made real through emplacing conservation as a place-based practice within the boundaries of the park.

Second, foregrounding ethics as part of the performative frame creates the possibility for performances of environmental ethics to escape the boundaries of the day’s events, as well as the possibility for socially-engaged conservation to become part of an attendees’ personal

conservation practice. The concept of ethics as engaged practice becomes, then, both related to a given place (the conservation area managed by the state park staff), as well as providing impetus to engage in new conservationist behaviors once one returns from the event. After the readings I asked whether or not one of my respondents, Alicia, would do anything differently at home after hearing the Leopold readings and watching the *Green Fire* (2011) documentary. Alicia responded that she had just learned from another attendee that one of the trees that grows along her fence lines in Rogers was an invasive species. She noted with some satisfaction that “this week I’m going to get my husband to cut all of them down and we’re going to put in something else, not sure what yet.” The push to connect the rhetoric of environmentalism, coupled with the focus on, at times hyper-local, environmentally positive action extends the range of performance well beyond the confines of a single day’s performance of environmentalism.

This link between discourse and praxis is not the only important feature of the day’s events. There is a clear role that emotion plays in the performances that I observed, with various kinds of affective labor being performed that served as a kind of sub-frame within the scope of the larger performative frames. These sub-frames construct expertise of special kinds within conservation and activist spaces. Some of these frames may be as simple as the state park uniform which confers on its wearer the assumption of expertise, which is often based in fact. Some of these may be more subtle, such as the way that Dr. Smith is introduced, or the way that those “in the know” tend to pre-introduce him to those who don’t know who he is, or those who have never met him before. I have been on both ends of this exchange several times over the course of my fieldwork. Once during a Buffalo River Foundation board retreat to which I was invited, I was taken aside on three occasions before the arrival of Dr. Smith by various board members in order to make sure that I was “familiar with Ken Smith’s role in conservation.”

Often these sub-frames seem to be invoked by those whose ‘commitment’ to environmentalism is confirmed, often through the commitment to labor. For a parks employee this commitment is obvious through their choice of career, official titles or longer-term involvement with volunteering might also serve this function, a Arkansas Master Naturalist name tag (provided for every graduate of their training program) may also serve. The internal structure of these events empowers all attendees as conservation actors, but through these sub-frames we can see the role that labor and affect can serve to privilege some voices within conservation performance.

The ALD events also bring up several questions about the role of emotion, performance, and affect. What role does the affective labor on display engage and construct environmentalism and environmental subjectivities? How the emplacing of these involvements is explicitly performed as emotional, how is an impassioned plea involved and socially constructed? What role is there for emotion-talk to an audience whose attendance at the event signals agreement with the basic conception of environmentalism and environmental ethics?

The performances that I witnessed were the social performances of a conservation ethos that my respondents noted were critical to the public and personal celebration of Aldo Leopold’s life and work. Over the course of the day, I would have several conversations that would reiterate points made by a woman that I met at the event. Carol said that “it makes me feel pretty energized to come to [events like the ALD event at HSP-CA], I really like how they [referring to Jay Schneider particularly] are so fired up about their park, and about our environment.” These performances serve as a (re)orienting framing of social action, that also provides the impetus for doing the emotion-work that motivates the social action that it also helps to frame.

I asked Carol why she did environmental work. Her response was to describe herself, except in negative, referring to a vague sense that there were *others* who did not “care about the environment at all,” and that these others were somehow simultaneously unfeeling AND irrational social actors who wouldn’t take responsibility for “making [the Ozarks] beautiful, again.” These ALD performances, and others like them, built identities and subjectivities in both directions, both positive and in relief, so to speak. Performances of emotion were a necessary pre-cursor to the emotional and logical work of *belonging* and *relating* to the Ozarks. The everyday self of Carol, among others, was part of this social imaginary, and a part of the way that she creatively constructed herself as a socio-ethical actor.

The social fabric of ALD serves as part of the meshwork of an Ozarks emotionscape. In and among these movements is the network of actors whose individual emotional and practical engagements create the ebb and flow of environmental work. The regular (re)framing of social, ethical, emotional, and environmental selves is conducted through the performance and ‘emotion-talk’ that I describe above. The affective labor of all this is part and parcel of the actual labor, the movement across, through, and over the Ozarks.

When Ozarkers attend events like the ALD, this is the site and plastic media out of which emotional performances resonate across the landscape. The meshworks that arise are ones that provide a propulsive force, as well as form part of the connective tissue of social engagement, that ties together many of the groups and people that I deal with here.

In the next chapter I turn to the role of particular forms of cognitive, emotional, and social engagement in environmental restoration activities. Restoration is a set of activities in which we can see the interplay of concepts, affects, and cognitive modalities play out in the public expression of conservation. The restoration of local environments to specific aesthetic and

ecological parameters is a political project as much as it is an environmental one.

Environmentalities of the Ozarks are often actualized on the level of these communal engagements. Specific people, specific groups, specific locations are all integral to understanding how historical narratives of ownership are reproduced to provide connections for contemporary Ozarkers to the land, and at the same time reproduce the political and social dispossessions of place that are key aspects of settler-colonial projects. Ozarker identities become actualized, as they always have, through the engagement with an empty land, while ignoring the active, aggressive, and hegemonic removals of Native Americans.

IV. Returning to the Natural State: Power, Race, and Landscape in the Ozarks

“Wherever men live, they have operated to alter the aspect of the Earth, both animate and inanimate, be it to their boon or bane.”

-Carl O. Sauer from “The Agency of Man on the Earth” from *Man's Role in Changing the Face of the Earth*

“So accustomed are we to viewing images [of the environment] that we are, I think, inclined to forget that the environment is, in the first place, a world we live in, and not a world we look at. We inhabit our environment: we are part of it; and through this practice of habitation it becomes part of us too.”

-Tim Ingold from “Footprints Through the Weather-world: Walking, Breathing, Knowing”

“As America’s holiest shrines...parks reflect a whole spectrum of ideas about nation, culture, and even natural origins.”

-Mark David Spence from *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*

My car rolls to a stop outside the visitor’s center at HSP-CA, I am hoping to begin a season of working on the Van Winkel Mill historical trail at the park with a short introduction to the maintenance staff and a tour of the maintenance shed area. Eddie Silcott, who is a long-time conservation worker with a stretch of time working with the Nature Conservancy, is on-hand to give me a tour, so I meet him over at the maintenance area. Eddie is a gregarious and open person, quick to tell me about how the park works, and with little prodding to tell me about how he feels the park could “do even more, but mostly people seem happy to just do things like they got used to doing them years ago.”

The “shed” is a collection of structures, including a fuel storage building, a shed for storing kayaks, canoes, and larger earth-moving equipment, and a building that serves as a combined workshop, office area, herbicide and tool storage area. Clearly reflecting the size of the park, this maintenance area is well-equipped and comfortable with ample space for a whole

crew of Americorps volunteers along with a host of park employees as necessary. We make a quick tour of the area, Eddie is particularly excited to show me the three and a half foot diameter chunk of a fallen oak that was used in a tree-ring study conducted at some point, it sits taking up a not insignificant portion of the rear portion of the building. Nearby is a shelf with backpack sprayers and several hundred gallons of herbicides, including a wide selection of the kinds of neo-nicotinoids that are under fire from activists for the effects that these herbicides have on bee populations.

Eddie seems apologetic about the sheer volume of unopened containers of these herbicides, although he says that he has not heard that they “for sure” have negative effects on non-target plants, animals, and insects. His reticence might connect to a criticism that I have heard several times by different activists concerning the ways that state parks are “bureaucracies” that are essentially conservative and whose budgets are seen as a score-board where any reduction in budget allocations are seen as a loss for the park as a whole. This includes budget categories like “invasive remediation” and the buying of herbicide year-after-year even if the volume of herbicide actually used is much lower, leading to the large amount of neo-nicotinoids left on the shelf. That is not to say that HSP-CA doesn’t engage in the application of these chemicals for controlling invasives, Jay Schneider confirmed that the park sees these herbicides as a key part of an overarching plan for invasive control and the promotion of native ecosystems. The maintenance area of the park provides a synecdoche, at least in some ways, for the administrative priorities of the park as a whole, and in the case of the herbicides a means through which we can observe some of the inconsistencies in the work being done in the park and the funding priorities emphasized by administrators who are seldom, if ever, called upon to do the day-to-day work of the park.

In this chapter I argue that ecological restoration, with discourses of native vs. invasive and invasive removal, is part of a larger-scale social and political project in the Ozarks. I demonstrate the ways that power functions within the environmentalized flows of knowledge and praxis, where strong affects of xenobiophobia, such as in the native-invasive dichotomy, become knotted together with localized versions of an American nationalist project.

As has been observed at length elsewhere, it is clear that “the creation of America’s national parks was not an entirely noble undertaking” where the “establishment of national parks was part and parcel with the Anglo conquest of the continent” (Wellock2007:58). While the discourse of parks is one of an untouched “clean wilderness,” as early conservationists such as John Muir would have it, the reality is that “parks enshrine recently dispossessed landscapes” (as cited in Wellock 2007: 58; Spence 1999: 5).

According to Edward Said, in his analysis of imperialism, “to think about distant places, to colonize them, to populate or depopulate them: all of this occurs on, about, or because of land” and it is “the actual geographical possession of land is what empire in the final analysis is all about” (Said 1993:78). Said’s analysis of imperialism places the “geographical possession of land” as a central concern in the practice of imperialism, when we turn out attention to forms of settler colonialism we can see that it is not just distant land that is imagined. The systems by which geographical possession must be accompanied by discursive strategies, as well as the creation of machineries of power and the attendant corpus of laws, is part of my concern here.

It is never enough to inhabit the land. Narratives of landscape are powerful tools of asserting a form of historically conditioned possession. It is our land because we came from it, the trees and rocks and streams in it are written in us and us in them. For conservationists in the Ozarks, these stories may be ecological ones, they may be historical ones, or frequently they are

(or become) both. A dispassionate ecological critique of lespedeza as a problematic invasive plant becomes a part of this ongoing process as the term invasive can only come into existence through the mechanism of deciding which plants have a long enough history here to be called native. Much as these narratives then begin to merge into the historical settlement of the Ozarks, we are native because we have been here for many generations. Our people moved here from somewhere else, but over time they became from here more than they were from there. This becomes the way that claims to autochthony become integral to environmentalities, part of the functions of habitation and place-making as a process of subject formation. We become environmentalists through our actions, a sentiment that I have heard from my informants in numerous contexts and in a variety of formulations. Put your money where your mouth is, show you really care by getting out this Saturday for the stream clean-up, make sure that you get your email sent before the period of public comment closes on the CAFO. Show your support for the Buffalo by _____.

This process continues in spite of the fact that this dispossession is long accomplished. The physical, complicating presence of indigenous peoples whose claims on the land predate White settlement is no longer an issue, however, the nature of settler-colonial discourse is such that this dispossession must, apparently, be continued well beyond the fact of removal, of what Nichols identifies as exclusion, assimilation, and usurpation, into a re-writing of the facts of the landscape, of the meaning and import of ecosystems. For ecological restoration to serve a function in this discourse there are several conceptual moves that must be made. First, that a post-Romantic conception of unspoiled Nature still maintain its hold over both the social and the ecological views of the Ozarks. Second, that historical contextualizations of the environment must be drawn uncritically from settler documents, and from settler perspectives. Finally,

ecological restoration must be positioned to return a given area to its pristine, untouched, or ‘natural’ state.

Based on numerous conversations over my time in the field, it is clear that these three conditions are currently the status quo when it comes to many of the restoration projects underway in and around the Ozarks. Bill, one of my key informants affiliated with HSP-CA, spoke at length about the moral and ecological imperatives of restoration saying, “it’s our job to protect our environmental heritage...to restore it to the way that it used to be, because [plants] like lespedeza are coming in and wiping out the native grasses that [benefit the whole ecosystem].” Conversations with HSP-CA assistant superintendent Jay Schneider emphasized similar aspects to the park’s conservation, and according to Jay’s account of the restoration activities in the park, the focus was on linking historical accounts with the landscape as part of the aspirational goals for how “the park should look.”

Historically there has been an incredible upsurge in ecological or environmental restoration around the world (Aronson and Alexander 2013). At the same time, there has been a wide divergence in what is meant by ‘ecological restoration.’ A definitive review of restoration literature and the diversity of actual applications worldwide are out of the scope of our discussion here. However, it is important to discuss the basic definition of the project, particularly as it applies to Ozarks restoration projects. In order to contextualize ongoing Ozarks projects, such as land set aside at HSP-CA, I will briefly discuss the history of the concept and practice of ecological restoration,

The concept of rehabilitating degraded ecosystems with the goal of reinstating a set of relatively sustainable ecosystemic relationships is not a new one, Aldo Leopold’s work in Sand County attests to that, the importance and practice of restorative measures has only grown since

the inception of the discipline of restoration ecology in the early 1980s (Nunez-Mir et al 2015:670). In spite of “receiving so much attention and having so many adherents,” the discipline has had a long history of vagueness surrounding what is actually meant by the phrase “ecological restoration (Higgs 1997:340).

The rise of ecological restoration as an integral part of both the academic study of the environment and the conservation of a given ecosystem has expanded for a number of reasons, such as the growing public concern over ecological sustainability, the economics of restoration and environmental management, and the increasing focus on biodiversity as a key indicator of environmental quality (Lubchenco, et al. 1991).

There aren't any projects of the scope of William Cronon's 1983 analysis of New England's land use prior to and during European colonization that focuses on the Ozarks. We do, however, have access to numerous sources which indicate how well the Ozarks ecosystems were managed during the period between first contact with Europeans and the earliest period of American homesteading.

It is only relatively recently that attention has been paid to analysis of data concerning pre-historic human habitation in the Ozarks. Early work by August Beilman and Louis Brenner, in their analysis of the changing ecology of the Ozarks, that the Ozark region was relatively open consisting of what would now be termed an oak savannah, with swathes of open prairie (1951). Beilman and Brenner derived these conclusions exclusively from European and American sources such as Garcilaso de la Vega, accounts of LaSalle's expedition down the Mississippi, the famous account of the region by Henry Rowe Schoolcraft, and other similar settler accounts of the region. Following the logic of settler colonial discourse we can see that this writing contributes to the myth of “an original, pure, and empty land” that is “justification [for] advance

policies that would turn the myth into fact” (Nichols 2014:112). This assumption of an empty land is also woven into contemporary accounts, such as a biography of canoe rental magnate Joe Barnes, written by his daughter. Her account of her father’s life is predicated on a white settler history of the region, which will be discussed at more length below.

In spite of the fact that indigenous peoples are never directly mentioned except as the backdrop for the earliest accounts of the region, as in de la Vega’s narrative, we can see that others would later attribute the ecological state of the Ozarks in the 15th century to the active role played by Indigenous peoples (Malin 1956: 352). The fact that contemporary activists, conservationists, and state actors follow this same line of logic begins to make sense as the continuation of the received wisdom of historians and ecologists in the region. Even in the 1950s some were quick to note that “the conditions prevailing in the grassland interior during the century from 1750 to 1850 were anything but the eighteenth-century ideal ‘state of nature’” (Malin 1956: 354).

There are several sources that offer a background for understanding human-environmental relations and the historical management of ecosystems prior to the period of European and American colonization of the area. As W. Raymond Wood and R. Bruce McMillan state in their introduction to *Prehistoric Man and His Environments: A Case Study in the Ozark Highlands*, “man has adapted to and exploited the Ozarks for the 10,500 years he is known to have lived in the area” (1976: 3). According to an analysis of tools and other functional items collected at Rodgers Shelter, located on the Western edge of the Ozark Plateau, indigenous peoples engaged in a wide array of activities, necessitating diverse strategies in human-environmental engagement (Ahler and McMillan 1976: 163-199). While Ahler and McMillan do not extend their analysis to how human communities may have engaged with biotic and abiotic systems. McMillan, in a later

chapter, notes that there were major changes in floral and faunal assemblages that occurred over the course of the past 10,000 years (1976: 227). McMillan argues that forest edge ecosystems shift towards “one containing greatly reduced amounts of arboreal habitat” approximately 8,000-9,000 years ago, with a “gradual return to mixed plant communities” (1976: 227). The clear assumption that McMillan makes here is that the floral and faunal assemblages and the “grassland...succeeding to forest” that was encountered during “pioneer times” was the product of environmental change and not human involvement and management (1976: 227). Later McMillan seems to assume that changing environments required human adaptation, but only in the choice of which game to pursue and other small-scale changes in subsistence, instead of the kinds of larger-scale environmental engagements that are noted in other analyses of Native American engagements with ecosystems (see Krech 1999; Cronon 1993; Anderson, Barbour, and Whitworth 1997; Anderson and Moratto 1996; Blackburn and Anderson 1993). Not every change in ecosystems during this period is attributable to indigenous peoples, but it should not be our first assumption that indigenous peoples have no appreciable effect on the environments in which they live. There are several more recent studies that are now taking into account a landscape paleoecology that takes into account Native American ecological engagement, which may have an effect on local narratives of the environment, but that is yet to be seen (see Fowler and Konopik 2007, Verble 2012 [Diss.], and Guyette, Muzika, and Dey 2002).

Louis E. Vogeley, Jr. makes this observation, stating that “human and natural processes have altered the environment of the region in recent times...[and] these processes [have] brought about prehistoric environment change” (1990:13). The assumption here is that neither “human population nor environment” are constant, but “both are suspended in a dynamic relationship in which change is always possible,” and in light of on-going research on global climate change it is

a foregone conclusion that populations and environments are guaranteed to continue to change (Vogele 1990: 13). It cannot be emphasized enough that research should take into account that, even from the earliest period of human settlement of the Ozarks, indigenous peoples' "economic and social adaptations" were probably "more complex than we have previously imagined" (Sabo and Early 1990: 41).

It is important to note, though, that there is no monolithic set of practices through which Native Americans managed their environments. In fact, "interactions" between Native Americans' and their environments "were as diverse as Native Americans themselves" and were the "product of a specific historical process" (Mann 2011: 282). Future research into the historical ecology of the region might take the concept of environmentality as an organizing principle, which would allow analysis to directly incorporate human environmental strategies, ecological change beyond the scope of human management, and socio-cultural forces that generate and maintain individual praxis over time. While there would be specific methodological challenges in working from subtle paleo- and archaeological data towards a reconstruction of social and cultural systems, it might allow us to envision historical Native American cultures in the same level of complexity and dynamism that we find in contemporary communities around the globe.

Settler-colonialism and restoration projects

The ecological restoration projects undertaken at HSP-CA are wide in scope, both in terms of acreage covered and in terms of the long-term focus for these projects. According to park staff, controlled burns are one of the most important tools in their management arsenal. HSP-CA Superintendent Steve Chyrchel observed to me that "we burn as often as they [State Parks administrators and fire mitigation officials] let us." The park also purchases a large amount

of herbicide, according to maintenance staff, which is often sprayed along roadways and areas of restoration focus using backpack-style sprayers.¹¹ There are also projects dedicated to remediation through physical removal of invasive species, and the transplanting of native species, particularly in HSP-CA riparian zones.

As Mark David Spence notes, much of contemporary conservation strategies rest on the foundations laid by the rising sense of a national identity that followed the Civil War and the Mexican War, which was accompanied by the acute pangs of sentimentality and nostalgia for the “‘vanishing’ frontier” of the American West (1999:4). Spence argues that through a process of “patriotic transubstantiation” the meaning of the landscape changed, with this change progressing through modes of governance (1999). This transubstantiation also relied on the omnipresence of Romantic discourses of ‘wilderness’ and ‘Nature’ (see Nash 2014). As the meaning of land ownership changes to one that emphasizes White or European land tenure, it is possible to see how environmental restoration projects have come to be imbricated with the content of these nationalist socio-political projects of White possession of the land.

We can see the interweaving of social, political, and affective nostalgias in a passage from Jenny Barnes Butler’s biography of her father Joe Barnes, himself a key figure in the tourist industry in the Buffalo River watershed (2014). Butler writes that

the Buffalo River has been central to many little places like Freck¹² since the Indians were pushed westward in the early 1800s. Until then few white men had seen the Buffalo. The Indians didn’t keep records. The first white men, like the Dillards and the Smiths, were hunters and squatters and settlers who came in and took choice land for \$1.25 an acre. Like pioneers in other areas, they lived with an abundance of wildlife, such as herds of buffalo,

¹¹ There is some ambivalence among staff concerning the use of glyphosate, triclopyr, and other commonly available herbicides. In fact, park budgeting requires the purchase of huge volumes of herbicide, which may not be used for several years after purchase. A large wooden shelf in the maintenance area attests to how the motivation to always use up money ear-marked for specific purchases lest that money be cut in subsequent years’ budgets can reflect differences between park staff and park administrators on the effectiveness of given management strategies.

¹² A small township in Marion County, shown on maps as located between Water Creek and Baren Fork, and between Maumee and Yellville.

deer, and elk, for years. The wildlife and forests of hardwoods must have seemed endless to the first settlers (2014: 71).

This passage encapsulates commonly repeated tropes in oral histories of Ozark places, the story beginning with the silent Indians leaving the land (“they didn’t keep records”!), coupled with the early abundance of natural resources. Of course, in her narrative Butler discusses the contemporary difficulty of subsistence in the Ozarks without ever connecting narratively the “natural” legacy left behind by indigenous peoples, and the subsequent subsistence difficulties that happened as a result of white colonization of the Ozarks. As Butler notes further down on the same page, “most of the country had limited resources of wildlife and a forest of slow-growing hardwoods on rocky soils, which were largely gone within a century” (2014: 71).

In some sense, then, ecological restoration projects can, I think for many unintentionally, serve as a part of what Robert Nichols calls the “settler contract” (2014). Nichols observes that “it is not the case that all settlers...denied the existence of previous societies... it is often the case that actual settlers on the ground recognized Indigenous title” (2014:102). As time passes, however, the transubstantiation of the land into part of the settler-colonial identity occurs partly through the process of nostalgia and the social uses of local identities, and the prestige that habitation and ownership confers on locals. The gentle contestation of identity that occurs when Ozarkers question whether some is truly a local based on when they or their people arrived in the Ozarks is part of this prestige-contestation that occurs within environmentalist circles, as much as any other Ozarker sub-group. Dr. Smith’s gentle probing of my genealogical links to the Ozarks while on the way to the Aldo Leopold Day event fits into this mold, my identity could be *placed* by virtue of how long my people had lived here, and where exactly they were from within the area. I choose the term ‘place’ here quite deliberately as these questions set your location along multiple axes concurrently. The answers to these questions about one’s family place you in

time, geographically, and genealogically. You provide your own credentials for authority on Ozarker-ness, to local social networks, and often the likelihood (or actual evidence of) relatedness to the questioner and their social networks, it is not completely uncommon to unearth some form of family connection during one of these series of questions.

When I would pose the question directly to informants about the history of Indigenous peoples in the Ozarks, most would affirm that, of course, there was a historical presence of indigenous peoples in the Ozarks. At the same time, it was common that there was little specific knowledge about which peoples, at what times, and in which spaces. Often the role of the Cherokee, and genealogical connections to Cherokee, were emphasized by my informants, with a relative paucity of attention paid to other Native American cultures in the Ozarks. This narrative (dis)connection may reflect the fact that the Osage had been dispossessed of the Ozarks by 1808, while there was a much greater overlap between Cherokee and white settlers' habitation in the region (Blevins 2002: 14; see also Rafferty 1980). It may also reflect a generalized lack of knowledge concerning the variety and diversity of Native American cultures, which is particularly self-serving from the perspective of building autochthonous claims to the Ozarks. Narratives of a White Ozarks are much easier to construct when the existence of an alternate view is denied.

Parks employees and long-time volunteers often had some basic knowledge, but it is obvious from the specific content of trail interpretive materials and the content of educational events that inclusion of Indigenous peoples often served as a blanket statement of ahistorical preface or introduction of the primary concern, white settlement. Parks interpretation tends towards an almost exclusively monolithic "Native Americans." Although there are occasional exceptions in park material, the tone of park materials tends towards vagueness concerning

Native American history and only becomes effusive when dealing with the early days of white settlement.

This process is based on a social contract defined by the nature of settler colonialism. This settler contract is defined by Nichols as the “strategic use of the fiction of a society as the product of a contrast between its founding members insofar as it is employed in these historical moments to displace the question of that society’s actual formation in acts of conquest, genocide, and land appropriation” (2014:102). Nichols expands on the “dual legitimating function” of the settler contract that “first...[presupposes] no previous Indigenous societies, and, second by legitimizing the violence required to turn this fiction into reality” (2014:102). As Spence notes, “in the rare instances that park literature even mentions Indian, they tend to assume the unthreatening guise of ‘first visitors’” (1999:5).

In Hobbs State Park-Conservation Area’s (HSP-CA) literature there is scant reference to indigenous peoples generally, but where mentioned these references tend to take the form of statements like “for several hundred years, Native Americans lived and hunted buffalo, deer, turkey, elk and bear in this area [the current site of HSP-CA]” which is historically inaccurate in a number of ways. In other places in park literature, important because huge numbers of park visitors may only come into contact with the work of park interpreters through such literature, there is frequent mention of ‘tie,’ ‘thong,’ or ‘signal’ trees which represents the epitome of inaccurate white imaginings of indigeneity, which becomes a safe discourse of indigeneity since it is the province of white ‘experts’ and not something that needs the input of contemporary Indigenous communities with historical ties to the region.

Within the context of restoration, the dispossession takes the form of silences, elisions, or the condensation of thousands of years of history into an ahistorical ethnographic present with all

of the attendant assumptions of the Noble Savage, the Ecological Indian, or any of the other tropes of Western discourse about Indigenous peoples. It is clear that the early discourses of conservation that concern Indigenous peoples still have effects on contemporary conservation practices. Dispossession has so deeply become a part of conservation praxis that it has become necessary to flush it back into the open so that, instead of the silent oblivation of Indigenous peoples and the history of their removal from the Ozarks, we might serve the worthy cause of conserving and preserving unique and beautiful ecosystems while also building new forms of environmentality that are inclusive, just, and recognize both historical and ongoing forms of dispossession, genocide, and violence in all of their reality.

This is a common version of the narrative, notice the way that James Tippet describes the increase in men and the attendant decrease in wildlife in his 1937 *Paths to Conservation*, a text intended for what we would now describe as a young adult audience. We must ask the question that Tippet seems oblivious to, why does the history of “man” in North America begin with European colonization? This same question could be asked of much of the literature and public documentation on many restoration projects. Tippet’s introduction gives us the outline of the natural history of North America. He states that

No country was richer in natural resources than America when Columbus first came to it. Its hills and valleys, its mountains and plains swarmed with wild life. Enormous flocks of wild pigeons nested in its forests. Bison roamed its vast plains. Ducks and geese populated its waters. Bears and wolves prowled through the forests. Deer and wild turkeys furnished many a pioneer family with food. The beaver with its soft fur tempted hunters and trappers. Covering the surface of the country were so many kinds of flowers and trees that many books would be needed to describe them. The fringed gentian, the trailing arbutus, the pink lady’s slipper and many another interesting and dainty flower used to grow in profusion. Huge forests of pine, hemlock, hickory, and oak could be found easily. Some of all these can still be found, but in vastly diminished numbers. Men came to America to make homes. They killed the wild creatures for food or for clothing, often only for the sport of killing them. They cut the forests for building shelters or for the purpose of clearing the land for crops. Animals that loved the deep woods found themselves without homes or food. As men increased, they decreased; sometimes they entirely disappeared. It was only when men

began to find that the forests were going, that many useful and interesting and beautiful things were fast vanishing and could never be replaced, that they began to take thought for preserving some of the rich heritage they had had in the beginning. Tippet 1937: 3-4

Spence provides a clear way of understanding the continuing effect of this discourse, and its attendant environmentality, that generated and sustains the national conservation movement. Spence notes that “generations of preservationists, government officials, and park visitors have accepted and defended the uninhabited wilderness preserved in national parks as remnants of a priori Nature (with a very capital N)” (Spence 1999:5). It is imperative to complete the argument that “such a conception of wilderness forgets that native peoples shaped these environments for millennia,” from which parks become the crystallization of discourses¹³ of “a continent awaiting ‘discovery’” (Spence 1999:5). It is this irony of settler colonial spatial practices, the place-making apparatus of the environmentalities of conservation, that spurred Cronon to write that “the movement to set aside national parks and wilderness areas followed hard on the heels of the final Indian wars, in which the prior human inhabitants of these areas were rounded up and moved onto reservations” (1995: 9). Cronon continues that “the myth of the wilderness as ‘virgin’ uninhabited land had always been especially cruel when seen from the perspective of the Indians who had once called that land home [as] they were forced to move elsewhere” so that “tourists could safely enjoy the illusion that they were seeing their nation in its pristine, original state, in the new morning of God’s own creation” (1995: 9).

The ‘land ethic’ that park staff wax poetic about at events like ALD (discussed in Chapter 2) take on a completely different character in this light. Even as these events serve to forge

¹³ This is similar in shape to what Henri Lefebvre refers to as ‘spatial practice,’ being visible signs of the quotidian and the routes that simultaneously binds and separates the socially meaningful designations of space in a society (1991). In Spence’s example, the lived spaces of Native American culture become resignified as pure repositories of the ontological category of ‘wilderness.’ We can see this process at work in early conservationist ideas for preserving ‘unspoiled’ Native American bands and the ‘unspoiled’ land that they inhabited.

connections, build environmental ethics and orthopraxis, and allow for the performance of emotion, these events also become the site of settler-colonial discourses that are dependent on knowing that attendees have an uncomplicated *right* to the practice of this pseudo-religious engagement with natural spaces.

Tie trees and imagined Indians

The history of the signal tree in American conservation discourse has its roots in the early part of the 20th century, but was a controversial topic even at that time. George H. Holt protested in a letter to the editor of the Chicago Herald on November 11, 1911 concerning the erection of a bronze tablet to mark an “Indian trail tree at Glencoe” (cited in Quillinan 1998: 4). Holt’s critiques are multiple. First, Holt notes that the tree was damaged within living memory, but also that those who believe this to be a “living relic” do not understand the manner of growth of damaged saplings (Elliot 1993). Additionally, Holt argues that Native Americans needed no such trail markers to follow well-established routes, find water or other resources, or for any other reason (Quillinan 1998: 5).

Others have noted that there is a surplus of literature on so-called “trail trees,” but that it is also primarily “limited to journalistic pieces and non-academic publications, often produced by a small group of enthusiasts and self-published writers” (Kawa, Painter, and Murray 2015: 184). Contemporary scholarly research often discusses signal trees under the rubric of the culturally modified trees (CMTs), although, as noted above, the use of CMTs by North American Indigenous Peoples is less well documented with regards to the use of signal trees. We can see this particularly as compared to well-documented uses for living trees, such as the capture of “sweet liquid sap of trees” or the collection of “resins, gums, and pitch” (Turner et al. 2009: 247). Turner et al., in a compilation of CMTs cross-culturally, do mention the signal tree, but

tend to lend much credence to the sources that other scholars have noted are “journalistic” and “non-academic” in nature (2009: 247).

How does this discourse displace the reality of indigeneity in favor of a tame Indian, whose marks can be read on the land, but is who is herself perpetually absent. Indians become an undifferentiated ahistorical mass, generically interchangeable, and homogenous throughout time. Not just a static homogeneity, but an absent one whose presence is signaled through a reading of the landscape for the traces of their activity. This tamed and anti-septic textual presence becomes a simulacrum of an Indian, one whose activity becomes a commodity and signal of cultural capital for the current possessors of these traces. Park interpreters can thus speak for this “identical copy” of Indian traces on the land (Jameson 1993:74). It is safe to do so since there is little chance that the presence of a real community of Native Americans will compete with white discourses of Indians. This cooption of Indigeneity is thus protected from competing with Indigenous voices, silencing the actual traces of Native Americans which, as we have discussed above, are the actual objective of restoration projects.

The signal tree, or tie tree, comes to resemble a signature, in the same sense that Derrida critiques, that both promises the *presence* of Native Americans but is fundamentally dependent on the *absence* of the person or persons that the signature denotes. Derrida applies the concept of *différance* to the dual “interval of a *spacing* and *temporalizing* that puts off until ‘later’ what is presently denied, the possible that is presently impossible” (1992: 278). One reason that we can see the erasure of the actual indigenous peoples within the discourse of the tie tree is due to the function of the tree as dependent on this present absence. The tree becomes the performance of an irretrievably lost Native American past, knowledge, and ecological practice. Of course, it is not lost, but is constructed around its own impossibility.

This discussion is not intended to be a denial of the concept that humans in North America may, at various times and for various reasons, have intentionally modified trees in this way. However, the arguments for the prevalence of these signal trees in the Mountain Stewards' literature is currently based more on a purely speculative basis. According to the Mountain Stewards, who are the primary proponents of the signal tree as a widespread Indigenous practice, there are several key reasons that point to signal trees' authenticity. They list seven key arguments in favor of their perspective: intuition, uniformity, morphology, shape, density, proximity, and age (Mountain Stewards 2007). Additionally, there is a supporting communication from a single dendrochronologist indicating that these trees are not 'freaks of nature,' but are culturally modified (Mountain Stewards 2007).

Taking the first four of their criteria we must note that much of the argument here is that these trees appear unique, which they move beyond without any discussion of how they arrive at the conclusion that 'distinct' means 'modified by humans.' As noted by the author of the Mountain Stewards page on the Trail Tree Project, identified only as a member of the group that met at HSP-CA but is most likely Al Knox, staff member of HSP-CA staff, "all of us at the meeting are people who came upon these trees...and thought they were very 'different'" (Mountain Stewards 2007). Having worked with Al Knox over the course of this fieldwork, I base this conjecture on having heard him state this in almost these exact terms. Other tree features, i.e. uniformity, morphology, and shape, follow as justification for that initial assertion of intuition of human involvement. This self-reinforcing argument becomes its own justification. "How can they look so similar unless..." becomes an argument that appeals back to itself as justification.

Density, proximity, and age are used as another way of authenticating these trees, where a vague assertion that these trees “are often found in relatively close proximity,” as well as in “areas known to be inhabited by earlier cultures of people,” and that they all appear to be “quite old” (Mountain Stewards 2007). Of course, with a settlement history stretching back at least 25,000 years, and with some estimates of U.S. indigenous populations in the 16th century at approximately 4.4 million people, we might well argue that there are few areas in North America that were not inhabited.

The question that we now turn to is how the potentially spurious discourse and focus on the tie-tree as an established fact of Cherokee, and other Indigenous Peoples, life relates to the kinds of settler-colonialism that renders the Ozarks as a White space. I argue that for my informants there are several key elements that make the tie-tree both attractive, but also functional in establishing a cultural, cognitive, and emotional link to the Ozarks. For many the tie-tree discourse constructs Native Americans as an absent presence in the Ozarks. Second, this discourse serves to replace Native Americans, whose ties to the land are ‘clearly’ deep and vital, with White authority to speak for that same land. Finally, this narrative places Native Americans as distant in time, thus dispossessed from all prior claim to the land.

This process is deeply entwined with the ongoing processes of settler-colonialism. Phillip J. Deloria identifies and analyzes how this kind of discursive and ideological “playing Indian” serves in the construction of American identities that functions within the displacement of interior and exterior the Indian Other (1998: 37). As Deloria notes, there is an imperative within the American settler-colonial mentality that provides the conceptual and imaginative field of identity construction. This imperative makes it impossible to “conceive an American identity

without Indians,” while “at the same time, there was no way to make a complete identity” in the face of a living Native American presence (Deloria 1998:37).

The present absence of the Indian on the land thus becomes centered not in human agency, but in the traces of their passage across the land (Derrida 1993:223). This meshwork of Indian presence becomes empty of disruptive or eruptive contestation over meanings. The motivation for understanding the meshwork of Native American lives, and the landscape that the passage of lives has made, is one that I find laudable (Ingold 2011:63). An uncluttered claim to ownership guarantees both the physical reality of access, but also the narrative canvas of the Ozarks landscape to write on which to write our own history. This history is uncomplicated by having to face the brutality and destructiveness of the settler-colonial social project.

At the same time, we must look to several issues, however, to understand that the Mountain Stewards mission has little to do with the reality of Native American lives and cultures, with the “entangled lines of life, growth, and movement” of real people whose culture informs and is part of contemporary Indigenous experiences. Taking the concept of the social imaginary drawn from Arjun Appadurai’s work on the transnational, we can see that the passage across the land that is being documented by the proponents of tie-tree mythology is part of the social imaginary of contemporary Ozarks and Appalachian white culture (1996).

Since this is not a practice considered important by contemporary Cherokee people, the absence of their voices on the practice allows the Mountain Stewards to achieve the status of de facto experts. The silence of Native voices appears both as compliance to this authority, but also makes it less likely that this authority and expertise will be disrupted by divergence or disagreement. A book sold through the Mountain Stewards website, *The Mystery of the Trees: Native American Markers of a Cultural Way of Life that Soon May be Gone*, even goes so far as

to argue that the lack of contemporary support or knowledge among Cherokee communities is actually due to the fact that “the knowledge of the existence [of] these trees, their use, and their being a part of the Indian culture was not well know (sic) to some tribal elders since this aspect of tribal culture had been all but lost” (Wells et al. 2011:i). The text of the book tends towards broad generalizations about Native American cultures, such as the statement that all “Indians believe that all living things have a spiritual being [and they] would offer up prayers for forgiveness before they would take the life of any living thing including a tree” (Wells et al. 2011:1). Fully taking part of the imagined “Ecological Indian” that Shepard Krech has described as “the dominant image...of the Indian in nature who understands the systemic consequences of his actions, feels deep sympathy with all living forms, and takes steps to conserve so that earth’s harmonies are never imbalanced” (1999:21).

The authors of the Mountain Stewards book on tie-trees are keenly aware of the criticism that has been levelled at the work on these trees over the century, or so, of writings on them. One of the primary Native American cultural groups that the Stewards focus on is the Cherokee, particularly since the two areas where the group is most active are Northwest Arkansas and in Appalachia. In *Mystery of the Trees* the authors note that seminal work by James Mooney does not include a single mention of tie-trees in any shape or form, even though he records other kinds of woodcraft and lore (2011:5).

Several of my informants at HSP-CA were instrumental in promoting and spreading the discourse of the tie tree (Mountain Stewards 2007). Al Knox, whose work revolves around trail maintenance in the park, is particularly vocal about these ‘signal’ trees. While there is not a firm agreement about the terminology, there are those for whom the signal tree is a cut and dried fact of indigenous life.

It is obvious how through this sleight of hand that these trees become conceptually owned, not by the Cherokee, but by the Mountain Stewards, and by extension the White cultures that have become the colonial inheritors of Native spaces. As the Mountain Stewards website declares, these trees become “part of our national heritage,” which requires White involvement to protect, thus salvaging this history as part of the inevitable chain of settler-colonialist society (2007). This process of mythologizing the Ozarks serves the function of generating ownership through discursively re-writing the meaning of the landscape (Barthes 2013). This process echoes that described by Eric Hobsbawm in his analysis of the invention of the traditions of nationalist projects (2015: 1-14).

In this way, the Mountain Stewards draw together conservationist ideology, discourse, and praxis with conceptions of Indian-ness that are more akin to Deloria’s “playing Indian” than they are to open engagement with Native American people and communities. Further, we can see how the fetishization of these trees as iconic representations of an imagined Indianness that is now lost, forgotten, or being erased is akin to Deloria’s description of the “object hobbyists” who he describes as being devoted to “the replication of old Indian artifacts and costumes” and often associated with a thriving trade in Native American artifacts and art (1998:137, 135).

These object hobbyists “looked to Indianness” in the development of identity and, for our purposes, systems of power and social governance. There are few keystones of the American governmentality and national identity than that of the Indian, which “has been central to efforts to imagine and materialize” identities in the US (Deloria 1998:129). In this kind of relation to Indianness, “Indian people were basically irrelevant” because Indianness had come to reside within and be embodied by objects (Deloria 1998:170). As Deloria notes, this is closely related to Marxist conceptions of commodity fetishization, these objects become invested with a kind of

life that obscures the reality of their production, by people living in specific social situations at specific times and places. In the Mountain Stewards literature we can clearly see this process crystalizing around the tie-tree, which becomes the physical embodiment of a “part of the Indian Culture” which has been all but lost even to “tribal elders” (Wells 2011:i). As Indianness is constructed here as a series of living semaphores, dotted lines that stretch generally between places known or suspected to have been Indian settlements, it can be read by anyone who knows how to read the land. Deloria notes that hobbyists’ use of textual Indians did not revolve around “authorship or...history,” but instead around the “words themselves and the people who encountered them, interpreted them, and derived meaning and import from their emotionally charged cadences” (1998: 167). Thus, a substitution is made on a subtextual level, the Indian that made the trees is interpellated with the viewer, where does the Indian who made the tree end and the new steward of the land and the tree begin? In fact, this discursive movement is intimately connected to the emotionscape of the park and the region generally for the Mountain Stewards.

Park staff at HSP-CA, particularly those in key administrative positions, have been instrumental in the propagation of the tie-tree discourse. In an article entitled “Arkansas Signal Trees,” published on a local news and culture site in December 2015, the author notes that the search for tie-trees began in earnest at HSP-CA in 2007 (Mitchell). Al Knox, the park’s “trail guy,” poses for a picture next to one of the trees in a photo included with the story. According to the Mountain Stewards a large number of tie-trees have been identified in Northwest Arkansas (Mitchell 2015; Mountain Stewards 2007). I have had several conversations with Knox and others about the HSP-CA conservation efforts for tie-trees, which is a key part of the current park identity. For Al, and then-superintendent Steve Chyrchel among others on staff at the park, these trees provide a physical “link between the Indians who lived here” and the contemporary

ecological and cultural conservation mission of the park. The “original stewards” of the land have “left” and it falls to the Mountain Stewards, the park staff, and similar groups to take up this role.

Cultural conservation, which includes this tie tree projects and a project to identify and conserve remaining Chinquapin trees within park boundaries, fits within the general conception of conservation at the park. Van Winkle Hollow, former site of the first steam-powered sawmill in the region, is located on Little Clifty Creek and is one of the primary historical sites on the park. Park staff uses the area to interpret several key themes in Arkansas history for visitors. As with tie trees the Hollow is used to illustrate the history of the Ozarks, particularly the extractive industry of logging that virtually clear-cut the Ozarks during the 19th and early 20th centuries (Brandon 2014; see also Smith 1986 for a discussion of this industry in the Ouachita Mountains south of the Ozarks).

Natives-Invasives in Restoration Ecology

The native-invasive dichotomy is a complex topic, one which could easily need further elaboration than we are capable providing here. Depending on the group, their particular concerns, or the topic at hand it was a frequent occurrence for any given conversation or meeting to end up with a lengthy discussion of identification of various invasives, the negative effects of invasive species on native ecosystems, and on-going attempts at remediation and removal, all shot through with impassioned performances of strong emotions in the space between love of native ecosystems and the hate of the invading species.

One late fall day, while I was volunteering at a Nature Conservancy/Buffalo River Foundation owned property, one of the key Nature Conservancy administrators was asked by various volunteers, staff members, and nature walk participants to identify various plants plucked

from the side of the gravel road cut into the side of the ravine, just below the road leading back towards Clifty and Ponca. Feats of identificatory prowess were common among the various experts on plants, with local experts and those with scientific training often engaging in an interesting back-and-forth of expertise. The Ozarker local experts often had narrative, what Tim Ingold would call ‘storied,’ knowledge of their plants, anecdotes of use, tidbits about attributed medicinal properties, or personal stories that highlighted first sightings or a plant’s role in local culture. Common and local names were commonly used (2011: 156-164).

For the scientific and ecologically minded, however, the use of latinate scientific names was common. This kind of expert also, often, was attributed the authority to declare a given species’ status as native, invasive, or place it within another relevant category such as edible. With the attendant value judgments that ecologists, and many environmentalists, now commonly attach to invasive species.

On this day, Tim would take the offered leaves, stems, or late flowers and give the name in a few seconds. Sometimes, he wouldn’t need to even touch the plant to declare it *Plantago major* and give a quick set of features used to distinguish it. “But, too bad it’s invasive,” he’d continue. One of the Ozarker experts would chime in about this, or another of the 20 or 30 such plants that Tim had identified, whether it had been useful in healing and how it might be prepared. In the case of this plantain the rejoinder from the audience, one of whom was considered an expert in medicinal and edible plants in the area, was the low exclamation, “I didn’t know that plantain was invasive, my Dad always said it was good for putting on wounds and you could make a tea out of it for treating stomach problems.”

This contestation, almost always won by the assertion that a weed, bush, or tree was an invasive, has its roots in ongoing environmentalist discourses regarding the negative effects of

introduced plants and animals. These invaders are the unnatural natural within ecosystems. I have overheard, or taken part in, many conversations like this one at HSP-CA.

“What makes Privet so bad?” The response, “Well, in addition to shading out slower-growing natives, it’s mostly evergreen here [meaning in Arkansas] which can keep sun from warming the water that it shades in the winter which kills the fish in the stream, too. I’m sure that it’s fine in China or Japan, but when it gets over here there’s nothing to keep it from going crazy and growing so fast that it chokes out anything that’s not ligustrum. It’s hard to kill it and it produces nasty berries all year round, too.” The key here is the aside that the plant is fine in its native habitat, where the speaker seems to presume that the plant has checks on its growth from other plants, animals, insects, and etc. in the ecosystem, but that here it is, as Mary Douglas would note, matter out of place (2000 [1996]: 44). In Douglas’s classic formulation about the role of ‘dirt’ and pollution in culture, she argues that symbolic systems embedded in cultural practice are produced by, and produce the categorical categories by which humans understand their environment (meant broadly to include the built, as well as, the ‘natural’) (2000 [1996]: 43). Systems of classification produce dirt and tabooed objects and practices, they are the “[byproducts] of a systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements” (2000 [1996]: 44).

The exchange that I relate above is not an isolated incident, I might give a conservative estimate of hearing hundreds of discussions of invasive plants and animals, the threats that each posed to vulnerable local ecosystems or species, the techniques for removal, all filled with acrimony directed towards the foolish people who imported these invaders willingly, and the ignorant who can’t or won’t stop aiding in their propagation. While this also contributes to the formation of environmental subjects affected by threats to the environment, it also directs action

towards a clear ‘enemy’ that can become the receptacle for the negative, but motivating, emotions that environmentalist discourses use to recruit new volunteers and activists.

At the same time, this use of a broad dichotomous schema is part of the way that activists are instructed in constructing ‘a stable world,’ one that is recognizable because its plants and animals belong to the place that they are found. There are, of course, numerous problems with this conceptual system since the term ‘invasive’ is not a stable one easily mapped onto plants known to have been introduced to a given ecosystem. There are numerous examples of ‘plants out of place’ who are out of place more for how they interact with their ecosystem, such as *Juniperus ashei* (often colloquially referred to as cedar) which is native to North America and occurs widely across major sections of the south, southwest, and midwest. At the same time plants like *Plantago major*, in the above example, are not treated with the same level of opprobrium or to aggressive remediation strategies. When pressed I have received various answers for this question, why is *Ligustrum japonica* (colloquially Privet or Ligustrum, which is often extended as a category to cover various related *Ligustrum spp.*). One is that it just doesn’t act invasive, although *Plantago major* is described almost exclusively by my informants, apart from several plant medicine and folk healing professionals, as being a weed that grows well primarily in recently disturbed soils, such as those found near roadways, new construction, and in landscaped areas. A second explanation for this oversight, particularly among my several informants who were multi-generational Ozarkers or interested in herbal medicines, is that the humble plantain has medicinal uses and is culturally a part of Ozarker medicines.

I have found that the more closely tied to European medicinal usage, and those that were introduced, unsurprisingly, the earliest during European settlement of North America are those plants least likely to be placed within the invasive category, but still be knowingly acknowledged

as being ‘non-native.’ So, there is some categorical shifting for Ozarkers as invasive plants come to be temporally linked not to European settlement of the continent, but later, most often during the 20th century. Sometimes this period shrinks further to take only into account plants that have most recently arrived in the latter half of the 20th century, as the use of *Ligustrum spp.* does.

This makes sense as plants are mobile in some of the same ways that people are (Pieroni and Vandebroek 2007). We wouldn’t be so worried about plants “escaping cultivation” if plants weren’t capable of conquest, as Jimmy, one of the maintenance workers at HSP-CA, pointed out. I would often pose the question, most often to some of the remediation and plant specialists at various meetings, how long does it take before a plant becomes native? Most answers are vague, and most environmental literature on invasive species often assumes that the categories of native, invasive, and naturalized plants are relatively stable ones with these definitions primarily resting on economic and environmental/ecosystemic degradation (Sax and Gaines 2008).

In some ways the category of natives is constantly slipping as evolutionary changes continue in spite of the ‘logic of inversion’ that turns an ecosystem into a bounded unit, with the contents of the system contained by these limits (Ingold 2011:148). The logic of inversion, then, is the process by which animals, or other objects of inquiry, are de-contextualized from their environments, the systems of their living world, and the unique paths that they take in, around, and through their environments. This logic turns a complex mesh of living things, vibrant encounters of animals, plants, microbes, landforms into a network of discrete points connected by lines (Ingold 2011: 63). This schematic view is what limits research into emotions and cognitions by begging the question of the *location* of these processes as being primarily internal to a given human or animal.

The same problems hold whenever any system is seen as a container for its contents as opposed to the immanent set of whole connections, pathways, and wayfarings of a collection of elements (Ingold 2011:148). Through this same logic, according to Ingold, human existence becomes described as “fundamentally place-bound” instead of “place-binding,” where life actually “unfolds not in places but along paths” (Ingold 2011:148). This process contributes to conceptions of environment that emphasize ecosystem services, or the concept that human survivability within the short term of a given environment is the primary lens through which we comprehend ecosystems.

A full review of the considerable literature on invasive species is not possible here, however, there are some key concepts that underpin contemporary ecological discourses in the Ozarks. Most discussions conform to the “conventional ecological wisdom” that “interprets invasive species” as uniformly disruptive, as opposed to native species which are the other side of the dyad that retains all of the positive qualities of nature (Foster and Sandberg 2004:178). This binary distinction is one that dominates most of the non-expert discourse, seeming to filter from trained specialists of varying levels of expertise.

The United States Department of Agriculture defines an invasive plant (a subset of all non-native plants) as a plant that is “able to establish on many sites, grow quickly, and spread to the point of disrupting plant communities or ecosystems” (NRCS). In relatively vague fashion these plants must “cause economic or environmental harm or harm to human health” (NRCS). Some authorities point to the ways that “invasive species eat, compete, and hybridize with native species often to the detriment of the natives,” which can cause the “loss of ecosystem services such as water filtration, soil stabilization, and ‘pest’ control” (Lockwood et al. 2007: 3). The terminological morass surrounding the definitions of key terms such as ‘invasive,’ ‘non-native,’

‘naturalized,’ and related synonyms (ranging from ‘alien,’ ‘colonizing,’ ‘escaped,’ ‘exotic,’ ‘nuisance,’ ‘pest,’ ‘tramp,’ and ‘weed’) makes definitive synthetic definitions difficult to find within the ecological literature (2007).

For my informants, however, this tangled web of terms seemed to have a much less complex set of conceptual and semantic features. Based on numerous discussions about invasive species and the general value of native ecosystems there are only a few terms that were the keystone concepts that became, following Sara Ahmed’s discussion, part of a process of affective stickiness (see Ahmed 2004: 89-92). Terms such as “invasive” were immediately understood, even in situations concerning problematic natives such as juniper, as they created a knowable set of surface features that were inextricably linked from emotions such as disgust, hate, and anger (Ahmed 2004). Much as any class on plant identification illustrates and names previously un-noticed features, such as the shape of the base of the stem of native grasses that can be mistaken for *Sorghum halpense* (better known colloquially as Johnson Grass), and then “surfaces” these plants with the appropriate terminology. This process of education occurs all around the Ozarks on every fine Spring, Summer, or Fall weeken, and even some Winter ones, at any number of state parks, trail systems, or other natural spaces where plant walks and invasive removal projects are in constant motion. The edges of trails become the surfaces of native-invasive competition, walks become education and indoctrination into the proper way of understanding and acting towards species.

This sharing of expertise is a multi-scalar cognitive and social event. In my experience these native removal workshops, and other kinds of nature walks and educational programs, serve as the context for the entangling of direct experience of the environment with conceptual systems and associated knowledges, both of which inextricably interpellated with affective

orientations towards the plants targeted at a given invasive removal activity. These nodes in the meshwork of everyday life serve as the direct point at which emotion and affect combine to color, and motivate future activist activity (Ingold 2011). The body of the activist becomes the site at which environmental affects are felt, and propagated through social networks. According to Ahmed, signs become sticky as an “effect of the histories of contact between bodies, objects, and signs” (2004: 90).

When I assert that invasive plants are sticky signs, I mean that just as with other strong emotions and affects that objects become bound “together in the very moment that objects become attributed with...feeling” (Ahmed 2004: 88). In a sense, of course, invasive species are merely “matter out of place” that highlights the system of ethnobiological classification that is part of the contemporary post-colonial/neo-colonial connected world (Douglas 2000). We must, however, move beyond this simple form and ask, how is it that these systems are formed, how are they navigated, negotiated, and communicated? Since we know that we are not merely presented with a classificatory scheme at the time of our birth which we then enact throughout our lives (see Ingold 2011 and Milton 2002), we are instead active agents in the propagation, re-creation, and habituation of cultural forms. We also know that these classificatory schemes are cognitively relevant and that these cognitive forms are part of an enacted aspect of how we process the world around us (Nolan et al. 2006). How do we connect these potentially divergent processes? In the Ozarks expertise and simple, transmissible discourses can create the perception of unity and coalesce senses of self and kinds of land ethics.

The hate of invasives, much as with Ahmed’s notion of disgust, rests on direct multi-directional contact (2004: 84-89). While invasive hate serves to both signal types of intolerable contact, it also “involves a relationship of touch and proximity between the surface of bodies and

objects” (Ahmed 2004:85). Within the context of ALD and other events held at HSP-CA, as well as through training programs such as the Arkansas Master Naturalists, identifications of invasives occur at the fingertips; they occur with direct social contact, and at the level of bodily engagement (with tools such as backpack sprayers filled with glyphosate and chainsaws); this engagement is one that puts one in proximity with the hated object and through the feeling of work in its liberating and its painful aspects it links the activist body with the disgusting, the destructive, and the murderous invasive species.

While the hate of a given target species is one part of this process though which my informants share and gather knowledge about the Ozarks and its ecosystems, hate alone is not the only ‘sticky’ emotion that marks the ways that activists understand and experience the Ozarks. The BRF, BRWA, StO, and other groups are predicated on the ways that positive emotions are also sticky, although a righteous indignation might be the ambiguous outgrowth of positive emotions as predicated on the ‘threat’ to native species, water quality, etc. As Ahmed notes, the affect of the world around us is part of our toolkit for constructing and coping with the world around us. Ingold’s description of a world that is not limited by the logic of inversion, where even our “skull is leaky [and] the mind is what leaks!,” seems true because “the processing loops involved in perception and action are not interior to the creature whose mind we are talking about” (2011: 86). And yet, the world IS surfaced in various ways in spite of the “fluid space” that Ingold describes (2011: 86-87). It is the sticky affects of love and hate, of aggravation, frustration, ecstasy, and enjoyment that give us some the capability to undercut the same surfacing with water-language and karst-thought that will be the primary subject of the next chapter. The quick tacking back and forth between the rhizomatic haecceities and the arborescent

ontologies of the clade and guidebook are some of the specific ways that Ozarks environmentalism is woven through the mesh of Ozarks-ness.

I just went back to my field notes to try and find a single interview or respondent that did not use some form of these sticky and surfacing ways of speaking. I couldn't find a single one across interviews with volunteers with the BNRP, BRWA, BRF, various Master Naturalists, volunteers with the Nature Conservancy, the board members of StO, and various other individuals. The ubiquity of emotion denies the role of an unbiased objective rationality that is expressed in the rejection email that I discussed in the introduction.

Native Plants and Animals and Native People: Concluding Thoughts

What the preceding discussion of the native and invasive dichotomy leaves out is the links between humans and animals that I made in the Introduction. Returning to the idea that invasive feral hogs are a danger to life and limb, we can see that the emotional investments in returning the Ozarks to an imagined ecological "normal" are sometimes drilled down to the level of the existential. Even when the 'harm' wrought by an invasive species takes on a purely ecological character, as with invasive grasses and trees, I have had conversations with environmentalists that discuss the potential effects on the environment of the Ozarks as one that is present and dire. I do not in any way want to minimize this perspective, there are real effects of destabilization, decreases in biodiversity, and other possible deleterious outcomes such as erosion and increases in uncontrollable wildfires that can be related to the uncontrolled introduction of invasive species. At the same time, I note the deep irony of white settlers bringing with them their creatures of empire, and then generations later decrying and disavowing these species as if their forbearers were not implicated in these creatures' arrivals (Haraway 2016: 15).

Native Ozarkers have become native to the place, through some of the practices detailed above, among others, but these other plants and animals are still seen as eruptions and disruptions to the normal ecological systems of the region. I once vexed a conservation biologist by asking how long it would take for Privet to be considered native to North America. As far as I can tell it is much easier for humans to colonize and become native than it is for the seeds, spores, eggs, and animals that we bring with us. From my frustrated biologists' perspective the disruptive influence of a feral hog, or a wildly multiplying Privet tree and its teeming berries, or the ravenous spread of a kudzu vine is much more clear and quantifiable than the effects of white settlement and dispossession. At the same time, it is clear that the transition from Native American management modalities in the Ozarks has wrought changes on the landscape that we only seek to address and remediate in a very limited and myopic manner through the creation of small 'protected' areas, and tenuous social and political structures.

I wrote of the *oursness*, the owned quality of land from which my Ozarker contacts derived a narrative sense of self. The systems of possession, story-telling, knowing, feeling, and doing that I describe articulate with the ongoing story of environmentalism and conservation in the United States. The environmentalism-cum-romanticism of Teddy Roosevelt and John Muir gave us a vision of a "clean, safe wilderness appropriate for tourist viewing" (Wellock 2007: 58). These spaces would be felt as the preservation of the forest temples at which these tourists could sip at a divine table. The sleight of hand where Native Americans were dispossessed and then ownership of these spaces was bestowed on the white settlers who were the heir-apparent on the clean, safe, and *empty* field. This process builds a sense of ownership from a vocabulary of hills, hollers, hogs, steam sawmills, Ozarkers, Arkansawyers, hillbillies, hicks, watersheds, karst,

among a near infinitude of other terms. When park staff refers to Parks as Nature's Cathedrals, they are begging the question, *whose Cathedrals?*

Environmental restoration is predicated on harnessing the systems for propagating knowledge of natives and invasives, and the means through which environmental perception becomes an ongoing game of is [x] plant *native or invasive*? Socially these perceptual modes seem to find their propulsive affect in the emotional performance of *hatred* and the surfacing of the environmental world in this specific reductive discourse. Environmental restoration projects then are part of a larger settler-colonial project, but take their propulsive force from this inversion of the dichotomous native-invasive pair. It is because it is possible for settlers to become native that the irony of invasive species being an existential threat to the settler-colonial society along whose own pathways their seeds were strewn initially. The rise of the restoration project is one of the primary sites of environmental labor. This labor depends upon the cognitive and emotional labor that is generated through the discursive environmental model of natives and invasives. The discursive effect is one that further removes 'native' from a context of Native Americans as recently disinherited, and the land as ethnically cleansed of them and their cultures, and one that only admits to usage in terminologies and systems of thought that tend towards a reinforcement of the settler-colonial project.

While the settler-colonial project has yet to be overturned through scholarship concerning it. The reliance on elisions and lacunae invites us to consider that its hold on restoration must be tenuous indeed if we can begin to address this system through the revision of educational materials, the inclusion of Native Americans on panels and as educators, and the counter-hegemonic assertion that Ozarks history begins well before the history of American colonial-settlement in the Ozarks.

The critique that I make above is not an argument against parks, or conservation, but an argument *for* inclusion and decolonization of the parks system. National and State Parks, and their smaller urban counterparts, are not accessible in an equitable way for most non-white Americans (Byrne 2012; Dai 2011; Heynen, Perkins, & Roy 2006; Leslie, Cerin, & Kremer 2010; Wolch, Byrne, and Newell 2014). Solutions to these issues would need to include changes to land use, city-planning and directed development, and economic changes to address income inequality. At the same time, if the narrative of American history is not changed to tell a more diverse and accurate story, and the internal culture of the parks systems does not change, then structural changes would still be insufficient. I advocate for a two-front approach where structural issues are addressed simultaneously with restoration projects, and narratives of place are re-told to include the actual diversity of the places that we inhabit.

This is a long-term solution, but one that is by no means impossible. I don't believe that settler-colonialism as a whole could be simply uprooted through the changes that I outline above. However, if the process of decolonization can start anywhere, the means through which ecological restoration could serve as an initial starting point is ready enough at hand. Forcing the discussion of dispossession, ethnic cleansing, and adding complexity to our narratives of place would go a long way towards hastening the reconciliation that is necessary for acknowledging and changing the current system. A parallel might be the ongoing cultural discussion related to monuments put up valorizing and memorializing Confederate generals and troops. The discussion about how white supremacy is reproduced through the symbolic medium of *lieux de mémoire* may serve as a jumping off point for this similar decolonizing cultural project (Nora and Kritzman 1996).

The new modality of parks interpretation, through which Native American participation would be woven, might be messy. These new histories and stories are particularly tangled and complicated compared to the kinds of settler-colonial fables that are told about white settlement currently. “This tangle is the texture of the world,” though, and our stories of ourselves can and should be told in ways that respect the lines of movement that sometimes gratify us and sometimes ask us to be better and do better (Ingold 2011: 71). It is time for the stories that we tell about history to become more complicated.

Uncomplicated stories are the product of the “moment of hegemony” according to Antonio Gramsci, notable Italian Marxist and social theorist (Mann 2007). I have shown in this chapter how these uncomplicated narratives allow white imaginaries to be written in the silences and elisions of the official account of history. The ‘tie-tree’ can only become the primary gnomon of Native American traces on the land when the work of silencing and removing actual Native peoples and cultures is nearly complete. Parks should acknowledge their role in crystallizing and actualizing cultural values and social imaginaries of the wider socio-political field, as I note in the epigraph by Spence at the beginning of this chapter (2000: 7). Acknowledgement requires more than a nod towards this concept though, I would argue that parks must become sites of re-narrating histories that include all parts of the history, and not just the neat and self-serving stories that reinforce white settler-colonialism and other systems of racial inequality.

In the next chapter I move to a discussion of how political and social boundaries are being subverted through social and cultural practices that take water and karst as their primary tools for thought. This discussion of *karst-thought* and *water-language* as a means through which new forms of social organization are occurring in the Ozarks allows us to see how the

performance of emotion, cognitive modes for understanding the natural world, affective strategies for feeling local environments, and the complexities of ecological restoration take place in the context of activism that is capable of moving against the grain of social and political systems. I argue that the prevalence of the watershed, and the role of karst in thinking through ecological issues in the Ozarks is one means through which Ozarkers effect change in systems, in governance, and on landscapes and ecological systems.

V. Activism Subverting Boundaries: Karst-thought and Water-language in the Ozarks

Hist, in hogsback woods! The haystacked
Hollow farms in a throng
Of waters cluck and cling,
And barnroofs cockcrow war!

-Dylan Thomas, from "Prologue" in *Collected Poems* [xxiii-xxiv]

"You want to go see the sinkhole?" asked Stephen, one of my key informants, after a big breakfast and a long interview with him and his wife. Of course, I was excited to see their solar set up, with its web-enabled logging of power production, Stephen and Charity had frequently invited state officials, employees of SWEPCO, and other activists to come and view their set up and see just how simply solar could become the solution for power production. Stephen and Charity are two of the key figures working with Pat Costner's Save the Ozarks group, whose campaign against a high-voltage transmission line cutting through some of the most scenic parts of the Buffalo River Watershed (across the King's River, specifically).

I arrived at Stephen's and Charity's house early enough to get a full plate of scrambled eggs and veggies, along with a hearty slice of toast. While we ate I had a chance to ask Stephen and Charity a number of questions, informally teasing out a history of activism and of the Ozarks. Stephen and Charity's history involves decades of visits, friendships with residents, but most of their working life was spent in Washington D.C. in the jewelry business. "What brought you to the Ozarks? How did you get involved with SavetheOzarks (StO)?" Charity replied, "Well, we had been planning to retire, but when Pat [Costner, driving force behind the anti-SWEPCO transmission line group Save The Ozarks] called us saying that SWEPCO was going

to clear-cut their way through the Buffalo River for those power lines, well we sold the business and we were here helping her as soon as we could.” Stephen and Charity aren’t the only ones to have come running to help protect the Ozarks, a number of activists are those who retire to the Ozarks with the goal of protecting the things that made them fall in love with the Ozarks in the first place.

After our discussion, with the dishes rinsed and put away, Stephen and Charity took me on the full tour of their property. Although it had been a chilly morning, the day was already comfortably warm. Stephen and Charity walked me along the property line on the south side of the property, pointing out a huge area that had been ‘appropriated’ by a cantankerous neighbor who had shifted his fence to take a few hundred square feet of property to make room for a new out-building on his property. This blatant flaunting of the law and social decency seemed particularly vexing since Stephen and Charity had spent the better part of their years in the Ozarks working to prevent the eminent domain seizures of property for SWEPCO’s planned high voltage transmission line.

For Stephen and Charity, and the many supporters across the Ozarks, this violates strongly held beliefs in private property, ownership, and the right to be left alone on one’s property. These beliefs about property owners’ rights are not always aligned with environmental causes, the Battle for the Buffalo and the ensuing years of National Park Service management of river tourism often pitted those who fought to preserve the river against land-owners and business operators against one another (see Compton 2010 and Butler 2014). Many of StO’s activists were aware of, or actively worked with, activists who are fighting against eminent domain laws in Arkansas.

“See those trees over there” Charity said pointing across the spur of the Kings River that their property adjoins. I noted that they had the definite signs of having been girdled, had a strip of bark removed all the way around the trunk. “Yeah, our neighbors don’t do anything to discourage the beavers from coming up here and killing the trees, and then just downstream from us our neighbors moved their fence about 50 feet into our property line, that must have happened right after the surveyor came, but right before we moved in,” Stephen added. These two comments seemed to relate to the dual understanding of ‘private’ property being put into play. Beyond the overt political strategy of contesting eminent domain laws as a means of resistance against government over-reach, these comments reach to a particular idealization of private property owners as potential community members, but also as erstwhile competitors (at least potentially). While the role of government in the transgressions against private property have a certain cache in the region, regardless of one’s political leanings, these criticisms also serve as a counter-hegemonic narrative that disrupts the use of governmental authority as a catspaw for local, regional, national, and international corporate interests. This is the role that eminent domain protest plays within the context of StO-aligned activists.

This is an issue that cuts across contemporary American political divides in a historically nuanced way, as the Arkansawyer and Ozarker distaste for external authority has often made little distinction between outsiders affiliated with government entities, and those who were affiliated with corporate entities. This is a general thread running through much of the response to attempts to impose authority from outside the region, Ozarkers have often been a thorn in the side of even attempts to govern the region from far-flung regions like Little Rock (see Blevins 2002).

Their argument is tactically appropriate for their campaign. They make the case that SWEPCO's use of business-as-usual regulations allows them to cut a quarter-mile wide swathe through some of the most scenic and tourism-dependent parts of the Buffalo River watershed. They further argue that the SWEPCO plan relies heavily on industry-controlled regulatory bodies and the taken-for-granted use of city, county, and state eminent domain laws and regulations. The argument is one that fits easily within the local conception of Ozarks identity that one should be left alone to live as they please on their own land. This argument has worked as easily for those seeking to block the national river designation for the Buffalo as for StO's anti-powerline campaign.

I argue that there are several linked tactics ranging from the discursive and conceptual to specific structural and organizational principles that are key to current activist networks within the Ozarks. Further, these networks tend to subvert, alter, and cut against the grain of contemporary political boundaries and geographical limitations. I use the term *karst-thought* as a way of highlighting the mobile, systems-based discursive and conceptual thinking that appears as a key way for activists to understand their activism (both in its day-to-day functions, as well as in defining the goals of their activism). There is, at the same time, a set of real organizing principles, actions, and functional engagements with political process, coalition-building, and activist recruitment that I refer to as *water-language*. Karst-thought is a set of ecologically-grounded ways of thinking that are used to think through problems and systems, while still foregrounding the shifting footing and empty spaces that make up the "solid ground" of the Ozarks. This way of thinking depends on an understanding of the karst topography of the Ozarks that is "characterized by sinkholes, caves, and numerous springs" where "groundwater permeates the limestone and dolomite, it dissolves the stone and washes much topsoil away with it"

(Campbell 2009: 2; see also Rafferty 2001). This understanding is one that thinks through the space within solid things, it sees openings, it notices the flow of water through the solid, it puts activists within a mental space where the invisible is the inevitable support of the visible. This thinking makes the underwhelming sinkhole that Stephen and Charity took me to see into the visible proof of an invisible process, the external signifier of the internal signified. The productive slippage between these occasional signifiers to the resounding truth of the karsty signified is a productive one for researchers like Dr. John van Brahana¹⁴ whose work seeks to intensify these proofs of the lines of movement that water makes in passing through the land.

This kind of thinking is one where the phrase “we all live downstream” is addended with the acknowledgement that what is deposited, dumped, or left on the ground will eventually end up in the river, the ocean, in plants, in animals, and in humans. This kind of thinking is one that sees the solid ground as a conduit for liquid, whether pure water, snowmelt, hog waste, or fertilizer. Karst-thought takes the watershed as another key organizing principle, a way of thinking that provides a localizable way of linking your activities to a whole flowing system of water movement. You are always thinking and acting on this conceptual background whether in the middle of a drought or the middle of a torrential downpour. Of course, water (as any trail-builder will tell you) follows its own laws, and the boundaries of the watersheds that matter most to my informants (the Illinois River Watershed, the Buffalo River Watershed, and the Beaver Lake Watershed primarily) are mapped across multiple overlapping municipal, local, county, and even state boundaries.

Water-language is the necessary adjunct to this way of thinking. Numerous times throughout my fieldwork I would be asked, “What watershed do you live in?” The stand-and-

¹⁴ Dr. Brahana is instrumental in research on water quality in the Buffalo River Watershed.

deliver moment was one that both tested your credibility as an expert and activist, but also was the secret sign by which you would be known. Those living in the same watershed skipped the prefacing conversation about what issues are/were pressing, what events to mention that would be relevant to one another's activism, and other similar conversations that would be a necessity for 'outsiders.' You would flow together, socially and spatially converging into a larger stream of activist and environmentalist activity and social solidarity.

I am by no means the first one to identify the ways that watersheds have become an important feature of environmentalism and environmental thinking. Watershed consciousness has been a feature of environmentalism, particularly within the subset of environmental bioregionalists, since the 1970s (Parsons 1985). The roots of this kind of thinking are deep, and go back to John Wesley Powell, founder of the Bureau of American Ethnology. Powell argued for a Western expansion that "depended on topography, surface water sources, and cooperation" that would make parcels "irregularly shaped" as they followed the "undulations of watersheds" (Lockyer and Veteto 2013: 8). The fundamental violence of white settler-colonialism is a non-issue in most bioregionalists' accounts of place, which is an omission that I think can be corrected as I note in the previous chapter. This kind of thinking is fundamentally bioregional, and features "forms of direct democracy and consensus decision making" (Lockyer and Veteto 2013: 9). There is a clear antecedent to current forms of thinking that Brian C. Campbell details in his ethnography of back-to-the-landers who worked to create a sense of the Ozarks as a "distinct biopolitical, as well as bioregional entity" (as quoted in Campbell 2013: 59). At the same time, the *karst-thought* and *water-language* that I discuss here is not part of a back-to-the-land movement, and in fact very few of the contacts that I have made are making a full break with contemporary Arkansas and Ozarks society and politics, such as Campbell describes (2013).

I invoke the karst and water in my theoretical formula to discuss the constant movement between ‘politics-as-normal’ in American society and the bioregionally-focused ways of thinking through space and solidarity that deny these same social and political realities. My contacts are not back-to-the-landers, they are folks who live in Fayetteville, or Eureka Springs, or Bentonville and spend their evenings and weekends on the Buffalo, or at a state park, or riding the Ozark Greenway on a bike.

Stephen and Charity’s sinkhole is a physical manifestation, a present proof of the links between solid earth and flowing water. While I stood in the cool morning air looking down at the several foot-wide depression the conversation turns to one of the primary assertions of the StO criticism of SWEPCO’s proposed transmission lines. “You know, they wanted to cut a quarter-mile wide corridor, and guess what they do to maintain that easement?” Charity asked. “Not sure, seems like a lot of work,” I replied. “Well, they broadcast spray roundup every couple of months, guess where that ends up?” came the reply. “Well, everything ends up downstream, right?” I replied. “That’s right, all of that would end up in the Buffalo, or the Kings [River] or somebody’s well.” Much of the organizing that occurred within the StO rubric engaged this sense of “we all live downstream” which is not just a slogan derived from Pat Costner’s book *We All Live Downstream* (1990), but part of a larger organizing principle that has been adopted among many local organizations. The various watershed affiliated groups, such as the Buffalo River Watershed Alliance, or the Illinois River Watershed Partners (IRWP) are at the forefront of these social organizations of landscape which utilize strategies for thinking through water. The tracks and secret paths of water are lines of flight that take environmentalism out of, and across categories of locales, whether these locales are individual communities or larger state structures. This political strategy goes beyond ways that social groups have resisted being made legible by a

state. The empowering aspect of organizing and building social structures on a bedrock of karst can be seen in the ways that the BRWA and IRWP have created communities of action, welded together geographically and socially distinct enunciatory communities (see Fortun 2001). The advantages to cutting across governmentalized localities is that these groups can tactically adopt the techniques of statecraft to become legible in specific and controllable ways. These groups, and the way that they invite Ozarkers and others to conceptualize ecosystems and environments, are a “breath of fresh air,” as it was described to me during the StO event celebrating SWEPCO’s retraction of their transmission line plan. This breathing space opens up opportunities for imagining new social, political, and economic realities. At this same event I overheard several conversations about “building our future” as active agents whose collective power comes as a part of the movement of water over and through the Ozarks landscape.

This chapter relies heavily on the analysis of Tim Ingold’s “logic of inversion” in the functioning of environmentalized areas and social organizations (2011). What Ingold describes is seen in conceptions of how individuals are understood to interact with the world around them. Through this logic, the field of our involvement in the world becomes “an interior schema” that manifest in appearances and behaviors as the outward expression of the interior (Ingold 2011: 68). Perhaps the gymnastics through which social scientists have put themselves concerning the nature of emotion (internal state vs. social construction) or the nature of cognition as an individual and internal capacity that interacts through a series of inputs and outputs is an outgrowth of this general logic, as identified by Ingold.

Ingold explains that the logic of inversion is not merely the province of social science and social theory, but it also has found purchase in general modes of social organization, cultural discourses of selfhood, and the way that environmentalists with whom I worked tended to

discuss how they related to the world around them. This general interface of selves with not-selves is “deeply sedimented within the canons of western thought” according to Ingold (2011: 68). At the same time, I argue that there are distinct discursive and cognitive modes, termed *karst-thought* and *water-language*, that describe the ways that Ozarker activists are organizing in the region. These conceptions are important in the ways that environmentalism in the Ozarks has the potential to provide a line of flight outside of the closed circle of inversion, and into a socially and politically relevant counter-point to this logic.

Water-language and karst-thought are two strategies that both escape the closed circle of politically relevant units, the kinds of units that states are most able to see (see Scott 1998). Even as they may establish, or do establish other competing closed/inverted loops, these counter-hegemonic definitions of solidarity work to re-center political, social, and environmental action within locally-referent units. No longer do we see Fayetteville, or Harrison, but we see larger and smaller overlapping watersheds that link multiple communities.

As evidence we can see that the ongoing protests against the Concentrated Animal Feeding Operation (CAFO) ‘hog farm’ given a permit by the Arkansas Department of Environmental Quality (ADEQ). The Buffalo River Watershed Alliance (BRWA) describes the farm, located “near Big Creek, West of Mt. Judea, (Hwy. intersections 74/123) in Newton County, Arkansas,” as “the treatment facility will consist of shallow pits with a capacity of 759,542 gallons, a settling basin with capacity of 831,193 gallons and a holding pond with capacity of 1,904,730 gallons” which “amounts to 2,090,181 gallons of manure, litter, and wastewater per year, equivalent to what the city of Harrison produces” (Stewart 2017).

One early event that I attended after beginning my project was a protest organized last-minute by the BRWA at an event attended by the Governor of Arkansas, Asa Hutchinson. The

protest was conducted by BRWA veterans, who had materials and strategies that had been well-developed over the course of prior protests. People from all over the Ozarks piled out of car after car, my final estimate was that at least 80 people attended the protest on a weekday with little prior organizing.

I made some rounds, trying to meet as many people as possible, which was made easier by the way that t-shirts, signs (both for home and for the protest event), bumper stickers, fliers, informational brochures, and other informational materials were passed around and shared by protesters. During my brief discussions with dozens of my fellow protesters, I found out that some of the protesters had driven more than 45 minutes or an hour to be at the protest well in advance of the Governor's arrival. The event may have been haphazardly organized, but the attendees were used to the ordinances concerning protesting, and ensured that we would not be ordered to leave by the State Police. As the protest progressed through the day, I heard plans for protests made and passed through the crowd. "Hey, are you going to be at the float [referring to a canoe float protest to bring awareness to Buffalo River water quality]?" was a question that I heard several times, and answered myself!

Events like these take the scientific and hydrogeological research of Dr. John Van Brahana and his research collaborators, and combine it with the narratives of historical struggle for water quality and natural preservation from Dr. Neil Compton's and the Ozark Society's 'Battle for the Buffalo.' Discursively within this mixture of fine-grained hydrogeological research we can find the appearance of karst-thought as the near-fatalistic acknowledgement that the existence and operation of the CAFO within the Buffalo River watershed as "both water and air pollution are certain" (Stewart 2017). The solid ground underneath the CAFO is known to be prone to the

kinds of polluting processes that allow waste to enter the realm of purity (Stewart 2017; Douglas 2000).

It is not just the acknowledgement of potential harm that lead to the protest that I briefly describe above, but the organizing power of water-language in communicating danger in and to purity. Organizing discourse penetrates the same spaces that the water flows within the watershed, and even calls those who build a sense of self around relating to the Buffalo, into moving along with it. Water-language is what permeates the discursive karst at these events. It is held in reserve as it draws activists together. I think the preponderance of water metaphors is no mistake in these accounts and in the interviews and social interactions that I have had.

Scientific discourse buttresses the organizing principles of water-language. Van Brahana research papers (such as Murdoch, Biting, and Brahana 2016; and Brahana et al. 2016) serve to transmute the solid ground underneath the clay waste-holding pools into the threat that “any opening in the soil could be the entrance to a sinkhole or cave yet undiscovered” (Stewart 2017). The invisible world is made visible, the emptiness within the solid becomes the defining characteristic of the solid, and not the exception. Science becomes the means through which dissolved oxygen, karst geology, and a push to require dye-testing to make these invisible passages through rock become visible and present experience of the Ozarks. We can see that the Ozarks watershed then becomes a kind of peculiar land ethic that defines proper and ethical ways of interacting with the land that acknowledge that your backyard and its conservation are aspects of an invisible social and environmental network.

The creation of the Buffalo National River (BNR) was a huge success for environmentalists within the boundaries of the BNR versus unprotected areas that the Army Corps of Engineers were racing to dam up as part of the mid-twentieth century flurry of infrastructural growth. Tom

Butt, in a memoir about floating the Buffalo River describes it simply stating “dammed rivers do not flow wild and free, riverside farms are drowned and their owners evicted, so it was not without its cost [however] again, and again, throughout Tennessee, Alabama, Missouri, and Arkansas, in the mid twentieth century, the social cost of this was trumped in the public’s eye by the benefits...and the mountain rivers were dammed, and tamed, and harnessed” (4). Butt joined the Ozark Society as a twelve-year-old, donating his “hard earned lawn mowing money” to contribute to the first “Battle for the Buffalo River” (6). The social upheaval of the damming process may have been avoided, but Butt also notes that the creation of the National River also “caused the condemnation and removal of hill families from their ancestral farms,” and the narrative of which has been remixed and remade across the social groups affected by the battle over the CAFO and its multi-million-dollar financial backing (6).

The ways that water-language and karst-thought allow social solidarities to imagine localities is a line of flight out from the ways that “localities articulate with the state on a one-to-one basis and with each other only minimally or not at all” (Agrawal 2005: 91). Through the organization of new localities, such as the linked watersheds of the Ozarks, contemporary social, geographical, and political localities are overlaid with the impetus to organize and act across less-permeable barriers. In the case of water activism, which is often based on a “not in my backyard” mentality, this creates a much more mobile and politically explosive conception of what space is under a given person or group’s purview. Pat Costner, founder and lead activist for StO, has told me that when “we discuss water issues, well, the back yard gets pretty big.” In the Buffalo River watershed, your back yard might include your line of sight across multiple valleys full of wildlife, small homesteads, and all the way to the low line of mountains on the other side.

The “viewsheds” are part and parcel of the linked conception of space and place imagined and enacted by karst-thinkers and water-talkers in the Ozarks.

Karst-thought and water-language are also techniques for turning the tools of statecraft, bureaucratizing practices and political structure-building, from their traditional targets, the citizenry (whether peasants, small-holders, or other forms of local communities), and towards the state itself. James C. Scott’s seminal *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* serves as the source for much of the discussion that follows (1998). For Scott, the legibility-processes of statecraft create governable locales, citizenry that become *flattened* into discernable, but limited, units (such as by race or ethnicity, religion, profession, gender, or whatever other categories are necessary). Similarly, Agrawal describes this process as it occurred in rural Indian villages, where the state applied new procedures to govern forests and generated forest councils that “greatly expand the realm of visibility for officials in the revenue and forest departments” (2005b: 6).

Local legibilities that are created around the Ozarks involve complex definitions of tourism and trade, local livelihoods based around tourism, and larger-scale economic processes that involve transnational business and wealth, such as that which financed the CAFO (identified as a Brazilian corporation by the BRWA) and more subtly the role of Wal-Mart, Tyson, Cargill, and other business interests local to the region. As with the social coalitions formed by US environmental advocats in other areas, “new social coalitions have been formed...to fundamentally challenge how the risks and rewards of industrial society are distributed” (Fortun 2001: 15).

Detour Through BRWA Karst Advocacy

The BRWA is particularly active in developing and deploying *karst-thought* and *water-language* in their advocacy against the CAFO “hog farm” that was built in the Buffalo National River Watershed. Van Brahana and the other dedicated researchers, volunteers, and network of advocates use hydrogeology and public science education to re-conceptualize the Ozarks. In this section, I will discuss several recent posts made on the BRWA Facebook page. These posts highlight several key issues in the ways that karst and water are actually used in the practice of advocacy for my respondents and contacts.

First, *karst-thought* is one that hinges on re-visualizing the ground, and landscape, as porous, and not as a firm foundation or stable field on which the built environment is simply placed. This revisualization is accomplished through the language of hydrogeology, and through the use of various forms of visual representation. These representations range from photo series detailing sinking streams (and hence the reality of groundwater movement), and diagrammatic representations of karst structures as examples to imagine through.

Second, *karst-thought* and *water-language* in advocacy tend towards the articulation of systems as being under threat. This risk-based language resembles other kinds of environmental calls-to-action that rely on an affective use of threat that is prone to becoming “logically recessive,” to use Brian Massumi’s terminology (2010: 55). What is meant by this construction is that it relies on a relationship to “fact” that continues to be justified no matter how far one retreats from that fact. Massumi’s subject concerns the use of threat and risk in justifying the Iraq War perpetrated by the administration of George W. Bush, but the same conceptual use of threat seems to be in play here. For Massumi the process begins with a justifying fact for action: Saddam Hussein possesses weapons of mass destruction, and then becomes Hussein possesses

the capacity for such weapons, and then becomes Hussein is working to (or would or could) build such a capacity (Massumi 2010: 55). This “affect-driven logic” ensures that the actual facts are continually in play, even as these facts cannot materialize a “clear and present danger—or even an emergent danger” (Massumi 2010: 55). Even as the threat to water quality is much more assured than the threats of weapons of mass destruction in Iraq, these calls-to-action use similar forms of self-justifying affective logic.

A recent post on the BRWA page can serve as an example of the affective logic of *water-language* that is used strategically to build and sustain BRWA’s advocacy. The post reads:

Why are we so obsessed with “karst” geology in the Buffalo River watershed? When you think “karst”, think of swiss cheese. If you were to drop 3 inches of rainfall on a bean field in south Arkansas, the water would seep through the soil to a depth of 10 or 15 feet over the course of a year. If you drop the same amount of rainfall near the Buffalo which is all karst, the water will seep through a thin layer of topsoil after which it can easily travel 200 feet in a DAY! That is why karst environments are so much more vulnerable to pollutants. BRWA 6/18/2017

This passage utilizes both of the strategies that I outline above. The anonymous author weaves together the visualization of karst geology, a factually-grounded description of water movement, and the affective threat of pollutants that serves as the keystone for advocacy against the waste storage and disposal of the industrial agriculture practiced by the CAFO farm.

Karst-language and Water-thought in Enunciatory Communities

I use Kim Fortun’s conception of *enunciatory communities*, as separate from ‘stakeholders,’ as a way “to account for the emergence of new subject positions, as entrenched signifying systems are being challenged and displaced” (2001: 13). The stakeholder model, which is deeply ingrained within both activist and governmental systems, is one that “can’t seem to tolerate much complexity—or much dissent” according to Fortun (2001: 11). Examples of this abound in literature on conservation efforts across diverse social and cultural contexts (see Fortun 2001,

Satterfield 2007, West 2006, and Vivanco 2011 for examples across multiple continents).

Enunciatory communities, such as I describe using Ozarks karst-language and water-thought and the praxis of the watershed, “emerge in response” to changing social and political circumstance, and the failure of older models to adequately cope with changing economic and socio-political context. Key to the way that the watershed is an enunciatory community is that the watershed cannot be divorced from its context, even as the Buffalo National River attracts engagement from outside of its watershed, the specificity of the watershed is never in question (Fortun 2001: 13).

Second, the watershed organization, such as the BNRP and the BRWA, are inherently “fissured within, even when members themselves insist otherwise” (2001: 13). I had a serendipitous encounter with a BRWA founding member at one of my son’s school functions. Sitting in front of me at the event was a woman in her 30s, dressed in comfortable loose-fitting clothing and a pair of well-worn hiking sandals. The ample downtime occasioned by herding children on and off of a small stage for the event gave us time to chat. It wasn’t long before we began discussing the Buffalo.

Rachel’s engagement with the Buffalo was one of the bases for her social and emotional identity as a self-described “hippie” and “river-rat.” Rachel, once she heard about my research, told me her personal history of the river, with the recent activism being “the only thing I could do after they decided to build that hog farm on our river.” When we spoke, in late 2015, she was no longer with the BRWA due to a “difference in strategy” that she would not elaborate on then or later. Rachel had lived around Jasper in an “off-the-grid” home down a “long dirt road,” but had recently been forced to relocate to a new home, essentially abandoning the house. Nonchalantly at the beginning of our conversation she told me that, “I kept having folks drive by

when they thought I wasn't home and taking pot shots at my house, knocking out windows, stuff like that [and] I was afraid that one evening I'd wind up getting more than a broken window." She continued, "I guess they got what they want, I had to move to a new house and just leave [where I was living]."

The threat of violence from outside activist circles was compounded by her feeling of exclusion from the organization that she had helped start, and it is this internal fissuring that is key to understanding the morphologically complex landscape of watershed-based *enunciatory communities* (Fortun 2001: 13).

Integral to the non-totalizing concept of watershed *enunciatory communities* is the way that double binds, a concept drawn originally from Bateson (1972), affect the way that the "persistent mismatch between explanation and everyday life" forces Ozarks activists to "'dream up' new ways of understanding and engaging the world" (Fortun 2001: 13). Double binds within the praxis of environmentalism cut across a commerce-environment dichotomy that exists in national and local discussions of environmental protection. Local activists, for example StO and BRWA, use the argument of lost tourist revenue rhetorically, but this is also an argument that is made to other environmental activists. I was initially surprised with the number of activists who used the multi-million-dollar tourism industry as the basic justification for protection. This surprise dissipated as I began to see the local activists as members of an enunciatory community that often made their living from tourism-related industries.¹⁵ Static narratives of environment versus commerce do not accurately represent the complexity of either commerce-centric

¹⁵ Mike Mills, founder of the BRF, is a key example of an activist for whom the tourism industry has made him wealthy, but he is also intellectually and emotionally engaged with the river in a way that cannot be reduced to cold self-interest. The personal narrative that he told me over multiple interviews and encounters rests firmly on his renouncing the opportunity to "make a living like my dad wanted me to" with his University of Arkansas degree and on his more than a decade of living on a modest income from his canoe-rental and river guide business that would later grow into building a series of rental cabins.

narratives of the Buffalo and of land use generally, or of conservation-centric narratives of the Buffalo that focus on communal use of land which must be conserved. This is true even as the volume of tourists could be argued to cause harm to the river that conservationists seek to protect. I often asked, “what happens to the conservation argument here when/if tourism is no longer the big money maker?” The answers to this question were never satisfactory to me, or, I think, to my respondents. The most frequent response was, “I don’t know,” or “it won’t matter if we get it right now.”

As I discuss in Chapter 2, the tools of statecraft that Scott describes, such as mapping, census-taking, and regulating land-use, are not by necessity uni-directional. Fortun provides two ethnographic examples, the Indian response to the Bhopal Disaster and an example of grassroots activism in the US, that depict how “grassroots organizations emerge” as a response to “decisions affecting the local level...being made by outsiders” (2001: 12). It is clear in the Ozarks that “the resources (including cultural and political authority) necessary to institutionalize local-level decision-making are often available only through the law” leading to situations where “the law can create a space for grassroots organizations to work” and at the same time “[undermine] the very modes of sociality such space was to protect” (2001: 12-13). It is clear that while the term ‘grassroots’ is the general term for locally-organized activism, that the Ozarks example gives us a model that isn’t so much grass as it is *water*, flowing through our karst and penetrating across local social and political organization, undermining them even as it is, on some level, dependent on them.

Even on this level we find a double-bind that presents a conundrum that locals will have to dream and imagine their way out of. The BRWA, and other watershed alliances, attempt to speak all along the length of a body of flowing water, such that the water itself retains rhetorically and

symbolically some of the ecological services and movements of actual water. By acknowledging the role of water as part of a karst network, we also acknowledge that solid ground in the Ozarks is not very solid after all, it is defined not by its solidity but by its permeability, by the voids that exist within it. The applicability of this metaphor for activism does matter, for me and for my respondents. Donna Haraway, drawing her own insights from the work of Marilyn Strathern, argues that “it matters what we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties” (2016: 12). This makes the local counter-hegemonic use of the tools of statecraft into a “cosmopolitics,” which makes decisions about the Buffalo (and the numerous other watersheds in the Ozarks) required to “take place somehow in the presence of those who will bear the consequences” (2016: 12). When ADEQ, or regulatory bodies concerned with public utilities as with the StO campaign against SWEPCO’s high-voltage transmission lines, makes a ruling, grants a permit, or imposes or relaxes regulations, the karst-language and water-thought of local activism moves to hold these bodies accountable, to make these decisions *as if these bodies were local*.

This organizing principle may take into account more than just water. Two of my key respondents from my work with StO called me to join them at a townhall regarding a proposed wind farm in Elm Springs. This raucous, hot, and packed town hall illustrated the ways that local cosmopolitics required the case for this development to be made in the presence of those it would affect. At the time of this writing it seems that the project may not continue, although at the time the Mayor and the city council had been treating the farm as a “done deal,” according to one older resident who told me, “well, it sure ain’t, yet.” Opposition to the project had arisen quickly and centered around the closest neighbors to the wind farm who had used social media to build a

public outcry large enough to force a townhall meeting where the CEO, CFO, and the engineer who had designed the turbine technology being proposed for the site were called upon to make a case directly to the residents most affected by the proposal. I allow that there is a possible windshed or soundshed that applies the liquid principles of water-thought to other kinds of activism, at least nascent in the way that this particular wind-farm found its activist organization.

In this chapter I present the idea that contemporary Ozarks environmentalist discourse and praxis is in the process of transformation through two linked processes. First, there is an ongoing, contested, reconceptualization of environmental knowledge that is based on the flows of water across and under the Ozarks. At the same time, this internalized, transmitted, and learned orientation towards the natural world is actualized and practiced in a set of linked social engagements. I refer to the former as karst-thought and the latter as water-language. For Ozarkers who engage in the kinds of environmental practice that I observed and in which I participated, these new ways of thinking and being are tied in with discourses of science, hydrogeology, and ecology, but are not simply mapped to a scientific discourse.

It is clear that watersheds are now an important and vital part of both environmental education efforts, as with the Arkansas Master Naturalists training courses, as well as environmental advocacy, such as local activist and StO founder Pat Costner's work on the role of water in waste management (1992), and the on-going fight for the purity of the Buffalo River watershed being waged by the BRWA and others. While there is no dearth of historical examples of water purity and cleanliness activism, what is happening in the Ozarks, and elsewhere in environmental activism, is a renaissance of water-language that pushes political organization and advocacy beyond the restrictive confines of nationalist projects, and the entrenched political

structures of municipalities→counties→states→nation that have been the backdrop of American activism (Hays 1987: 432-457).

The role that *karst-thought* and *water-language* will play in the future of Ozarks environmentalism is yet to be seen, but there is undeniable power in the ways that communities build themselves. The tools of statecraft, noted above, are not the sole province of the state in the Ozarks. Navigating the halls of bureaucracy and legislation are hundreds and thousands of Ozarkers whose thoughts are full of watersheds and words pick their way through the karst. These Ozarkers create and organize their *enunciatory communities* to speak with a vast multitude of voices clamoring for respect and clean water and local control and to have no one despoil the low hills and deep hollers of their places. Woven throughout this advocacy of place, people, and ecological systems are the “explanations, justifications, and agendas for change” through which my contacts “play their cards, stake positions, and win or lose” (Fortun 2001: 19). Following these ways of thinking and speaking can orient new scholarship to “study how systems change and how advocacy makes a difference” even in the face of social, political, and economic continuities (Fortun 2001: 17). Of all the people that I spoke to, precious few were critical of capitalism, critical of the nation-state, or critical of the national political project of Federalism. And yet within this seemingly solid rock of social and political unification, there were the hollows and spaces of *karst-thought* that let water pass through and change the terms and meanings of these concepts to fit local needs for advocacy.

VI. Concluding Lines: Traces of Where We Have Been and Living Trajectories

“The line of words fingers your own heart. It invades arteries, and enters the heart on a flood of breath; it presses the moving rims of thick valves; it palpates the dark muscle strong as horses, feeling for something, it knows not what. A queer picture beds in the muscle like a worm encysted—some film of feeling, some song forgotten, a scene in a dark bedroom, a corner of the woodlot, a terrible dining room, that exalting sidewalk; these fragments are heavy with meaning. The line of words peels them back, dissects them out. Will the bared tissue burn? Do you want to expose these scenes to the light? You may locate them and leave them, or poke the spot hard till the sore bleeds on your finger, and write with that blood. If the sore spot is not fatal, if it does not grow and block something, you can use its power for many years, until the heart resorbs it.”

-Annie Dillard from *The Writing Life*

The long quote that begins this conclusion is the first page of Dillard’s *The Writing Life* that I opened to while procrastinating on writing this conclusion (1990). I chose it for this conclusion because it draws together many threads of my time in the field, but also the intersections of this writing with my personal life, my emotional and family life, and the secret internal life that seldom is seen, even by those who are closest to us. I feel as if I, too, am dissected, even as I dissect the seemingly endless pile of journals, notebooks, scrapbooks, piles of loose documents, and numerous other mementos and fragments collected through the course of this project. This splitting open, the finding of “cracks in the firmament” through which we can see a kind of light (and probably more firmament all the way down), continues as I dissect my own recollections, memories, intuitions, thoughts, insights, and emotions for the most valuable, most interesting, and potentially valuable pieces of all of these (Dillard 1990: 20).

I will be brave and say that there is some intentionality in the breadth of this document. I think of a book recently published, and gifted to me by my supervisor Justin Nolan, written by the well-known, well-respected, but not uncontroversial, philosopher and academic Donna Haraway, who writes that “nothing is connected to everything; everything is connected to something” (2016). This encapsulation of another passage by Thom van Dooren (2014), is also

part of an ongoing engagement with movement that I hope arises in my own work. This engagement is part of Clifford's 'roots and routes,' and part of Tim Ingold's environmental and phenomenological explorations of the 'meshwork.'

The lines of this dissertation are steps along a spider's web that is being built, sympoietically¹⁶, out of the collective experiences and actions of an ever-changing collection of living and non-living agents. This larger project is perhaps too large to be contained in any single work. I see this project as completing a necessary piece of the larger work.

The various pieces of this project, whether cognitive, emotional, social, psychological, performative, and political, are all a part of a specific form of social practice: environmental activism. This activism, as I describe it, is the space in the middle of a mesh made up of institutions (experienced, contemporary, historical, and imagined), ecological (watersheds, environmental systems, and the messy lives of animals, human and otherwise), and protected and valued spaces (communities, social and political solidarities, and environmentally protected, and the sites around and in which these are oriented).

To point to the part of the mesh of Ozarks that is our subject here, I have drawn together descriptions and criticisms of the role of emotion in speaking and acting as an environmentalist, which can only take place within the ongoing social and political projects of environmental conservation as related to the business of living and the business of business in the Ozarks. The emotionscapes that I describe include those textured by the native-ness and foreign-ness of plants, of the relationship to the land in terms of settlement and colonization, and importantly in terms of thinking through karst hydrogeology and the discursive use of water. I have tried to

¹⁶ Haraway uses this as a part of her argument for 'string figuring' that highlights how systems are collectively-producing, and not bounded in the ways that are often assumed in the contemporary world of the "individual" and of the "self-producing" subject that is dreamed of by the neo-liberal and the post-Enlightenment (2014: 33-34).

answer the question of how we can contextualize the cognitive and emotional in the context of tens of thousands of years of human and natural history, even when this project is not, currently, possible to complete. Further, how can we place these concerns within the political and social systems that selectively engage with individuals, as well as biotic and abiotic systems?

Interestingly, as with the scholarly practice of deconstruction, it seems that the more one dissects and takes apart stories and narratives, the social, and related complex human activities, the more that there is to take apart. This process seems to be its own answer to criticisms of the ongoing practice of critical enquiry, that it “takes all the fun out of things.” In a sense, then, my insight that the longer that I have engaged in this project the more there is to say, the more that I look at a newspaper clipping on the rise of Chronic Wasting Disease amongst wild cervids in the Ozarks and Arkansas, or a page of a fieldwork journal describing the sound of water trickling around and under boulders in a deep Ozarks ravine, the more that I find there is to potentially explore. Perhaps that is why the story in this dissertation about how we Ozarkers live, and how we fight for what we love, can feel scattered at times. Also, it may be that when we confront the complex, we have to find ways to add complexity to our analysis in ways that doesn’t completely obscure our potential insights.

Each chapter has dealt with some related aspect of activism within the Ozarks region. In chapter 2, I deal with the ways that the concept of environmentalities can describe the basic structure of state power as it interacts with social groups and engaged individuals as part of the process for creating and contesting environmental subjectivities. For Ozarkers, these complex processes are not uni-directional, I note that a number of my activist participants would turn the tools of statecraft against the privileged, the wealthy, and the structures of governance in ways

that allowed activists to turn systems which are a means of control, into systems of self- and community-determination.

This large-scale process is one that is glimpsed, as with any state system, in any number of the thousands of interactions of the micro-politics of power (see Foucault 2000, 2009). We can see that state power plays a clear and on-going role in local and regional systems (see Scott 1998). These small glimpses, while fruitful for analysis in the ethnographic mode, are often not clearly articulated and internalized as being connected to large-scale systems in the affects of their participants. We don't live our lives, unless you are an anthropologist, apparently, with the story of where we fit into state power, and how we capitulate and resist power in a hundred different ways from day-to-day. At the same time, it is impossible for me to argue against contextualizing the quotidian within these systems.

I move to a discussion of the role of ecological restoration within the context of larger historical forces through the lens of the ecological restoration project. Such projects are ubiquitous in the Ozarks, ranging from prairie preservation projects at HSP-CA which are large in scale to the neighborhood scale project like the World Peace Wetland Prairie on the West Fork of the White River in Fayetteville. The preservation of the 'Cherokee tie-tree' or 'signal trees,' in general, seems to fit within the realm of ecological conservation and restoration.

The benefits to humans and biotic systems for these projects are seldom disputed, as I discuss in the chapter, however, it is important to question some of the social and political implications for these projects. These projects, building on the role of environmental conservation within the structure of environmental subjectivity, serve functions well beyond their stated goals, or at least fit within larger scale social, political, and historical forces. For the Ozarks there is no more important example of the role of history in contemporary social practice

than its dispossession from the indigenous peoples whose dwelling made settlements and produced the “nature” that confronted European and American settlers.

A point which I do not address in the chapter concerns the ways that the activists and environmentalists with whom I worked respond to the basic ideas I address. I’m almost certain that several fieldwork relationships were re-assessed on the part of my informants based on these ideas. While the response was not universally negative, my argument was, with a few exceptions, greeted with a fairly cold reception. No one disputed the basic shape of the argument, but as with the group mentioned in the introduction, the idea that environmentalism can be studied, practiced, *and criticized*, is often met with disinterest, or even hostility. There is a distinct similarity between the difficult way that emotion is dealt with in environmental and policy decisions in many Western countries, and the way that critical stances are often treated. During my fieldwork I experienced both kinds of subtle silencing. Kay Milton narrates how a “legal representative made what might have appeared to be a casual remark” that a Northern Irish government official “[seemed] to be in love with mud-flats” (2002: 130). In much the same way there are social signals that are used to indicate that you are in a sensitive position with regard to how you are performing environmentalism. I do not believe that I am incorrect in my analysis because my informants disagreed explicitly or implicitly with me. In fact, as I mention in the introduction, it is often as important to pay attention to the elisions and that which is purposefully silenced.

In this chapter I conclude that the means through which we decide on what “nature” is and how best to “restore” damaged ecosystems, is intimately tied to how settler-colonial discourses succeed in discursively continue the process of dispossession. This becomes enshrined in legalistic structures and governmentalized restoration practices. These practices

begin to literally re-write the landscape, creating cultural readings that are at times wildly inaccurate, as with signal-trees, or serve the function of making white settlement the primary lens through which we understand land-use, environmental management, and the meanings of landforms themselves.

My goal in this critical stance is to point to the means of crafting an environmental activism that is engaged with indigenous peoples, honest to the colonial histories, and inclusive of the diversities of these contemporary communities. With this criticism in mind, I move to a discussion of the, as I call it, karst-thought and water-language of Ozarks environmentalism. These two interconnected terms are intended to address my observations of how water and geophysical systems are used purposefully in activism, but also in subtle and unconscious ways.

In this section I highlight the ways that anti-CAFO protesting, Pat Costner's water-focused conception of environmental protection, and environmental education and organizing centered around the concept of watersheds serves to cut across political boundaries, organize political subjectivities, and transmute scientific and ecological knowledge into social organization praxis. Thinking karst is my shorthand for the way that Ozarkers, particularly environmentalists but not limited to that group, have come to understand the solid earth as solid in general practice, but permeable and porous for both positive and negative substances. Water flows through the ground, not just over it, but like a sinking stream the earth is the receptacle for that which can be noticed by signs, but is not visible in and of itself. How these concepts are conceptualized matters, as runoff, leaks in containment tanks and pools, and the use and mis-use of sewers and other municipal water systems are all parts of how karst-thought impacts environmentalities in the Ozarks.

I describe ways of performing and speaking that create the means through which we can invert localities, in this case through exploring non-human systems that encompass the visible and the interiority of the landscape. Talking water and thinking karst are ways of discussing the figures and the ground of human activity in ways that deny the painterly Western notions of figure and ground that Ingold, among many others, find so objectionable. Ingold states that, “the landscape surface [in many Western accounts] is...supposed to present itself as a palimpsest for the inscription of cultural form,” but it is Ingold’s argument that “to the contrary, that the forms of the landscape – like the identities and capacities of its human inhabitants – are not imposed upon a material substrate but rather emerge as condensations or crystallisations of activity within a relational field” (2012: 47).

In advancing this concept in Chapter 4, I point to some of the ways that Ozarkers are already starting to push activism into unique forms, particularly as they build counter-narratives of place and self, of social solidarity and collective action, that are being written across the landscape again and again. Sauer, as in the epigram to chapter 2, argued that humans have always shaped the places that we live, landscape ethnoecologists like Johnson and Hunn, linguists such as Basso, among many others have echoed this sentiment and carried this assumption even further into the recognition that the landscape that we dwell within is of our own making, literally and figuratively. The way that we imagine our world, is also how we act towards it. The way that we speak about and to the land is also how we make our homes on it, and rely on it for any number of needs and wants. The stories that we tell about it, are stories that always have ourselves as the, sometimes unacknowledged, audience. Clifford Geertz famously said that culture is the stories that we tell ourselves (1973). Landscape is both prop and agent, storyteller and medium for stories, something that is often assumed to be from the outside of

culture, but, perhaps, is as much a part of these stories as any more obviously crafted cultural object. It is us and not-us, and that has been part of the conception of the world that is being grappled with overtly and covertly within the lives included here.

I continue this argument in Chapter 4, by discussing the ways that *karst* and *water* become ways of thinking, imagining, and acting across, over, and through the complexities of activism in the contemporary Ozarks. For the organizing principles, actions, and functional engagements with political process, coalition-building, and activist recruitment that I coin the term *water-language*. Whereas, *karst-thought* is a set of ecologically-grounded ways of thinking that are used to think through problems and systems, which still foregrounds the shifting footing and empty spaces that make up the “solid ground” of the Ozarks. It is through these that the concept of the watershed has come to dominate local forms of activism, and it is this way of thinking and acting that I argue generates the local uses of the tools of statecraft to produce a cosmopolitical Ozarks where state power is both contested and brought down to the locality where political decisions must meet (or at least are subjected to) Ozarkers’ local scrutiny.

Where do we go from here? What is the next step for understanding Ozarks activism? As with all ethnography this work captures a moment, even as I have endeavored to make the ‘now’ that I describe a ‘long now.’ The work of understanding activism, particularly in places like the Ozarks requires linking these narratives further to both the history of activism in the United States, but also to the dynamic changes in American society, culture, and the ongoing political upheaval that has seen the election of Donald Trump to the presidency. In this context, it will be necessary to engage diverse communities, conduct assessments that are grounded within these communities, and work for a social justice that is both inclusive and acknowledges the real complexities of *enunciatory communities* throughout the country and the world.

In this work, I describe the role of environmentalist events, affective and emotional performances, systems of governance under contestation, the role of historical narrative in ecological restoration, and the forms of thought and discourse that provide lines of flight for Ozarkers. And all of this provides the clear basis for a host of future research engagements with the practices and people that I describe here. First, it is necessary to further engage with social performance as it relates to the ethical and practical social behaviors of environmental activists. It will be necessary to ask about the role of *emotion* across a host of environmentalist activities. These emotionscapes must be pursued in ways that are attendant to the ways that individual experiences, social organization, and political engagements with the environment are textured and generated through emotion and affect. How does emotion contribute to environmental cognition and the propagation of expertise in the Ozarks? What role does environmental education play in fostering an environmental ethics rooted in emotional engagements with the biotic and abiotic systems of the Ozarks? Finally, what emotionscapes are generated through these practices? How do we texture our world with emotional resonance, all the while living through the everyday?

Similarly, the role of power (and its inequalities) should be explored. The vast majority of my contacts are relatively homogenous in race and class, but the Ozarks is not a monolithically white or middle-class region. It would be well-taken to analyze how the environmentalities that I describe relate to, or conflict with, the kinds of environmentalities at play in Hispanic and Latinx, Marshallese, Native American, and Asian communities within the region. The political ecology of conservation in the Ozarks is incomplete here, for that reason.

Additionally, subsequent scholarship should pursue the complexities of a non-exclusive bioregionalism that is built using the *karst-thought* and *water-language* that I describe here. How

are these processes harnessed, subverted, and successful? What are the limits to the possible political, social, and economic effects of these ways of thinking and speaking? What relationship to environmental cognition, expertise about the Ozarks, and scientific epistemologies are pertinent to understanding the role of water, watershed, and geology on social and cultural activity in the region? With all of this said, there is much work yet to be conducted, but I am certain that what I have written here can serve as a jumping off point for this comprehensive research program on Ozarks environmentalism. It is also possible that multi-sited ethnographic practice may allow for comparing, and contrasting, pictures of how these issues play out in other activist communities and for other bioregions in the US and abroad.

Bibliography

- Abel, T. and J. R. Stepp. 2003. A new ecosystems ecology for anthropology. *Conservation Ecology* 7(3): 12.
- Abel, T. 2000. Ecosystems, sociocultural systems, and ecological economics for understanding development: the case of ecotourism on the island of Bonaire, N.A. Dissertation, University of Florida, Gainesville, Florida, USA.
- Abel, T. 2003. Understanding complex human ecosystems: the case of ecotourism on Bonaire. *Conservation Ecology* 7(3):10. [online] URL: <http://www.consecol.org/vol7/iss3/art10>.
- Abu-Lughod, Lila. 1985. "Honor and the Sentiments of Loss in a Bedouin Society." *American Ethnologist* 12:245-261.
- Abu-Lughod, Lila. 2000. *Veiled Sentiments: honour and poetry in Bedouin society*. Berkeley, CA: University of California Press.
- Acheson, J. M., and J. A. Wilson. 1996. Order out of chaos: the case for parametric fisheries management. *American Anthropologist* 98(3):979–994.
- Adams, R. N. 1988. *The eighth day: social evolution as the self-organization of energy*. University of Texas Press, Austin, Texas, USA.
- Adams, R. McM. 2001. Complexity in archaic states. *Journal of Anthropological Archaeology* 20:345–360.
- Adams, W. M., and David Hulme. 1998. *Conservation and communities: changing narratives, policies and practices in African conservation*. Manchester: Institute for Development Policy and Management, University of Manchester.
- Agrawal, Arun. 2005a. "Environmentality". *Current Anthropology*. 46 (2): 161-190.
- Agrawal, Arun. 2005b. *Environmentality: technologies of government and the making of subjects*. Durham: Duke University Press.
- Agrawal, Arun, and Clark C. Gibson. 1999. "Enchantment and disenchantment: the role of community in natural resource conservation". *World Development*. 274: 629-649.
- Agrawal, Arun, and Clark C. Gibson. 2001. *Communities and the environment: ethnicity, gender, and the state in community-based conservation*. New Brunswick, N.J.: Rutgers University Press.
- Agrawal, Arun, Richard Chase Smith, and Tania Li. 1997. *Community in conservation: beyond enchantment and disenchantment*. Gainesville, Fla: Conservation & Development Forum.

Ahler, S.R. and R.B. McMillan. 1976. Material culture at Rodgers Shelter: A reflection of past human activities. In *Prehistoric man and his environments: A case study in the Ozark Highland*. W.R. Wood and R.B. McMillan, eds. New York, NY: Academic Press: 163-209.

Ahmed, Sara. 2004. *The Cultural Politics of Emotion*. NY: Routledge.

Ahmed, Sara. 2008. *Happiness*. London: Lawrence & Wishart.

Albrecht, Glenn, Gina-Maree Sartore, Linda Connor, Nick Higginbotham, Sonia Freeman, Brian Kelly, Helen Stain, Anne Tonna, and Georgia Pollard. "Solastalgia: The Distress Caused by Environmental Change." *Australasian Psychiatry* 15, no. S1 (2007): S95–S98.

Alexiades, Miguel N., ed. 2013. *Mobility and migration in indigenous amazonia: contemporary ethnoecological prespectives*. New York: Berghahn Books.

Allen, John. 2003. *Lost geographies of power*. Malden, MA: Blackwell Pub.

Altieri, Charles. 2003. *The particulars of rapture: an aesthetics of the affects*. Ithaca: Cornell University Press.

Amit, Vered, ed., 2004, *Biographical Dictionary of Social and Cultural Anthropology*, New York, NY: Routledge.

Anderson, Ben. 2006. "Becoming and being hopeful: towards a theory of affect". *Environment and Planning, D, Society & Space*. 24 (5): 733-752.

Anderson, Benedict R. 2006. *Imagined communities: reflections on the origin and spread of nationalism*. London: Verso.

Anderson, E. N. 1996. *Ecologies of the heart: emotion, belief, and the environment*. New York: Oxford University Press.

Anderson, E. N., Deborah M. Pearsall, Eugene S. Hunn, Nancy J. Turner, and Richard I. Ford. 2011. *Ethnobiology*. Hoboken, New Jersey: Wiley-Blackwell.

Anderson, James N., 1973, "Ecological Anthropology and Anthropological Ecology" in *Handbook of Social and Cultural Anthropology*, John J. Honigmann, ed., Chicago, IL: Rand McNally, pp. 179-239.

Anderson, K. and M. Barbour (2003). "Simulated Indigenous Management: A new model for ecological restoration in national parks." *Ecological Restoration* 21(4): 269-277

Anderson, M. Kat; Michael G. Barbour; and Valerie Whitworth
1997 "A World of Balance and Plenty: Land, Plants, Animals, and Humans in a Pre-European California." *California History*, Vol. 76 (Summer and Fall): 12-47.

Anderson, M. Kat and Michael J. Moratto 1996. "Native American Land-Use Practices and Ecological Impacts." Pp. 187-206 in Sierra Nevada Ecosystem Project, Final Report to Congress, Vol. II, Assessments and Scientific Basis for Management Options. Wildland Resources Center Report No. 37. Davis, CA: University of California, Centers for Water and Wildland Resources. Several mentions and citations to other studies.

Appadurai, Arjun. 1996. "Global ethnoscaples: Notes and queries for a transnational anthropology." Pp. 48-65.

Ardoin, Nicole M., Janel S. Schuh, and Rachelle K. Gould. "Exploring the Dimensions of Place: A Confirmatory Factor Analysis of Data from Three Ecoregional Sites." *Environmental Education Research* 18, no. 5 (2012): 583–607.

Argyrou, Vassos. 2005. *The logic of environmentalism: anthropology, ecology and postcoloniality*. New York: Berghahn Books.

Ascher, William, Toddi A. Steelman, and Robert G. Healy. 2010. *Knowledge and environmental policy: re-imagining the boundaries of science and politics*. Cambridge, Mass: MIT Press.
Abu-Lughod, Lila. 1993. *Writing women's worlds: Bedouin stories*. Berkeley: University of California Press.

Asplen, L. 2008. "Going with the flow: Living the mangle through environmental management practice." In Pickering, A. and Guzik, K., editors, *The mangle in practice: science, society, and becoming*, *Science and Cultural Theory*, pages 163–184. Duke University Press.

Athanasiou, Athena, Hantzaroula, Pothiti and Yannakopoulos, Kostas. 2008. "Towards a New Epistemology: The 'Affective Turn'." *Historein* 8:5-16

Atran, Scott and Douglas Medin. 2008. *The native mind and the cultural construction of nature*. Cambridge, MA: MIT press.

Averill, James R. 1982. *Anger and aggression: an essay on emotion*. New York: Springer-Verlag.

Averill, James R. "Emotions as episodic dispositions, cognitive schemas, and transitory social roles: Steps toward an integrated theory of emotion." *Perspectives in personality* 3 (1991): 137-165.

Averill, James R., Gary W. DeWitt, and Michael Zimmer. 1978. "The self-attribution of emotion as a function of success and failure". *Journal of Personality*. 46 (2): 323-347.

Averill, James R., and Elma P. Nunley. 1988. "Grief as an Emotion and as a Disease: A Social-Constructionist Perspective". *Journal of Social Issues*. 44 (3): 79-95.

Averill, James R., Kyum Koo Chon, and Doug Woong Hahn. 2001. "Emotions and Creativity, East and West". *Asian Journal of Social Psychology*. 4 (3): 165-183.

Bachelard, Gaston, Maria Jolas, and John R. Stilgoe. 1994. *The poetics of space*. Boston: Beacon Press.

Bailenson, Jeremy N., Michael S. Shum, Scott Atran, Douglas L. Medin, and John D. Coley. "A bird's eye view: Biological categorization and reasoning within and across cultures." *Cognition* 84, no. 1 (2002): 1-53.

Baistow, K. 1995. "Liberation and regulation? Some paradoxes of empowerment". *Critical Social Policy*. 14(4): 34.

Barbalet, Jack M. 1998. *Emotion, social theory, and social structure: a macrosociological approach*. Cambridge, UK: Cambridge Univ. Press.

Barbalet, J. M. 2002. *Emotions and sociology*. Oxford: Blackwell Pub./Sociological Review.

Barrett, Lisa Feldman, Paula M. Niedenthal, and Piotr Winkielman. 2005. *Emotion and consciousness*. New York: Guilford Press.

Barthel, Stephan, Carl Folke, and Johan Colding. "Social–ecological Memory in Urban gardens—Retaining the Capacity for Management of Ecosystem Services." *Global Environmental Change* 20, no. 2 (2010): 255–65.

Barthes, Roland. 2013. *Mythologies*. New York, NY: Hill and Wang.

Bates, Marston, 1953, "Human Ecology," *Anthropology Today*, Alfred L. Kroeber, ed., Chicago, IL: University of Chicago Press, pp. 700-713.

Bateson, Gregory. 1972. *Steps to an ecology of mind; collected essays in anthropology, psychiatry, evolution, and epistemology*. San Francisco: Chandler Pub. Co.

Bauman, Richard. 1977. *Verbal art as performance*. Prospect Heights, Ill: Waveland Press.

Bauman, Richard. 2011. *Story, performance, and event: contextual studies of oral narrative*. Cambridge: Cambridge University Press.

Bavington, D. 2002. "Managerial ecology and its discontents: Exploring the complexities of control, careful use and coping in resource and environmental management." *Environments: A Journal of Interdisciplinary Studies* 30(3): 3–22.

Beilman, A.P. and Brenner, L.G. 1951. "The recent intrusion of forests in the Ozarks." *Annals of the Missouri Botanical Garden* 38. St. Louis, MO: 261-282.

Benac, David. 2010. *Conflict in the Ozarks hill folk, industrialists, and government in Missouri's Courtois Hills*. Kirksville, Mo: Truman State University Press.

- Ben-Zeev, Aharon. 2001. *The subtlety of emotions*. Cambridge, Mass. [u.a.]: MIT Press.
- Bennett, John W., 1944, "The Interaction of Culture and Environment in the Smaller Societies," *American Anthropologist* 46:461-478.
- Bergson, Henri, and Arthur Mitchell. 1944. *Creative evolution*. New York: Modern library.
- Bergson, Henri, Nancy Margaret Paul, and William Scott Palmer. 1988. *Matter and memory*. New York: Zone Books.
- Bergson, Henri, and Frank Lubecki Pogson. 1960. *Time and free will, an essay on the immediate data of consciousness*. New York: Harper.
- Bergson, Henri. 1977 [1935]. *The two sources of morality and religion*. Translated by R. Ashley Audra and Cloudesley Brereton, with the assistance of W. Horsfall Carter. London: Macmillan.
- Berkes, Fikret, and Nancy J. Turner. 2006. "Knowledge, Learning and the Evolution of Conservation Practice for Social-Ecological System Resilience". *Human Ecology*. 34 (4): 479-494.
- Berlant, Lauren Gail. 2004. *Compassion: the culture and politics of an emotion*. New York: Routledge.
- Berlant, Lauren Gail. 2011. *Cruel optimism*. Durham: Duke University Press.
- Berlant, Lauren Gail. 2012. *Desire/love*. Brooklyn, New York: Dead Letter Office, BABEL Working Group an imprint of Punctum Books.
- Berlin, Brent. 1992. *Ethnobiological classification: principles of categorization of plants and animals in traditional societies*. Princeton, NJ: Princeton University Press.
- Berlin, Brent, and Paul Kay. 1969. *Basic color terms; their universality and evolution*. Berkeley: University of California Press.
- Bernard, H. Russell. 2011. *Research methods in anthropology: Qualitative and quantitative approaches*. Plymouth, UK: Altamira Press.
- Bhabha, Homi K. 1994. *The location of culture*. London: Routledge.
- Biernacki, P, and D Waldorf. 1981. "Snowball Sampling: Problems and Techniques of Chain Referral". *Sociological Methods and Research*. 10 (2): 141-163.
- Biersack, Aletta, 1999, "Introduction: From the "New Ecology" to the New Ecologies," *American Anthropologist* 101(1):5-18.

Blackburn, Thomas C. and Kat Anderson, eds. 1993. *Before the Wilderness: Environmental Management by Native Californians*. Menlo Park, CA: Ballena Press.

Blevins, Brooks. 2002a. *Hill folks a history of Arkansas Ozarkers & their image*. Chapel Hill: University of North Carolina Press

Blevins, Brooks. 2002b. "'In the Land of a Million Smiles': Twentieth-Century America Discovers the Arkansas Ozarks". *The Arkansas Historical Quarterly*. 61 (1): 1-35.

Blevins, Brooks. 2009a. *Arkansas/Arkansaw how bear hunters, hillbillies, and good ol' boys defined a state*. Fayetteville: University of Arkansas Press.

Blevins, Brooks. 2009b. "The Arkansas Ghost Trial: The Connie Franklin Case and the Ozarks in the National Media". *The Arkansas Historical Quarterly*. 68 (3): 245-271.

Bogart, Barbara Allen, and Thomas J. Schlereth. 1990. *Sense of place: American regional cultures*. Lexington, Ky: University Press of Kentucky.

Boiger, Michael, and Batja Mesquita. 2012. "The Construction of Emotion in Interactions, Relationships, and Cultures". *Emotion Review*. 4 (3): 221-229.

Borofsky, Robert, ed., 1994, *Assessing Cultural Anthropology*, New York, NY: McGraw-Hill, Inc.

Botkin, Benjamin Albert. 1949. *A treasury of Southern folklore; stories, ballads, traditions, and folkways of the people of the South*. New York: Crown Publishers.

Bourdieu, Pierre. 1977. *Outline of a theory of practice*. Cambridge, U.K.: Cambridge University Press.

Bourdieu, Pierre, and John B. Thompson. 1991. *Language and symbolic power*. Cambridge, Mass: Harvard University Press.

Buffalo River Watershed Alliance Facebook Page. June 14, 2017.

<https://www.facebook.com/164944453665495/photos/a.183676815125592.1073741828.164944453665495/797415210418413/?type=3>

Butler, Jenny Barnes. 2014. *Stolen water, forgotten liberties: a true story of life along Arkansas' South Highway 14 and the Buffalo River*. Ashland, OR: Hellgate Press.

Brady, Erika. "Debatable land: Frontier versus wilderness in the Ozark National Scenic Waterways." *Folklife annual* (1989): 46-57.

Brady, Erika. 1990. "Mankind's thumb on nature's scale: trapping and regional identity in the Missouri Ozarks." in *Sense of place: American regional cultures*. Eds Bogart, Barbara Allen and Thomas J. Schlereth. Pp. 58-73.

Brady, Erika. "The river's like our back yard": tourism and cultural identity in the Ozark National Scenic Riverways." *Conserving Culture: A New Discourse on Heritage*, University of Illinois Press, Urbana (1994): 138-151.

Brahana, John Van, J Nix, C Kuyper, T Turk, F Usrey, S Hodges, C Bitting, K Ficco, E Pollock, R Quick, B Thompson, and J Murdoch. 2016. "Geochemical Processes and Controls Affecting Water Quality of the Karst Area of Big Creek near Mt. Judea, Arkansas." *Journal of Arkansas Academy of Science* v70.

Brandon, Jamie C. 2008. "Van Winkle's Mill: Recovering Lost Industrial and African-American Heritages in the Ozarks". *The Arkansas Historical Quarterly*. 67 (4): 429-445.

Brandon, Jamie C., and James M. Davidson. 2005. "The Landscape of Van Winkle's Mill: Identity, Myth, and Modernity in the Ozark Upland South". *Historical Archaeology*. 39 (3): 113-131.

Brandon, Jamie Chad, and Maria Franklin. 2004. *Van Winkle's Mill mountain modernity, cultural memory and historical archaeology in the Arkansas Ozarks*. Thesis (Ph. D.)--University of Texas at Austin, 2004.

Brennan, Teresa. 2004. *The Transmission of Affect*. Cornell University Press.

Briggs, Charles L. 1986. *Learning how to ask: a sociolinguistic appraisal of the role of the interview in social science research*. Cambridge [Cambridgeshire]: Cambridge University Press.

Briggs, Jean L. 1970. *Never in anger; portrait of an Eskimo family*. Cambridge: Harvard University Press.

Brockwell, Sally, Sue O'Connor, and Denis Byrne, eds., *Transcending the Culture-Nature Divide in Cultural Heritage: Views from the Asia-Pacific Region*, ANU ePress, Canberra Australia.

Brookfield, H.C. and P. Brown. 1963. *Struggle for Land: agriculture and group territories among the Chimbu of the New Guinea highlands*. Oxford University Press.

Brooks, Ann, and Ruth Simpson. 2013. *Emotions in transmigration: transformation, movement and identity*. Basingstoke: Palgrave Macmillan.

Brown, Cecil H. 1984. *Language and living things: uniformities in folk classification and naming*. New Brunswick, N.J.: Rutgers University Press.

Brown, Steven D., and Paul Stenner. 2001. "Being Affected: Spinoza and the Psychology of Emotion". *International Journal of Group Tensions*. 30 (1): 81-105.

- Browne, Kath, Jason Lim, and Gavin Brown. 2007. *Geographies of sexualities theory, practices, and politics*. Aldershot, Hampshire: Ashgate. NOTE: for chapter Legg, Stephen. "Foucault's Population Geographies: Classifications, Biopolitics, and Governmental Spaces"
- Bruner, Jerome. 1991. "Narrative Construction of Reality." In *Critical Inquiry* 18:1-20.
- Bucci, Wilma Ph.D. n.d. "Pathways of Emotional Communication". *Psychoanalytic Inquiry*. 21 (1): 40-70.
- Butler, Judith. 2010. *Gender trouble: feminism and the subversion of identity*. New York: Routledge.
- Butt, Tom. N.D. "Down the Buffalo River...Ponca to White River, June 2010." <http://www.tombutt.com/pdf/down%20the%20buffalo.pdf>
- Byrne, J. 2012. When green is White: The cultural politics of race, nature and social exclusion in a Los Angeles urban national park. *Geoforum*, 43(3), 595–611.
- Calhoun, Cheshire, and Robert C. Solomon. 1984. *What is an emotion?: classic readings in philosophical psychology*. New York: Oxford University Press.
- Callicott, J. Baird. 1996. "Do Deconstructive Ecology and Sociobiology Undermine Leopold's Land Ethic?" *Environmental Ethics* 18 (4): 353-372. Cf. 369; 372.)
- Callicott, J. Baird, Larry B. Crowder, and Karen Mumford. 1999. "Current Normative Concepts in Conservation". *Conservation Biology*. 13 (1): 22-35.
- Campbell, Brian C. 2009. "Ethnoecology of the Ozark Highlands' agricultural encounter" *Ethnology*. 48 (1): 1-20.
- Campbell, Lisa. 2007. "Local Conservation Practice and Global Discourse: A Political Ecology of Sea Turtle Conservation". *Annals of the Association of American Geographers*. 97 (2): 313-334.
- Carolan, Michael S. 2006. "Ecological representation in deliberation: the contribution of tactile spaces". *Environmental Politics*. 15 (3): 345-361.
- Carneiro, R. L. 1982. Successive reequilibrations as the mechanism of cultural evolution. In *Self-organization and dissipative structures: applications in the physical and social sciences*. W. C. Schieve and P.M. Allen, eds. Austin, TX: University of Texas Press. Pp. 110–115.
- Casagrande, David G., and Miguel Vasquez. 2010. *Restoring for Cultural-Ecological Sustainability in Arizona and Connecticut*. New York, NY: Routledge.

Castro Teresa. 2010. "Mapping the City through Film: From 'Topophilia' to Urban Mapscales." In *The city and the moving image*. Richard Koeck and Les Roberts, eds. London, UK: Palgrave Macmillan.

Cavalli-Sforza, L. L., and M. W. Feldman. 1981. *Cultural transmission and evolution: a quantitative approach*. Princeton University Press, Princeton, New Jersey, USA.

Ceppek, Michael L. 2011. "Foucault in the forest: questioning environmentality in Amazonia". *American Ethnologist*. 38 (3): 501-515.

Chagnon, Napoleon A. 1968. *Yanomamö: the fierce people*. New York: Holt, Rinehart and Winston.

Chan, Kai MA, Anne D. Guerry, Patricia Balvanera, Sarah Klain, Terre Satterfield, Xavier Basurto, Ann Bostrom, et al. "Where Are Cultural and Social in Ecosystem Services? A Framework for Constructive Engagement." *BioScience* 62, no. 8 (2012): 744–56.

Chan, Kai, Terre Satterfield, and Joshua Goldstein. "Rethinking Ecosystem Services to Better Address and Navigate Cultural Values." *Ecological Economics* 74 (2012): 8–18.

Chernela, Janet M. 2005. "The politics of mediation: local-global interactions in the Central Amazon of Brazil." *American Anthropologist: Journal of the American Anthropological Association* 107(4): 620-631.

Christian, Donna, Walt Wolfram, and Nanjo Dube. 1988. *Variation and change in geographically isolated communities: Appalachian English and Ozark English*. Tuscaloosa, AL: University of Alabama Press.

Clewell, A. F. and J. Aronson. 2006. "Motivations for the Restoration of Ecosystems." *Conservation Biology* 20(2): 420-428.

Clifford, James. 1999. *Routes: travel and translation in the late twentieth century*. Cambridge, Mass: Harvard University Press.

Clifford, James, and George E. Marcus. 1986. *Writing culture: the poetics and politics of ethnography: a School of American Research advanced seminar*. Berkeley: University of California Press.

Clough, Patricia Ticineto, Jean O'Malley Halley, and Michael Hardt. 2007. *The affective turn: theorizing the social*. Durham, NC: Duke University Press.

Coates, Peter, 1998, *Nature: Western Attitudes Since Ancient Times*, Berkeley, CA: University of California Press.

Cohen, Emma. "Anthropology of knowledge." *Journal of the Royal Anthropological Institute* 16 (2010): S193-S202.

Coleman, Janet L. 2002. Native plants: the preservation and restoration of native plants in designed landscapes in Northwest Arkansas. Fayetteville, AR: Janet L. Coleman.

Collier, M. 2011. "Incorporating socio-economic factors into restoration: implications from industrially harvested peatlands." *Restoration Ecology* 19(5): 559-563.

Compton, Neil. 1992. The battle for the Buffalo River: a twentieth-century conservation crisis in the Ozarks. Fayetteville: University of Arkansas Press.

Conklin, Harold C. 1955. "Hanunóo Color Categories". *Southwestern Journal of Anthropology*. 11 (4): 339-344.

Conklin, Harold C. 1954. The Relation of Hanunoo Culture to the Plant World. Unpublished Dissertation.

Connell, J. and Waddell, E., eds. 2006. Between Local and Global: Environment, Change and Development in the Asia Pacific Region. Routledge. Festschrift for Harold Brookfield.

Connolly, W. 2002. *Neuropolitics*. University of Minnesota Press, Minneapolis MN

Connor, L. 2014. *Climate Change and the Anthropos: Planet, People and Places*. London: Routledge/Earthscan.

Connor, L., Higginbotham, N. 2013. "Natural Cycles" in lay understandings of climate change. *Global Environmental Change*, 23(6): 1852-1861

Coole, Diana H., and Samantha Frost. 2013. *New materialisms ontology, agency, and politics*. New Materialisms. Durham: Duke UP.

Cortes-Vazquez, Jose A., and Morgan Zedalis. "Identity and Native Species Conservation: Similar Historical Ecologies from Idaho to Spain." *Human Ecology* 41, no. 6 (2013): 937-45.

Costner, Pat, Joe Thornton, and Melinda Lawrence. 1989. *We all live downstream: the Mississippi River and the national toxics crisis*. Washington, D.C.: Greenpeace USA.

Course, M. (2010). Of words and fog linguistic relativity and amerindian ontology. *Anthropological Theory*, 10(3), 247-263.

Cox, George W. 1969. *Readings in conservation ecology*. New York: Appleton-Century-Crofts.

Cozzo, David N. 2002. "Cherokee System of Folk Botanical Classification from the Archival Materials of James Mooney." In *Ethnobiology and Biocultural Diversity*, John R. Stepp, Felice S. Wyndham, and Rebecca K. Zarger, eds. Athens, GA: International Society of Ethnobiology.

- Cralle, Walter Odro. 1936. Social change and isolation in the Ozark mountain region of Missouri. Chicago: University of Chicago Press.
- Crane, Todd A. 2010. "Of Models and Meanings: Cultural Resilience in Social-Ecological Systems." *Ecology and Society* 15(4): 19.
- Crane, Todd A. 2014. "Bringing STS into Agricultural Anthropology: Technology Development as Cultural Encounter Between Farmers and Researchers." *Culture, Agriculture, Food and Environment* 36(1): 45-55.
- Crapanzano, Vincent. 1992. *Hermes' dilemma and Hamlet's desire: on the epistemology of interpretation*. Cambridge, MA: Harvard UP.
- Crapanzano, Vincent. 2015. *Recapitulations*. New York: Other Press.
- Creswell, John W. 2007. *Qualitative inquiry & research design: choosing among five approaches*. Thousand Oaks: Sage Publications.
- Cronon, William. 1983. *Changes in the land: Indians, colonists, and the ecology of New England*. New York: Hill and Wang.
- Cronon, William. 1996. *Uncommon ground: rethinking the human place in nature*. New York: W.W. Norton & Co.
- Cruikshank, Barbara. 1994. "The will to empower: Technologies of citizenship and the war on poverty." *Socialist Review*. 23(4): 29-55.
- Crumley, C. L., ed. 1994. *Historical ecology: cultural knowledge and changing landscapes*. School of American Research Press, Santa Fe, New Mexico, USA.
- Crumley, Carole L., A. Elizabeth van Deventer, and Joseph J. Fletcher. 2001. *New directions in anthropology and environment: intersections*. Walnut Creek: Altamira Press
- Cvetkovich, Ann, and Janet Staiger. 2010. *Political emotions: new agendas in communication*. New York: Routledge.
- Dai, D. 2011. Racial/ethnic and socioeconomic disparities in urban green space accessibility: Where to intervene? *Landscape and Urban Planning*. 102(4): 234-244.
- Damasio, Antonio R. 2003. *Looking for Spinoza: joy, sorrow, and the feeling brain*. Orlando, Fla: Harcourt.
- D'Andrade, Roy G. 1995. *The development of cognitive anthropology*. Cambridge: Cambridge University Press.

D'Antonio, Carla and Laura A. Meyerson. 2002. "Exotic Plant Species as Problems and Solutions in Ecological Restoration: A Synthesis." *Restoration Ecology* 10(4): 703-713.

Darwin, Charles. 1965. *The expression of the emotions in man and animals*. Chicago: University of Chicago Press.

Davies, Charlotte Aull. 2012. *Reflexive Ethnography: A Guide to Researching Selves and Others*. Hoboken: Taylor and Francis.

Dawson, Andrew, Jennifer Lorna Hockey, and Andrew H. Dawson. 1997. *After writing culture: epistemology and praxis in contemporary anthropology*. New York: Routledge.

de la Cadena, Marisol. 2010, "Indigenous Cosmopolitics in the Andes: Conceptual reflections beyond 'politics'," *Cultural Anthropology* 25 (2): 334-370.

de Certeau, Michel. 1984. *The practice of everyday life*. Berkeley: University of California Press.

Deloria, Philip Joseph. 2007. *Playing Indian*. New Haven, CT: Yale University Press.

De Munck, Victor C., and Elisa Janine Sobo. 1998. *Using methods in the field: a practical introduction and casebook*. Walnut Creek, CA: AltaMira Press.

Derrida, Jacques. 1993. "Structure, sign, and play in the discourse of the human sciences." *Postmodernism: A reader*. Robert Docherty, ed. New York, NY: Columbia University Press. Pp. 223-242.

De Rijke, Kim. "Water, Place and Community: An Ethnography of Environmental Engagement, Emplaced Identity and the Traveston Crossing Dam Dispute in Queensland, Australia." PhD Thesis. The University of Queensland, 2012.

Deacon, Terrence. 2013. *Incomplete Nature: How mind emerged from matter*. New York, NY: Norton.

Dean, Jodi. 2000. *Cultural studies and political theory*. Ithaca, NY: Cornell Univ. Press.

Deleuze, Gilles. 1988. *Spinoza, practical philosophy*. San Francisco: City Lights Books.

Deleuze, Gilles and Felix Guattari. 1987. *A thousand plateaus: capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.

Denemark, R. A., J. Friedman, B. K. Gills, and G. Modelski, editors. 2000. *World system history: the social science of long-term change*. Routledge, London, UK.

Denzin, Norman K., and Yvonna S. Lincoln. 1994. *Handbook of qualitative research*. Thousand Oaks: Sage Publications.

Depew, D. J., and B. H. Weber. 1995. *Darwinism evolving: systems dynamics and the genealogy of natural selection*. The MIT Press, Cambridge, Massachusetts, USA.

Descartes, René, and Stephen Voss. 1989. *The passions of the soul*. Indianapolis, IN: Hackett Pub. Co.

Descola, Philippe. 2013. *The Ecology of Others*. Prickly Paradigm Press.

Descola, Philippe, and Gísli Pálsson. 1996. *Nature and society: anthropological perspectives*. London: Routledge.

Dillard, Annie. 1990. *The writing life*. New York: HarperPerennial.

Doane, Molly. 2012. *Stealing Shining Rivers: Agrarian Conflict, Market Logic, and Conservation in a Mexican Forest*. University of Arizona Press.

Douglas, Mary. 1973. *Rules and meanings; the anthropology of everyday knowledge*. Harmondsworth, Eng.: Penguin Education.

Douglas, Mary. 2000 [1996]. *Purity and danger: an analysis of the concepts of pollution and taboo*. London: Routledge.

Dove, Michael R., 2006, "Equilibrium Theory and Inter-Disciplinary Borrowing: A Comparison of Old and New Ecological Anthropologies," in *Reimagining Political Ecology*, Aletta Biersack and James B. Greenberg, eds., Durham, NC: Duke University Press, pp. 43-69.

Dove, Michael R. 2011. *The Banana Tree at the Gate: A History of Marginal Peoples and Global Markets in Borneo*. Yale University Press.

Dove, Michael R., and Carl Carpenter 2008 "Introduction: Major Historical Currents in Environmental Anthropology," in *Environmental Anthropology: A Historical Reader*, Malden, MA: Blackwell Publishing, pp. 1-85.

Döveling, Katrin, Christian von Scheve, and Elly Konijn. 2011. *The Routledge handbook of emotions and mass media*. London: Routledge.

Durham, W. H. 1991. *Coevolution: genes, culture, and human diversity*. Stanford, CA: Stanford University Press.

Duncan, James S., and David Ley. 1993. *Place/culture/representation*. London: Routledge.

Dunsky, Ann, Steve Dunsky, David Steinke, Buddy Huffaker, Stephen Most, Curt Meine, Peter Coyote, et al. 2011. *Green fire: Aldo Leopold and a land ethic for our time*. Oley, PA: Bullfrog Films.

- Earnst, W. G., editor. 2000. *Earth systems: processes and issues*. Cambridge University Press, Cambridge, UK.
- Edgar, T. 2007. "Restoration in Mind: Placing Ecological Restoration in a Cultural Context." *Environments: A Journal of Interdisciplinary Studies* 35(1): 25-43.
- Edgerton, Frank N. 2012. "Bibliographic Essay: Relationships in Nature: A History of Ecology," *CHOICE* 50(4):607-2012.
- Ekman, Paul. 2005. *Emotion in the human face*. Oxford: Oxford University Press.
- Ellen, R. 1982. *Environment, subsistence and system: the ecology of small-scale social formations*. Cambridge University Press, Cambridge, UK.
- Ellen, R. F., and Katsuyoshi Fukui. 1996. *Redefining nature: ecology, culture, and domestication*. Oxford, UK: Berg.
- Ellis, R., Waterton, C., and Wynne, B. 2010. "Taxonomy, biodiversity and their publics in twenty-first-century DNA barcoding." *Public Understanding of Science* 19(4): 497–512.
- Elton, Charles S. *The ecology of invasions by animals and plants*. Chicago: University of Chicago Press.
- Ermentrout, Robert Allen. 1982. *Forgotten Men: The Civilian Conservation Corps*. New York: Exposition press.
- Escobar, A. 1996. *Construction nature: elements for a post-structuralist political ecology*. *Futures* 28(4):325–343.
- Escobar, A. 1998. *Whose knowledge, whose nature? Biodiversity, conservation, and the political ecology of social movements*. *Journal of Political Ecology* 5:53–82.
- Escobar, Arturo. 2004. "Constructing Nature: Elements for a Poststructural Political Ecology." In *Liberation ecologies*. Michael Watts and Richard Peet, eds. Pp. 46-68. London: Routledge.
- Fabinyi, Michael. 2012 *Fishing for Fairness Poverty, Morality and Marine Resource Regulation in the Philippines*. ANU EPress.
- Faucher, Luc, and Christine Tappolet. 2007. *The modularity of emotions*. Calgary: University of Calgary Press.
- Feld, Steven, and Keith H. Basso. 1996. *Senses of place*. Santa Fe, N.M.: School of American Research Press.
- "Feral Hogs." ND. <https://www.agfc.com/en/hunting/feral-hogs/>

Fiedler, Klaus, and Joseph P. Forgas. 1988. *Affect, cognition, and social behavior: new evidence and integrative attempts*. Toronto: C.J. Hogrefe.

Filer, C., 2004. 'The Knowledge of Indigenous Desire: Disintegrating Conservation and Development in Papua New Guinea' In A. Bicker, P. Sillitoe and J. Pottier (eds), *Development and Local Knowledge: New Approaches to Issues in Natural Resources Management, Conservation and Agriculture*, pp. 64-92. London: Routledge.

Filer, C., Mahanty, S., Milne S. and Dressler Wolfram. 2012. 'The Social Life of Forest Carbon: Property and Politics in the Production of a New Commodity Human Ecology'.
<https://crawford.anu.edu.au/pdf/staff/rmap/cfiler/Filer-2012-the-social-life-of-forest-carbon.pdf>

Filer, C., with N.K. Dubash and K. Kalit, 2000. *The Thin Green Line: World Bank Leverage and Forest Policy Reform in Papua New Guinea*. Boroko: National Research Institute (Monograph 37). Canberra: Australian National University, Research School of Pacific and Asian Studies, Resource Management in Asia-Pacific Project.

Filer, C., ed. 1999. *Dilemmas of Development: The Social and Economic Impact of the Porgera Gold Mine, 1989-1994*. Canberra: Asia-Pacific Press (Pacific Policy Paper 34). Port Moresby: National Research Institute (Special Publication 24).

Finnegan, Ruth. 2003. "Music, experience and the anthropology of emotion". *The Cultural Study of Music*. 181-192.

Fisher, Philip. 2003. *The Vehement Passions*. Princeton: Princeton University Press.

Fitzgerald, Des. "The affective labour of autism neuroscience: Entangling emotions, thoughts and feelings in a scientific research practice." *Subjectivity* 6, no. 2 (2013): 131-152.

Ford, Richard. 2012. "History of Ethnobiology" in *Ethnobiology*. E.N. Anderson, Deborah Pearsall, Eugene Hunn, and Nancy Turner, eds. Somerset: Wiley.

Fortun, Kim. 2001. *Advocacy after Bhopal: environmentalism, disaster, new global orders*. Chicago: University of Chicago Press

Foucault, Michel. 1980. *Language, counter-memory, practice: selected essays and interviews*. Ithaca, N.Y.: Cornell University Press.

Foucault, Michel. 1980. *Power/knowledge. a selected interviews and other writings 1972-77*. New York: Pantheon Books.

Foucault, Michel, Luther H. Martin, Huck Gutman, and Patrick H. Hutton. 1988. *Technologies of the self: a seminar with Michel Foucault*. Amherst: University of Massachusetts Press.

Foucault, Michel. 2009. *Security, Territory, Population: Lectures at the College de France 1977-1978*. Trans. Graham Burchell. New York: Picador

Foucault, Michel. 2003. "Society Must Be Defended": Lectures at the College de France 1975-1976. Trans. David Macey. New York: Picador.

Foucault, Michel. 2000. Power: Essential Works of Foucault 1954-1984. Ed. James D. Faubion. Trans Robert Hurley, et al. New York: New Press.

Fowler, Cynthia, and Evelyn Konopik. 2007. "The history of fire in the southern United States." *Human Ecology Review*: 165-176.

Frampton, Kenneth. 1993. "Toward a critical regionalism: six points for an architecture of resistance." In *Postmodernism: A reader*. Thomas Docherty, ed. Pp. 268-280.

Freyfogle, Eric T. 2000. "A Sand County Almanac at 50: Leopold in the New Century." *Environmental Law Reporter* 30: 10058-10068.

Fried, M. H. 1967. *The evolution of political society: an essay in political anthropology*. Random House, New York, New York, USA.

Frijda, Nico H. 1986. *The emotions*. Cambridge, UK: Cambridge University Press.

Frost, Samantha. 2016. *Biocultural creatures: toward a new theory of the human*. Durham, NC: Duke University Press.

Galvin, Kathleen A., 2006, "Human-Environment Interactions: New Directions in Human Ecology," Belmont, CA: Thomson Learning Academic Resource Center.

Garibaldi, A. 2009. "Moving from Model to Application: Cultural Keystone Species and Reclamation in Fort McKay, Alberta." *Journal of Ethnobiology* 29(2): 323-338.

Garibaldi, A. and N. Turner 2004. "Cultural keystone species: implications for ecological conservation and restoration." *Ecology and Society* 9(3): 1.

Geertz, Clifford. 1973. *The interpretation of cultures: selected essays*. New York: Basic Books.

Geertz, Hildred. 1959. "The vocabulary of emotion: A study of Javanese socialization processes." *Psychiatry: Journal for the Study of Interpersonal Processes*.

Gell-Mann, M. 1994. *The quark and the jaguar: adventures in the simple and the complex*. W. H. Freeman, New York, New York, USA.

Gibbs, Anna, 2001. *Contagious feelings: Pauline Hanson and the epidemiology of affect*. Bundoora, Vic.: LaTrobe University.

Gibbs, Anna. 2011. "Affect Theory and Audience". In *The Handbook of Media Audiences*. Virginia Nightingale, ed. Pp. 251-266.

Glacken, Clarence J., 1967, *Traces on a Rhodian Shore: Nature and Culture in Western Thought From Ancient Times to the End of the Eighteenth Century*. Berkeley, CA: University of California Press.

Gluck, Sherna Berger, and Daphne Patai. 1991. *Women's words: the feminist practice of oral history*. New York: Routledge.

Goffman, Erving. 1971. *The presentation of self in everyday life*. Harmondsworth: Penguin.

Golley, F. B. 1993. *A history of the ecosystem concept in ecology: more than the sum of the parts*. Yale University Press, New Haven, Connecticut, USA.

Gomes, T. 2013. "Novel ecosystems in the restoration of cultural landscapes of Tl'chés, West Chatham Island, British Columbia, Canada." *Ecological Processes* 2(15): 1-15.

Goodenough, Ward. 1956a. "Componential Analysis and the Study of Meaning." *Language* 32(1):195-216.

Goodenough, Ward. 1956b. "Residence Rules." *Southwestern Journal of Anthropology* 12:22-37.

González, Beatriz. 2005. "Topophilia and Topophobia". *Space & Culture*. 8 (2): 193-213.

Goodwin, Philip. 1998. "Hired hands or local voice': understandings and experience of local participation in conservation". *Transactions*. 23 (3): 481-499.

Gordon, S. L. 1981. The sociology of sentiments and emotion. *Social psychology: Sociological perspectives*, 562-592.

Gordon, Robert, Andrew P. Lyons, and Harriet D. Lyons, eds., 2011, *Fifty Key Anthropologists*, New York, NY: Routledge.

Gorton, Kristyn. 2007. "Theorizing emotion and affect: Feminist engagements." *Feminist Theory* 8:333-348.

Gould, Rachelle Kathryn. "The Forest Has a Story: Reforestation and Cultural Ecosystem Services in Kona, Hawai'i." Stanford University, 2013.

Green, Lesley, ed. 2013. *Contested Ecologies: Dialogues in the South on Nature and Knowledge*. Cape Town, SA: Human Sciences Research Council Press.

Green, Lesley & David R. Green. 2013. *Knowing the Day, Knowing the World: Engaging Amerindian Thought in Public Archaeology*. University of Arizona Press.

Greenberg, J. B., and T. K. Park. 1994. Political ecology. *Journal of Political Ecology* 1:1-11.

Gregg, Melissa, and Gregory J. Seigworth. 2010. *The affect theory reader*. Durham, NC: Duke University Press.

Grice, A. C., J. Cassady and D. M. Nicholas 2012. "Indigenous and non-Indigenous knowledge and values combine to support management of Nywaigi lands in the Queensland coastal tropics." *Ecological Management & Restoration* 13(1): 93-97.

Groffman, P. M., and M. L. Pace. 1998. Synthesis: what kind of a discipline is this anyhow? Pages 473–481 in M. L. Pace and P. M. Groffman, editors. *Successes, limitations, and frontiers in ecosystem science*. Springer-Verlag, New York, New York, USA.

Gunderson, L. H., and Holling C. S., editors. 2002. *Panarchy: understanding transformations in human and natural systems*. Island Press, Washington, D.C., USA.

Gunderson, L. H., C. S. Holling, and S. S. Light, editors. 1995. *Barriers and bridges to the renewal of ecosystems and institutions*. New York, NY: Columbia University Press

Gunderson, L. H., C. S. Holling, and S. S. Light. 1995. Barriers broken and bridges built: a synthesis. Pages 489–532 in L. H. Gunderson, C. S. Holling, and S. S. Light, editors. *Barriers and bridges to the renewal of ecosystems and institutions*. Columbia University Press, New York, New York, USA.

Gupta, Akhil, and James Ferguson. 1997. *Anthropological Locations: Boundaries and Grounds of a Field Science*. Berkeley: University of California Press.

Guyette, Richard P., Rose-Marie Muzika, and Daniel C. Dey. "Dynamics of an anthropogenic fire regime." *Ecosystems* 5, no. 5 (2002): 472-486.

Haenn, Nora. 1999. "The Power of Environmental Knowledge: Ethnoecology and Environmental Conflicts in Mexican Conservation". *Human Ecology*. 27 (3): 477-491.

Haenn, Nora, and Richard R. Wilk. 2006. *The environment in anthropology a reader in ecology, culture, and sustainable living*. New York: New York University Press

Haenn, Nora; Birgit Schmook; Yol Reyes; Sophie Calme. 2014. "Improving Conservation Outcomes with Insights from Local Experts and Bureaucracies." *Conservation Biology* 28(4): 951- 958.

Hall, C. A. S., D. Lindenberger, R. Kummel, T. Kroeger, and W. Eichhorn. 2001. The need to reintegrate the natural sciences with economics. *BioScience* 51(8):663–673.

Hagen, J. B. 1992. *An entangled bank: the origins of ecosystem ecology*. Rutgers University Press, New Brunswick, New Jersey, USA.

- Haraway, Donna Jeanne. 2016. *Staying with the trouble: making kin in the Chthulucene*. Durham, NC: Duke University Press.
- Harré, Rom. 1986. *The Social construction of emotions*. Oxford, OX, UK: Blackwell.
- Harris, Marvin, 2000, *The Rise of Anthropological Theory: A History of Theories of Culture*, Walnut Creek, CA: AltaMira Press.
- Harris, Mark. 2007. *Ways of knowing: anthropological approaches to crafting experience and knowledge*. New York: Berghahn Books.
- Harris, James A., Richard J. Hobbs, Eric Higgs, and James Aronson. 2006. "Ecological Restoration and Global Climate Change." *Restoration Ecology* 14(2) pp. 170-176.
- Harrison, Faye Venetia. 1991. *Decolonizing anthropology: moving further toward an anthropology for liberation*. Washington, D.C.: Association of Black Anthropologists.
- Hatch, Elvin, 1973, "The Growth of Economic Subsistence and Ecological Studies in American Anthropology," *Journal of Anthropological Research* 29:221-243.
- Hatfield, Elaine, John T. Cacioppo, and Richard L. Rapson. 1994. *Emotional contagion*. Cambridge, UK: Cambridge University Press.
- Havlick, D. and M. Doyle 2009. "Restoration Geographies." *Ecological Restoration* 27(3): 240-243.
- Hayles, N. Katherine. 1995. "Searching for Common Ground." In *Reinventing Nature?: Responses to Postmodern Deconstruction*. Michael Soule and Gary Lease, eds. San Francisco, CA: Island Press: 47-63.
- Hays, Samuel P. 1987. *Beauty, health, and permanence: environmental politics in the United States, 1955-1985*. Cambridge [Cambridgeshire]: Cambridge University Press.
- Head, L. 2000 *Cultural Landscapes and Environmental Change*. Arnold, London
- Head, L. 2000 *Second Nature: The history and implications of Australia as Aboriginal landscape*. Syracuse University Press, New York.
- Heelas, P. 1983. Indigenous representatives of the emotions: the Chewong. *J. Anthropol. Soc. Oxford*, 14, 87-103.
- Heelas, P. 1996. Emotion talk across cultures. *The emotions: Social, cultural and biological dimensions*, 171-199.
- Heemskerk, M., K. Wilson, and M. Pavao-Zuckerman. 2003. Conceptual models as tools for communication across disciplines. *Conservation Ecology* 7(3):8.

Heider, Karl G. 2011. *The cultural context of emotion: folk psychology in West Sumatra*. New York: Palgrave Macmillan.

Heinen, Joel T., and Rahul J. Shrivastava. 2009. "An analysis of conservation attitudes and awareness around Kaziranga National Park, Assam, India: implications for conservation and development". *Population and Environment*. 30(6): 261-274.

Helm, June. 1962. "The Ecological Approach in Anthropology," *American Journal of Sociology* 17:630-639.

Hensold, Nancy C., Mark J. Leoschke, and Sharon W. Morgan. 1986. *Rare plants of the Ozark National Scenic Riverways*, final report. Jefferson City, Mo: Missouri Dept. of Conservation.

Herzfeld, Michael, 2001, "Environmentalisms," in *Anthropology: Theoretical Practice in Culture and Society*, Malden, MA: Blackwell Publishers, pp. 171-191.

Hewes, Leslie. 1942. *The Oklahoma Ozarks as the land of the Cherokees*. New York: American Geographical Society.

Heynen, N., H. Perkins, and P. Roy. 2006. "The political ecology of uneven urban green space: The impact of political economy on race and ethnicity in producing environmental inequality in Milwaukee." *Urban Affairs Review* 42(1): 3-25.

Higginbotham, N., L. Connor, and F. Baker. 2014. Subregional differences in Australian climate risk perceptions: coastal versus agricultural areas of the Hunter Valley, NSW. *Regional Environmental Change*, 1-14.

Higgs, E. S. (1997). "What is Good Ecological Restoration?" *Conservation Biology* 11(2): 338-348.

Higgs, E. (2003). *Nature by Design: people, natural process, and ecological restoration*. Massachusetts, Massachusetts Institute of Technology.

Hobsbawm, Eric and Terence Ranger, eds. 2015. *The invention of tradition*. Cambridge, UK: Cambridge University Press.

Hochschild, Arlie Russell. 1983. *The managed heart: commercialization of human feeling*. Berkeley: University of California Press.

Holland, Dorothy C., and Naomi Quinn. 1987. *Cultural models in language and thought*. Cambridge, UK: Cambridge University Press.

Holling, C. S. 1978. *Adaptive Environmental Assessment and Management*. London, UK: John Wiley.

Holling, C. S. 1986. The resilience of terrestrial ecosystems: local surprise and global change. Pages 292–317 in W. C. Clark and R. E. Munn, editors. *Sustainable development of the biosphere*. Cambridge, UK: Cambridge University Press.

Holling, C. S. 1987. Simplifying the complex: the paradigms of ecological function and structure. *European Journal of Operational Research* 30:139–146.

Holling, C. S. 1995. What barriers? What bridges? Pages 3–34 in L. H. Gunderson, C. S. Holling, and S. S. Light, editors. *Barriers and bridges to the renewal of ecosystems and institutions*. New York, NY: Columbia University Press.

Holling, C. S. 1998. Two cultures of ecology. *Conservation Ecology* 2.

Holling, C. S., L. H. Gunderson, and G. D. Peterson. 2002b. Sustainability and panarchies. Pages 63–102 in L. H. Gunderson and C. S. Holling, editors. *Panarchy: understanding transformations in human and natural systems*. Washington, DC: Island Press.

Homewood, Katherine, and Daniel Brockington. 1999. “Biodiversity, conservation and development in Mkomazi Game Reserve, Tanzania”. *Global Ecology and Biogeography*. 8 (3-4): 301-313.

Hopkins, Debra. 2009. *Theorizing emotions: sociological explorations and applications*. Frankfurt: Campus Verlag.

Hornborg, A. 2001. *The power of the machine: global inequalities of economy, technology, and environment*. Walnut Creek, CA: AltaMira Press.

Hornborg, Alf, and Carole Crumley, ed. 2007. *The World System and the Earth System: Global Socioenvironmental Change and Sustainability since the Neolithic*. Left Coast Press.

Howe, Cymene. 2014. “Anthropocene Ecoauthority: The Winds of Oaxaca. *Anthropological Quarterly* 87(2): 381-404.

Howell, Benita J. 2002. *Culture, environment, and conservation in the Appalachian South*. Urbana, IL: University of Illinois Press.

Hulme, David, and Marshall W. Murphree. 2001. *African wildlife & livelihoods: the promise and performance of community conservation*. Cape Town, SA: D. Philip.

Hufford, Mary. 1994. *Conserving culture: a new discourse on heritage*. Urbana, IL: University of Illinois Press.

Hunter, Carl G. 1989. *Trees, shrubs & vines of Arkansas*. Little Rock, AR: Ozark Society Foundation.

Hynes, Maria. 2013. "Reconceptualizing resistance: sociology and the affective dimension of resistance". *The British Journal of Sociology*. 64 (4): 559-577.

Illouz, Eva. 2007. *Cold intimacies: the making of emotional capitalism*. Cambridge, UK: Polity Press.

Ingold, Tim. 2004, "A Circumpolar Night's Dream," in John Clammer et al., eds., *Figured Worlds: Ontological Obstacles in Intercultural Relations*. Toronto: University of Toronto Press, pp. 25-57.

Ingold, T. 2010. "Footprints through the weather-world: walking, breathing, knowing." *Journal of the Royal Anthropological Institute (N.S.)* (2010 special issue): S121–S139.

Ingold, Tim. 2011a. *Being alive: essays on movement, knowledge and description*. London: Routledge.

Ingold, Tim. 2011b. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. Routledge.

Ingold, Tim, and Jo Lee Vergunst. 2008. *Ways of walking: ethnography and practice on foot*. Aldershot, England: Ashgate.

Izard, Carroll E. 1971. *The face of emotion*. New York: Appleton-Century-Crofts.

Izard, Carroll E. 1972. *Patterns of emotions; a new analysis of anxiety and depression*. New York: Academic Press.

Izard, Carroll E. 1977. *Human emotions*. New York: Plenum Press.

Izard, Carroll E. 1979. *Emotions in personality and psychopathology*. New York: Plenum Press.

Izard, Carroll E. 1989. *Development of emotion-cognition relations*. Hove: Erlbaum.

Izard, Carroll E. 1991. *The psychology of emotions*. New York: Plenum Press.

Izard, Carroll E., Jerome Kagan, and Robert B. Zajonc. 1984. *Emotions, cognition, and behavior*. Cambridge, UK: Cambridge UP.

Jackson, Anthony. 1987. *Anthropology at home*. London: Tavistock Publications.

Jackson, Stephen T. and Richard J. Hobbs. 2009. "Ecological Restoration in the Light of Ecological History." *Science* 325 pp. 567-569.

Jackson, Sue, and Lisa R. Palmer. "Reconceptualizing Ecosystem Services Possibilities for Cultivating and Valuing the Ethics and Practices of Care." *Progress in Human Geography*, 2014.

Jaggar, Alison M. 1989. "Love and knowledge: Emotion in feminist epistemology." *Inquiry* 32, no. 2: 151-176.

James, William. 2007. *What is an emotion?* Radford, VA: Wilder Publications.

Jameson, Frederic. 1991. *Postmodernism, or, The cultural logic of late capitalism*. Durham: Duke Univ. Press.

Jannis Androutsopoulos. 2013. "Localising the global on the participatory web." In *The Handbook of language and globalization*. Nikolas Coupland, ed. Malden, MA: Wiley-Blackwell.

Johnson, A. W., and T. Earle. 1987. *The evolution of human societies: from foraging group to agrarian state*. Stanford University Press, Stanford, California, USA.

Johnson, Allen. 1982. "Reductionism in cultural ecology: the Amazon case". *Current Anthropology*. 23 (4): 413-428.

Johnson, Leslie Main. 2010. *Trail of story, traveller's path reflections on ethnoecology and landscape*. Edmonton: AU Press.

Johnson, Leslie Main, and Eugene S. Hunn. 2012. *Landscape ethnoecology: concepts of biotic and physical space*. New York: Berghahn Books.

Johnson, Leslie Main and Iain Davidson-Hunt. 2011. "Ethnoecology and Landscapes." In *Ethnobiology*. E.N. Anderson, Deborah Pearsall, Eugene S. Hunn, and Nancy J. Turner, eds. Pp. 267-284.

Johnson-Laird, P. N., and Keith Oatley. 1988. *The language of emotions: an analysis of a semantic field*. Princeton, NJ: Princeton University, Cognitive Science Laboratory

Jordan, Glenn H. 1991 "On Ethnography in an Intertextual Situation: Reading Narratives or Deconstructing Discourse?" In *Decolonizing Anthropology*. Faye V. Harrison, ed. Washington, D.C.: American Anthropological Association.

Jordan, William R. 2003. *The Sunflower Forest: Ecological Restoration and the New Communion with Nature*. Los Angeles, CA: University of California Press.

Jordan, William III. 2003. *The sunflower forest: Ecological restoration and the new communion with nature*. Berkeley, University of California Press.

Johnstone, Barbara. 2002. *Discourse analysis*. Malden, Mass: Blackwell.

Jorgensen, Danny L. 1989. *Participant observation: a methodology for human studies*. Newbury Park, CA: Sage Publications.

Juzek, Charles, and Susan E. Mehrrens. 1974. *Earthkeeping; readings in human ecology*. Pacific Grove, CA: Boxwood Press.

Kagan, Jerome. 2007. *What is emotion?: history, measures, and meanings*. New Haven, CT: Yale University Press.

Kapferer, Bruce. 1979. "Emotion and feeling in Sinhalese healing rites." *Social Analysis* 1: 153-176.

Kawa, Nicholas C., Bradley Painter, and Cailín E. Murray. 2015. "Trail Trees: Living Artifacts (Vivifacts) of Eastern North America". *Ethnobiology Letters*. 6 (1): 183-188.

Kemper, Theodore D. 1978. *A social interactional theory of emotions*. New York: Wiley.

Kempton, Willett. 1981. *The Folk Classification Of Ceramics A Study of Cognitive Prototypes*. Oxford, UK: Elsevier Science.

Kempton, Willett, James S. Boster, and Jennifer A. Hartley. *Environmental values in American culture*. MIT Press, 1996.

Kimmerer, R. 2011. *Restoration and reciprocity: the contributions of Traditional Ecological Knowledge. Human dimensions of ecological restoration: integrating science, nature and culture*. D. Egan, Island Press: 257-276.

Kimmins, J. P. 1987. *Forest ecology*. MacMillan, New York, New York, USA.

Kohler, Robert E. 2002. *Landscapes and Labscapes: Exploring the Lab–Field Border in Biology*. Chicago: The University of Chicago Press.

Kohn, Eduardo. 2014. *How Forests Think: Toward an Anthropology Beyond the Human*. UC Press.

Kondo, Dorinne K. 1990. *Crafting Selves: Power, Gender, and Discourses of Identity in a Japanese Workplace*. Chicago, IL: University of Chicago Press.

Kosek, Jake. 2006. *Understories: the political life of forests in northern New Mexico*. Durham, NC: Duke University Press.

Kottak, Conrad P., 1999, "The New Ecological Anthropology," *American Anthropologist* 101(1):23-35.

Kovecses, Zoltan. "The Folk Model of Romantic Love in America." *High and Low in American Culture* (1986): 125-32.

Kövecses, Zoltán. 1990. *Emotion concepts*. New York: Springer-Verlag.

- Krech, Shepard. 1999. *The ecological Indian: myth and history*. New York: W.W. Norton & Co.
- Krech, Shepard. 2005. "Reflections on conservation, sustainability, and environmentalism in Indigenous North America". *American Anthropologist: Journal of the American Anthropological Association*.
- Kronenfeld, David B. 2011. *A companion to cognitive anthropology*. Chichester, West Sussex: Wiley-Blackwell.
- Lacy, Leslie Alexander. 1976. *The Soil Soldiers: The Civilian Conservation Corps in the Great Depression*. Radnor, PA: Chilton Book Company.
- Lake, Alison. 1994. *Strategic sentiments: Javanese women and the anthropology of emotion*. Thesis (A.B., Honors in Women's Studies and Anthropology)--Harvard University, 1994.
- Lakerveld, Roan, Karen Fortuin ESA, and Todd Crane TAD. 2012. "Applying Political Ecology to Ecosystem Services: Operationalizing an Alternative Approach to Ecosystem Services."
- Lahiri-Dutt, Kuntala, ed. 2014. *The Coal Nation: Histories, Ecologies and the Politics of Coal in India*. Aldershot: Ashgate.
- Lahiri-Dutt, Kuntala and Gopa Samanta. 2013. *Dancing with the River: People and Life on the Chars of South Asia*, Agrarian Studies Series, New Haven: Yale University Press.
- Lahiri-Dutt, Kuntala, ed. 2011. *Gendering the Field: Towards Sustainable Livelihoods for Mining Communities*, ANU E Press.
- Lahiri-Dutt, Kuntala, ed. 2006. *Fluid Bonds: Views on gender and water*, Stree, Calcutta.
- Landman, Janet. 1995. "Through a glass darkly: Worldviews, counterfactual thought, and emotion." In *What might have been: The social psychology of counterfactual thinking*: 233-258.
- Lansing, S. J. 1991. *Priests and programmers: technologies of power in the engineered landscape of Bali*. Princeton University Press, Princeton, New Jersey, USA.
- LaPin, Deirdre Ann, Louis Guida, and Lois Pattillo. 1982. *Hogs in the bottom: family folklore in Arkansas*. Little Rock, AR: August House.
- Latour, Bruno. 1993. *We have never been modern*. Cambridge, MA: Harvard University Press.
- Latour, Bruno. 2004. *Politics of nature: how to bring the sciences into democracy*. Cambridge, MA: Harvard University Press.
- Latour, Bruno. "Visualization and cognition." *Knowledge and society* 6 (1986): 1-40.

Latour, Bruno, and Steve Woolgar. 1986. *Laboratory life: the construction of scientific facts*. Princeton, N.J.: Princeton University Press.

Lave, Rebecca. 2012. *Fields and Streams: Stream Restoration, Neoliberalism, and the Future of Environmental Science*. University of Georgia Press.

Leach, Melissa, and James Fairhead, 2002, "Anthropology, Culture, and Environment," in *Exotic No More: Anthropology on the Front Lines*, Jeremy McClancy, ed., Chicago, IL: University of Chicago Press.

Lefebvre, Henri. 1991. *The production of space*. Oxford, UK: Blackwell.

Legg, Stephen. 2005. "Foucault's population geographies: classifications, biopolitics and governmental spaces". *Population, Space and Place*. 11(3): 137-156.

Lele, Sharachchandra, Oliver Springate-Baginski, Roan Lakerveld, Debal Deb, Prasad Dash, and others. 2013. "Ecosystem Services: Origins, Contributions, Pitfalls, and Alternatives." *Conservation and Society* 11(4): 343

Leopold, Aldo, and Charles Walsh Schwartz. 2000 [1949]. *A Sand County almanac, and Sketches here and there*. Topeka, KS: Topeka Bindery.

Lepofsky, D., E. K. Heyerdahl, K. Lertzman, D. Schaepe, and B. Mierendorf. 2003. Historical meadow dynamics in southwest British Columbia: a multidisciplinary analysis. *Conservation Ecology* 7(3):5.

Leslie, E., E. Cerin, and P. Kremer. 2010. Perceived Neighborhood environment and park use as mediators of the effect of area socio-economic status on walking behaviors. *Journal of Physical Activity and Health* 7(6): 802-810.

Levin, Simon A. 1998. Ecosystems and the biosphere as complex adaptive systems. *Ecosystems* 1:431–436.

Levin, Simon A. 1999. *Fragile dominion: complexity and the commons*. Perseus, Cambridge, UK.

Levin, Simon A., and Stephen R. Carpenter. 2009. *The Princeton guide to ecology*. Princeton: Princeton University Press.

Lew, Alan A., Colin Michael Hall, and Allan M. Williams. 2004. *A companion to tourism*. Malden, MA: Blackwell.

Lewicka, Maria. 2011. "Place Attachment: How Far Have We Come in the Last 40 Years?" *Journal of Environmental Psychology* 31(3): 207–30.

Lewis, Michael. 2004. *Inventing Global Ecology: Tracking the biodiversity ideal in India 1947-1997*. Ohio University Press.

Lewis, Michael, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett. 2008. *Handbook of emotions*. New York: Guilford Press.

Lewis, M., & Saarni, C., eds. 1985. *The socialization of emotions* (Vol. 5). Plenum Publishing Corporation.

Leys, Ruth. 2011. "The Turn to Affect: A Critique." *Critical Inquiry* 37:434-472.

Little, Paul E., 1999, "Environmentalists and Environmentalisms in Anthropological Research: Facing a New Millennium," *Annual Review of Anthropology* 28:253-284.

Lock, Andrew, and Thomas Strong. 2010. *Social constructionism: sources and stirrings in theory and practice*. Cambridge, UK: Cambridge University Press.

Lockyer, Joshua, and James R. Veteto. 2015. *Environmental Anthropology Engaging Ecotopia Bioregionalism, Permaculture and Ecovillages*. New York, NY: Berghahn Books.

Lockwood, Julie L., Martha F. Hoopes, and Michael P. Marchetti. 2007. *Invasion ecology*. Malden, MA: Blackwell Pub.

Long, Jonathan, Aregai Tecle, and Benrita Burnette. 2003. "Cultural Foundations for Ecological Restoration on the White Mountain Reservation." *Conservation Ecology* 8(1): 4.

Long, Jonathan W. 1998. "Restoring the Land and Mind." *Journal of Land Resources & Environmental Labor*. 18: 51.

Lounsbury, Floyd G. 1956. "A Semantic Analysis of the Pawnee Kinship Usage". *Language*. 32 (1): 158-194.

Love, Thomas F. 1977. "Ecological Niche Theory in Sociocultural Anthropology: A Conceptual Framework and an Application". *American Ethnologist*. 4 (1): 27-41.

Long, J., A. Tecle and B. Burnette 2003. "Cultural foundations for ecological restoration on the White Mountain Apache Reservation." *Conservation Ecology* 8(1).

Low, Setha M., and Denise Lawrence-Zúñiga. 2003. *The anthropology of space and place: locating culture*. Malden, MA: Blackwell Pub.

Low, Setha M., and Sally Engle Merry. 2010. *Engaged anthropology: diversity and dilemmas*. Chicago: University of Chicago Press.

Low, Setha M., and Neil Smith. 2006. *The politics of public space*. New York: Routledge.

Low, Setha M., Dana Taplin, and Suzanne Scheld. 2005. *Rethinking urban parks: public space & cultural diversity*. Austin: University of Texas Press.

Low, Setha M. 2000. *On the plaza: the politics of public space and culture*. Austin: University of Texas Press.

Lowe, Celia. 2006. *Wild Profusion: Biodiversity Conservation in a Indonesian Archipelago*. Princeton University Press.

Lowie, Robert H., 1917. "Culture and Environment," in *Culture and Ethnology*, New York, NY: McMurtrie, pp. 47-65.

Lubchenco, Jane, Annette M. Olson, Linda B. Brubaker, Stephen R. Carpenter, Marjorie M. Holland, Stephen P. Hubbell, Simon A. Levin, James A. MacMahon, Pamela A. Matson, Jerry M. Melillo, Harold A. Mooney, Charles H. Peterson, H. Ronald Pulliam, Leslie A. Real, Phillip J. Regal, and Paul G. Risser. 1991. "The sustainable biosphere initiative: An ecological research Agenda: A report from the Ecological Society of America." *Ecology* 72(2): 371-412.

Luke, Timothy W. 1995. "On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism." *Cultural Critique* 31: 57-81.

Lutz, Catherine. 1988. *Unnatural emotions: everyday sentiments on a Micronesian atoll & their challenge to western theory*. Chicago: University of Chicago Press.

Lutz, Catherine, and Lila Abu-Lughod. 1990. *Language and the politics of emotion*. Cambridge, UK: Cambridge University Press.

Lynch, Elizabeth B., John D. Coley, and Douglas L. Medin. 2000. "Tall is typical: Central tendency, ideal dimensions, and graded category structure among tree experts and novices." *Memory & Cognition*. 28(1): 41-50.

McCarthy, John F. 2006. *The Fourth Circle: A Political Ecology of Sumatra's Rainforest Frontier*. Stanford University Press.

McCarty, Joey. 1977. *Civilian Conservation Corps in Arkansas*. Thesis (M.A.)--University of Arkansas, Fayetteville, 1977.

McCay, Bonnie J. 2008. "An Intellectual History of Ecological Anthropology," in *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology*, Bradley B. Walters, Boonie J. McCay, Paige West, and Susan Lees, eds., Lanham, MD: Rowman & Littlefield Publishers, Inc., pp. 11-25.

McCay, B., and J. M. Acheson, editors. 1987. *The question of the commons: the culture and ecology of communal resources*. University of Arizona Press, Tucson, Arizona, USA.

McHenry, Robert, and Charles Lincoln Van Doren. 1972. *A documentary history of conservation in America*. New York: Praeger.

- McMahon, Darrin M. 2005. *Happiness: a history*. New York: Atlantic Monthly Press.
- McNeill, J. R. 2001. *Something new under the sun: an environmental history of the Twentieth-century world*. Norton, New York, New York, USA.
- McNeil, W. K., and William M. Clements. 1992. *An Arkansas folklore sourcebook*. Fayetteville: University of Arkansas Press.
- McPeake, Rebecca, and John M. Tomeček, and Don White, Jr. 2016. "Chronic Wasting Disease in Deer and Elk in Arkansas." Fayetteville, AR: University of Arkansas Division of Agriculture, Research & Extension.
- McWilliam A.R. 2013. "Cultural Heritage and its Performative Modalities: Imagining the Nino Konis Santana National Park, East Timor" in *Transcending the Culture-Nature Divide in Cultural Heritage: Views from the Asia-Pacific Region*, S. Brockwell S. O'Connor, and D. Byrne, eds. *Terra Australis* No. 36. ANU E Press, Canberra, pp191-201.
- Maher, Neil M. 2008. *Nature's New Deal: The Civilian Conservation Corps and the Roots of the American Environmental Movement*. New York: Oxford University Press.
- Malin, James C. 1956. *The grassland of North America: prolegomena to its history*. Lawrence, KS.
- Mann, Charles C. 2012. *1491: new revelations of the Americas before Columbus*. New York: Knopf.
- Marchand, Trevor H. J. 2010. *Making knowledge: explorations of the indissoluble relation between mind, body and environment*. Malden, MA: Wiley-Blackwell.
- Marcus, J. 1998. The peaks and valleys of ancient states: an extension of the dynamic model. Pages 59–94 in G. M. Feinman and J. Marcus, editors. *Archaic States*. School of American Research Press, Santa Fe, New Mexico, USA.
- Marcus, Richard R. 2001. "Seeing the Forest for the Trees: Integrated Conservation and Development Projects and Local Perceptions of Conservation in Madagascar". *Human Ecology*. 29 (4): 381-397.
- Markman, Robert Paul. 1972. *The Arkansas Cherokees, 1817-1828*. Norman, Okla: [s.n.].
- Markus, Hazel Rose, and Shinobu Kitayama. 1994. *The cultural construction of self and emotion: Implications for social behavior*.
- Marling, Raili. n.d. "Gender and Emotion in Comparative Perspective". *CLCWeb: Comparative Literature and Culture*. 15(7).

- Marres, Noortje. 2009. "Testing Powers of Engagement". *European Journal of Social Theory*. 12 (1): 117-133.
- Marsella, Anthony J., Roland G. Tharp, and Thomas J. Ciborowski. 1979. *Perspectives on cross-cultural psychology*. New York: Academic Press. SEE Boucher, J. 'Culture and Emotion'.
- Martin, Gary J. 1995. *Ethnobotany: a methods manual*. London: Chapman & Hall.
- Marx, Karl. 1967 [1867]. *Capital*, Vol. I. International Publishers, New York, New York, USA.
- Massumi, Brian. 1993. *The Politics of everyday fear*. Minneapolis: University of Minnesota Press.
- Massumi, Brian. 2002. *Parables for the virtual: movement, affect, sensation*. Durham, NC: Duke University Press.
- Massumi, Brian. 2010. "The future birth of the affective fact: The political ontology of threat." In *The affect theory reader*. Melissa Gregg and Gregory J. Seigworth, eds. Duke University Press.
- Matt, Susan J., and Peter N. Stearns. 2014. *Doing emotions history*. Urbana: University of Illinois Press.
- Mathews, Andrew S. 2011. *Instituting Nature: Authority, Expertise, and Power in Mexican Forests*. MIT Press.
- Meadows, D. H., D. L. Meadows, and J. Randers. 1992. *Beyond the limits: confronting global collapse, envisioning a sustainable future*. Chelsea Green Publishing Company, White River Junction, Vermont, USA.
- Medin, Douglas L., and Scott Atran. 1999. *Folkbiology*. Cambridge, Mass: MIT Press.
- Mencher, Joan. 1966. "Kerala and Madras: A Comparative Study of Ecology and Social Structure", *Ethnology* Vol.V:135-171.
- Merleau-Ponty, Maurice. 2015 [1945]. *Phenomenology of perception*. London: Forgotten Books.
- Miller, E. Joan Wilson. 1969. *The naming of the land in the Arkansas Ozarks: a study in culture processes*. Normal, Ill: Illinois State University.
- Miller, William Ian. 1997. *The anatomy of disgust*. Cambridge, Mass: Harvard University Press
- Milne, S. 2012 'Grounding forest carbon: Property relations and avoided deforestation in Cambodia'. *Human Ecology* 40(5), pp. 693-706.
- Milton, Kay. 2002. *Loving nature: Towards and ecology of emotion*. New York, NY: Routledge.

Milton, Kay. 2003. *Environmentalism and cultural theory: exploring the role of anthropology in environmental discourse*. London: Routledge.

Minnegal, Monica, ed. 2005. *Sustainable Environments, Sustainable Communities: Potential Dialogues between Anthropologists, Scientists and Managers*. Melbourne: University of Melbourne, School of Anthropology, Geography and Environmental Studies (Research Paper 21).

Minnegal, Monica and Peter Dwyer. 2008. "Fire, flood, fish and the uncertainty paradox". *The Australian Journal of Anthropology*. Vol. 19 (1): 77-81

Minnegal, Monica and Peter Dwyer 2008. Managing risk, resisting management: Stability and diversity in a southern Australian fishing fleet. *Human Organization*. 67:97-108.

Minnis, Paul E. 2009. *Ethnobotany: a reader*. Breinigsville, PA: University of Oklahoma Press.

Modiglianai, Andre. 1968. "Embarrassment and embarrassability." *Sociometry*.

Moore, Amelia. 2012. "The Aquatic Invaders: Marine Management Figuring Fishermen, Fisheries, and Lionfish." *Cultural Anthropology* 27(4).

Moore, Donald S. 1998. Subaltern struggles and the politics of place: Remapping resistance in Zimbabwe's eastern highlands. *Cultural Anthropology*. 13(3): 344-381.

Moran, Emilio. F. 1990. *The ecosystem concept in anthropology*. Westview Press, Boulder, Colorado, USA.

Moran, Emilio F. 1996. "Environmental Anthropology," in *Encyclopedia of Cultural Anthropology*, David Levinson and Melvin Ember, eds., New York, NY: Henry Holt and Co. volume 2: 283-389.

Moran, Emilio F., and Eduardo S. Brondizio. 2012. "Introduction to Human-Environment Interactions Research," in *Human-Environment Interactions: Current and Future Directions*, Eduardo S. Brondizio and Emilio F. Moran, eds., New York, NY: Springer: 1-24.

Morgan, L. H. 1877. *Ancient society*. Holt, Rinehart and Winston, New York, New York, USA.

Monroe, W.H. (1970) A glossary of Karst terminology: USGS Water Supply Paper, 1899-K: 26.

Morris, Robert Lee. 1943. "Ozark or Masserne". *The Arkansas Historical Quarterly*. 2 (1): 39-42.

Mouffe, Chantal. 1992. "Citizenship and Political Identity." *October*. 61: 28-32.

- Mouffe, Chantal. 1997. "Feminism, citizenship, and radical democratic politics". *Feminist Social Thought : a Reader*.
- Mueller, Shane T., and Elizabeth S. Veinott. 2008. "Cultural mixture modeling: A method for identifying cultural consensus." *ARA Technology Review* 4 (1): 39-45.
- Mulder, Monique Borgerhoff, and Peter Coppolillo. 2005. *Conservation: linking ecology, economics, and culture*. Princeton, N.J.: Princeton University Press.
- Murdoch J., Bitting C., and Van Brahana J. 2016. "Characterization of the karst hydrogeology of the Boone Formation in Big Creek Valley near Mt. Judea, Arkansas—documenting the close relation of groundwater and surface water". *Environmental Earth Sciences*. 75 (16).
- Nabhan, G. P. and D. Martinez. 2012. "Traditional ecological knowledge and endangered species recovery: is ethnobiology for the birds." *Journal of Ethnobiology* 32(1): 1-5.
- Nadasdy, Paul. 2004. *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon*. UBC Press.
- Nading, Alex M. 2014. *Mosquito Trials: Ecology, Health, and the Politics of Entanglement*. UC Press.
- Nash, Roderick. 1982. *Wilderness and the American mind*. New Haven, Conn: Yale University Press.
- Nash, Roderick. 1990. *American environmentalism: readings in conservation history*. New York: McGraw-Hill.
- Nast, Heidi J., and Steve Pile. 1998. *Places through the body*. London: Routledge.
- Nathanson, Donald L. 1992. *Shame and pride: affect, sex, and the birth of the self*. New York: Norton.
- Navaro-Yashin, Yael. 2009. "Affective spaces, melancholic objects: ruination and the production of anthropological knowledge." *Journal of the Royal Anthropological Institute* 15:1-18.
- Nazarea, Virginia D. 2006. "Local Knowledge and Memory in Biodiversity Conservation". *Annual Review of Anthropology*. 35: 317.
- Negri, Antonio, and Michael Hardt. 1999. "Value and Affect". *Boundary 2*. 26 (2): 77-88.
- Nelson, James Gordon, and Patrick Lloyd Lawrence. 2009. *Places linking nature, culture and planning*. Calgary: University of Calgary Press.
- Netting, Robert M. 1971. "The Ecological Approach in Cultural Study," Addison-Wesley Modular Publications No. 6.

Netting, Robert M. 1996. "Cultural Ecology," in *Encyclopedia of Cultural Anthropology*, David Levinson and Melvin Ember, eds. New York, NY: Henry Holt & Co. volume 1: 267-271.

Neves, Katja. 2009. "Urban Botanical Gardens and the Aesthetics of Ecological Learning: A Theoretical Discussion and Preliminary Insights From Montreal's Botanical Garden." *Anthropologica* 51(1): 145.

Neves-Graca, Katja. 2005. "Chasing Whales With Bateson and Daniel." *Australian Humanities Review* 35.

Nichols, Robert. 2014. "Contract and Usurpation: Enfranchisement and Racial Governance in Settler-Colonial Contexts." In *Theorizing native studies*. Audra Simpson and Andrea Smith, eds.

Ngai, Sianne. 2005. *Ugly feelings*. Cambridge, Mass: Harvard University Press.

Nolan, Justin M., and Andrea Pieroni. 2014. "Introduction to special issue on food security in a changing world." *Journal of Ethnobiology* 34 (1): 4-6.

Nolan, Justin M., and MC Robbins. 2000. Ethnobotany and ethnicity in the ozarks: A reply to jones. *Human Organization*, 59 (1): 140-142.

Nolan, Justin M., and Mary Jo Schneider. 2011. "Medical Tourism in the Backcountry: Alternative Health and Healing in the Arkansas Ozarks". *Signs*. 36 (2): 319-326.

Nolan, Justin M., and Michael C. Robbins. 2000. "Cultural conservation of medicinal plant use in the Ozarks". *Human Resources Abstracts*. 35 (1).

Nolan, Justin M. 2007. *Wild harvest in the heartland: ethnobotany in Missouri's Little Dixie*. Lanham, Md: University Press of America.

Nora, Pierre and Lawrence D. Kritzman. 1996. *Realms of memory: rethinking the French past*: v. 1: Conflicts and divisions. New York, NY: Columbia University Press.

Novick, Adam P. 2013. "Risk to maintenance-dependent species from orthodoxy in species based land-use regulation." Master's thesis. University of Oregon. Novick, Adam P. "Risk to Maintenance-Dependent Species from Orthodoxy in Species-Based Land-Use Regulation." University of Oregon, 2013.

Nugent, David, and Joan Vincent. 2004. *A companion to the anthropology of politics*. Malden, MA: Blackwell Pub. NOTE: for chapter Stoler, Ann. "Affective States."

Oatley, Keith. 1992. *Best laid schemes: The psychology of the emotions*. Cambridge University Press.

Odum, E. P. 1953. *Fundamentals of ecology*. W. B. Saunders, Philadelphia, Pennsylvania, USA.

- Odum, H. T. 1983. *Systems ecology*. New York, NY: John Wiley.
- Odum, H. T. 1996. *Environmental accounting: energy and decision making*. New York, NY: John Wiley.
- Odum, H. T., and E. C. Odum. 2001. *A prosperous way down: principles and policies*. Niwot, CO: University Press of Colorado.
- Odum, H. T., and R. C. Pinkerton. 1955. Time's speed regulator: the optimum efficiency for maximum power output in physical and biological systems. *American Scientist* 43:321–343.
- Ogden, Laura. 2011. *Swamp Life: People, Gators, and Mangroves Entangled in the Everglades*. University of Minnesota Press.
- Ogunseitan, Oladele A. 2005. Topophilia and the Quality of Life. *Environmental Health Perspectives*. 113:143-148.
- O'Malley, P. 1992. Risk, power, and crime prevention. *Economy and Society*. 21(3): 252-75.
- O'Neill, R. V., D. L. DeAngelis, J. B. Waide, and T. F. H. Allen. 1986. *A hierarchical concept of ecosystems*. Princeton University Press, Princeton, New Jersey, USA.
- Orlove, Benjamin S. 1980. "Ecological anthropology". *Annual Review of Anthropology*. 9: 235-273.
- Orlove, Benjamin. 2006 [1999]. "The new ecological anthropology." In *The environment in anthropology a reader in ecology, culture, and sustainable living*. Nora Haenn and Richard R. Wilk, eds. New York: New York University Press.
- Orlove, Benjamin S., and Stephen B. Brush. 1996. "Anthropology and the conservation of biodiversity". *Annual Review of Anthropology*. 25: 329-352.
- Ostrom, E., and H. Nagendra. 2006. "Inaugural Article: Insights on linking forests, trees, and people from the air, on the ground, and in the laboratory". *Proceedings of the National Academy of Sciences*. 103 (51): 19224-19231.
- Overing, Joanna, and Alan Passes. 2000. *The anthropology of love and anger: the aesthetics of conviviality in Native Amazonia*. London: Routledge.
- Owens, Dorothea Jody. 2012. *Nature's Classroom: An Ethnographic Case Study of Environmental Education*. (Diss.) University of South Florida, 2012.
- Pace, M. L., and P. M. Groffman, eds. 1998. *Successes, limitations, and frontiers in ecosystem science*. Springer-Verlag, New York, New York, USA.

- Papoulias, Constantina, and Felicity Callard. 2010. "Biology's Gift: Interrogating the Turn to Affect". *Body & Society*. 16 (1): 29-56.
- Parker, H. Jane. 1992. "Engendering Identity (s) in a Rural Arkansas Ozark Community." *Anthropological Quarterly* 65 (3): 148-155.
- Parsons, J.J. 1985. "On "bioregionalism" and "Watershed Consciousness." *The professional geographer*, 37: 1-6.
- Peace, A., Connor, L. and Trigger, D. 2012. 'Environmentalism, Culture, Ethnography'. Special issue of *Oceania*, 82(3).
- Pedersen, Morten Axel. 2012. "Common nonsense: A review of certain recent reviews of the 'ontological turn.'" *Anthropology of this Century* 5.
- Pereira, P. M., and M. P. da Fonseca. 2003. Nature vs. nurture: the making of the montado ecosystem. *Conservation Ecology* 7(3):7.
- Peterson, G. D., T. D. Beard, Jr., B. E. Beisner, E. M. Bennett, S. R. Carpenter, G. S. Cumming, C. L. Dent, and T. D. Havlicek. 2003. Assessing future ecosystem services: a case study of the Northern Highlands Lake District, Wisconsin. *Conservation Ecology* 7(3):1
- Phelps EA. 2006. "Emotion and cognition: insights from studies of the human amygdala". *Annual Review of Psychology*. 57: 27-53.
- Picard, David, and Mike Robinson. 2012. *Emotion in motion tourism, affect and transformation*. Farnham, Surrey, England: Ashgate.
- Pickett, S. T. A., and M. L. Cadenasso. 2002. The ecosystem as a multidimensional concept: meaning, model, and metaphor. *Ecosystems* 5:1-10.
- Pieroni, Andrea, and Ina Vandebroek. 2007. *Traveling cultures and plants: the ethnobiology and ethnopharmacy of migrations*. New York: Berghahn Books
- Pierotti, Raymond, and Daniel Wildcat. 2000. "Traditional Ecological Knowledge: The Third Alternative (Commentary)". *Ecological Applications*. 10 (5): 1333-1340
- Pinney, Christopher. 1992. "The iconology of Hindu oleographs: linear and mythic narrative in popular Indian art". *Res*: 33-61.
- Plutchik, Robert. 1980. *Emotion: A psychoevolutionary synthesis*. New York: Harper & Row.
- Plutchik, Robert, and Henry Kellerman. 1980. *Theories of emotion*. New York: Academic Press.
- Poe, Melissa R., Joyce LeCompte, Rebecca McLain, and Patrick Hurley. 2014. "Urban Foraging and the Relational Ecologies of Belonging." in *Social & Cultural Geography* 15 (8): 1-19.

Prigogine, I. 1980. *From being to becoming: time and complexity in the physical sciences*. W. H. Freeman and Company, New York, New York, USA.

Prigogine, I., and I. Stengers. 1984. *Order out of chaos: man's new dialogue with nature*. Bantam Books, Toronto, Ontario, Canada.

Probyn, Elspeth. 2005. *Blush: faces of shame*. Minneapolis: University of Minnesota Press.

“Quick Facts” 2017. <http://savetheozarks.org/quick-facts/>

Quillinan, Carol. 1998. *The history of Indian trail trees*. Publishers Circulation Corporation.

Quinn, Naomi, ed. 2005. *Finding culture in talk: a collection of methods*. New York: Palgrave Macmillan.

Quinn, Naomi. 2006. “The self”. *Anthropological Theory*. 6 (3): 362-384.

Rademacher, A. 2011. *Reigning the River: Urban ecologies and political transformation in Kathmandu*. Durham and London, Duke University Press.

Rafferty, Milton D. 1980. *The Ozarks, land and life*. Norman: University of Oklahoma Press.

Raffles, Hugh. 2002. In *Amazonia: A Natural History*. Princeton University Press.

Rambo, Terry. 1983. “Conceptual Approaches to Human Ecology,” Honolulu, HI: East-West Center Environment and Policy Institute Research Report No. 14.

Randolph, Vance. 1951. *We always lie to strangers; tall tales from the Ozarks*. New York: Columbia University Press.

Randolph, Vance. 1964. *Ozark magic and folklore*. New York, N.Y.: Dover Publications.

Rappaport, R. A. 1968. *Pigs for the ancestors: ritual in the ecology of a New Guinea people*. Yale University Press, New Haven, Connecticut, USA.

Raymond, Christopher M., Gerald G. Singh, Karina Benessaiah, Nancy J. Turner, Harry Nelson, and Kai MA Chan. 2013. “Engaging Multiple Disciplines in Ecosystem Services Research and Assessment: A Reply to Orenstein.” *BioScience* 63 (12): 913–14.

Raymond, Christopher M., Gerald G. Singh, Karina Benessaiah, Joanna R. Bernhardt, Jordan Levine, Harry Nelson, Nancy J. Turner, Bryan Norton, Jordan Tam, and Kai MA Chan. 2013. “Ecosystem Services and beyond: Using Multiple Metaphors to Understand Human–environment Relationships.” *BioScience* 63 (7): 536–46.

- Reckwitz, Andreas. 2012. "Affective spaces: a praxeological outlook". *Rethinking History*. 16 (2): 241-258.
- Redding, Paul. 1999. *The logic of affect*. Ithaca, NY: Cornell University Press.
- Redman, C. L. 1999. *Human impact on ancient environments*. The University of Arizona Press, Tucson, Arizona, USA.
- Riessman, Catherine Kohler. 1993. *Narrative Analysis*. Newbury Park: Sage Publications.
- Riessman, Catherine Kohler. 2008. *Narrative methods for the human sciences*. Los Angeles: Sage Publications.
- Rikoon, Sandy, and Robin Albee. 1998. "Wild and Free, Leave 'Em Be": Wild Horses and the Struggle over Nature in the Missouri Ozarks." *Journal of folklore research* 35(3): 203-222.
- Rival, Laura. 2014. "Encountering nature through fieldwork: expert knowledge, modes of reasoning, and local creativity." *Journal of the Royal Anthropological Institute* 20(2): 218-236.
- Robertson, David P., and R. Bruce Hull. 2001. "Beyond Biology: toward a More Public Ecology for Conservation". *Conservation Biology*. 15 (4): 970-979.
- Roedner, Beverly J., David A. Hamilton, and Keith E. Evans. 1978. *Rare plants of the Ozark Plateau: a field identification guide*. St. Paul, Minn: North Central Forest Experiment Station, Forest Service, U.S. Dept. of Agriculture.
- Rogers-Martinez, D. 1992. "The Sinkyone Intertribal Park Project." *Restoration and Management Notes* 10(1): 64-69.
- Rorty, Amélie. 1980. *Explaining emotions*. Berkeley: University of California Press.
- Rosaldo, Michelle Zimbalist. 1980. *Knowledge and passion: Ilongot notions of self and social life*. Cambridge, UK: Cambridge University Press.
- Rosaldo, Michelle Zimbalist. 1984. "Toward an anthropology of self and feeling." In *Culture Theory: essays on mind, self, and emotion*. R. A. Shweder and R. A. LeVine, editors. pp. 137–157. Cambridge, UK: Cambridge University Press.
- Rosaldo, Renato. 1989. *Culture & truth: the remaking of social analysis*. Boston: Beacon Press.
- Rössler, Beate. 2004. *Privacies: philosophical evaluations*. Stanford, Calif: Stanford University Press. NOTE: for chapter Gatén, Moira. "Privacy and the Body: The Publicity of Affect"
- Ruby, Jay. 1982. *A Crack in the mirror: reflexive perspectives in anthropology*. Philadelphia: University of Pennsylvania Press.

Russell, James A. 1995. *Everyday conceptions of emotion: an introduction to the psychology, anthropology, and linguistics of emotion*. Dordrecht, Netherlands: Kluwer Academic Publishers.

Russell, Roly, Anne D. Guerri, Patricia Balvanera, Rachelle K. Gould, Xavier Basurto, Kai MA Chan, Sarah Klain, Jordan Levine, and Jordan Tam. 2013. "Humans and Nature: How Knowing and Experiencing Nature Affect Well-Being." *Annual Review of Environment and Resources* 38: 473–502.

Sabo, George, and James P. Harcourt. 1990. *Human adaptation in the Ozark and Ouachita Mountains*. Fayetteville, Ark: Arkansas Archeological Survey.

Said, Edward W. 1993. *Culture and imperialism*. New York: Vintage Books.

Salthe, S. N. 1985. *Evolving hierarchical systems: their structure and representation*. Columbia University Press, New York, New York, USA.

Salthe, S. N. 1993. *Development and evolution: complexity and change in biology*. The MIT Press, Cambridge, Massachusetts, USA.

Salthe, S. N. 2003. Infodynamics, a developmental framework for ecology/economics. *Conservation Ecology* 7(3):3. [online] URL: <http://www.consecol.org/vol7/iss3/art3>.

Sanderson, S. K. 1990. *Social evolutionism: a critical history*. Blackwell, Cambridge, Massachusetts, USA.

Satterfield, Theresa A. 2007. *Anatomy of a Conflict: Identity, Knowledge, and Emotion in Old-Growth Forests*. Vancouver: UBC Press.

Satz, Debra, Rachelle K. Gould, Kai MA Chan, Anne Guerri, Bryan Norton, Terre Satterfield, Benjamin S. Halpern, et al. 2013. "The Challenges of Incorporating Cultural Ecosystem Services into Environmental Assessment." *Ambio* 42 (6): 675–84.

Sax, Dov F., and Gaines, Steven D. 2008. *Species invasions and extinction: The future of native biodiversity on islands*. National Academy of Sciences.

Scherer, Klaus. 2005. "What are emotions? And how can they be measured?" *Social Science Information*. 44 (4): 695-729.

Schlunke, Katrina. 2013. "Ecologue." *Cultural Studies Review* 12, no. 1: 132-140.

Scoones, I. 1999. New ecology and the social sciences: what prospects for a fruitful engagement? *Annual Review of Anthropology* 28:479–507.

Scott, James. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven, CT: Yale UP.

- Sedgwick, Eve K. 2003. *Touching Feeling: Affect, Pedagogy, Performativity*. Duke UP.
- Sedgwick, Eve Kosofsky, and Adam Frank. 1995. "Shame in the cybernetic fold: Reading Silvan Tomkins." *Critical Inquiry*, 21(1994/1995).
- Sedgwick, Eve Kosofsky, Adam Frank, and Irving E. Alexander. 1995. *Shame and its sisters: a Silvan Tomkins reader*. Durham: Duke University Press.
- Service, E. R. 1975. *Origins of the state and civilization: the process of cultural evolution*. W. W. Norton and Company, New York, New York, USA.
- Shaviro, Steven. 2007. "Pulses of Emotion: Whitehead's "Critique of Pure Feeling"." *The Pinocchio Theory*.
- Shebitz, D. 2005. "Weaving traditional ecological knowledge into the restoration of basketry plants." *Journal of Ecological Anthropology* 9(1): 51-68.
- Shouse, Eric. 2005. "Feeling, emotion, affect." *M/c journal* 8, no. 6: 26.
- Shweder, Richard A., and Robert Alan LeVine. 1984. *Culture theory: essays on mind, self, and emotion*. Cambridge, UK: Cambridge University Press.
- Sills, David L. 1968. *International encyclopedia of the social sciences*. New York: Macmillan & The Free Press.
- Sivaramakrishnan, K. 1999. *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India*. Stanford: Stanford University Press.
- Smail, D. J. 1993. *The origins of unhappiness: a new understanding of personal distress*. London: HarperCollins.
- Smail, David. 2000 "On not being able to eff the ineffable." in *Changes* 18 (3): 172-176.
- Smail, D. J. 2001. *The nature of unhappiness*. London: Robinson.
- Smith, E. A. 1984. Anthropology, evolutionary ecology, and the explanatory limitations of the ecosystem concept. Pages 51–85 in E. F. Moran, editor. *The ecosystem concept in anthropology*. Westview Press, Boulder, Colorado, USA.
- Smith, H. D. 2008. Using Traditional Ecological Knowledge to develop closure criteria in tropical Australia. Mine Closure 2008 - third international seminar on Mine Closure, Johannesburg, South Africa.
- Smith, Jonathan Z. *To take place: Toward theory in ritual*. University of Chicago Press, 1992.

- Smith, Kenneth L. 1986. *Sawmill: The Story of Cutting the Last Great Virgin Forest East of the Rockies*. Fayetteville, AR: University of Arkansas Press.
- Sodikoff, Genese Marie. 2012. *Forest and Labor in Madagascar: From Colonial Concession to Global Biosphere*. Indiana University Press.
- Solomon, Robert C. 2003. *What is an emotion?: classic and contemporary readings*. New York: Oxford University Press.
- Sousa, Ronald De. 1979. "The rationality of emotions." *Dialogue* 18 (1): 41-63.
- Spence, Mark David. 2000. *Dispossessing the wilderness Indian removal and the making of the national parks*. New York: Oxford University Press.
- Spencer, H. 1973 [1877]. *The Evolution of Society*. Pages 6–28 in P. Bohannan and M. Glazer, editors. *High points in anthropology*. Alfred A. Knopf, Inc., New York, NY.
- Stearn, W. T. 1959. "The Background of Linnaeus's Contributions to the Nomenclature and Methods of Systematic Biology". *Systematic Zoology*. 8 (1): 4-22.
- Stedman, Richard C., and Micah Ingalls. 2014. "Topophilia, Biophilia and Greening in the Red Zone." In *Greening in the Red Zone*, Keith G. Tidball and Marianne E. Krasny, eds., pp. 129–44.
- Stepp, J. R., E. C. Jones, M. Pavao-Zuckerman, D. Casagrande, and R. K. Zarger. 2003. Remarkable properties of human ecosystems. *Conservation Ecology* 7(3):11
- Steward, J. H. 1955. *Theory of culture change: the methodology of multilineal evolution*. University of Illinois Press, Urbana, Illinois, USA.
- Stewart, Pam. 2017. "Facts About the Mount Judea Hog Farm CAFO" <http://buffaloriveralliance.org/page-1547312>
- Stewart, Pamela J., and Andrew Strathern. 2003. *Landscape, memory and history: anthropological perspectives*. London: Pluto.
- Stigler, James W., Richard A. Shweder, and Gilbert H. Herdt. 1999. *Cultural psychology: essays on comparative human development*. Cambridge, UK: Cambridge University Press.
- Suchet-Pearson, Sandie, Sarah Wright, Kate Lloyd, and Laklak Burarrwanga. 2013. "Caring as Country: Towards an Ontology of Co-Becoming in Natural Resource Management." *Asia Pacific Viewpoint* 54 (2): 185–97.
- Sullivan, P. 1989. *Unfinished conversations: mayas and foreigners between two world wars*. University of California Press, Berkeley, California, USA.

Sunam, Ramesh K., Mani Ram Banjade, Naya S. Paudel, and Dil Bahadur Khatri. 2010. "Can Bureaucratic Control Improve Community Forestry Governance?" 2010. https://www.researchgate.net/publication/228203867_Can_Bureaucratic_Control_Improve_Community_Forestry_Governance

Szerszynski, B., Heim, W., and Waterton, C., eds. 2003. *Nature Performed*. Blackwell Publishing.

Tabuchi, Hiroko. <http://www.nytimes.com/2016/09/05/business/energy-environment/rolling-coal-in-diesel-trucks-to-rebel-and-provoke.html>

Tainter, J. 1988. *The collapse of complex societies*. Cambridge University Press, Cambridge, UK.

Tainter, J., T. F. H. Allen, A. Little, and T. W. Hoekstra. 2003. Resource transitions and energy gain: contexts of organization. *Conservation Ecology* 7(3):4. <http://www.consecol.org/vol7/iss3/art4>.

Tansley, A. G. 1935. The use and abuse of vegetational concepts and terms. *Ecology* 16(3):284–307.

Taylor, Janelle. 2005. "Surfacing the body interior". *Annual Review of Anthropology*. Annual Review of Anthropology , Vol. 34: 741-756

TenHouten, Warren D. 2012. *Emotion and reason: mind, brain, and the social domains of work and love*. London: Routledge.

Terada, Rei. 2003. *Feeling in Theory: Emotion after the "Death of the Subject"*. Harvard University Press.

Thomas, Dylan. 2010. *Collected poems*. New York: New Directions.

Thomas, R. B. 1973. *Human adaptation to a high andean energy flow system*. The Pennsylvania State University, University Park, Pennsylvania, USA.

Thomas, R. B. 1976. Energy flow at high altitude. Pages 379–404 in P. T. Baker and M. A. Little, editors. *Man in the Andes: a multidisciplinary study of high-altitude quechua*. Dowden, Hutchinson and Ross, Inc., Stroudsburg, Pennsylvania, USA.

Thomas, W. L., Carl Ortwin Sauer, Marston Bates, Lewis Mumford, and Paul Fejos. 1956. *Man's role in changing the face of the earth*. Chicago, Ill: University of Chicago Press.

Thornton, Russell, C. Matthew Snipp, and Nancy Breen. 1990. *The Cherokees a population history*. Lincoln, Neb: University of Nebraska Press.

- Thraillkill, Jane F. 2007. *Affecting fictions: mind, body, and emotion in American literary realism*. Cambridge, Mass: Harvard University Press.
- Thraillkill, Jane F. 2007. "Emotive Realism". *Journal of Narrative Theory*. 36 (3): 365-388.
- Thrift, Nigel. 2004. "Intensities of feeling: towards a spatial politics of affect." *Geografiska Annaler: Series B, Human Geography* 86 (1): 57-78.
- Tilden, Freeman, and Paul Schullery. 1986. *The national parks: the classic book on the national parks, national monuments & historic sites*. New York: Knopf.
- Tilman, D. 1996. Biodiversity: population versus ecosystem stability. *Ecology* 77: 350-363.
- Tippett, James Sterling. 1937. *Paths to conservation*. Boston: D.C. Heath and Co.
- Toledo, V. M., B. Ortiz-Espejel, L. Cortés, P. Moguel, and M. D. J. Ordoñez. 2003. The multiple use of tropical forests by indigenous peoples in Mexico: a case of adaptive management. *Conservation Ecology* 7(3): 9. <http://www.consecol.org/vol7/iss3/art9>.
- Tomkins, Silvan S., and Bertram P. Karon. 1962. *Affect, imagery, consciousness*. New York: Springer Pub. Co.
- Tomkins, Silvan S., and Carroll E. Izard. 1965. *Affect, cognition, and personality; empirical studies*, ed. by Silvan S. Tomkins [and] Carroll E. Izard. New York: Springer.
- Tomkins, Silvan S., and E. Virginia Demos. 1995. *Exploring affect: the selected writings of Silvan S. Tomkins*. Cambridge, UK: Cambridge University Press.
- Toussaint, S., Sullivan, P., Yu, S. 2005, 'Water Ways in Aboriginal Australia: An Interconnected Analysis', *Anthropological Forum*, 15 (1): 61-74
- Townsend, Patricia K., 2009, *Environmental Anthropology: From Pigs to Policies*, Prospect Heights, IL: Waveland Press.
- Trigger, D. 2013. Rethinking nature and nativeness. In *Anthropologists Up Close and Personal: Works and Lives that Are Shaping the Discipline*, C. Shore and S. Trnka eds., Berghahn Books, Oxford & New York: 140-157.
- Trigger, D. and Griffiths G. eds. 2003. *Disputed Territories: land, culture and identity in settler societies*. Hong Kong: Hong Kong University Press.
- Trigger, D., J. Mulcock, A. Gaynor and Y. Toussaint 2008. "Ecological restoration, cultural preferences and the negotiation of 'nativeness' in Australia." *Geoforum* 39(3): 1273-1283.

Trigger, D. S., Y. Toussaint and J. Mulcock 2010. "Ecological Restoration in Australia: Environmental Discourses, Landscape Ideals, and the Significance of Human Agency." *Society & Natural Resources* 23(11): 1060-1074.

Trosper, R. L. 2003. Resilience in pre-contact Pacific Northwest social ecological systems. *Conservation Ecology* 7(3):6. [online] URL: <http://www.consecol.org/vol7/iss3/art6>.

Tsing, Anna Lowenhaupt. 2005. *Friction: An Ethnography of Global Connection*. Princeton University Press. P. 121- 154.

Tuan, Yi-Fu. 1975. "Place: An Experiential Perspective". *Geographical Review*. 65 (2): 151-165.

Turner, Nancy J., and Fikret Berkes. 2006. "Coming to Understanding: Developing Conservation through Incremental Learning in the Pacific Northwest". *Human Ecology*. 34 (4): 495-513.

Tzonis, Alexander, and Liane Lefaivre. 1990. "Why critical regionalism today?." *Architecture and Urbanism* 236: 22-33.

Ukai, Satoshi. 2001. "The Future of an Affect: The Historicity of Shame." *Traces* 1: 3.

Ulanowicz, R. E. 1986. *Growth and development: ecosystems phenomenology*. Springer-Verlag, New York, NY.

Ulrich, Robert S. 1993. "Biophilia biophobia and natural landscapes" In *The Biophilia hypothesis*. Stephen R. Kellert and Edward O. Wilson, eds. Washington, DC: Island Press.

Valentino, Alicia Beth. 2006. *The dynamics of industry as seen from Van Winkle's mill, Arkansas*. Dissertation. University of Arkansas, Fayetteville.

van de Vijver, G., S. N. Salthe, and M. Delpo, eds. 1998. *Evolutionary systems: biological and epistemological perspectives on selection and self-organization*. Kluwer, Dordrecht, The Netherlands.

Van Dooren, Thom. 2016. *Flight ways*. New York, NY: Columbia University Press.

VanWey, Leah K., Elinor Ostrom, and Vicky Meretsky. 2005. "Theories Underlying the Study of Human-Environment Interactions," in *Seeing the Forest and the Trees: Human-Environment Interactions in Forest Ecosystems*, Emilio F. Moran and Elinor Ostrom, eds., Cambridge, MA: MIT Press, Chapter 2: 23-56.

Varela, Francisco J., Evan Thompson, and Eleanor Rosch. 1991. *The embodied mind: cognitive science and human experience*. Cambridge, Mass: MIT Press.

Vayda, A. P. 1983. Progressive contextualization: methods for research in human ecology. *Human Ecology* 11:265–281.

Vayda, Andrew P., and Roy A. Rappaport, 1968, "Ecology: cultural and non-cultural," in *Introduction to Cultural Anthropology*, James A. Clifton, ed., Boston, MA: Houghton Mifflin Co., pp. 477-497.

Vayda, A. P., and B. McCay. 1975. New directions in ecology and ecological anthropology. *Annual Review of Anthropology* 4: 293–306.

Veenhoven, R. 1984. *Conditions of happiness*. Dordrecht, Holland: D. Reidel.

Verble, Robin Michelle. 2012. *Effects of prescribed fire on Ozark ant ecology* [Dissertation]. University of Arkansas at Little Rock.

Visweswaran, Kamala. 1994. *Fictions of feminist ethnography*. Minneapolis: University of Minnesota Press.

Vivanco, Luis A. 2002. "Seeing Green: Knowing and Saving the Environment on Film". *American Anthropologist*. 104 (4): 1195-1204.

Vivanco, Luis A. 2011. *Green Encounters: Shaping and Contesting Environmentalism in Rural Costa Rica*. New York, NY: Berghahn Books.

Viveiros de Castro, Eduardo. 2012. "Immanence and Fear: Stranger events and subjects in Amazonia," *HAU: Journal of Ethnographic Theory* 2 (1): 27-43.

Vogt, K. A., J. C. Gordon, J. P. Wargo, D. J. Vogt, H. Asbjornsen, P. A. Palmiotto, H. J. Clark, J. L. O'Hara, W. S. Keeton, T. Patel-Weynand, and E. Witten, editors. 1997. *Ecosystems: balancing science with management*. Springer-Verlag, New York, New York, USA.

Wade, Matthew, and Maria Hynes. 2013. "Worshipping Bodies: Affective Labour in the Hillsong Church". *Geographical Research*. 51 (2): 173-179.

Watkins, Megan. 2006. "Pedagogic Affect/Effect: Embodying a Desire to Learn". *Pedagogies*. 1 (4): 269-282.

Wali, A., G. Darlow, C. Fialkowski, M. Tudor, H. del Campo, and D. Stotz. 2003. New methodologies for interdisciplinary research and action in an urban ecosystem in Chicago. *Conservation Ecology* 7(3):2. [online] URL: <http://www.consecol.org/vol7/iss3/art2>.

Wallerstein, I. 1974. *The modern world-system I: capitalist agriculture and the origins of the European world-economy in the Sixteenth century*. Academic Press, New York, New York, USA.

Walters, C. J. 1986. *Adaptive management of renewable resources*. MacMillan, New York, New York, USA.

- Waterton, C. 2002. "From field to fantasy: Classifying nature, constructing Europe." *Social Studies of Science* 32(2): 177–204.
- Weber, Robert Phillip. 1990. *Basic Content Analysis: Second Edition*. Newbury Park, CA: SAGE publications.
- Webster, Leonard, and Patricie Mertova. 2007. *Using narrative inquiry as a research method: an introduction to using critical event narrative analysis in research on learning and teaching*. London, UK: Routledge.
- Weigand, Edda. "The Vocabulary of Emotion." E. Weigand (1998). *Contrastive Lexical Semantics* (1998): 45-65.
- Weir, Jessica. "Connectivity," 2008. <http://www.australianhumanitiesreview.org/archive/Issue-November-2008/weir.html>.
- Weir, Jessica K. *Country, Native Title and Ecology*. Vol. 23. ANU E Press, 2012.
- Weller, Susan. 2007. "Cultural Consensus Theory: Applications and Frequently Asked Questions". *Field Methods*. 19 (4): 339-368.
- Weller, Susan C., and A. Kimball Romney. 1988. *Systematic data collection*. Newbury Park, Calif: Sage Publications.
- Wellock, Thomas Raymond. 2007. *Preserving the nation: the conservation and environmental movements, 1870-2000*. Wheeling, Ill: Harlan Davidson, Inc.
- Wells, Don, Diane Wells, John Nardo, Robert Wells, and Lamar Marshall. 2011. *Mystery of the trees: native American markers of a cultural way of life that soon may be gone*. Jasper, GA: Mountain Stewards Publishing.
- West, Paige. 2005. "Translation, value, and space: theorizing an ethnographic and engaged environmental anthropology". *American Anthropologist : Journal of the American Anthropological Association*.
- West, Paige. 2006. *Conservation is Our Government Now: The Politics of Ecology on Papua New Guinea*. Duke University Press.
- West, Paige. 2012. *From Modern Production to Imagined Primitive: The Social World of Coffee from Papua New Guinea*. Duke University Press.
- White, L. A. 1959. *The evolution of culture: the development of civilization to the fall of Rome*. McGraw-Hill Book Company, New York, New York, USA.
- Wicken, J. S. 1987. *Evolution, thermodynamics, and information: extending the Darwinian program*. Oxford University Press, New York, New York, USA.

- Wicken, J. S. 1988. Thermodynamics, evolution, and emergence: ingredients for a new synthesis. Pages 139–169 in D. J. Depew and B. H. Weber, editors. *Entropy, information, and evolution: new perspectives on physical and biological evolution*. The MIT Press, Cambridge, Massachusetts, USA.
- Willers, Bill. 2000. “A Response to “Current Normative Concepts in Conservation” by Callicott et al”. *Conservation Biology*. 14 (2): 570-572.
- Williams, Raymond. 1977. *Marxism and literature*. Oxford, UK: Oxford University Press.
- Williams, Raymond. 1979. *Politics and letters: interviews with New Left Review*. London: NLB.
- Wilson, David J., 1999, *Indigenous South Americans of the Past and Present: An Ecological Perspective*, Boulder, CO: Westview Press
- Winterhalder, B. 1984. Reconsidering the ecosystem concept. *Reviews in Anthropology* 11:301–307.
- Winterhalder, B., and E. A. Smith. 2000. Analyzing adaptive strategies: human behavioral ecology at twenty-five. *Evolutionary Anthropology* 9:51–72.
- Wodak, Ruth, and Michael Meyer. 2001. *Methods of critical discourse analysis*. London: SAGE
- Wolch, Jennifer R., Jason Byrne, and Joshua P. Newell. 2014. “Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’”. *Landscape and Urban Planning*. 125: 234-244.
- Wolf, Eric R. 1972. “Ownership and Political Ecology.” *Anthropological Quarterly* 45(3): 201-205.
- Wolverton, Steve, Justin M. Nolan, and Waquar Ahmed. 2014. “Ethnobiology, political ecology, and conservation.” *Journal of Ethnobiology* 34, no. 2: 125-152.
- Wood, Walter Raymond and R. Bruce Mcmillan. 1976. *Prehistoric man and his environments: case study in the Ozark Highland*. Amsterdam: Academic Press Inc.
- Worby, Eric. 2000. "Discipline without oppression": Sequence, timing, and marginality in Southern Rhodesia's post-war development regime. *Journal of African History*. 41(1): 101-25.
- Worster, Donald. 1977. *Nature’s Economy: A History of Ecological Ideas*. Cambridge University Press.
- Worster, Donald, 1994, *Nature’s Economy: A History of Ecological Ideas*, New York, NY: Cambridge University Press (Second Edition).

Worster, Donald. 1999. "The ecology of order and chaos". *Environmental History Review*. 14 (1-2): 1-18.

Wynne, Brian. 1992. "Knowledges in Context". *Science, Technology & Human Values*. 16 (1): 111-21.

Young, G. L. 1974. Human ecology as an interdisciplinary concept: a critical inquiry. *Advances in Ecological Research* 8: 1-105.

Yovel, Yirmiahu. 1999. *Desire and affect: Spinoza as psychologist ; papers presented at the third Jerusalem conference (Ethica III)*. New York: Little Room Press.

Zajonc, Robert. 1980. Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35(2), 151-175.

Zimmerman A.S. 2008. "New knowledge from old data: The role of standards in the sharing and reuse of ecological data". *Science Technology and Human Values*. 33 (5): 631-652.