Attachment, Risk, and Entanglement in Ashtabula County, Ohio

Master’s Thesis
Presented in Partial Fulfillment of the Requirements for the Degree Master of Arts in the
Graduate School of The Ohio State University

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The Ohio State University
2016

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Abstract

The U.S. Environmental Protection Agency defines environmental justice as “the fair treatment and meaningful involvement of all people… with regards to environmental policymaking” (EPA 2016). The idea that all people should be included in the decision-making process regarding their local environment reflects the democratic ideal of justice: that collective benefits are maximized when everyone has a say. However, in practice, this ideal is often messily implemented, and there are multiple structural barriers that impede some groups from fully participating in this process. Drawing on ethnographic fieldwork from a summer in Ashtabula County, Ohio, I investigate one such case—the Vincina Protocol Project—in which a group of grassroots environmental justice activists struggle to gain footing in the complex legal and scientific networks that surround environmental policymaking. I found that while ecological knowledge did play some role in activist proclivities, they actually rejected the label of environmentalist and filtered their message through an anthropocentric rhetoric that emphasizes the attachments between people and places as a condition for justice. I argue that the tendency for environmental scientists and policymakers to see such rural folk as Appalachian Ohioans as ignorant or uncaring ignores the material realities that prevent them from meeting the conditions of the democratic ideal, and investigate the ways in which this discourse further marginalizes Appalachian environmental justice activists. In concluding, I propose an alternative framework that considers society as part of nature in dealing with the multitude of social justice problems that plague rural communities across the United States.
Dedication

For John Bargielski, Vincina “Squeak” Helfinstine, Larry Thompson, and Betty A--.
When agents leave, their entanglements remain; in tracing the conditions of the loose threads left by their departure, we can uncover much about our world and theirs.
Acknowledgments

Any movement, however great or small, is always the product of many individuals’ time, effort, and passion. As Margaret Mead once pointed out, social change begins with the actions of a few concerned citizens who think a bit differently than those around them. Much in this way, I consider this thesis not a cumulative finale to one episode of environmental justice activism, but rather a steppingstone that hopefully propels this singular movement just a little bit forward. In this spirit, these acknowledgments are as much a thank-you to those who contributed to this project as they are an opportunity to draw my readers’ attention to their stories.

First and foremost, my thanks and heart goes out to the local activists with whom I worked: Mike Helfinstine, with whom I have spent countless hours on the phone, Skype, texting, and driving around northeast Ohio; Cheryl and David Walker, who helped me understand the organization and activities of the group better than anyone else could; and the various other VPP activists who lent me their time and insights. Through the hard work of these individuals, problems that many in the community regard as prevalent are finally being discussed publicly with empowered officials. It is no easy feat to create a social movement, yet these people are laying the groundwork for one, a day and an individual at a time.

In addition to these activists, I spent a good deal of time meeting and talking with others in the community who had, they claimed, been affected by some kind of “environmental” illness in their lives. Many of these people were people I’ve known for many years, telling stories I had heard elements of before. Unlike the activists, who were usually adamant that I use their real names, these people wanted to retain their anonymity, and so most are given pseudonyms or only their first name is used. Yet they are an incremental part of local activism in their own right as participants in this study. While most do not have the time to give to a movement or would rather remain hidden to
avoid socioeconomic harm, they also told me that they felt that their participation in the study was a "safe" way of voicing their concerns. Again, all it takes is the smallest contributions of a few to make something happen.

Then of course, there were those who gave their time and made my work better in other ways: Dr. Anna Willow for all of her thoughtful feedback on my writing and guidance through the research process; Dr. Jennifer Syvertsen and Dr. Becky Mansfield for their support and guidance throughout as members of my Master’s committee; Dr. Jeff Cohen, Dr. Barbara Piperata, and Dr. Joy McCorriston, who all provided feedback on my work at various stages; and undoubtedly the many graduate students and colleagues in my department and at the Dimensions of Political Ecology Conference where this was presented who questioned me, challenged me, and encouraged me have made this better, as well.

Last—but absolutely not least—since this is a thesis about places and their meanings to and relationships with people, it makes sense to give acknowledgments to Ashtabula County. Ask anyone my age who grew up there and they will tell you that they have a bittersweet relationship with it. On one hand, we collectively acknowledge that the place has seen the last of its former glory, and most of us recognize that the wheels of cultural change tend to move particularly slow. We lament the lack of opportunity that exists in the post-recession economy. High school graduations were full of talk about leaving and never coming back. “Trashtabula” is a fun nickname that we like to throw around. But that changes when it’s someone from Mahoning County, or Lake County. Almost like the n-word, invoking Trashtabula from the outside is like a call to battle. We despise what the place has become, but at the same time it is filled with memories and attachments that we cannot shake. I think that it is inherently human and therefore requires no citation to say that there is something curiously nostalgic about the place you grew up. With relation to nature, home is our first ecosystem. We can witness historical
ecological transitions pass across our own lifetimes at home. In this way, place has informed my approach and been a key informant in the way I interpreted my results. I thank home for its contribution to this study.

What, then, can be made of these acknowledgments? It is one thing to thank people in writing; it is another to thank them through actions. I hope that this thesis will be one step of many toward solutions and justice for these people. At times, I wonder given the conditions of my upbringing if my own body is a ticking time bomb waiting to succumb to pollutants I was exposed to. For now, the best that I can do is commit myself to furthering the cause.

In the novel *Cloud Atlas*, a story unfolds across six lifetimes. In each person’s life, they record the details of some significant event. The medium varies, but includes a diary, letters, a novel manuscript, a film, and oral tradition. The protagonist of the following story is influenced in some way by reading, hearing, or watching the story of whomsoever preceded them. In a way, I hope that perhaps this thesis will have a similar outcome. I would hope that a reader of this work might someday feel influenced to do something as I did when I read similar ethnographies like *Strong Hearts, Native Lands* and *Polluted Promises*. Stories are powerful agents of change, for they create the relationships upon which entanglements rest. I hope that my readers walk away finding that they, too, have become attached to the people and places I describe here.
Vita

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Introduction: Called Home

“Love begins at home.”
- Mother Teresa

“I lost my wife Vincina, or ‘Squeak,’ as she was known, last year,” he said. “It was one year after she was diagnosed with ALS and it was right around her birthday.”
- Mike Helfinstine

I first met Mike Helfinstine and Cheryl Dickson-Walker on a Skype conversation in November 2014. I had been searching for a Master’s thesis topic that would allow me to understand how and why some people become environmentalists, while others do not. In late October 2014, T—a friend from high school shared a news article about the “Vincina Protocol Project” (VPP) on Facebook.

A quick look at their website revealed the specifics: VPP is a coalition of environmentalists from my home county of Ashtabula, Ohio who were trying to motivate public awareness of suspected environmental issues. They also had a history of other social justice activism on drug education and awareness. The group’s formation was motivated by the death of Mike’s wife, Vincina “Squeak” Helfinstine. Squeak died of a rare illness called Amyotrophic Lateral Sclerosis—ALS, or sometimes Lou Gehrig’s disease. It appeared as though the group had mapped a cluster of ALS cases in the small community of Conneaut, Ohio, a town along the Ohio-Pennsylvania border and the shores of Lake Erie, and the northeastern-most place in the state of Ohio. Conneaut also is just a few miles east of where I grew up, in Ashtabula Township. Both are located in Ashtabula County, the largest county in the state.

Immediately, I felt a visceral connection to the cause. As a boy, I grew up in a relatively rural area just up the street from a number of chemical and manufacturing plants. A smell which can only be described as someone having cracked rotten eggs into a litterbox full of cat urine was just something to which we became accustomed; it was not until I returned years later with my boyfriend and he pointed it out that I realized that such odors were not part of everyone’s childhood. Lakeshore Park, a historic project constructed during the New Deal public works era, has been ranked the dirtiest beach in America for the last three years in a row by the U.S. Environmental Protection Agency. For years, I had grown up surrounded by many of the health problems VPP was expressing interest in. They claimed to have answers. I wanted to believe them.

Within a few days, I was put into contact with both Cheryl, the VPP’s director of publicity, and Mike, the project’s self-described ringleader. We eventually met on Skype. For 45 minutes, I listened to the pair talk about the ALS clusters, how they had mapped the data using obituaries, and the seemingly well-researched statistics. In a population of 100,000, there would be an expected 3.9 cases of ALS, they told me. In Conneaut, which has a population of 13,000, there were at least fourteen known cases.

Cheryl shared with me two other maps that showed the same thing, but in different towns in the county: Jefferson, Geneva, and my hometown, Ashtabula. Community organizing had connected them to this data through many routes: public records, colloquial testimony, gossip, political dealmaking, and networking, to name a few. But they were limited by two things. One, a lack of organizational funds meant that they relied on donations from a few people to carry out activities. Two, they had reached a scientific stalemate, and hit a point at which they no longer had the sophisticated knowledge needed to make local officials listen. Their struggle, they said, made them feel powerless; yet they were determined to “do something about it.”

I quickly agreed to join the project. In addition to my interest in environmental activism, I held vested interests in the community in question. Although skeptical of the validity of much of their data, I found myself wondering “what if?” and growing more
and more intrigued at the possibility of uncovering an environmental justice case literally in my own backyard.

Upon these considerations, I thought back to one day in 2009, when I was in my senior year of high school. Each year, several high achieving alum of Edgewood Senior High were brought back for an award ceremony and invited to give a speech to the junior and senior classes. This particular year, a trio of brothers were being inducted together. Each had as impressive a résumé as the next: a Harvard educated dentist, a Yale educated lawyer, and a Ph.D in education. The attorney, who practiced in Geneva, OH (also part of Ashtabula County) spoke of the importance of coming back and giving back to the community. Too often, he argued, young people left the community because it had so little to offer. He pled to us to go ahead and go off and receive our educations, but then to bring our talents back home, to bolster the workforce and help the community move forward. I had not considered this memory in a long time, but in that moment it achieved a new significance, taking on a newfound agency in my life that had simply been dormant for six years. I felt as though my special connections to the particular place afforded me a special insight that could be valuable not only to Mike and Cheryl, but also to providing a meaningful contribution to the broader discipline of anthropology. At the very least I justified the project based on my status as a graduate student at The Ohio State University and saw the research in the context of a major public university funding projects of use to the state.

**Environmental Justice as Attachment**

Kay Milton (2002: 3-4) proposes that emotions, ordinarily conceived as psychological responses to social stimuli, are better thought of as part of a broader class of responses to environmental stimuli, of which the social environment is a part. According to Milton, we merely think of emotions as primarily interpersonal because much of our modern environment is constituted of socialization. The United States Environmental Protection Agency (EPA) defines environmental justice as the “fair treatment and meaningful involvement of all people… with respect to environmental...
policymaking.” Through their pledged commitment to providing for the equitable
distribution of risks, benefits, and presumably with these social constitutions of nature,
the U.S. EPA conveys a sensitivity to the affective connections between people in
nature—the pinnacle of these being the very fact that a safe environment provides for
life, the most powerful affect of all.

Yet at the same time, the policies and approaches of the EPA and other
government agencies frustrate people like Mike. Time and time again, he would tell me
of his frustrations with the Conneaut City Council, the Ohio EPA and Department of
Health, and Conneaut’s state representatives to “wake up” and “do something.” By his
accounts, nature—or something in it—was responsible for his wife’s death, and
government was in turn responsible for nature. Losing Squeak constituted a new
socionatural attachment for Mike, which in turn realigned the affects between him and his
elected representatives.

This thesis is an attempt to explain how a specific kind of affect—environmental
justice—manifests in the world. I argue that a sense of justice arises from a sense of lost
attachment to another individual. The disintegration of an attachment leads humans to
construct new ways of attaching to the world. Recognizing the degradation of the
environment as possibly responsible for a loss of attachment could lead one to attempt to
recreate or preserve that attachment via activism. In Mike’s case, an environmental
justice affect came to fill the void left by the passing of his wife. However, the kind of
attachment need not be direct. As I will show in later chapters, the kind of attachment
replaced can be one of broad social constitution. For instance, some members of a
community may not lose a direct relationship; however, if their emotional bonds to the
community are strong enough, even seemingly distant losses can be enough to trigger the
generation of an environmental justice attachment.

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2 United States Environmental Protection Agency. 2016. “What is Environmental
2016.
The need to formulate answers to these questions is more pressing now than ever before. The most recent IPCC report details both the rapid pace and tangible impacts of climate change in the coming decades. Prominent among the impacts is human health: rising temperatures will both exacerbate existing health conditions in vulnerable populations and increase the sites where transmissible illnesses can breed and evolve. Changes in atmospheric content and climate cycles will force human bodies to adapt to Earth in unprecedented ways. As Carole Crumley (1994, p. 1-2) states, anthropology is curiously in an optimal position to integrate among the sciences and humanities in a way that will be required in order to solve today’s most pressing environmental challenges. This requires us to integrate humans and nature dialectically both in theoretical (through interdisciplinary research and theoretical borrowing) and ethnographic (through the integration of anthropologies of the land and body) practice.

Obviously, it is not simply enough to consider how affects are generated. It is readily apparent that not all who experience a loss as a result of a perceived environmental injustice will seek to become activists for the cause. Rather, there are a series of structural factors that act upon people in ways that prevent them from acting on their affects. These can range from constraints that make it hard for activists to succeed to the everyday activities that consume county residents’ lives, preventing them from being able to give time or energy to the cause at all. In a town of mostly working class people, many of whom are dependent on polluting industries, social pressures keep would-be boat rockers at their oars. The fear of losing a valuable source of income in a place of little perceived opportunity is enough to keep many of the residents with whom I spoke from saying much.

Valuing nature can take many forms, from enjoyment to identification to protection. The ability to personify nature and think of it as agentive is one of the hallmarks of environmentalism (Milton 2002: 48-54). In identifying their environment as a source of harm, I argue that VPP activists are acknowledging its agency and influence on their lives. Because VPP activists also acknowledge the agency of people over nature in their concern with contamination, they are able to identify and equate the harms. This,
I contend, is a form of personification of the kind Milton describes. However, personification is only one way of acknowledging human relationships with nature. The ways in which nature is conceived and represented by Ashtabula County residents must be understood as part of a complex network of relationships.

**Entanglements and Emotion**

A useful way to envision this network of affects and rational choices is the theoretical concept of entanglement. Alex M. Nading (2014) defines entanglement as the “unfolding, often incidental attachments and affinities, antagonisms and animosities that bring people, nonhuman animals, and things into each other’s worlds” (11). In its original context, Nading uses entanglement to write about the ecology that brings Nicaraguans together with Dengue fever carrying mosquitoes and the material realities of their landscape and social world. In this framework, Dengue comes into being through a complex network that includes infrastructure, social practices, mosquitoes, and viruses. Human and nonhuman agents become entangled with one another as their dependency is interwoven by culturally mediated practices: constructing a physical sanitation infrastructure or a sociocultural public health one has grand implications for the ecology and survival of the mosquitoes and viruses. Likewise, decisions made on livelihood and practice eventually become embodied through Dengue.

The entanglement proposed by Nading explains a modern public health dilemma using a political ecology of both constructed and “authentic” natures. For Nading, the body is a site manufactured by nature; even insofar as humans can modify natural surroundings by building infrastructure, their praxis ultimately has dialectical consequences that obscure the boundary between self and surrounding. Viruses, themselves acellular agents, are conceived as an extension of nature; their transmission by the slightly-less-inhuman mosquito is an ecologically and socially dynamic process. As the ecological problems of today bring increased scrutiny and attention to the dialectical relations between human and environmental health, this research speaks to an
emerging and robust research trend that crosses disciplinary boundaries (Mansfield 2008).

The illnesses in question in Ashtabula County are largely non-communicable, and so the relationship between human and nonhuman agents there takes a different form than that exposed by Nading or others who have written about entanglement. However, just as Nading’s subjects wove tales of the mosquitoes and viruses they worked to combat, my own informants indicated a strong affinity toward the perception of risk based largely on cues from other creatures. Consider the following quote from an interview taken in August 2015:

“We used to have friends who went out on the Lake and would fish. Over time, they started cutting them open and finding tumors... you couldn’t eat them anymore. Something in that water made the fish sick, and that’s the first sign that something is wrong.”

On this and other occasions, Ashtabula County locals described their use of other organisms as indicators for their own health. Poor fishing seasons meant trouble in the lake. Tumors on the fish and deer caught locally indicated that something was amiss. And the smells and appearance of indigenous flora provided warnings for decreases in the quality of the local environment. Entanglement, to these people, was apparent when they saw other species become ill as a result of human activities.

The perception that human activities were disrupting the livelihood of animal and plant life on which they depended imbued local Ashtabulans with a sense of risk. The effect of chemical pollutants on physical bodies, whether human, nonhuman animal, plant, or (in the case of algal blooms) protistan, served as an “biomarker” that the landscape itself had fallen ill. Such examples are commonplace in ethnographies of nature—for instance, Aletta Biersack’s ethnographic subjects in the Porgera Valley of Papua New Guinea first qualitatively assessed the destructive prowess of the poisoned river based on the prevalence of dead fish and other animals who swam in it and drank from it (2006). Though this is but one example of the forms entanglement can take—and there will surely be more explorations of it later in this thesis—it readily conveys a
vitalistic affect among both living and nonliving objects in nature that I contend shapes how people interpret risk.

Finally, there is one particular, peculiar affective relationship between human and technonature that unexpectedly came to drive much of this project: drugs. In all of my conversations, accounts of environmental illness almost always led to an account of drug use and trafficking. Infected bodies become sites for restitution first by prescription and later by illicit trade. One informant described how over the course of a few years, her doctor’s prescription of various drugs for fibromyalgia led to an addiction first to pills and later to heroin when she could no longer afford the large orders her physician said were necessary to abate her pain⁶. While many Ashtabulans see drugs as a social problem, the constitution of entanglement in various health problems remains unapparent and easily obscured. Two kinds of drugs—methamphetamine and heroin—dominate the legal and social discourse in Ashtabula County. The former is a stew of toxins concocted by mixing multiple man-made chemicals in a volatile process; the latter is derived from the Poppy flower, placing it a step closer to conventional ideas of what constitutes “natural.” It was abundantly evident through all with whom I spoke that drug trafficking and use were locally-specific concerns. The insinuation of a relationship between unexplained illness and addiction, while inconclusive from this small sample alone, is a curious entanglement to pursue. It was, in fact, the disclosure from one drug dealer with whom Mike had worked on an earlier anti-drug campaign that had told him about the alleged dumping. In the words of Melissa Checker, “Once they recognized that the environment threatened them the same way crime, drugs, and lack of education did, the environment became an ecological and social concern that was compatible with other social justice goals” (Checker 2005: 100).

Theory, Application, Methods: A Tripartite Framework for Research Motivation

Anthropologist Charles Hale (2001) characterized activist anthropology first and foremost by its methodology. To Hale, activist anthropology is chiefly defined by its collaborative engagement between ethnographer and informant, subject and object. In an
effort to equalize power relations between these poles of subject and object (Haraway 1988: 580), activist anthropologists seek to include their informants in the planning, execution, analysis, and dissemination of the study. The result is a disintegration of the boundaries, and thereby the two poles, placing both the ethnographer and their informants inside the intimate space of cultural knowledge creation. As stated previously, the ultimate goal of this thesis is to answer a compelling theoretical question: why do some people become environmental justice activists? However, a commitment to activist ethnography yields a second and third goal. It logically follows then that the second goal is to produce a more nuanced understanding of environmental perceptions and beliefs within the Ashtabula community so as to assist the activists of VPP in their efforts. Third, it has been my experience in my brief time as an anthropologist that activist methods are at times questioned for their authenticity, objectivity, and validity; therefore, it is my final goal to explore the applications of activist methods in this study and perhaps inform our discipline’s long standing debate over the role of humanism in anthropology by making a case for emotions as a baseline for risk assessment. These three goals are consistent with trends in anthropology that frequently include, often emphasize, and occasionally even demand interdisciplinary and applied research designs. Thus, they will be timely contributions respectively to theory, practice, and methodology in cultural anthropology.

The anthropological concern with social issues dates to predecessors as early as Franz Boas and Margaret Mead: the anthropological perspective wielded by American anthropologists was a mighty tool used to combat social inequities. Cultural relativism should prevent Western anthropologists from seeing ourselves as the master of any race, and ethnographic data gave insight into the myths our culture told about human sexuality and expected gender roles. Some anthropologists, like Nancy Scheper-Hughes (1995), advocate a “militant anthropology” (415) that approaches anthropological research with an intent to accomplish certain social goals. Goals, however, are morally relative, and intimately connected to specific cultural values. This begs the question: who gets to decide which goals are in the best collective interest? Many times, in public health projects around the globe, this discourse is steered by the United States and its allies.
Western biomedicine enjoys special privilege in a decision making framework that emphasizes rationality and control (Foucault 1964), but often this comes at the expense of cultural sensitivity and risks imposing a particular ontology onto less powerful groups—and therefore reconfiguring their unique affective relationships with the nonhuman world. It is therefore integral to the goals of this thesis that the exertion of this privilege as a form of power in Ashtabula County is examined, questioned, and deconstructed.

Whether or not there exist environmental problems in Ashtabula County is not for me to decide. I lack both the methodological and analytical training to answer many of the questions my own informants pose. Rather, my responsibility as an ethnographer is to collect data on how illness, degradation, and risk are culturally understood. If, however, there are in fact serious environmental problems in Ashtabula County, then I hope that my research will provide insights into how best to address the problem. Preventing environmental health problems has an inherently sociocultural dimension, and thus should be an important consideration when approaching issues of behavioral change in environmental legislation.

My Positionality on the Research Landscape

When I began my graduate career, I had a vague, broad interest in socioenvironmental issues. I never thought that I would have walked into a project focused on my own home community. From birth in 1992 until starting college in 2010, I called Ashtabula Township my home. The better part of my family still lives there. I know a large portion of the community—including many of my own informants—intimately. Although I did not know Mike or Cheryl before this project began, we have overlapping social networks that include many of the same business people, community vocalists, and politicians in the County. This intimate placement in Ashtabula’s social world afforded me many opportunities that other, non-native ethnographers would have had to work far harder to achieve. Familiarity with Ashtabula’s health and landscape folklores gave me many of my starting hunches. For instance, I knew several people in
the community who suffered from hormonal imbalances that they claimed their doctors
told them were common in the region, and so I started by tapping their networks.

Yet at the same time, my own inclusion in this community posed its own
challenges. While I was privileged to be able to call on many people that I know, the
personal connection made the sadness of some of their tales a greater burden yet for me
to bear. It is one thing when a man tells you he lost his wife to ALS; it is another when a
family who you are interviewing together and have known for a full decade is recounting
the loss of their father to cancer. Further, my ethnographic analyses forced me to question
over and over many assumptions about the world that I did not realize I had, or had
locked away in the pits of my childhood memories. First, I was forced to confront the
knowledge that my home, with its proximity to chemical exposure, was not as safe as I
had once thought. Second, I had to re-evaluate my own notions of what it meant to be
from Ashtabula County. As an academic and a homosexual, I often felt out of place there
growing up; now, I confronted old ideas about politics, education, and culture that I once
sought to distance myself from as a young adult. Not only was I deconstructing an
important, tantalizing, research question, but I was also deconstructing many of the
formative elements of my own life.

In positions like mine, the lines between science and activism, anthropology and
development, can become blurred. At times I myself questioned whether these lines had
been overstepped in the process of ethnography. While the issue of native ethnography
has been debated throughout anthropology, I find that the simplest justification rests on
scientific principles of methodology. Scientists select the appropriate methods, or tools,
for the questions being asked. Each method, tool, or technique has both advantages and
limitations, most of which are case specific. While the vast majority of anthropology has
been conducted on the “other,” an increasing amount of work has been focusing on
anthropologizing the “self”: activist, applied, and public anthropologies, postmodernism,
interpretive understanding, and positionality have all opened the door to developing a
body of knowledge that seriously considers how the ethnographer engages in
constructing knowledge about his or her subjects.
This sort of “native ethnography” (Rolston 2014) has been undertaken by other ethnographers interested both in conducting quality research and in giving back to their home communities in some way. In my case, being a native ethnographer and a part of the community made my efforts to find people willing to talk to me much easier. Ashtabulans exhibit many of the personality traits one would expect of a rural community: friendliness, a family-oriented atmosphere, and (critically) intense ties to the place they call home. On describing my research, its goals, and my own positionality as a native of Ashtabula, I saw bodies or heard tones relax. I was “one of them” and could be trusted. For a community that is distrustful of what they see as imposition of modern cultural values, the knowledge that they are speaking with someone who “gets” them put many of my informants at ease.

This positionality brings me to an important point: people from the Appalachian U.S. are frequently denigrated in the discourses of everyday U.S. American life. Ignorant, hick, backwards, stupid, or inbred are some of the disparaging terms used to alienate the rural working class. Yet beyond these surface-level stereotypes, Appalachian culture and society is historically rich and structurally complex. Extractive resource policies have left many parts of Appalachia with severe environmental problems. Economic developments have favored the burgeoning metropolises in the U.S.’s south and western fronts; meanwhile, cities and towns along the Appalachian mountains and their foothills have steadily lost populations, businesses, and, with them, economies. The result is a region that is structurally incapable of providing for the wellbeing of its citizens. The tendency to fault these individuals for their own fates is, I argue, culturally prevalent and misguided; to fully understand the situation, we must attune ourselves to the inequalities and imbalances that allow metropolitan puppeteers to pull the strings of these living, breathing people in the Appalachian corner.

Through my activist convictions and efforts to help VPP, I hope that one ultimate outcome of this thesis can be an enriched and less stereotype-grounded conception of Appalachians in the U.S. collective conscious. Frankly, I am sick of comments such as the recent disparaging statement in the Cleveland Plain Dealer following Sarah Palin’s
endorsement of Donald Trump for President that the RNC should house its delegates “in trailers in Ashtabula.” Appalachians deserve dignity as people with unique and important roles in contemporary U.S. culture, especially as the region continues its economic transition (see chapter one of this thesis) Further, in my collaborations with government and activist groups during this project, I hope that my own ethnographic findings can be put to good use in affecting positive change for the well-being of my home community. Obviously, direct action as a scientist compromises my own abilities to be “neutral” or “objective,” and too much direct action borders on an ignorance-based justification for the kinds of development that I hope to dispel. Fortunately, I follow in the footsteps of a lineage of anthropologists who have dedicated themselves to the compassionate advocacy of socially just causes (Checker and Fishman 2004). I consider it our duty as both the most scientific of the humanities and the most humanistic of the sciences to pursue such endeavors.

Research Methods

While the interviews for this thesis took place over the months of May, June, July, and August 2015, I have been an ongoing participant observant with the Vincina Protocol Project from my decision to adopt it as my thesis topic in November 2014. The form of my participant observation took a rather unusual one for an ethnographer: because VPP is a loose, informal coalition of activists, they do not have a “home base” where their activist operations occur, and therefore a multisited ethnographic approach is needed (Marcus 1995). Rather, activism for VPP occupies technological space; as a result, much of my participant observation notes were taken on emails, phone calls, text messages, and even at times Facebook conversations. The constitution of this “technological landscape” is a phenomenon that I will explore in detail in the first chapter of this thesis.

3 Larkin, Brent. “Sarah Palin and Donald Trump’s nonsense aimed at Iowa fringe but should scare the rest of us.” Cleveland Plain Dealer. 22 January 2016.
In addition to regular participant observation in Ashtabula County with VPP activists and through my conversations on day-to-day volunteer activities from my home in Columbus, Ohio, I conducted interviews with seventeen people, in both group and individual formats. Generally, interviews were conducted one-on-one, but in two cases—an interview with Cheryl and David Walker of Media Magic Productions/VPP, and one with a family in Conneaut—group interviews were done. For some of the interviews, Mike Helfinstine was present as an observer; this only occurred when he knew the informant well and had previously interviewed the individual himself. Although relatively few in number, the saturation of data was more than sufficient to be able to draw discernible conclusions (LeCompte and Schensul 2010). The interviews were with a variety of citizens living and working in Ashtabula County—and, in one case, Lake County—and covered a variety of contexts. I interviewed individuals not only who participated in VPP activities, but also nurses, law enforcement, journalists, and private citizens. Sampling for the interviews began with Mike and Cheryl’s immediate network of journalists, volunteers, and consultants to VPP. Once this limited pool had been exhausted, I turned to personal networks of friends within the region whom I knew fit my criteria of suffering from an illness they deemed unexplained. The diversity of experiences covered in these interviews yields insights into how seemingly unrelated themes—for instance, environmental health and drug trafficking—are actually intimately entangled with one another across the Ashtabula landscape. Most of these interviews were accessed through the social network of VPP activists, but some were accessed through advertisements on social media and through my own network of acquaintances in the area.

The final component of my research consisted in an open-ended electronic survey with questions designed to elicit scaled responses regarding perceptions of various problems within the county. The intention of this survey was to attempt to draw meaningful generalizations with interview data. The survey was distributed via Facebook and email to Ashtabula County residents. A total of 75 individuals responded to the survey. The justification for this survey stems from the relatively low number of
ethnographic interviews conducted, and allows for a more robust analysis of general themes among Ashtabula society and culture (Willow 2011). However, it should be noted that technological proficiency and internet access are barriers to participation in this study, and thus survey results, while probably insightful, cannot be used to generalize across the entire population.

Interviews and qualitative survey responses were analyzed using open-ended codes. Coding was completed in three stages: first, a set of hypotheses regarding research questions was translated into a set of codes in conjunction with memory recall from interviews as well as theoretical constructs from the literature; second, throughout the process of labeling these pre-determined codes, passages were evaluated as they arose to determine if a new code was necessary; finally, the coded interviews and surveys were cross-referenced with field notes and quantitative survey data to determine if there were any significant findings left unaddressed. The organization of this thesis reflects the aggregation of significant codes—those relating to modernity and nature-culture in Ch. 1, and those relating to embodiment, health, and social networks in Ch. 2.

Building the Vincina Protocol: Structure and Organization of the Thesis

The concept of entanglement, with its intuitive attentiveness to the ways people and things make and remake their relations with one another on an ongoing basis, opens doors for talking about anthropological issues in a way that is both integrative and holistic in addition to being focused on dynamic patterns of ecology rather than static ones. It permits us to think about the ways land, bodies, and discourse are related without relying too explicitly on any one of these objects. For Bruno Latour (1993), networks constituted the means of production by which natural and social objects—really one in the same to him—come to exist. If this is the case, then entanglement opens this theoretical perspective further to include not only the mode of production of the materiality of environmental justice, but also its semiotics and discourses. The latter are key to understanding Ashtabula’s affective ecology. While some might contend that environmental injustice is best defined by a measurable, material presence of illness
and/or accumulation, I argue that this in fact obscures the very nature by which environmental justice comes to be an issue of significance in the world. It does so by silencing and discrediting those who speak out, when in fact environmental health science is to date very inexact and regularly acknowledged as susceptible to the whim of political and economic pressures.

Likewise, while entanglement acknowledges the loose affinities and indeterminate consistencies that exist in our relationships with nonhuman objects, it simultaneously presents a practical problem with respect to writing this thesis. By conceiving of human and nonhuman entities as distributed actants within an agentic network, entanglement unfurls the classical notion of hierarchical theory. To rectify this, I have broken down the thesis into two major parts. In chapter one, I explore how knowledge of nature is constructed and set into motion by the general public. In addition to ethnographic evidence of Ashtabula County residents’ at times internally contradictory modernist constitutions of “the environment,” I also explore the general history of the concept in American environmentalism, science, and anthropology. Throughout this and the subsequent chapter, the notion of an environmentalist ethnographic ethic will structure both my analytical and narrative approach.

In chapter two, I move from the very abstract question of how Ashtabula County residents obtain their understandings of nature to how they act upon it. What makes an environmentalist? Why are some people more prone to speak out against perceived injustices than others? And, critically, what is the role of person-to-person affect in generating person-to-nonperson affect? Here, I argue that pollutants—in this case, broadly conceived to include environmental toxins and drugs alike—are crucial in their role as hybrids between the human and nonhuman worlds with an agentic capacity to make and remake relationships that are pivotal to the generation of an environmental justice affect.

In her book *Loving Nature: Towards an Ecology of Emotion*, Milton points out that much contemporary social scientific and neuroscientific research provides evidence that rational and emotional thought, historically dualized as a product of the Cartesian
solution, are not so different after all, and in fact influence one another in an indiscernibly constant feedback loop. I suppose, then, that it is not so surprising that I would pursue a topic of both “emotional” and “rational” interest that intersects my activist and communitarian convictions with my academic ones. I expect that most scientists and policymakers will reel at my suggestion that superimposed rationality in the form of education and the reduction of ignorance in communities like Ashtabula means little without an acute attentiveness also to the unique affinities people have with the nonhuman world. To challenge injustice, we must acknowledge that this approach leads us to disaffect ourselves both from fellow humans and nonhuman nature. To combat injustice, we must, to paraphrase the words of Margaret Mead, engage with a steadfast thoughtfulness and commitment to changing the world for the betterment of all, human and nonhuman alike.
Chapter 1: Modernity and the Perception of Nature

Introduction

Richard: So then, how did this environmental illness affect you and your family?

Dennis: I don’t know if I’m willing to go as far as to say that this is a definitive environmental issue. I don’t know if I’m prepared to give you that reply. Whatever the answer is, we’re grasping right now, I think it’s interesting that when you look at the issue of toxic clusters and such... is it by chance that they have to be around, downwind, in the vicinity of runoff and bad places that existed?... Logical folks draw conclusions, and some disastrous diagnoses have come out of that particular plant. Ironically, though, I will tell you that most of it was not ALS or of that nature. It was mostly cancer. So I think there’s a distinction here between the two that has to be looked at. But I think that there was a lot of cancers that came out of people who worked at this particular facility... Again, it’s one of those, when you look at the statistical probability of folks that have this... and then it hits your house, well that’s odd. But then to know that two and three and four, it again statistically speaking we’re defying the odds, I believe. Two per hundred thousand, I believe, is the number that’s been used? The population in this county is barely that, and we can name 11-20 cases north of route 90. Things that make you say, hmmm. Well, clearly, this is one of those, and to be touched by it obviously you feel unfortunate, but you also start to look for answers.

This quote was taken from an interview with a public employee of the
city of Geneva, Ohio—a small city in the western part of Ashtabula County—on June 22nd, 2015. Dennis lost his mother and a close friend to ALS just a few years ago, and as a result has become involved with the coalition of activists in his county to demand local action on the perceived issue. However, interestingly enough, Dennis himself shows several internal contradictions. As a public employee, Dennis admits that the plant in question was a known EPA Superfund site, and explains that through his job training he was given information about the various chemicals and other materials involved in the plant. However, even with this information, he expresses doubt and is unwilling to draw direct conclusions about a relationship between pollution and illness. Critically, he also asked that his identity be kept secret for the purposes of publication, for fear of retaliation by his higher-ups working in local government.

Dennis’ adherence to skepticism and uncertainty, as well as his desire to remain anonymous, are indicative of his unwillingness to challenge the status quo. While he fears that something may be amiss, he chooses to abstain from drawing conclusions because he perceives a lack of legitimate evidence to appeal to authorities. However, he also questions whether or not such a relationship exists, suggesting that he doubts the scientific and political authorities that have not made declarations on the problem.

The quote illustrates how power and authority shape considerations of authentic knowledge among lay people, as well as how emerging uncertainties from novel forms of pollution complicate the overall perception and interpretation of risk. For the people of Ashtabula County, the environment has often been regarded as a place of recreation and enjoyment. Ashtabula County residents take pride in their rural dwelling as a source of livelihood, as well as the quaintness it offers compared to city life. The idea that the landscapes they enjoy might be contaminated by issues they would otherwise relegate to urban areas represents to many, like Dennis, an ontological shift away from locally specific forms of cultural knowledge that have grounded their way of life for generations. How do Ashtabula County residents facing these seemingly novel risks reconcile the tensions between fear and existing cultural knowledge?
Answering this question requires an examination of why such a division between human bodies and natural processes occurs in the first place. This phenomenon is not limited to merely public conceptions of nature; rather, it is also found implicitly in the theoretical history of anthropology. The cultural anthropologist’s purview always contains an implicit spatial component, yet our perspective has not always considered directly the reciprocal relationship between human and environmental activity. The very nature of studying phenomena cross-culturally is grounded in our discipline’s assumption that people in different places behave, believe, and understand the world differently from one another. The observable differences between people in different places have led many cultural anthropologists to wonder about the relationship between place and culture. This sense of wonderment has manifested in diverse ways throughout our discipline’s history. Early American anthropology, for example, conceived landscape as the space where people interacted and exchanged culture (Kroeber 1940). Later theoretical developments drew attention to the relations between humans and the environment—namely, the ways in which the environment constrains and structures our everyday lives. Meanwhile, research trends in cultural anthropology that emphasize issues such as environmental health, environmental justice, climate change, and phenomenological landscapes have reconceptualized landscape and humans as both dialectical and iterative, dynamically linked as part of a flexible, indeterminate relationship that cannot be explained merely by conceiving landscape as a space to be acted within or upon.

The genealogy summarized above could easily be told as a linear progression from premodern ignorance to postmodern enlightenment, in which anthropologists have over time broken down the insipient nature-culture dualism. Such a narrative would be dishonest, however, in that it would mask the role of ethnographic subjects in shifting discourse by casting them as mere agents aiding the development of a privileged perspective. In order to fully appreciate and understand the current research state of landscape in anthropology, it is necessary to understand how non-anthropological
discourses of nature and the environment implicated their historically congruent theoretical developments.

This chapter explores the connections between several anthropological theories of landscape and their historical or cultural antecedents. Through an examination of the history of environmentalism in the United States, I show how cultural constitutions of nature and culture infiltrate and guide our scientific understandings of nature, which then in turn bear a significant influence on our social lives. As historical moments (Foucault 1977) emerge and diverge over time, so too do anthropological theories of human interactions with the nonhuman world. I will draw on my ethnographic fieldwork in Ashtabula County, Ohio to show the role science plays in shaping cultural dispositions toward nature.

A Landscape of Risk: Ashtabula County in Geographic and Historical Context

Before I delve into the theoretical history of the landscape concept and other visions of socionature (Castree 2002) existent in anthropology, I first want to provide a thorough orientation to Ashtabula County. Located in the far northeast corner of the state of Ohio, bordering Pennsylvania to the east and Lake Erie to the north, Ashtabula is the largest of 88 counties in the state. Ashtabula County was created in 1808 and organized in 1811. Its name comes from an Iroquois word for “river of many fish.” The county government is located in the village of Jefferson. In 2010, the U.S. Census Bureau reported a population of 101,497, a 1.2% decrease since the previous census. The median household income in 2010 was a modest $42,139. While we often hear about women national making only 75% of what men make, the discrepancy in Ashtabula County is even more stark: women, on average, make 67% as much as their male counterparts.

In terms of its ecology, like much of northeast Ohio, Ashtabula County was founded on wetlands in the thicks of what used to be temperate deciduous forests; today, Ashtabula retains some of its historic ecology, although the forests and wetlands are far

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Ashtabula’s landscape—the sum of its geological, cultural, ecological, and infrastructural components—constitutes the intellectual topography on which VPP’s activism is founded. VPP activism is motivated by the hypothesis that ALS is caused by environmental contaminants as a result of human activity. Consequently, they tend to focus on specific features of the landscape—principally, waterways and industrial zones are of interest since they support the hypothesis of water contamination. In this way,
human activity is conceived as antagonistic to a balanced, healthy ecology; toxins reverberate back to human bodies like foreign invaders that destabilize homeostasis. According to VPP activists, the illnesses can even be represented spatially across the landscape in the form of “clusters,” which show what households have had cases of ALS. Cheryl told me that VPP organized the cluster through a series of interviews and by culling local obituaries.

VPP activists tell me that the map was a request made by Ashtabula County’s State Representative, John Patterson, when he met with the group to discuss their concerns. After Patterson asked the group to track the illness and help him gather information, Cheryl constructed the map. As Cheryl stated in an interview:

Cheryl: Once we ended up getting into the actual politics of this and trying to get leadership in Conneaut and our representative at the State of Ohio to actually get this situation investigated... We contacted Representative Patterson and Senator Cafaro to find out if they could assist us. Cafaro concentrated on getting the EPA involved. Patterson, we started working with him to try to establish legislation so that they would mandate the collection of information on ALS and motorneuron diseases. That’s why he requested that we start making a plot map of disease outbreaks in the county. That’s why we started doing that. It’s not that he didn’t do anything. We just lost resources for moving forward on getting more information. He was pleased that’s what we were doing, but until we get the information, it’s not like he can get us more assistance to get the information. He can’t do that until after he received information.

Rather than rely on the power of personal narrative alone, VPP activists were forced to contend with the realities of modern science and its foreboding influence on the U.S. political process. The landscape concepts they utilize are thus a product of a particular, modernist socionatural paradigm that fundamentally dualizes the human from the nonhuman as “culture” and “nature.” In this next section, I will explain just what I mean
by this through a historical look at the various ways anthropologists have thought about “the environment” over time.

Figure 1.2: Map of known ALS cases near Conneaut, Ohio, 1993-2014. Each pin represents a distinct case. As you can see, there appears to be an epicenter of many cases near one another just north of U.S. Route 20 in Conneaut, with the cluster spreading out beyond that.

Nature as Setting: Dualism in Early Anthropological Literature

Anna Willow (2012: 4) praises landscape as having “the capacity to unify material and ideological ways of thinking about the world that have been separated in Western ontology since the time of Descartes.” Indeed, the Cartesian Dualism—or the separation of mind and body—has had a profound impact both on Western ontology and, by way of ethnocentrism, anthropological theory. Dualism fetishizes the phenomenological as a tenet of human exceptionalism that unbounds it from the ordinary constraints of nature. In cultural anthropology, the distinction becomes codified by the
preference of our discipline’s founders to study primitive people who lived in isolation from modernity.\textsuperscript{5}

Examples of dualistic theory in anthropology reach as far back as the discipline’s inception. Kroeber (1940) invoked dualism in his study of cultural diffusion in the American southwest. According to Kroeber, cultural traits developed near the center of a cultural core, and diffused outwards as people migrated or came into contact with other societies through trade and conflict. Here, the emphasis is clearly on culture as ideology; the material foundations of culture—i.e. the landscape—are merely backdrop for what Kroeber considers the more important question, which is \textit{where} cultural traits originate and \textit{how} they spread across space to other cultures. The “environment” is thought of as nothing more than a space occupied by humans.

Stimulus diffusion is but one early example of the ways dualism has pervaded anthropological thought. To be sure however, the tendency for dualism as an ontology to dissociate humans from nonhumans has many consequences, at least two of which are of significant consequence here. First, it distances humans from nature—but not all humans. Human exceptionalism privileges modernity as the means by which people escape the constraints of nature, thus distancing them from their obvious ecological roots (Ingold 1993; Willow 2015). The ontological dissociation of humans and nature has the practical consequence of dividing any consideration of modern social life from its environmental roots. Rather than understand our environments as a network composed of parts, dualism prompts us to think about “the environment” using an us-them mentality, where “them” refers to nonhuman nature, or all other life forms. Yet at the same time, “the environment” does not distinguish between inanimate land and living organisms. Dualism is therefore a reification of the human condition that dismisses the realities of ecology.

\textsuperscript{5} Dualism manifested in the treatment of such primitive peoples as more reliant on their environments than modern Europeans, thus resulting in environmentally deterministic theories like E.B. Tylor’s cultural evolutionism and even earlier conceptions of diffusionism.
Second, by privileging modernity, dualism bifurcates social life between those who create modernity and those who are unable to achieve mastery of nature. Those who create modernity perceive themselves as having transcended nature. The rest—the poor, indigenous, and minorities—are naturalized, and thus linked in subjugation and exploitation. Anthropological and lay conceptions of nature and culture alike have tended to conceive of the subjugated as both romantic compatriots living in perfect harmony with nature (Hames 2009; Willow 2012: 5-7) and as evolutionary inferiors who have not yet transcended nature’s constraints (Hobart 1993; Ortner 1996). Early anthropological tendencies to see modernists as “more evolved” reify this dualism and reinforce the social inequalities arising from it. Kroeber takes this for granted when failing to account for relations of power across space; this is ultimately the reason his model is outdated by measure of current anthropological theorizations.

This last point is particularly consequential for the Ashtabula County case. Key to the argument put forward by VPP is that residents of the County are being taken advantage of by economic and political interests from outside of the area. The chain of political influence exerted on the county is readily apparent in an anecdote Mike told me back in June. Near the time of his wife’s death, the struggle to balance healthcare costs and the actual act of caring for his wife led Mike to fall behind on house payments. Shortly after Squeak died, Mike traveled to stay with his son in another town; during that time, the federal bank financing his home loan hired what Mike told me was a “regional contractor, who then hired a private citizen in the area” to enter Mike’s home for a foreclosure audit. However, the proper legal filings had not been completed, and so the entry was technically illegal. The entrant allegedly took some of Mike’s electronic devices used to store data for VPP, and Mike has had much difficulty retrieving it as a result of the hierarchical and geographically complex chain of command by which power and agency flowed.

While early anthropologists like Kroeber made little to no effort to deconstruct a dualism that they were probably not aware they were engaging, later generations of anthropologists took a more critical interest in understanding human-nature relations. In
the mid-1900’s, explosive growth in biological ecology prompted many social scientists to examine evolutionary, behavioral ecology, and systems theories as possible models for human behavior (Winterhalder & Smith 1992). The premise for this adoption was the realization in biology that adaptations arise in response to environmental pressure. Abundant evidence had accumulated to indicate that this was the case with physical traits—but what about behavioral?

20th century biology spawned two important theoretical changes in anthropology. Human behavioral ecologists (discussed above) adopted many of the same models as their behavioral ecology forefathers; the result has been a tendency to diminish human behavior to a mere response to environmental constraints. Steward (1958) adopted a softer version of behavioral ecology in formulating cultural ecology. According to Steward, humans must adapt to environmental pressures by developing novel technologies—either material artifacts or cultural practices—that enable them to cope with their environments. A point to note about both theoretical orientations is that they reflect the modernist tendencies of their epistemological predecessor to bifurcate humans and nature. In HBE, humans are reduced to rational agents who must make either efficient survival decisions in order to cope with their environment. In cultural ecology, the same process is assumed, but a softer, qualitative disposition sets the tone. The two ecologies do not actually consider humans as interactants within a network of living organisms as biological ecology would, but they instead set up a structural binary that juxtaposes them in opposition to one another. The resulting vision of nature as structure and setting dismisses the possibility of asking questions about dynamic human-natural processes before we even move past the conceptual phase of designing research.

Perhaps the quintessential classic example of cultural ecology comes from Roy Rappaport’s Pigs for the Ancestors (1969). In this ethnography of ritualistic pig slaughter in Papua New Guinea, Rappaport makes the argument that the pig slaughter is a population control response intended to keep the pigs from ravaging the island ecosystem. However, we can immediately see the shortcomings to this approach for the Ashtabula County case. The suggestion that VPP activism could be a cultural response to
survival pressures in nature is certainly a worthwhile and intriguing conversation; however, a key problem with Rappaport’s work is that it assumes a closed system, with known variables and consequences. The islanders instinctively are aware that every few years they must sacrifice their growing pig population or face resource depletion. Conversely, Ashtabula residents are keenly unaware of the environmental hazards that apparently surround them.

Early American anthropology can teach us two important lessons about the role of the environment in theorizing culture. First, literary evidence clearly indicates that Western ontology has pervaded and shaped anthropological thought by privileging modernist conceptions of the environment as a setting for human actors. Superior human knowledge is regarded as a tool by which our species escapes the limits of nature. Second, the academic climate that this kind of epistemology generates limits the kinds of questions that can be asked by anthropologists. In this sense, academic knowledge is very much a product of social and historical moments. Modern science is one such example of this. However, it should be noted that anthropological conceptions of human nature draw influence from multiple areas of cultural awareness, not just modern science. In the following section, I will discuss how the rise of American environmentalism in the 1960’s and 1970’s concurred with an increased politicization and socialization of environmental anthropology.

**Dualistic Nature and Culture**

Advances in biological ecology during the 1950’s and 1960’s are indicative of a growing cultural awareness of a symbiotic relationship between humanity and nature (Carson 1962). Increasingly, they also evoke the notion of an ecological “crisis” in the making, usually as a result of human activities. In order to correct the misalignments that place humans at risk for catastrophe, modern scientific authors advocate the need to understand nature’s holism so as to better control it. Take for example the following passage from *Silent Spring*:
“All this has been risked—for what? Future historians may well be amazed by our distorted sense of proportion. How could intelligent beings seek to control a few unwanted species by a method that contaminated the entire environment and brought the threat of disease and death event to their own kind? Yet this is precisely what we have done…. All this is not to say there is no insect problem and no need of control. I am saying, rather, that control must be geared to realities, not to mythical situations, and that the methods employed must be such that they do not destroy us along with the insects.” (Carson 1962: 8-9)

Carson’s admission of a reality of an insect problem and thus the need for human intervention replicates the human-nature dualism by casting insects as antagonists that humans must overcome in order to produce enough resources to survive. The dualism is legitimated by modern science, as she argues that management practices must be based on reality and not “mythical situations.”

Rachel Carson has been widely credited by environmentalists as the founder of the modern environmental movement (PBS 2009). Silent Spring stimulated a newfound cultural awareness of the reciprocal relationship humans have with nature. Here, the word “modern” is of great importance, as it frames the way post-Carson environmentalists came to understand environmental problems. Gíslí Pálsson (2006: 70-96) delineates the three principle characteristics of modernism as dualism, privileging of scientific epistemologies, and the goal of linear control6. Thus, the modern environmental movement preserved dualistic and managerial tendencies, and served to further reify science’s status as our most important tool for cultural survival.

6 Pálsson calls this the “assumption of linear control.” However, I prefer to imagine control as a goal rather than an assumption. Granted, formulating such a goal requires the conception that control is possible in the first place, but casting control as an assumption glosses the fact that scientists, like Smith and Carson, frequently admit that we do not have control, but that we must work to correct it. In this way, the objective of control is properly situated as a norm rather than belief.
Tim Ingold (1993) points to this peculiar paradox as evidence that modern environmentalism is actually the crux of the human tendency toward dualism and control. According to Ingold, environmentalism creates an object—the environment—and a subject—humanity, which recreates the Cartesian dualism. The dualism is only broken through antagonistic relations, such as natural constraints against humans or pollution that taints the environment. In order to preserve nature’s purity (and thus the dualism), human intervention is needed. However, he is keen to point out that the bifurcation that dominates environmentalist thought did not begin with Carson’s modern environmentalism. Rather, Ingold points to the early preservation and conservation movements in the U.S. as the source of this paradox. The designation of certain landscapes for preservation purposes is usually contingent upon some combination of their aesthetic beauty, amount of development, and increasingly the prevalence of biomarker or endangered species within their boundaries. In designating preserved landscapes, we imbue those spaces with cultural values of naturalness and purity. The human-modified landscape is seen as a violation of natural principles; this continued to be the case even after the transition to modern environmentalism post-Carson.

U.S. environmentalism tends frequently to invoke old dualistic ideas even as they promote the notion that humans and nature are engaged in a reciprocal relationship. The most notable of these, as Ingold points out, is the idea that we can somehow set aside swaths of land to be free from human intrusion or influence. The distinction between natural and unnatural also pervaded much of VPP and other Ashtabula residents’ ways of thinking about environmental health. One VPP activist I interviewed, Whitney, was a family friend of Mike and Squeak’s who sold a product called ProTandem. According to Whitney, the product was a “nutriceutical,” meaning that it was all natural, and was designed to rid the body of toxins to allow optimum function. Whitney took particular care to ensure that I understood the difference between a pharmaceutical—which is manufactured and therefore rendered unnatural by virtue of its relationship to bureaucratic regulatory agencies like the FDA—and a nutriceutical, which is unregulated, unprocessed, and therefore “natural” and “healthy.” From medicines to pollutants,
whether or not something is natural is increasingly a marker for its goodness among members of the public, including especially VPP activists.

As I have shown, this has its roots in the earliest forms of scientific environmentalism in the U.S. I have argued that the advent of modern environmentalism was a product of the desire to have greater managerial power over nature, not less, and that this served to preserve dualistic ontologies in the American public consciousness. However, while the goals of Carson and other early environmentalists may have been the same as those that preceded them (better human living through science), there is no doubt that the modern environmental movement at the very least awoke people to the realization that human activities that alter nature can eventually impact us, too. While the first environmentalists built their campaign on saving and cleaning up the Earth, their focus on anti-pollution legislation demonstrated a keen awareness of human health impacts (PBS 2009). The shift in focus from preserved and conserved landscapes “over there” to the immediate environmental concerns that arise as a result of urbanization, industrial agriculture, and increased consumption “over here” provides evidence of a shift away from the dualism by considering the immediate human landscape.

**Humanizing Ecology**

While the advent of modern environmentalism could be taken as the critical juncture at which the human-nature dualism tilted in the direction of balance, it is important to realize that the ontological shifts that took place were well under way beforehand. As I discussed previously, ecology and environmental science partially eroded the dualism by suggesting holism through the study of interorganismal relationships. The socialized ecology promoted by 1970’s environmentalists perpetuated dualism by maintaining humanity’s role as master of nature, but simultaneously broke down one of its fundamental cognitive barriers by integrating landscapes within the human purview. To narrate this transition as one of inherent progress and deconstruction would be an ironic contradiction in my argument against linear, neat categorizations of science and history. Rather than representing *a deus ex machina* that sparked the
beginning of a more efficient human consciousness about the environment, Carson’s work is rather a piece of evidence embedded alongside a number of similar intellectual contributions. Each contribution is in and of itself a distinct piece of evidence pointing towards a broader sociocultural trend. By conceiving of the intellectual changes as “historical moments” (Foucault 1977) rather than landmarks that constitute the beginnings of distinct intellectual sequences, we can arrive at a more holistic and nuanced vision of how human-environmental thought has changed over time.

The 1960’s and 1970’s, during which time the U.S. environmental movement began to take shape, are often colloquially cited as times of great social change and increased democratic consciousness, especially among the young generation in college at the time. The environmentalist predilections awakened by Rachel Carson and her contemporaries have done little to quell in the four decades since they first entered mainstream culture. In fact, one should reasonably argue that they have intensified. The public trend towards critique of human-environmental relations was mirrored by an academic trend with much the same goals.

This broader academic trend is reflected in developments in anthropological approaches to landscape post-1970. Michael Dove (2006) notes that over its lifetime, anthropology has been a discipline of borrowed ideas, susceptible to the ebbs and flows of culturally salient paradigmatic regimes. Such an observation is consistent with the premise of this chapter, and even serves to reinforce it. In its early years, anthropologists strived for an objectivity and generalizability that paralleled advances in the life and physical sciences. The project led many social scientists, like Julian Steward, to adopt

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7 This is a practice that can be traced to sociologist Émile Durkheim. According to Durkheim (1938: 89-112) society can be likened to an organism, with each individual representing an organ. Durkheim says that individuals, much like organs, perform a function that is vital to the operation of the society/organism. Though the argument has been critiqued ad nauseum by anthropologists and liberal pundits alike, it is important to note that the tendency to link biology and sociology often comes tagged with a citation to Durkheim’s ideas.
biological metaphors in order to explain social phenomena. Steward capitalized on gains in biological ecology in order to justify the need for understanding how cultures adapted to their environments.

Environmentalism’s penetration of anthropological discourse is marked most fundamentally by a consideration of the role of inequality in causing and structuring environmental injuries. Environmental injuries are defined as those adverse affects of human effluents into the environment that eventually come back around to impact the health of certain populations (Low & Gleeson 1998: 11). Here, I argue that environmentalist anthropologies have made significant contributions to the postmodernization of landscape theory by drawing attention to the dialectical relationships that exist between humans and nature via health. Drawing again on Pálsson’s (2006) three tenets of modernism—dualism, privileged science, and linear control—I examine the work of two environmental anthropologists—Eric Wolf and Carole Crumley—for their contributions to a humanized ecology.

Eric Wolf’s “Ownership and Political Ecology” (1972) is cited by many anthropologists as the first invocation of political ecology in our discipline (Biersack & Greenberg 2006). However, contrary to the belief of some in our field, political ecology is not an original anthropological theory, and has existed in geography primarily as a theory of space for decades (Peet et al. 2011). The version of political ecology adopted by Wolf remained faithful to many of the original ideas put forward by environmental geographers. According to Peet et al. (2011: 24) political ecology combines the concerns of ecology and political economy, coalescing around the ways human beings manage nature through development, conservation, and knowledge production. These particular foci, however, did not evolve simultaneously, nor have they all existed throughout

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8 Although it is not stated explicitly what the authors mean by “ecology,” it can be deduced based on language referring to scientific and environmentalist conceptions of nature and ecology throughout that the authors appear to be intentionally leaving this word open to interpretation. In this sense, political ecology combines scientific, political economic, and also humanistic ideals of nature-human interactions.
political ecology’s tenure. Each of these broad concerns arose independently from one another as part of broader intellectual shifts. For instance, the political ecology of knowledge production is relatively new compared to the political ecology of development primarily due to historical factors\textsuperscript{9}. Each of these three processes refers to a way humans plan or manage natural spaces. A similar approach is clear in Wolf’s work when he explains that the allocation of resource management practices along kin lines reflected a particular social organization designed for the management of necessary resources.

Carole Crumley’s historical ecology (1994), while not technically of the same theoretical strain as Wolf’s political ecology\textsuperscript{10}, bears to it many similarities—particularly, a concern with human environmental management practices. Crumley’s thesis is that by focusing on the ways the environment constrained human behavior in the past, we have failed to account for the multiplicity of complex ways they altered their surrounding environment, including to enhance its potential for habitability. Crumley points to agricultural clear-cutting as a major example of this, drawing on a wider body of literature that refutes the notion that all Native Americans lived in a state of equilibrist harmony with their environments (Hames 2007; Willow 2011; Willow 2012: 7-8).

Wolf and Crumley both presented visions of the landscape that were more attentive to the role of humans in constructing physical nature. They are further reflective of a long political ecological tradition that prioritized environmental protection and development atop the research agenda. Reflecting once again on Pálsson’s definition of modernism, we also see that foci on environmental development and conservation further exemplify objectives of control, as well as dualize nature by reifying aforementioned here-there landscapes according to degrees of human intervention. In the final section of

\textsuperscript{9} Carson’s work certainly contributed to this—a major tension in the aftermath of \textit{Silent Spring} concerned the validity of Carson’s work, with many scientific experts criticizing and dismissing her findings. The rises of feminist and postmodern epistemologies in academia in the later 20\textsuperscript{th} century also fit within this category.

\textsuperscript{10} Indeed, while Wolf is also a cultural anthropologist, Crumley’s work was primarily in archaeological theory, and so draws on a slightly different intellectual tradition.
my paper, I will examine how the political ecology of knowledge production—that third, most historically recent research agenda—reconstitutes what we mean by “landscape” by forcefully questioning the conditions under which landscapes exist in the first place.

According to Carole Crumley (1994):

“The introduction of historically informed environmental analysis into regional studies offers an important opportunity anthropologists, archaeologists, geographers, and historians to demonstrate the relevance of work in which they have been engaged for a century... Contradictions emerge between human groups because people occupying particular localities develop models of their environments based on their specific needs and experiences; these models may be at odds with those of other groups, leading to competition over scarce resources... (6-9).”

Crumley evokes several of the most critical concepts I have discussed so far in this passage: she offers a manifesto for anthropologists as part of a modernist agenda, she cautions the urgency of environmental antagonisms, and she describes the roles of culture and power in constituting environmental conditions. In so doing, she simultaneously engages in dualism, the privileging of science, and an assumption that control is possible. However, I have emphasized the portion that I feel best elicits that third and most recently recognized research agenda for political ecologists: the production of environmental knowledge. As Crumley and Wolf have set up their arguments, culturally-specific knowledge about the environment—including perceptions of what it is—create the divisions along which diverse groups interact and engage in unequal relations. Thus, knowledges about the environment and how to utilize it create fundamental divisions between groups of people that leave them at odds with one another.

All of the authors and theorists we have discussed up to now—from Carson to Wolf to Crumley—have adopted a primarily materialist disposition toward human-environment relations. Ideology has been a consideration to varying degrees. Although none of the authors make mention of what could be considered a political ecology of knowledge production, Wolf and Crumley each suggest that cultural difference—whether
it be political or historical—rests on differing interpretations of the environment or nature. A logical leap is here made between ideology and materiality: the assumption is that less efficient utilizers of resources will have less productive power, which therefore implies that superior intellectualities will be more successful. This is, of course, another instance of the reification of modern science and linear progress. It glosses the role of ideology as a mere route to outcomes. It does not ask detailed questions about how ideologies are constructed or employed, or about the ways ideology constitutes a reality of its own.

Such a conception is steeped in the Marxist dialectical materialist tradition. However, this approach fails to give proper attention to the sources of antagonism and disempowerment that underlie the presumably uneven cultural landscape. What are the sources of intellectual inequality? And more importantly, how are intellectual representations of nature shifting in light of the rise of mainstream environmentalist philosophies, both within and outside of the Ivory Tower?

**Environmentalist Anthropology**

To be sure, Steward (1958: 342), Wolf (1972: 201), and Crumley (1994: 1) all evoked the lamentations of dualism and urgency of resolving socioecological problems that are characteristic of environmentalism. They are all illustrative of the growing academic and public consciousness of human-environment relations. They are also modest examples of a shift towards environmentalist anthropology. Environmentalism, according to Kay Milton (1996: 104) is one of several “ecological alternatives” that informs and structures individuals’ ways of life. Environmental activists seek to promote a particular ideological agenda that they fundamentally believe to be evolutionarily or ecologically justified.

Environmentalist anthropology, then, is both a topical interest and theoretical orientation for cultural anthropologists. As Kay Milton argues, anthropology provides an opportunity to examine and understand environmental problems in their most fundamental sense because of the convergence of politics, economics, and social life that
occur within the anthropological culture concept (1996: 69-105). Like Crumley, Milton carves out a niche for anthropology in interpreting and understanding how global environmental problems take shape. Environmentalist anthropology invites us to consider issues of knowledge production—implicitly present in Rachel Carson’s struggles against the chemical industry—as significant objects of research in their own right and not merely as a proximate toward explaining privileged materialist outcomes of environmental conflict.\footnote{To be sure, the material consequences of environmental conflict are, of course, the driving force behind environmentalism, and the \textit{raison d’être} why we should be taking environmentalists seriously. However, by failing to consider ideology as a research object in its own right, we fail to investigate the processes by which those material realities become a fact, and thus may miss critical points of intervention that we so thirst for.}

Insofar as environmentalist anthropology invites us to investigate the locally specific ways cultures conceive of nature, it further opens up new possibilities to deconstruct Western dualistic and modernist tendencies by reminding us of the effects pollution has not just on our bodies, but also on our social systems in the former of higher healthcare costs and crime rates and lower property values and civil morale. Environmentalist anthropology is inherently critical of the multiple epistemologies that have been used to frame ecological ethics and praxis. The understanding of nature that one obtains within an environmentalist anthropological framework is one that emphasizes the local subjectivities and conditions that promote inequality and environmental injury, especially the production and distribution of knowledge within a society.

It is prudent here to add caution against the common tendency for environmentalists, including environmental anthropologists, to evoke the paternalistic and imperialistic tendencies of modern science in justifying their otherwise well-intended goals and means. Inequality is inherently \textit{subjective}: it is legitimated in the ideology of the ruling class, and understood only in terms of one’s position within society (Haraway 1988: 575-577). Environmentalism’s status as a marginalized epistemology does not
“exempt [it] from critical re-examination, decoding, deconstruction, and interpretation” (584).

The last point is particularly important in formulating an environmentalist anthropological ethic. As both a theory and method, environmentalist anthropology encourages anthropologists to think critically about the relations of power that guide our informants everyday lives. For some, that means inaction. Rather than propose a militant anthropology à la Scheper Hughes (1995), I instead offer the suggestion that collaborative research design such as the way I have approached my ethnography can yield important insights that might otherwise go unnoticed. For instance, much of my analysis of the way VPP activists approach dualism was informed by strategic planning directly alongside Mike, Cheryl, and other core activists. Environmentalist anthropology’s active engagement with research populations provides a sophisticated, insider view of how ontologies—even dualistic ones—drive activist motivations. This is something that earlier theorizations could not accomplish alone. The benefit to this is that anthropologists can now understand how cultural dispositions toward nature and justice are made—and remade—over time.

Environmentalism, Entanglement, and Biopower

The key point about environmentalism is that it is constitutive of series of relationships both among and between humans and nonhuman nature. It advocates that people take a particular stance towards their management of and interaction with nature. However, that relationship is governed by local particulars that can vary even in what they think that nature really is. Ogden (2012) and Nading (2014) call these relationships entanglements, or “the unfolding, often incidental attachments and affinities, antagonisms and animosities that bring people, nonhuman animals, and things into each other’s worlds” (Nading 2014: 11). In the case of environmentalism, Nading’s definition could be expanded modestly to also include all nonhuman life; under the category of “things,” we can consider both manufactured and raw objects/resources, including the very landscape itself.
Entanglements also constitute relations of biopower among individuals and nature. Biopower refers broadly to the management of bodies within society, especially the ways in which relations of power are ascribed onto individuals’ physical beings (Biehl 2011). Biopower is discursively constructed, predicated on what is “natural” to justify governance (Foucault 2008). “Nature” is thus usurped by the ruling class and its relationship to the proletariat manipulated to suit desired ends. Bodies constitute a specific site where history, culture, and society make their imprint on material reality, despite our tendency as Westerners to believe that biology is free from the sphere of political influence (Foucault 1977: 153). Biopower and entanglement are thus synonymous as relations among and between living organisms.

Conceiving the environment as an intellectual relationship between humans and nature is a tempting theoretical disposition because it finally permits us to unpack the dualism that nature has always assumed to be composed of, encouraging (if not necessitating) us to reexamine the tenets of modernism as they apply to “nature.”

Entanglements have three advantages over the landscape theories discussed earlier in this chapter. The first advantage is that they deconstruct dualisms of humans and nature. Entanglements do this in two ways: first, by complicating the bifurcation of subject/object through the consideration of multiple actors, both living and inanimate (Chagani 2014); second, by considering all actors within the system as agents entangled in specific relationships among and between one another in a series of overlapping webs of relations. That is to say, rather than simply seeing one object in nature, entanglement conceives the components of nature—animals, plants, fungi, weather, manmade objects, and so on—and the relations they all have amongst each other, as well as to different humans.

The second advantage that entanglements have is that they engage important theoretical discussions concerning the role the production of knowledge has played in facilitating the modern environmental crisis. The scientific production of knowledge facilitates the ways in which bodies—human and nonhuman alike—are managed throughout a society (Wagler 2009; Fletcher 2010; Biehl 2011). Therefore, knowledge
Production is an important process that can tell us something about the way people come to understand their relationships with nonhuman actors. Dualism represents a specific kind of imagined entanglement that defies more particular relations within the categories “human” and “natural.” The consequences of dualism bring humans, nonhuman animals, and places into one another’s beings through disturbing reconfigurations that place the stability of those relations at risk. Dualistic ontologies of nature motivate consumptive and extractive tendencies, as well as our otherization of minority/marginalized communities, and so it thereby informs cultural practices like the relations of power, production, and kinship. Environmentalist anthropology proposes to combat dualistic—and thus oppressive—landscape ontologies by deconstructing and complicating our notions of what a socioenvironmental relationship even is.

A final advantage of entanglement is its ability to explain environmental justice as something other than environmentalism. Environmental justice activists, including those involved with VPP, frequently distinguish themselves from environmentalists by arguing that their people-centered approach is “less extremist” than conventional environmentalism. I have already shown that modern U.S. American environmentalism was founded largely on the concerns of the working and middle classes. Anna Willow (2015) notes that environmental justice activists frequently deride conservation and modern environmentalism for their connections to the upper and middle classes, respectively. Joan Martinez-Alier (2002) notes that environmental issues affect poor people differently than they do rich: while “the environment” to a relatively affluent middle-class American might seem to be a luxury good, environmental injustice impedes the day-to-day lives and subsistence of the poor. Environmentalism is therefore just as much a conflict of biopower among activists for control of what environmentalist discourse even is as it is one between the public and their governments. Entanglement’s attention to interrelations among human and nonhuman agents alike allows us to move past the structural dualism of activists-opponents and see the complications that exist even within a seemingly homogeneous movement.
Modernism and Risk in Ashtabula County

How can a reconceptualization of socionatural relations informed by the political ecology of dualism help us to better understand the complications and contradictions present in Ashtabula County? First, many of the residents by and large still adhere to dualistic convictions of what their relationship with nature is like. For them, nature is a space for activity and play, not one that determines or influences survival. Modern scientific assertions reinforce this assumption by making it impossible to identify a direct cause for many of the health afflictions that Ashtabula County residents face.

A feature of the entangled landscape is the inability to pick out (or “disentangle”) certain variables in order to elicit the relationship between them. While this may be viewed as a limitation under modern scientific assumptions of linearity and control, I prefer instead to understand it as an asset, since it most accurately represents the current state of knowledge among the environmental scientific community. While some relationships can be identified, few can be described in perfect detail due to the prevalence of multiple variables. Those residents who interpret risk are merely trying to make sense of a landscape that once seemed determinate and bounded, but no longer appears that way.

At the same time that environmentalism has instigated cultural and academic awareness of the ways knowledge production can be used as a vehicle for biopower, it has simultaneously facilitated a condition of unknowing within the public collective. Often, individuals who claim to be the victims of environmental injury are unable to prove their claims using accepted scientific standards, exacerbating existing perceptions of vulnerability and disempowerment (Checker 2007; Willow 2014). The result is a “risk society” that increasingly problematizes real and imagined biological dangers, driven by an increased pattern of individualization within the society that detaches people from scientific knowledge that would otherwise govern their behavior (Szerszynski et al. 1996). The critical study of knowledge production has eroded the intellectual foundation of landscape, creating a state of cultural distress for those afflicted by environmental injustice.
Conceiving environmental health risk requires a framework that first allows for one to make the logical connections between environmental pollution and human health risk. Rather than an issue of proper scientific education, this should be viewed as an issue of culture, especially of the authority of tradition. To be sure however, modern scientific understandings are imperfect themselves in deconstructing human-nature dualisms. Landscapes are complex: they cannot be reduced to one or two measurable variables of interaction between humans and “nature”; there are rather a series of relations present that constitute the landscape. Earlier anthropological accounts of landscape are insufficient for explaining the paradox that governs the uneven relations in Ashtabula County because they inevitably attempt to essentialize or reduce the actors working within the human-environmental network. While it is untrue to say that such a perspective has developed gradually over time, the intricacies of entanglement theory show us that there is more work to be done if we are to be able to effectively identify and combat environmental injuries in any meaningful way.

This, then, is the contribution that an ethnography of environmental health can make. Confusion, uncertainty, fear, and the demands of everyday life are what keep Ashtabula County residents from acting on the concerns so many of them expressed to me. The development of what I will call an “environmental class consciousness”—the ways in which one’s use and relationship to the environment are restricted by the habitus in which they participate—relies on a non-dualistic conception of socionatural relations, and is essential to combatting environmental injustice at the local level in places like Ashtabula County. Appalachians, like many other marginalized cultures, are naturalized through their relationship to resource-extractive and processing industries and a relatively low development index compared to the rest of the country. By naturalizing them, we thus reify a social order that inevitably exposes them to greater amounts of our own excesses. This is the paradox of environmental injustice: the naturalized “other” becomes the object for pollution, and is thus forcibly modernized by intrusive practices.
Conclusion: Rebuilding the System

Throughout this chapter, I have examined the role modernism has played in shaping intellectual dispositions toward the environment both within and outside anthropology. Central to my argument has been the idea that dualism structured many of the ecological crises that plague us today by obscuring the ecological impacts of human actions. Dualism is thus best understood as a relation of biopower that facilitates the accumulation of wealth among the powerful and marginalizes the disempowered through exposure to environmental injuries. Heightened perceptions of social and ecological vulnerability produce an uncertain, vacuous life for marginalized groups.

Environmentalist anthropology is an integral contribution to our field because it reflects both a growing practical concern with environmental issues arrived at through advances in modern science and an interest in reducing socioecological inequalities that are rooted in the same problematic epistemology. In terms of biopower and entanglement, environmentalism constitutes, as Kay Milton put, one of several “ecological alternatives” to our dominant dualistic discourse. Environmentalism is a kind of entanglement that, unlike dualism, attends to peculiarities and particularities within human-nature relations. Rather than merely conceiving two categories, an environmental justice-based conception of environmentalism breaks down what we mean both by humans and nature, complicating the boundaries between them both physically and relationally.

The ultimate contribution of environmentalist anthropology, then, is its proficiency in allowing ethnographers to move past dualistic socionatural ontologies by opening our eyes to the “root causes of inequality, oppression, violence and related conditions of human suffering” (Hale 2001) that occur as a result of them. In part, this means acknowledging the complex relationships that exist between environmental and other social problems. VPP activists, while certainly dualistic in their visions of what it means to pollute the environment, move us toward this with their focus on both people and embodied outcomes.

However, there are many in Ashtabula County who remain in disbelief that the environment could harm their body. Although none such people participated in my
interviews, I know of their existence both from the words of my informants and from my own personal experiences. I can remember debating the existence of climate change in a high school biology course, and hearing many of my fellow (honors) students scoff at the idea that humans could hold such power over nature. VPP activists frame this, as is commonly done, as an issue of awareness, scientific literacy, and education. Educate the populace, they say, and we can fix it. However, as VPP learned over the course of the summer, education and outreach might not be as easy as they once thought.

How, then, can dualistic conventions be eliminated? That is the ultimate, unanswerable question that emerges from this thesis. Rather than a conclusion, I find myself in wonderment. I have argued, and maintain, that environmentalist ethnography provides a viable means for theorizing this and subsequently putting it into practice. However, while I have established how Ashtabula County residents think and feel about their environment, I have yet to explain the specific nature of the relationships they hold and how this connects to VPP’s organizing strategy and goals. I will do this in the following chapter; for now, I want to propose simply that an irrational system of being in the world such as dualism cannot be rectified by rational means. Fortunately, a rationalistic education is not the only means by which enculturation occurs, and so other paths towards an ecologically harmonious future that acknowledges our affinitive entanglements both to other people and nonhuman nature may exist. It is simply a question of finding what works for the local culture.
Chapter 2: Entanglements of Social and Environmental Pollution

Introduction: Of Needles and Nature

Connie: Recently, I’ve been feeling better than I had. I am fourteen months clean and sober from opiates and heroin. Before getting into heroin, I had quite a few surgeries and, in the late 80’s into 90’s I was diagnosed with fibromyalgia, clinical depression, and anxiety. Also, after moving here to the east side of town, after living on the west side my whole life, I had really really bad dizzy spells, which I was admitted for time after time, and which they called Pot’s disease, where the blood pressure bottoms out. But I was never sick... I don’t remember ever being sick at all until we moved to where we are. So I don’t know if that had anything to do with my diagnoses or not. But I’ve just been through a whole lot as far as health concerns.

This quote represents one of the most unexpected, yet also most interesting, finds of this thesis. Connie, a middle-aged woman who has lived in Ashtabula County all of her life, spent more than two decades addicted to various prescription pills her doctor had prescribed to her. She explains that the “cause” of her illness is unknown to her—and indeed, this uncertainty is common for the ailments she mentions suffering from. However, she notes that the symptoms only began once she moved to “where we are”—meaning from her youth home in a more rural part of Saybrook Township to Ashtabula Township, just a few miles from the factory epicenter.

For all intents and purposes, Connie does not fit the stereotypical image of what an Ashtabula resident might think a drug addict looks like. She is a short woman, about 5’2”, slightly plump, and very boisterous. Connie is very active in her church community,
maintains a close relationship with her three grandchildren, and has worked responsibly
her whole life. Indeed, she herself is quick to point out to me the contradictions in what
the collective imagines her identity to be and how she really is. Matter-of-factly, she tells
me that this is the way it is now: the junkie in the dumpster has turned into the struggling
grandmother next door.

Figure 2.1: Satellite view of Ashtabula Township industrial park and surrounding
areas. To the north and just a little west, in an unevenly shaped brown area, is a
landfill/wastewater treatment facility. Further east is the factory epicenter, where multiple
industrial plants are located within one mile of Lake Erie. In the northwest corner of the
map, where you can see shallower water, is the harbor; and in the deeper waters just next
to it, Lakeshore Park—the dirtiest beach in the United States. Connie’s home is located
just off of the southeast edge of the map. (Image: Google Maps)

This chapter explores the themes introduced in the quote by Connie: drug use,
unexplained illness, and social stigma. In the previous chapter, I argued that dualistic
conventions of nature and society guided the way Ashtabula residents think about their
relationship to “the environment.” In this chapter, I argue that such dualistic cultural
conventions further prevent Ashtabula residents from seeing relationships among and between the social problems they face. The key problem I explore is drug use, which was cited by 91% of Ashtabula residents in a survey as one of the most concerning problems facing the community; however, other social issues such as employment, education, and crime will also be addressed. I further argue that all of these problems are best theorized as entanglements, founded on affective relationships between people, things, and nonhuman nature. To make this case, I begin with a brief introduction to the anthropological and sociological literatures on risk and contamination. I will then move to a discussion of the two projects Mike and his network have launched—Meth-dot-com (antidrug activism) and the Vincina Protocol Project (environmental justice activism). I will discuss how both are guided by cultural understandings of risk. In the final section, I will turn to affect as a possible agent of social change.

Across each section I will develop the argument that Ashtabulans consider their own bodies to be sites of risk at the hands of pollution. However, drugs and effluents alike are embodied and personified in that they are considered to be the product of some person’s immoral behavior. They are not considered agentive until they enter the realm of the human, where people can manipulate them at will. As I will show moving forward, this has profound implications for how people respond to environmental justice and drug use as social problems.

**Risk, Modernity, and the Politics of Truth**

Social justice movements are predicated on two fundamental claims or assumptions: first, that sociopolitical inequality exists, and second, that it has direct, negative implications for the livelihoods of those who are on the lower extreme of the hierarchy. A concise and widely-agreed upon anthropological or sociological definition of “risk” satisfying to the needs of this thesis could not be discovered upon thorough

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12 Electronic survey, N=75
review of the risk literature.\textsuperscript{13} Szerszynski et al. (1996: 12-13) characterize risk as a symptom of modernity, pointing out that the notion of risk has its roots in rational choice economic and social theories. According to Szerszynski et al., the concept of risk is associated with an increased individuation in society. As people are increasingly freed from habitus, the concept of risk is allowed to enter into other, more personal relationships in their lives: their friendships, marriages, work relationships, and so on. As individuals have more and more control over their daily lives, they are inundated with choices beyond their capacity to fully absorb and assess information. Further, the capacity for trust in social institutions like science and politics is lost as affective bonds are disintegrated. The result is a culture or society that lives in a state of perpetual anxiety and fear.

Sznyszerski et al.’s conception of a risk society is a reflection of the old Marxist trope that capitalism isolates individuals from one another in a society as our lives and economic roles become increasingly specialized. However, the classification of a risk society they provide is somewhat misleading in its generalized focus on individuation. Melissa Checker’s (2005, 2007) research on environmental racism in Hyde Park focuses on one such “risk society,” in which the majority black residents of an Augusta, Georgia neighborhood seek retribution for alleged health problems caused by their residence at the center of a “toxic donut” of polluting industries. In contrast to Sznyszerski et al.’s claim that a risk society is the product of individuation, Checker demonstrates that risk societies can actually be composed of very strong communal bonds on the basis of shared

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\textsuperscript{13} The studies concerning risk cited in this thesis never provide a formal, operating definition of risk. Instead, risk is defined in the context of each paper in relation to something else. For Checker (2007), risk is a social construction or perception crafted by the marginalized groups engaging in environmental justice activism; for Lash et al. (1996), risk is instead characterized with reference to sociopolitical dimensions of science and technology. The lack of an operational definition of risk is a gap that requires closure if we are to move forward as a discipline on understanding how and why risks are assessed by different cultural actors.
... kinship, religion, and economic ties. Rather, individuation—and thus alientation—occurs at the community level as a result of systemic inequalities. Within risk societies, individuals become objects of experimentation, “living laboratories” for biopolitical managers (Goldstein 2014: 583). The realization of this objectification induces a state of anxiety for individuals, creating the uncertainty and mistrust characteristic of a risk society.

In Hyde Park, racism is the structural agent that marginalizes the predominately black residents of this low-income community. Hyde Park residents are alienated not only geographically in their “toxic donut,” but they are also socially isolated—from power and the material and social capital that would allow them to do something about their plight. Among these forms of capital that Hyde Park residents lack are money, political ties, and knowledge. They therefore find it difficult to contest a technocratic scientific management that, according to them, has insufficiently assessed the risks they faced. Science has failed them. Risk hence becomes synonymous with disempowerment and marginalization in addition to alienation.

The issue of scientific knowledge as a barrier to participation in broader discourses of environmental justice is a particularly intriguing and salient concern today. Generally speaking, people with a greater amount of environmental knowledge tend to have more positive views of environmental protection and stewardship (Arcury 1990). As our planet continues to face increasingly more and more severe forms of environmental crises, a central concern for governments, researchers, and environmentalists has emerged: what is the best way to alter human behavior in order to mitigate, reverse, or halt environmental destruction? Some groups, such as the Intergovernmental Panel on Climate Change (IPCC) have proposed massive global initiatives that involve governments, nongovernmental organizations (NGO’s), and transnational corporations in an effort to develop and educate populations in underdeveloped regions (Smith et al 2014).

However, as we can see from Checker’s research, it is entirely possible for people who lack formal scientific knowledge of the environment to become environmental...
activists. Further, Mark Hobart (1993) writes that conventional portrayals of indigenous groups as requiring scientific education to correct their wrongs both paints culture as an obstacle rather than a resource and disempowers and marginalizes those groups. Locally specific socionatural ontologies often view humans and nature as mutually inclusive rather than bifurcated, as well, meaning that they lack a fundamental cultural limitation of modern science (Biersack 2006; Pálsson 2006; Willow 2011).

Risk, therefore, appears to be predicated more strongly on alienation from social institutions than it does stupidity, ignorance, or cultural incompetence. Repeated subjugation, such as that inflicted upon the residents of Hyde Park, eventually leads to a distrust of authorities—including modern science as an institution and the governments that administer environmental management. The individuation that occurs as a result of this process both frustrates and confuses individuals. Without an affective bond to tie these individuals to a trustworthy framework for analysis, a risk society is born.

The inseparable nature of risk and modernity as co-conditional also suggests something about the prevalence of a human-nature dualism in risk societies. Some authors have written on the significance of “national sacrifice zones”—areas designated for pollution (Bullard 1994, 2005). In contrast to National Parks, sacrifice zones are spaces that have been set aside specifically to accommodate the excesses of human life. Superfund sites are a great example, although there may be other national sacrifice zones that are undocumented.

At first, the juxtaposition apparent in the concept of a national park versus sacrifice zone appears to cleanly fit the dualism. However, upon closer examination, we find that it is actually founded upon a set of internal contradictions. The simplest of these is that people, too, visit national parks; the converse—that there is nature in a national sacrifice zone—can also be said to be true. But it is actually even more complicated than that. Contaminants left by humans in sacrifice zones are then again picked up by people, whose bodies are then altered in some way. The lines between nature and technology are blurred in sacrifice zones, just as the lines between environment and human are by the concept of environmental justice. A national sacrifice zone is thus a particular kind of
risk society that blurs the distinctions between humans and nature within their boundaries.

During my preliminary research on pollution in Ashtabula County, I came across a blog published in December 2012, titled “Ashtabula - A Sacrifice Zone to Greed.”

At the time of the article’s writing, Ashtabula was home to four superfund sites—which the author claims is one of the highest amount in the state of Ohio. She expresses concerns about pollution in the area that may mimic the effects of Parkinson’s, as well as the very real threats of disability, cancer, and other illnesses. The article claimed that Ashtabula falls into the category of a national sacrifice zone, and attributes much of the blame to manganese. The author notes the entanglement of the natural and the social in the very first sentence of the independently published article: “Ashtabula, Ohio, is facing problems which could overload their already struggling social welfare services.” Drawing on the city’s historical and economic context, she warns that environmental injustice will only place further pressures on an already weak safety net. Her argument reminds me of VPP: I wondered if it was a source of inspiration for Mike, but he told me that he had not read the piece prior to me sending it to him.

If the formation of a risk society is predicated on the disintegration of affect to particular social institutions, then what could have happened in Conneaut, Ohio to make Mike and his cohort engage in environmental justice activism? I discovered an unexpected answer to that question myself early in the research process. In the next section, I will trace the history of Mike’s specific network of activism as it relates to Ashtabula County’s perceived drug problem.

**Cultural Activism and the Conneaut Drug Free Commission (CDFC)**

I did not initially set out on this project intending to research drug use and trafficking in Ashtabula County. Indeed, my initial research questions asked how and why VPP engaged in environmental justice activism. However, during some of my early

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14 Pillsbury-Foster, Melinda. “Ashtabula – A Sacrifice Zone to Greed.” *Freedom’s Phoenix*. Published 4-12-2012; accessed 3-2-2016.
conversations with Mike and Cheryl, I discovered that the root of their connection went further back even than their environmental justice activism, to an anti-drug awareness campaign in the 1990’s. At that time, Mike and his Wife, Vincina “Squeak” Helfinstine owned and operated two prominent restaurants in the tiny Conneaut community. In 2001, a twelve year old girl named Angela Boggs was killed at home when a shotgun accidentally discharged, firing directly at her face. The owner of the gun, who had friends over at the time, admitted to getting high on marijuana earlier that evening.

Mike, Cheryl, and David told me that the incident sparked interest in drug activity in the county for them and Squeak. While Mike and others pointed out that they felt drug problems in the county had begun to worsen much earlier—most stated that they perceived a shift beginning in the early 1980’s—the Angela Boggs shooting was a tragedy that produced a new kind of entanglement for a small group of activists. Once a face and name could be identified to the social problem, an attachment was formed, and the movement was born.

Although the activists involved with this earlier project were largely the same individuals involved with VPP, they did not go by the same name. Rather, they went by the name of the Conneaut Drug Free Commission (CDFC). Over the next few years, Mike and Squeak began to take matters into their own hands. As restaurant owners in a small town with high job turnover, they were often on the lookout for new servers. So, Mike tells me, he and Squeak began to seek out young women through their networks who had been involved in what Mike called “Ashtabula’s party scene.” The relationship was founded on reciprocal exchange: Mike and Squeak provided financial stability and moral mentorship for the young women, and the girls in turn gave information. The eventual outcome of the Meth-dot-com project was a brief, 17-minute mini-documentary published to Youtube by Media Magic Productions, the production company Mike and Cheryl own.15 The documentary was later presented to Conneaut City Hall in an effort to

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spur local officials to action. However, as Mike, Cheryl, and David told me, the project eventually hit a dead end here when the Conneaut City Council chose not to act.

From the story of their early activism with Meth-dot-com, we can elicit three important patterns that, as I will show coming up, held true among VPP activists when they turned their attention to environmental justice: messaging that invokes the dangers of mixing humans and technology, a gendered politics of organization and representation that exploits female citizens, and the use of anecdotal evidence to contradict claims made by scientists and politicians. Each of these was the product of specific relations of biopower among humans and nonhuman nature alike. For instance, the symbolic messaging utilized in Meth-dot-com focused on the body as a site of production. Angela Boggs, the victim of a tragic accident, became a central organizing feature of the Meth-dot-com campaign. The seventeen minute documentary released by the activists warns parents of the dangers of “twelve year old” girls going to parties, where they are recruited into sinister drug networks by older classmates. Drug and alcohol use are the primary focus, but other technologies such as social media and text messaging are also derided as facilitators of immoral behavior. The message is that drug lords from large cities are preying on young children; the evils of urbanization and technology are the ultimate culprits driving this ideological decay. The image of Mike clapping his hands into the camera, exclaiming, “Wake up parents! It’s time to wake up!” aims to empower them to reclaim their community.

Anthropologist Faye Ginsburg (2004: XIII) calls this cultural activism—a heuristic tool that “calls attention to the way that people engage in self-conscious mobilization of their own cultural practices in order to defend, extend, complicate, and sometimes transform both their immediate worlds and the larger sociopolitical structures that shape them.” Mike and his wife, spurred by their Christian faith and values, engaged as activists both by campaigning for public awareness of the perceived problem, as well as by mentoring girls. Tanya Erzen (2004) has written on the role of religion in changing sexualities in the ex-gay movement. Rather than a message of demoralization, her informants at New Hope Ministry rely on tales of hope and salvation to induce sexual
transformation (118-119). Similarly, the girls mentored by Mike and Squeak were encouraged to undergo a “sexual transformation” as part of their mentorship and employment at the restaurant, and also like Erzen’s informants (120-122), they testified as activism, delivering their stories on camera for the world to see.

We also see emerge from this a gendered hierarchy, both in terms of structure and representation. While Mike spearheaded the creation of the documentary, his wife Squeak spent most of her time in the restaurant. She funded the project, which was then in turn built utilizing the narratives of young women. As we will see later in the discussion of VPP, the gendered foundation of Mike’s activism is a defining characteristic of his general approach and has consequences for the type of audience drawn and the kinds of messaging portrayed. Reflecting again on Erzen’s work with the ex-gay movement, by “saving” individuals, they enter into a form of reciprocity which they feel inclined to give back. In both cases, the larger ideology relies on the efforts of a few disempowered individuals in order to continue to thrive.

Unfortunately, as members of the CDFC quickly found out, Conneaut City Council was largely uninterested in their claims. While the city acknowledged the drug problem as a major concern for the community, they cited spurious anecdotal evidence in CDFC’s argument. In particular, City Council claimed little ability to police the so-called “house parties” because they often occurred on private property, outside of the view and therefore jurisdiction of much law enforcement activity. The result of the hearing deeply frustrated CDFC activists. As David told me:

David: Eventually, we made a presentation to the City of Conneaut City Council. And... it’s a whole ‘nother story, the reaction to it wasn’t all that positive. There’s a lot of political... I don’t even know how I’d describe it. Basically, there was a lot of political backlash to his project because it turned out, according to our research on this, there’s a lot of corruption in city government and some of the city government people were involved with this whole drug network, which is not good... It’s deep, and it goes back generations, and to be very frank with you... when I see stuff like that

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Jimmy Demora scandal that went on in Cleveland, Conneaut makes that look like a walk in the park. Like a kid stealing candy. Big issues. It does go into other parts of the county, as well.

Political corruption and vested interests are thus seen as the explanation for inaction. Indeed, concerns over political corruption and distrust for officials is widespread among CDFC/VPP activists. Survey results indicate that only about 20% of Ashtabula residents see political corruption as a major issue in the community.

By framing political actors in the community as corrupt, disinterested, and ignorant of “reality,” CDFC activists place themselves in opposition as a traditionally-minded alternative that seeks to restore the small town community’s once dearly held values. Technocratic managers of people, nature, and things, City Council is an entity to be distrusted, and represents the first of many sociopolitical barriers for Mike and his clan of ragtag grassroots vocalists. Although Meth-dot-com has since largely died out and holds little significance in the historical memory of Ashtabula County residents—indeed, of the interviews I conducted with non-CDFC/VPP activists, not one had ever even heard of the initiative—it set the foundation for the specific kind of cultural activism Mike and his associates engaged in. This was an activism based on who decided what facts were admissible in considerations and constructions of social reality.

For my own sake, I looked up the case of Angela Boggs to learn more.\(^\text{16}\) I found upon reading the police report that many of the details provided to me by Mike did not match the official record. The story I had been told by Mike was that Angela had been invited to a party by a group of older individuals; her killer had taken the shotgun off of the wall, waved it in front of her face as a joke, and in his high stupor accidentally discharged it, killing her. However, according to the police report, there was no large house party—only a group of five adults, plus Angela (aged twelve), and some marijuana. The Cuyahoga County Coroner’s Office found that Boggs herself had no trace of alcohol nor any other substance in her system on the night of her death.

\(^{16}\) State v. Curtis, 2003-Ohio-6085.
On seeing the clear discrepancies between the police account of the accident and the one CDFC gave, I cannot help but wonder how much of their other claims came from similar misinterpretations, misinformations, or possibly even outright fabrications. Mike, Cheryl, and David were the only individuals with whom I spoke who had been involved with both VPP and CDFC; Cheryl and David both apparently subscribed to the same account of the story given by Mike. Regardless of the legitimacy or truthfulness of these claims, it is clear that the particular kind of activism proposed by this group is one that places itself in opposition to “legitimate” political, social, economic, and scientific actors. In the next section, I will compare themes across movement goals and examine the transition to environmental justice activism as it is informed by the same ideologies that guided the CDFC.

“It’s in the water!”: The Vincina Protocol

In 2012, shortly after CDFC’s presentation to the Conneaut City Council, Squeak became ill. She began to have trouble swallowing and would sometimes twitch or shake. Concerned, she and Mike sought medical help. An initial diagnosis was provided and Squeak was treated. But the conditions persisted, and over time they worsened. Other symptoms appeared: trouble breathing, memory loss, slurred speech, loss of coordination. Mike and Squeak repeatedly visited their doctors. Squeak underwent a number of tests, and was given a variety of possible diagnoses. Finally, in 2013—almost eighteen months after Squeak began exhibiting symptoms—a genetic test was done to determine if Squeak suffered from Amyotrophic Lateral Sclerosis (ALS), a fatal neurodegenerative disorder. When the test results came back, they bore with them bad news: Squeak was going to die.

When asking Mike to describe the ordeal, he appears visibly exasperated and upset. He described for me the anxiety, fear, and confusion associated with the arduous year and a half of testing and treating, diagnosing and misdiagnosing. “Why didn’t they do the genetic test earlier?” he wondered. Unable to receive a sufficient explanation from

17 When asked what Squeak’s initial diagnoses were, Mike could not recall; only that she had been misdiagnosed several times.
healthcare providers as to why the diagnosis took so long to acquire, Mike came to the conclusion that the healthcare field was inadequately informed and prepared to diagnose an ALS case when it came to them. Throughout the course of Squeak’s illness, Mike cared for her at their home in Conneaut. Very shortly after the diagnosis, she fully lost the ability to speak. She required assistance to eat, and needed her upper respiratory system evacuated of fluids every few hours so that she did not literally drown where she sat. He spent his full days with her, working on a new mission. He wanted to develop a protocol for diagnosing and treating ALS so that others would never have to face the same fears and anxieties as they had.

During Squeak’s illness, they reached out to a nonprofit organization—the ALS Care Project—for help caring for Squeak. The organization, run by registered nurse Pam Cazzoli and located in Canton, Ohio, does not provide direct care for patients; rather, they conduct research on the symptoms and conditions of ALS patients, as well as provide education and counseling to families in order to help them cope with their loved ones illness. Pam told Mike that she had been working on some new research on potential causes of ALS, and had found evidence to suggest that environmental stressors could be a trigger for the disease.

Also during this time, Mike told me that he began to review the documents and recordings from the CDFC project. However, this time, something caught his attention that had not before. In one interview with a drug trafficker, the informant told Mike and Cheryl that he had recently been contracted by the state of Ohio to bring “drum barrels” into Conneaut and dispose of them in a wooded location. In their original work on the project, CDFC simply interpreted this as evidence of a connection between drug traffickers and Conneaut’s city hall. However, spurred by his wife’s condition and the suggestions made by Pam, Mike began to wonder about a new link. So, he tells me, he began to do research. At first, he tried to find information online, but was able to make little headway in interpreting the complex science underlying current ALS research. He called labs across the U.S. associated with major ALS studies to try to figure out what was going on.
Eventually, he tells me, he arrived at what he considers a clear-cut answer: the state and local governments were trafficking pollutants illegally, and the chemicals were contaminating the local water supply. The contaminants had triggered algal blooms along Lake Erie, which released a neurotoxin that caused ALS. Eager to share his findings with the world, Mike called up his old friends, Cheryl and David Walker, and asked again for their help in creating a documentary to expose these issues to the public.

Mike’s narrative of his experience with ALS is one that reflects prominently upon the features of a risk society that I discussed earlier. Protocols for diagnosing illness were no longer regulatory mechanisms meant to protect; instead, from his perspective, they inhibited progress and created emotional distress. The government and modern science were agents of oppression who needed to be stopped.

On June 22nd, 2015, I had the pleasure of being able to spend almost a full day with Mike in Ashtabula County. After we traveled around for a few hours so that I could meet and take interviews with several of the residents who had been involved in VPP to varying degrees, I asked Mike to take me to the alleged contamination site in Conneaut. The map below (Figure 2.2) shows a general outline of the site we visited. Figure 2.3 below show a panoramic view of the area at street level. As you can see, it is not immediately discernible where the alleged toxic waste is from looking at the image. The neighborhood looks like many others in the County: a paved road, large yards with homes set further back from the street, an absence of sidewalks, and wooded areas all around. Yet at the same time, just beyond the outskirts of the woods near one home, Mike told me that there were “toxic drums,” resting in a wetland deep behind the woods, which
Figure 2.2: **Street map of Gore Road-Amboy Road alleged dump site.** The main site of alleged dumping is outlined in red, surrounding a small body of water near the intersections of Gore Road and Amboy Road. To the north is Lake Erie. (Obtained from Google Maps, 1st February 2016)

were owned by the county. According to Mike, the owner of the home, Marvin\(^{18}\), reported in 2014 that an especially large rainfall caused water contaminated with the

\(^{18}\) Marvin is a pseudonym; the real identity of the property owner is withheld due to privacy concerns. Although Marvin initially agreed to provide an interview for the study, he later redacted on that offer, citing fears that local officials might retaliate if he participated in my research. This underscores the feelings of fear and uncertainty that many Ashtabula residents have about “rocking the boat”—a theme I will explore in greater detail later in this chapter.
toxins to flood both his property and basement. However, the damage was not found to be the fault of the city, and so Marvin was forced to pay out of pocket to repair the damages.

Figure 2.3: Street view of Amboy Road alleged dump site. To the left, you can see Marvin’s house. The alleged retention pond is set in the wooded area behind his home.

Despite the insistence of local officials that the water was not contaminated, members of VPP with whom I spoke unanimously agreed that this was a fabrication made to protect the government from liability. As evidence of contamination, they point to the map of ALS clusters (see Figure 1.2, p. 20) that suggests a strong concentration of individuals near the alleged site. Determined to counter their claims, the group sought media coverage of the cluster. At first, local newspapers like the Star Beacon expressed interest and published a couple of short stories on the group’s activities. However, as time passed and no new information or alliances for moving the project forward surfaced, the “mainstream media,” as Mike has called it, waned interest. They turned instead to alternative media—chiefly, independent news outlets and online blogs—to promote their agenda.

Activism in VPP is thus informed by the politics of a risk society formulated during the days of CDFC. The relationship between this particular group of citizens, the broader society, and the local polities is particularly contentious. The rebuttal to their activism from the Conneaut City Council is one of both contention and deligitimation: council members, in newspaper interviews, have accused VPP of presenting scientifically
unfounded claims without hard evidence, and have expressed concerns about inciting panic or fear in the area. Indeed, even those who have been involved with VPP, like D-- (see Ch. 1, this thesis), are skeptical about the evidence. This is a skepticism deeply engrained in the dualistic thought processes consequential of modernity that I discussed at large in the previous chapter. In the next section, I will discuss the role differing convictions of modernity play in social justice activism in Ashtabula County.

**Rocking the Boat versus Falling in Line: Who Becomes an Activist?**

In order to answer the question of why some individuals engage in activism and others do not, I interviewed a series of people from Ashtabula County who had no association with VPP. Intentionally, I sought out individuals who either themselves suffered from or had a close association with someone with an illness with no definite, identifiable cause. I found from these conversations that it was not just VPP participants who were concerned about environmental and health issues in the County; in fact, nearly everyone with whom I spoke said this was a problem.

When I asked my informants what indicated the presence of environmental problems in Ashtabula County to them, I received a very similar set of responses from them all. By far, the most mentioned signal of an environmental issue was a marker I will refer to as “the smell.”¹⁹ This smell is a unique combination of cat urine and rotten eggs that lingers strongest in the industrial park of Ashtabula, but permeates throughout the county—particularly on hot days when air travels better. When asked what they associate this smell with, one informant told me that she associates it with the sound of an alarm that the plants ring each morning:

> Brenda: I know they release stuff, because they have this big huge sound thing and then they release stuff into the air. I can hear that from my house. It’s an alarm that goes off and it, they, you see things being released into the air, and it sounds again and then it’s done. They’re obviously putting pollutants into the air, but I don’t know what it is. The

¹⁹ Indeed, this is the colloquial term.
lake is right there and there are people who live right down from this. I could walk to the factories from where I live. But it doesn't sound or smell very pleasant. When you drive down Cook to Middle Road, which is where these factories are placed, it just smells like rotten eggs. It just doesn't smell very pleasant. There are areas fenced off that's supposed to be hazardous for human beings. I'm sure there are animals dying in those, which isn't good.

I can recall the first time I brought my partner Steven with me to visit Ashtabula during warm weather. We were house sitting for my Mom for one week while she took a vacation. One day, on our way to sunbathe at the most polluted beach in America, we drove past the industrial park (this is necessary to get from my home to the beach). Upon noticing the presence of a sulfuric odor, he inquired if I was the source. However, as the smell grew stronger and more potent, he quickly realized that it was not flatulence that he smelled, but instead the chemical factories we were driving past. My mother’s brother, who works in one of the plants in the industrial park, says that the smell is the result of paint production in the facility he works in, although I would not be surprised to discover that the smell itself is an entanglement of the many materials synthesized there.

Among other ecological markers that clued residents into environmental problems were advisory warnings released earlier that summer about breathability due to the diffusion of pollutants on particularly hot days; the color, odor, and news releases about water quality in the Ashtabula River and Lake Erie; the presence of coal in the Ashtabula Harbor; the degradation of private and public property by way of indiscriminate and unenforced pollution; and anecdotal prevalence of people with serious illnesses. Illnesses I heard frequently mentioned, including from informants who suffered from them, included ALS, Multiple Sclerosis (MS), various types of cancer, endocrine disorders, reproductive issues in females, autoimmune disorders, and rashes.

However, VPP activists constituted a small portion of my sample, and an even smaller portion of Ashtabula County’s population. I have stated that the main argument of this thesis is that in order to take environmental justice issues seriously, there must be
an embodied experience that creates an affective bond to nature by way of an affective
bond to another human. This was clearly the case: I found that all of my informants who
had this sort of experience took the concept of environmental issues seriously. Further,
they all also told me that when they expressed this view in public, they were often
challenged by others. Said one:

\[
\text{Megan: I'm thinking back to when global warming and climate change was first brought up... people would make fun of it. They wouldn't even kind of remotely or logically listen to what people have to say. They'd be like, no that's stupid, that's wrong, that's not possible. Like I said everyone here works in a factory or knows someone who works in a factory. I really think that if people start to believe these issues, they'll have issues with these factories, and so many people in Ashtabula would be out of jobs.}
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Social cohesion was thus an integral reason why many with whom I spoke did not engage in activism. The fear that addressing environmental problems would require a sacrifice of jobs and industry was enough to keep members of this weakened Appalachian rust belt economy from rocking the boat. “It is very important not to rock the boat here,” one informant told me. And indeed, the negative pushback against CDFC/VPP from the local government, as well as the difficulty in stirring up citizen interest, attest to this.

The concern over job losses speaks to a broader reason why many people in Ashtabula County are not as concerned with environmental issues: they are preoccupied addressing other perceived risks. As evidence of this, refer to Figure 2.4 below: you will notice that the highest ranking concerns—those with more than half feeling it is an issue—in order, are drug trafficking, the economy, poverty, and property crime. Environmental pollution ranks fifth, with a little less than half of Ashtabula County residents surveyed citing that this was a major concern.
Figure 2.4: Survey result: “Which of the following do you believe are problems in your community?” (N=75)

A number of different explanations were given for the underlying reason behind this. The most frequently given was related to Ashtabula residents’ capacity to understand what was happening to them:

\textit{Kacie: Ashtabula County can be a kind of unique place and in other ways it can be like any other small town. It’s a poorly educated area. The people that are from here that leave to get an education, not very many come back. So we, I think that we see, between low level or education, impoverishment... I don’t think people have the capacity to understand. A lot of people have no ability to leave even if they knew about it and knew the consequences.}

In addition to the idea that people are unaware, Kacie introduces another notion that I heard frequently: that even if they knew, they would not be able to do something about it because they are trapped financially. Thus, environmental
pollution as a social problem is a nonstarter: addressing the problem of pollution creates concerns over an already feeble economy, requires a scientific sophistication that not many residents of Ashtabula possess, and could not be given recourse even if it was acknowledged due to structural constraints.

One major difference exists between VPP activists and others with whom I spoke: the most outspoken activists in VPP (namely, Mike) were those who had the least financial risk posed to them by being outspoken. The closer an individual’s ties were to manufacturing or agricultural industries—polluting industries—the less likely they were to be open to environmental activism. As a means of mitigating opposition, VPP members ardently refuse to call themselves as environmentalists. Two reasons underlie this phenomenon. First, an environmentalist was characterized as “radical” or “extremist.” They are seen, including by some VPP members, as people who prioritize “trees over people.” What VPP is proposing is something people-centric. Second, they associated an environmentalist with sophisticated scientific and technological knowledge:

Richard: I find it interesting that you noted that you consider your work to be environmental justice, but you don’t consider yourself an environmentalist. What are some things that you associate with environmentalism? What would you consider to be an environmentalist?

Mike: A scientist that has the ability to convey the issues logically, to persuade Congress to pass new laws, to bring awareness to the issues of manufacturing, building etc. that’s relative to media understanding that information and being able to convey it to the public.

Broader concerns of, by, and for people thus inform how people perceive environmental issues. The issues are more likely to be taken seriously if they clearly affected someone immediate, and less likely to be taken seriously if addressing them would harm someone immediate. Broader concerns about the economy and community extend affect to include the knowledge that much of the community’s economic
infrastructure relies on polluting industries. But this leaves one final, critical question: why must the two be separated in the first place?

The Social Lives of Chemicals

“Once they recognized that the environment threatened them the same way crime, drugs, and lack of education did, the environment became an ecological and social concern that was compatible with other social justice goals” (Checker 2005: 100).

In addition to those illnesses I listed earlier that my informants mentioned to me as signaling environmental issues, there were also other “biomarkers” that were said to be symbolic of pollution to the social environment, as well. Among the issues mentioned in this category were drug addiction, type-2 diabetes, lung cancer, and obesity. This brings us full circle, to the discussion of Connie and her drug addictions presented at the start of this chapter. While the evidence of a one-to-one connection between pollution and drug use may be “just anecdotal” at this point, it is important to consider the logic underlying it, as well as the connotations of risk and dualism that inform it.

Drug addiction and trafficking were framed by my informants primarily as social problems. They were seen as bringing moral decay to the community and disrupting social order by promoting crime. They disaffected individuals from one another by turning people into “junkies” with whom social interaction was undesirable. And by this order, they are a more pressing and immediate threat. As Kacie put it:

“That’s all well and good and I appreciate in ten years I might have cancer, but right now I’ve got my six year old and we’re living next to people who are selling meth—what if the house blows up?”

In a risk society, when uncertainty abounds, the risks most easily perceived are the ones that do not take time to manifest. Environmental illness is often a result of accumulation of toxins in the body and exposure, sometimes over the course of years. Even still, there is a greater uncertainty regarding who gets environmental illnesses and why when exposure is constant across individuals in a population.
By bifurcating the problems faced by Ashtabula residents as “environmental” and “social,” the nature-culture dualism is reproduced and reified. Environmental justice makes a step towards integrating the two by acknowledging the human harms resulting from environmental pollution; however, to a great degree, other problems are still seen as separate. This was especially clear when I spoke with Michelle, a resident who serves on several County committees and advisory boards. According to Michelle, a lack of funding in the county means that causes are left competing for the little money that exists. Often, the funding process imposes this bifurcation, and as polluting industries pay fines and lobby against stronger laws.

Bruno Latour (1993) argues that an effective way to break down the nature-culture dualism and address the role of “hybrids”—objects that are neither quite natural or cultural—is to think of hybrid objects as a series of networks. I prefer to think of these as entanglements so as to acknowledge the relational quality that exists between objects and actors as well. When thought of as entanglements, drugs and environmental illness are actually intimately related. Let us make the assumption that Connie’s tale is true, and that her environment is responsible for her ailments. Effluents and drugs are then both part of a shared network, in which the release of effluents into the air and water by industries creates health problems, which require medications to treat. Communal poverty makes it difficult or impossible for some residents to receive the treatments they need, and so some turn to heroin or other drugs as a cheaper, stronger alternative. Industries could thus be said not only to be polluting the physical environment, but the social environment, too.

**Conclusion: Toward a Political Ecology of Social Justice**

How we theorize and talk about the confluence of social problems in Ashtabula County has great bearing on how we approach solving them. At present, many perceive the different issues afflicting the area to be disparate and unrelated, requiring solutions and strategies that are specific to the case at hand and mutually independent of one
another. However, I have argued that this is not the case, and that the collective assemblage of issues present in the county is actually much more integrated and complex.

The idea that these problems could be related defies the business-as-usual model of managing nature in Ashtabula County. However, here a fruitful opportunity has arisen: recognizing that various social problems can be related to one another makes our picture of cause and effect clearer, allowing us to more readily discern solutions. Furthermore, it eliminates the fallacious idea that we must pick one or the other; if the environment is related to drugs, crime, poverty, and social decay, then it becomes both easier to perceive as a source of problems. Thus, by association with human-to-human affect, nature comes into view.

Social justice is a complex issue that arises at the confluence of many structural factors. It is not mere oppression, but also entails more subtle and sinister forms of disenfranchisement. National sacrifice zones in particular are areas where we could expect to see such entanglements manifest. If we are to address social justice, then we must address it in all of its related forms. Ashtabula County residents are not just victims of environmental injustice; they are also victims of economic injustice. An increasingly high percentage of residents in the area are Hispanic, many of whom have migrated for job opportunities in the factories. These individuals could further be considered victims of racial justice. Women, who are more likely to accumulate and be affected by chemicals that target the endocrine system, are victims of a sex or gender based injustice. Only once we can acknowledge the deeply entangled nature of our lives and actions can we truly make progress in combatting injustice.
Conclusion: Disentangling the World

“Whenever we try and pick out something by itself, we find it attached to everything else in the universe.”
- John Muir

“The path of least resistance leads to crooked rivers and crooked men.”
- Henry David Thoreau

In October 2009, when I was seventeen, I was talking a walk with a friend near her home about two miles south of Ashtabula Township’s industrial park. While walking outside, we began to notice “the smell;” however, while ordinarily it would be of a certain strength, we noticed that something was off. It was very strong, and had a different aspect to it than one normally noticed. It almost smelled burned. A few minutes later, a thin white fog encapsulated the area. Confused and frightened, we went indoors, and looked online to find out what had happened. Apparently, the cloud was a result of a minor leak from one of the factories. We were advised that it was safe to go outside if we did not have any serious upper respiratory conditions, but we thought it would be best to remain indoors anyways.

The politics that surrounds risk assessment and response is certainly a tricky one. This is particularly so when the modern conception of risk has proven woefully inadequate at addressing economic, social justice, and ecological concerns in relation to one another. Typically, the modern concept of risk—of measurement, waiting until conclusions can be made to enact policy—results in too little, too late. Look no further than Flint.\(^\text{20}\)

If we continue to see issues like drugs, environmental justice, and joblessness as isolated problems, then we will never make sufficient progress toward achieving the goals of the modern social justice movement. Modern social justice preaches an epistemology of intersectionality (Collins 1998), in which various facets of identity overlap, reverberate, and multiply each other. In Ashtabula County, the intersection of social justice issues produces a profound situation that will be impossible to resolve without a holistic plan to address development, public health, and environmental issues together.

Ashtabula County has fallen on hard times. It is hard to think that just a few decades ago, this was a booming town on the lakefront, rated one of the best places to live in the United States of America. Now, it has lost much of its glory. Even the famed coal shipyard has recently announced that it is closing shop this year. Many of the small grocery stores, farmers markets, and other local vendors that I came to know and love as a child closed shop during the 2008 recession, giving way to the Wal-Mart empire.

It is often grimly said that following the path of least resistance leads to crooked men; we find this is the case with national sacrifice zones like Ashtabula County. By following the path of least resistance, polluting industries have found a way to evade regulations and carry on with “business as usual” inconsequentially. When 18.7% of your residents live in poverty, they will take any job they can get. When only 12.6% of your population has achieved a Bachelor’s Degree, they may never know the difference between a discourse constructed on truth and honor, and one constructed on lies and exploitation.

The issues prevalent in Ashtabula County did not occur overnight. They do not have simple, silver bullet solutions, and they are certainly not served well when thought of in isolation. As suggested by the stories told here, there may be a stronger relationship between these problems than many think. Overcoming issues of injustice in Ashtabula County requires an affinity for persons and a deep acknowledgment of the interrelated webs that constitute our worlds as human beings. Only once they can trust again will the
bonds of a fractured community be restored, and only then can they as a people move forward in pursuit of justice.

Live from Ohio: An Epilogue to VPP

I had the opportunity to catch up with Mike Helfinstine via phone call in late December. Due to the business of both of our schedules, it had been a long time since we had the opportunity to talk, and I wanted an update on where things were with him since we had last seen each other in July.

Mike told me that they were still trying to move forward with raising enough money for a documentary film on his wife and the ALS clusters in Ashtabula County. Due to familial illness, Cheryl and David Walker had not been involved in the project much for a few months. He had also fallen out with Pam Cazzoli of the ALS Care Project, who faced an unexpected family death that left her out of work for several months. However, through his persistent outreach to the entertainment industry, he had established relationships with two young aspiring actresses who were serving as the spokespeople for the project. Whitney, the Protandem saleswoman, was also signed on, making a feminine trio of spokespeople and continuing Mike’s legacy of having women at the forefront of his advertising.

It was hard for me to grasp at times what Mike’s goals for VPP were, and why he was following the strategies he was. They were often perplexing; he would suddenly change goals or add new ones, expanding a project more and more when it was already too bloated to accomplish with the limited resources available. And when opportunities for ordinary activism strategies presented themselves—such as when Cheryl suggested they seek nonprofit status or when Pam offered to absorb VPP as part of her own outreach—Mike flaked on them. It could seem to the untrained eye like aimless wandering, purposeless and done only to occupy time.

Indeed, I confess that I think that was part of it. However, the root cause—Mike’s emotional state—is what is critical. Upon Squeak’s death, Mike lost a partner of more than forty years. They had been inseparable for the bulk of that time. His disaffection
translated to passion for the thing he believes took his wife from him. And so he fights on.

But at the same time, the politics of the risk society enters and confounds the situation. Contentious political relations and a social desire not to “rock the boat” set up enormous obstacles. Further, the educational and economic conditions of Ashtabula County limit VPP’s resources for moving forward. With no sound model or framework for social justice activism, progress is halted.

For now, Mike and his new posse have been focusing on creating web broadcasts to air on Youtube and Google, where they seek to promote awareness of environmental pollution. They have increasingly expanded to other issues, as well: Mike is also engaged in a lawsuit against Wells Fargo Bank over a disagreement regarding mortgage payments at the time of Squeak’s illness, and so he has increasingly become vocal against the financial sector, too.

Risk politics produce the ontological framework within which Ashtabula County residents operate—whether or not they are conscious of it. When the community has so many serious issues, it can be hard to identify them all and ensure the rational calculation of risk that we as modern humans so desire. Disaffection and confusion color response; perception and action are each hindered by a lack of trustworthy social relations. By using people as emotional symbols for environmental problems, environmental justice activists are engaging in an attempt to restore a sense of emotional attachment to their world. Equally important, however, is the way VPP blurs the lines between emotion and rationality in their argument: there is little clear-cut distinction, and their appeal rests as much on a dissemination of perceived rational truths as it does subjective emotional appeals and social connections.

Anthropology with an Agenda

A second part of my argument in this thesis has been for an engaged anthropology of environmentalism. Engagement with environmental justice as an anthropologist is advantageous in at least three ways. First, it fosters a stronger researcher-informant bond
that will yield more honest, better results. Second, it promotes an ethical affinity, meaning that the ethnographer can be held responsible for the outcomes of the study; the idea is that this hopefully deters exploitation by social science. Third and finally, our data has value to the world, and utilizing our status as a researcher can offer political clout, however limited, to our informants in their efforts.

However, it would undoubtedly be foolish to suggest that environmentalist anthropology cannot have drawbacks. Checker (2014) warns against the notion of the “anthropological superhero,” or the anthropologist who falsely appears to have much more sway in society than they actually do. Indeed, it is the harsh cold reality that governments everywhere despise us and see little value in what we do. It is our responsibility to change that by being passionate advocates for social justice. We can do that using our own research as a baseline. If the climate scientists can do it, then damn it, we can, too.

We can also oppose the notion that there is such a thing as an objectivist approach to social justice. Social justice is an inherently subjective phenomenon. It is founded on the particular life experiences of certain people in relation to others, and it is a direct product of inequalities that exist. Homogenization is impossible in a situation like this. If we are to carve a niche for anthropology as leaders for social justice in this complex time, then we must be forceful in our conviction that the ethnographic approach tells us something that environmental toxicology science alone cannot.

And last, we must be willing to admit our agendas. I am an environmentalist and a social justice advocate. I am deeply concerned about Ashtabula and communities like it around the world. I do not know for certain if the pollution there is serious enough to be causing the health problems we are seeing. But my suspicion is that it is likely, and the contempt which the Conneaut City Council has shown for citizens who merely wish to express an interest in the common good disappoints me. I hope that they may change their mind when we have a chance to talk.
Retracing the Web—Some Final Thoughts

It is a curious thing to go back home and see things from a new perspective. Certainly anthropology has provided me with the tools to give my once-life a completely different look. Walking familiar steps and talking to familiar people taught me something new about the community and about myself as an anthropologist. From the experience, I have learned the value of an ethnography that is subjective, yet also scientific, in promoting a world that will be more equitable.

My main argument was premised on the notion that emotion, not education, is the means by which we will achieve environmentalist goals. Indeed, greater knowledge of and appreciation for the various entanglements that exist in nature can certainly foster an affective connection; however, in places like Ashtabula County, they do not have the luxury of being able to learn about nature by visiting a National Park or a science museum. They are forced to confront the realities of humanity’s connection with nature as a result of tragedy, and so this has a profound impact on their strategies for environmental activism.

I have shown how modern convictions contributed to the cultural conditions that facilitate this entanglement. As long as we continue to see humans as dominators of nature, so too will we proliferate other bifurcations of the social and natural that make addressing health concerns in risk societies a taller and taller order. Among the most consequential of these for rural communities like Ashtabula is the relationship between drug use and environmental health, as yet a widely underexplored topic. We can treat drug addicts all we want, but until we address the conditions that underlie their use, then the problem will just come back. Cut off one head, and two more shall take its place.

I have further argued that an engaged environmentalist anthropology provides superior insights to other anthropological ecologies. Ordinary political ecology is insufficient in its inconsideration of subjective experience. If anthropology is to truly be the most humanistic of the sciences, then it should utilize its research for the good and betterment of humankind—particularly our most vulnerable.
This will require a huge paradigm shift. I realize that such a dream could never be accomplished in my lifetime. Ideals and pragmatics aside, we can absolutely start here, now, with our engagements in the field and with the literature. By demonstrating the relationships humans maintain with each other and with the nonhuman world, we can uncover a network of information and consequences that we never would have perceived otherwise. Anthropological environmentalism has the advantage of envisioning environmentalism as cultural: shared, learned, and symbolic. This is the ultimate tool, as it provokes the kind of radical change that will be necessary if we are to avoid the forecasts of major ecological disaster now being released on an almost daily basis. How we wield that tool could have great consequence for communities like Ashtabula, and so we should utilize it responsibly, yet firmly. What we do now might only amount to a few drops in a limitless sea—but what is the sea but a multitude of drops?
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Appendix: Survey Questions and Select Aggregated Responses

1. In which jurisdiction of Ashtabula County do you reside?
2. Which of the following do you think are problems in your community?
3. Of the problems you selected, which do you think is most significant and why?
4. What do you think could be done to address the problems you identified as significant?
5. Do you think that pollution, habitat loss, or other environmental problems affect Ashtabula County?

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<th>No</th>
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<td>67.1%</td>
<td>11.4%</td>
<td>21.4%</td>
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6. Please explain your response to #5.
7. Do you think that the Federal or State EPA should do something about environmental issues in Ashtabula County?

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<td>23.5%</td>
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8. Please explain your response to #7.

9. Do you think that healthcare or illness is a problem in Ashtabula County?

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<td>7</td>
<td>10.1%</td>
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10. Please explain your response to #9.
11. Do you think that environmental pollution can affect an individuals’ health?

Yes 63 (90%)
No 2 (2.9%)
Unsure 5 (7.1%)

12. Please explain your response to #11.

13. Is there anything else you would like to share that you think would be helpful to my study?