



5-2022

“And they wrote it all down as the progress of man”: Relationships between environment, extractive industries, and Appalachian agency

Emma V. Kelly
ewiley1@vols.utk.edu

Follow this and additional works at: https://trace.tennessee.edu/utk_gradthes



Part of the [Appalachian Studies Commons](#), [Civic and Community Engagement Commons](#), [Nature and Society Relations Commons](#), [Place and Environment Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Kelly, Emma V., "“And they wrote it all down as the progress of man”: Relationships between environment, extractive industries, and Appalachian agency. " Master's Thesis, University of Tennessee, 2022.
https://trace.tennessee.edu/utk_gradthes/6423

This Thesis is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Masters Theses by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a thesis written by Emma V. Kelly entitled "'And they wrote it all down as the progress of man": Relationships between environment, extractive industries, and Appalachian agency." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Anthropology.

Raja Swamy, Major Professor

We have read this thesis and recommend its acceptance:

Tamar Shirinian, Bob Hutton

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

**“And they wrote it all down as the progress of man”: Relationships between environment,
extractive industries, and Appalachian agency**

A Thesis Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Emma V. Kelly

May 2022

Copyright © 2022 by Emma V. Kelly

All rights reserved.

ACKNOWLEDGEMENTS

I'd like to extend the deepest gratitude to my advisor, Dr. Raja Swamy, for supporting my work since I was a lost undergraduate and opening my eyes to activist anthropology, as well as Drs. Shirinian and Hutton for their work in shaping this research. This work would not have been possible without my interlocutors, the incredible people who allowed me into their homes and workspaces and gave up their time to speak with me. My brother deserves special recognition for his patience in letting me bounce ideas off of him and in providing invaluable literature and writing suggestions. I'd also like to thank my parents and friends for their help and feedback during this process. Finally, I'd like to thank my husband, who made me food, provided his uninhibited opinion, and kept me going throughout this degree. It should also be acknowledged that this degree was undertaken and completed on colonized Tsalaguwetiyi land.

ABSTRACT

The landscape of Central Appalachia has shaped and been shaped by its residents for thousands of years. The advent of industrialized extractive industries greatly shifted the nature and the extent of these processes, with capitalistic domination being asserted over the environment. While this shift towards industrialization was a widespread phenomenon, it undertook a unique trajectory within Appalachia, a region which occupies a distinct position within the national perspective. Although geographically established by the Appalachian Regional Commission, Appalachia is more than a politically defined set of counties: It is an incredibly diverse sociocultural region that exists on varying planes of marginalization within national discourse. Severe environmental pollution and degradation is one form of this marginalization and as such, should be considered both within its own ecological contexts and the social, economic, and political contexts which have created and maintained regional power disparities.

This research examines acts of agency and resistance in three Central Appalachian counties that have been affected by extractive pollution: Harlan and Martin counties in Kentucky and Scott County in Virginia. The residents in each of these counties have been impacted by environmental events, ranging from long-term coal mining operations to severe coal slurry spills. Through interviews and participant observation, I shed light upon the ways in which people have used their power to counteract the negative ramifications from these occurrences, including increasing the availability of healthcare, working to rehabilitate the land, and promoting sustainable energy sources. Furthermore, I position these acts in relation to so-called “outsider” perceptions and stereotypes and examine the connections between ascribed identities and the agentive acts of those onto whom such identities are assigned.

TABLE OF CONTENTS

Chapter One Agency and Environmental Justice in Appalachia	1
Background	1
Terminology.....	6
Focus	9
Methodology	10
Chapter Overview	16
Chapter Two Reading Appalachia	18
Appalachians as Agent and Subject.....	19
Merging Theory and Regional Studies	28
Chapter Three Materials and Methods.....	38
Translating Theory into Practice.....	38
Choosing the Sites.....	40
Creating a Dialogue	41
From Dialogue to Data.....	45
Chapter Four “Three Good Things in Appalachia: Bourbon, Horses, and Women”	47
Setting the Scene.....	47
"There’s Some Kind of Cadence:” The Creation of Community	47
Motivations and Priorities: Environmental, Social, Activist	50
A Day at the Health Wagon	59
Actors, Subjects, Agents	61
Chapter Five Conclusions and Recommendations	68
List of References	75
Appendices.....	83
Appendix A: Interview Prompts	84
Appendix B: Coding trees.....	85
Vita.....	88

LIST OF TABLES

Table 1. Activist organizations and their locations and missions.....	12
Table 2. Recommended sources on Appalachia by participants.....	71

LIST OF FIGURES

Figure 1. Map of Appalachian subregions and sites.....	11
Figure 2. Parent, child, and grandchild codes used during quantitative analysis	85

CHAPTER ONE

AGENCY AND ENVIRONMENTAL JUSTICE IN APPALACHIA

*'Then the coal company came with the world's largest shovel
And they tortured the timber and stripped all the land
Well, they dug for their coal till the land was forsaken
Then they wrote it all down as the progress of man.*

*And daddy won't you take me back to Muhlenberg County
Down by the Green River where Paradise lay
Well, I'm sorry my son, but you're too late in asking
Mister Peabody's coal train has hauled it away'*

John Prine, musician, *Paradise*

Background

People have lived in the region now known as Appalachia for thousands of years, interacting with the landscape and creating diverse settlements and lifestyles. The Appalachian mountain range has been home to numerous indigenous groups who were subjected to colonizing violence and displacement. It had its first contact with European explorers in the 16th century, when the de Soto expedition crossed the mountains on their path westward and began to be settled in earnest by European immigrants during the latter half of the 1700s (Williams 2002). The mountainous landscape played a dual role in shaping settlers' migration patterns: the rough terrain and resultant isolation deterred some, but the rich mineral capital attracted workers looking for stable employment and a chance to gain the rights to a coal seam and strike it rich. As the tide of industrialism swept over the region, the capitalistic domination of the land became more and more complete. The rich environment which had supported generations of indigenous and

settler peoples became a battleground in which the buried minerals were the prize and the very land itself, as well as its residents, became casualties.

While these extractive processes were occurring internally, Appalachia was also being formed in the external public mind through government policies, sociocultural stereotypes, and economic marginalization. Labels like *backward*, *fatalistic*, *white trash*, and *hopeless* gained traction within the public eye and were thus reflected in tangible approaches to the region (Harkins and McCarroll 2019; McCarroll 2018; Vance 2016; Weller 1965). These two dynamics did not exist in parallel: rather, they mixed and intersected and fed off of each other to create entrenched sociopolitical power disparities between the labelers, or the people controlling the destruction of the land, and those being labelled, or the residents of the land. Throughout these entangled threads of power, capital, and identity, Appalachia has also become characterized by the resistance of its inhabitants, primarily embodied by the generations of coal miners who have repeatedly carried out labor strikes.

The cultural creation of Appalachia is ongoing; Recently, *Hillbilly Elegy* has been promoted as a gospel guide to understanding rural conservative voters and has sparked a wave of literature rebutting the popular stereotypes and misconceptions that it actively promotes (Harkins and McCarroll 2019; NPR 2016; Senior 2016; Vance 2016). Acts of resistance and agency related to the environmental degradation resulting from extractive industries have also permeated the conversation surrounding Appalachia, environmental justice, and power dynamics. The strategies of Appalachian activists exist in constant negotiation with both external perceptions and their own self-knowledge. This can help

us understand how marginalized populations exert power in ways that aren't simply reactionary but instead based in self-awareness and deliberate action. It can also help us consider more deeply the ways in which external perceptions are altered or reinforced in the face of such negotiations.

This research examines such acts in three counties in Central Appalachia. The first, Harlan County, Kentucky, began to be industrially mined for coal at the end of the 19th century and has continued to be mined into the 21st century (Eller 1982; Williams 2002). It is home to the National Electric Coil Co./Cooper Industries Superfund site, which was placed on the National Priorities list by the Environmental Protection Agency in 1992. While the EPA's website states that the pollution does not currently threaten people living or working near the site because the area is connected to the public water supply, chemical pollution from the site heavily contaminated local groundwater supplies and the Cumberland River, which flows through the county (National 2017). Additionally, the Kentucky Division of Water has stated that Harlan County's topography has resulted in the county having areas of both moderate and high sensitivity to groundwater pollution. The Eastern Coal Field geographic region of Kentucky, which includes both Harlan and Martin counties, primarily consists of clastic sedimentary rocks, such as sandstone, shale, siltstone, and limestone. The porous and fracture-prone nature of these rocks means that contaminants can filter into the groundwater system more easily than other areas of the country, thus exacerbating the environmental effects caused by extractive industries (Ray, Webb, and O'Dell 1994).

Martin County, Kentucky, lies to the northeast of Harlan County and was impacted by a severe coal slurry spill in 2000, in which approximately 250 million gallons of slurry leaked from a waste containment pond owned by Massey Energy (Sealey 2006). Coal slurry, which can range from a thick sludge to a thin, runny mixture, often contains toxic metals such as mercury, lead, arsenic, lithium, copper, and chromium. In fact, recent reporting on the 2008 Kingston coal ash spill has proven that some coal ash contains radioactive uranium and radon (Bourne 2019; Satterfield 2020). Over two decades later, there is still a lack of accessible and safe water due to ongoing issues with the municipal water supply and continued contamination of groundwater. People in Appalachia are far more likely to already obtain their own water from private sources, and although recent tests have not detected lingering metals from the slurry spill, there are high levels of disinfectant byproducts inundating the water table that they are much more likely to ingest (Boles 2019).

The last county examined, Scott County, Virginia, has not been mined for coal, but rather has been extensively logged and also contained a lithium plant run by Foote Mineral Company from 1953 to 1971 (Fleener 2017:4). The lithium plant was located at Sunbright, which is northwest of the town of Duffield and upstream from Natural Tunnel State Park and produced significant amounts of both airborne and liquid waste. This site poses a unique challenge: namely, a lack of recorded data in the form of academic works or governmental reports. The sources are limited to a 1957 industrial report from the Department of the Interior, a 2017 paper by Dr. Lawrence Fleener, and short mentions in two articles in the *Virginia Minerals* journal (Evans 1957; Fleener 2017; Sweet 1982;

Sweet 1998). A lawsuit in 1958 helped to mitigate the airborne pollution, but the liquid waste was left in what is known as a “tailings pond,” which drained into the underground water table (Fleener 2017:7). In 1996, it was estimated that the Foote Mineral site had released a total of 246,745 pounds of pollutants from leftover waste material, with 96,745 pounds having been released in the preceding nine years when the plant was inactive. Fleener argues that “Since the plant was inactive and the smokestack was not in use, the only possible source of this pollution was the sludge pond” (Fleener 2017:8). In 2017, EPA declared the site exempt from cleanup requirements because the plant is not active, despite the active presence of hazardous waste.

Place plays an extremely important role within Appalachian environmental justice movements. Although not all of the interlocutors interviewed for this research are originally from Appalachia, several of them have generational ties to the area which are heavily rooted in personal ties to the land. When recounting what sparked their investment in environmental justice, they flooded me with memories such as skating on a pond beneath a slate ridge that was later strip-mined, practicing cross-country runs through forests that were simply razed one day, or working with relatives to boil water from their well for family gatherings. Although everyone has a place in some sense, it has a deeper meaning within this context. As Dr. Amy Clark, a professor at the University of Virginia at Wise whose family has lived in Central Appalachia for generations, put it, “...it’s a very physical, emotional, spiritual connection to your place.”

Even the interlocutors who were not originally from Appalachia spoke of place and of how it felt when they found their sense of place nestled in the coalfield mountains.

Understanding place in Appalachia means understanding what motivates the people who are fighting for the land and how they see their own role within the bigger picture of environmental protection and community. Incorporating place within environmental justice research expands the discourse beyond the incompatibility of capitalism and human well-being. It allows us to explore how intangible yet valuable attachments are mutilated by extractive exploitation and how they fuel acts of agency that are focused on the land itself instead of simply economic conditions.

Terminology

Some of the terminology used in this paper requires clarification, either due to niche usage or the myriad ways in which the terms are conceived. The term ‘Superfund site’ refers to areas with hazardous environmental conditions which are subject to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, otherwise known as CERCLA (P.L. 96-510: 1980). The Act requires the Environmental Protection Agency to clean up abandoned or uncontrolled waste sites that are spilling pollutants into the environment and sets aside a funding source, the ‘Superfund,’ for that purpose. It works in tandem with the National Priorities List, or NPL, which is a list of prioritized waste sites that are covered by CERCLA. ‘Coal slurry’ refers generally to a mixture of coal ash and water, which is typically then separated to use for fuel. Coal ash and its resultant slurry often contains toxins such as arsenic, mercury, and in the case of the Kingston ash spill, radioactive uranium and radon. The separation process leaves a residual fluid called blackwater, a pollutant which cannot be further purified. Slurry, blackwater, and other waterborne water materials are stored in ‘tailings ponds,’ large

impoundments that are often placed on the upper slopes of mountains where the earth can serve as a containment system.

Apart from technical terminology, the terms ‘Appalachia’ and ‘Central Appalachia’ deserve some elucidation. It is generally accepted that ‘Appalachia’ was first used to refer to the mountain range by the de Soto expedition after they encountered an indigenous tribe whom they termed the Apalachee. In 1895, William Frost, the president of Berea College, worked with geologist C. Willard Hayes to demarcate 194 counties that they then defined as Appalachia (Williams 2002:11). Currently, Appalachia’s geographic boundaries are defined by the Appalachian Regional Commission and span 423 counties across thirteen states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

Appalachia is more than a single set of counties with politically defined borders; the geographies, landscapes, economies, and people are not a monolithic entity. It is also a culturally defined concept, one that exists in constant negotiation with those who have lived there, have chosen to live there, and those who will never set foot anywhere near the mountains. Those who were raised within the geographic constraints and were part of the multiple migratory movements outward did not shed their Appalachian identity as soon as they set foot across the border. As Nancy Scheper-Hughes argues, while invoking Fintan O’Toole’s analysis of Ireland, emigrants and immigrants are vital components of a region and any conceptualization that dismisses them is hollow at best and deceitful at worst (Scheper Hughes 1979: 29). Nor can Appalachia be confined to stereotypical

behavioral notions of political conservativeness, rough mannerisms, poverty, and Bible Belt-esque beliefs that are often seen as more “legitimate” markers of Appalachian identity. Thus, when I write Appalachia, I am not only referring to a mountain range, or a group of counties, or an ascribed set of values and behaviors. When I write about Appalachian people, that should not conjure up visions of people whose families have necessarily stayed on the land for generations or who exist in a static state of so-called “mountain tradition.” Appalachia is used to refer to an area that is rooted in geography and geology but fleshed out by ongoing sociocultural, political, and economic relationships between residents, land, and nation.

This research takes place in ‘Central Appalachia,’ a subregion defined by the Appalachian Regional Commission which contains fifty-four counties between Tennessee, Kentucky, Virginia, and West Virginia (ARC). Central Appalachia, which includes all of the Appalachian counties in Kentucky, is the core of the region and is often most heavily equated with the coalfields. During my conversation with Amelia Kirby, the project manager for the Foundation for Appalachian Kentucky, Kirby clarified why she felt that identifying Central Appalachia by the coalfields is important. Leaned back in her seat, I can tell that she is choosing her words carefully. “The places that were [used] by [coal] corporations have very different social and economic trajectories than the rest of Appalachia...and so, like when I’m thinking what I mean by Appalachia, I think you have to make a distinction between places that lived under coal and places that didn’t. And that, to me, is more important than whether [someone says] Appalachian or

Appalachian.” She stresses different syllables, drawing out the vowels in her first pronunciation and hissing over the ‘ch’ sound in the second.

Focus

In this thesis, I will explore how people in Appalachia have used agentic acts to respond to the previously mentioned pollutive events and environmental injustices. I will examine how these acts counter hegemonic stereotypes perpetuated by people who are either unfamiliar with the region or who are actively invested in marginalizing the region for capitalist gain. I will draw upon landscape theory, neo-Marxist theory, and certain components of internal colony theory while undertaking an ethnographic approach that will prioritize the perspectives of local residents on their actions and experiences. At the same time, I will contrast those perspectives with the externally imposed labels from others to shed light on the ways in which forms of resistance are mischaracterized or ignored in the interest of maintaining a dominant narrative. Labels like ‘fatalistic’ or ‘backwards’ are liberally applied to Appalachia and actively contribute to a national disinterest in aiding the region and the ability of mining companies to evade responsibility for the negative effects of their industry. This research examines how, given that cultural practices are shifting spaces of political and social negotiation, such agentic practices in Appalachia relate to these stereotypes.

Furthermore, it will incorporate a spatiotemporal dynamic to better account for how the relationship between identity, agency, and environment have changed over time and in different spaces. This temporally longitudinal approach deepens our

understandings of how responses to community harms are affected by externally imposed identities brought about by an uneven distribution of political power. This effect is eloquently described by John Gaventa (Gaventa 1980: 206), who wrote “Through processes of coercive power, those most likely to challenge inequalities may be prevented from challenge, while those least likely to challenge maintain the political game as a ritual whose rules are clearly understood by all parties. Over time, there may develop a routine of non-conflict within and about local politics- a routine which may, to the observer, appear a fatalism found in ‘backwardness.’”

Methodology

For this research, a combination of participant observation and semi-structured interviews were used to gather data. Participant observation primarily occurred over three months which were spent volunteering at a mobile health clinic in southwest Virginia. I also became part of the New Economy Network, a group run through Appalachian Voices that brings together local citizens and environmental groups to identify discrete priorities and accomplish them. Additionally, fifteen interviews were carried out with fifteen interlocutors, who included local grassroots activists, residents, environmental workers, and political figures. The interview format can be seen in Appendix A. These interviews were recorded through audio recordings and handwritten field notes, which were then transcribed and qualitatively coded with NVivo software using the codes provided in Appendix B. All data was encoded through VeraCrypt software and stored on a private, password-protected laptop for security.

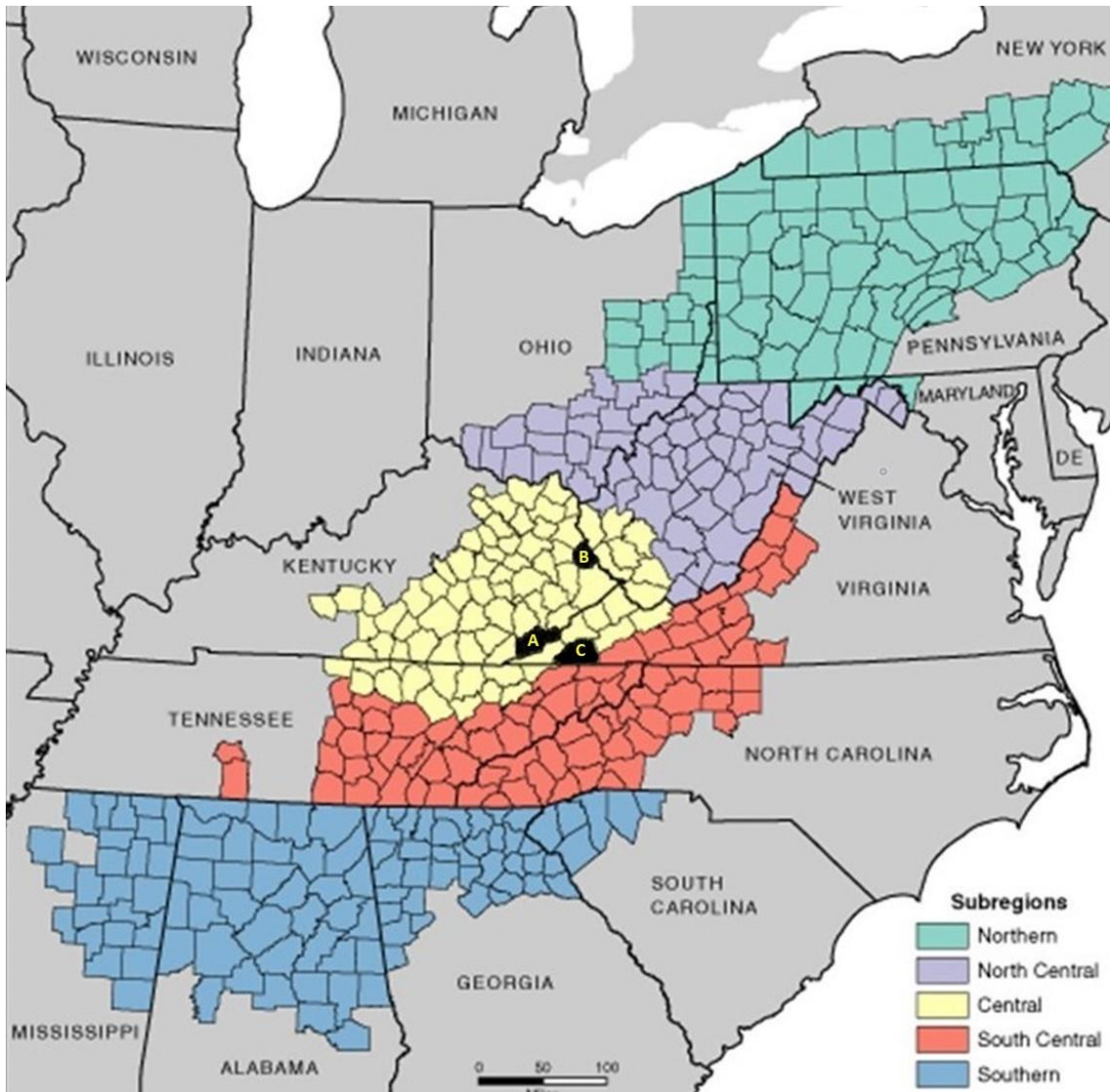


Fig. 1. Map showing the official subregions of Appalachia demarcated by the Appalachian Regional Commission. Sites are shown in black: A-Harlan County; B-Martin County; C-Scott County.

Table 1. Activist organizations mentioned by interlocutors with their respective locations and missions. Research was not conducted with all of these organizations.

Organization	Abbreviation	Office Locations	Mission
Appalachian Citizens Law Center	A.C.L.C.	Whitesburg, KY	Providing legal aid for people negatively impacted by the coal industry through environmental pollution, black lung, etc.
Appalachian Voices	A.V.	Boone, NC; Durham, NC; Charlottesville, VA; Norton, VA; Knoxville, TN	Transitioning away from fossil fuels and introducing sustainable environmental and economic practices
Appalshop		Whitesburg, KY	Using media and the arts to celebrate Appalachian diversity, promote Appalachian voices, and support community activism
Coal River Mountain Watch	C.R.M.W.	Naoma, WV	Combating mountaintop removal and other environmental issues while rebuilding sustainable communities
Clinch River Valley Initiative	C.R.V.I.	Southwestern VA	Revitalizing communities, outdoor recreation, and environmental wellbeing along the Clinch River

Table 1 Continued.

Organization	Abbreviation	Office Locations	Mission
Eastern Kentucky Social Club	E.K.S.C.	Lynch, KY; chapters nationwide	Maintaining relationships between black families who are part of the Appalachian diaspora
Highlander Research and Education Center	H.R.E.C.	New Market, TN	Supporting efforts for grassroots activism surrounding sustainability, justice, and equality
Kentuckians for the Commonwealth	K.F.T.C.	Offices in London, KY; Berea, KY; Bowling Green, KY; Lexington, KY; Louisville, KY; Covington, KY; Prestonburg KY	Addressing problems caused by a reliance on fossil fuels while increasing Kentuckians' participation and impact in sociopolitical structures
Livelihoods Knowledge Exchange Network	LiKEN	Lexington, KY	Building more resilient. Healthy. and knowledgeable communities
Martin County Concerned Citizens	M.C.C.C.	Inez, KY	Confronting and spreading awareness of issues caused by both discrete and infrastructural issues caused by pollution
Shaping Our Appalachian Region	S.O.A.R.	Pikeville, KY	Working with local communities to fill the economic gap left by the decline of the coal industry

Table 1 Continued.

Southern Appalachian Mountain Stewards	S.A.M.S.	Big Stone Gap, VA	Creating equitable communities while working with the tolls of extractive industries
Upper Tennessee River Roundtable	U.T.R.R.	Abingdon, VA	Achieving clean water through the watershed with the involvement of citizens in planning, educating, attracting funding, and serving as advocates for our water resources

The Interview

This next section describes an interview that is an amalgamation of multiple interviews conducted during this research. While each interview was unique, the constraints imposed by the ongoing COVID-19 pandemic and the semi-structured format resulted in several similar patterns.

Fifteen minutes before the interview starts, I start up my laptop and begin lining up Zoom, my notepads, my headset, and my lighting sources. I'm undertaking these interviews in a family member's childhood bedroom and so I do my best to create a solid wall of plants and books directly behind me as if I were in my own office. I usually have my cat, Pippin, settled on my lap; she has proven that she will scream if she is left outside of the room. As my interlocutor joins, a flurry of greetings as well as microphone and camera tests begin. Once it's established that everyone can be seen and heard, the interlocutor gives consent for being recorded and I start working through my questions.

In the beginning, the questions and responses are fairly scripted but we both relax as the interview continues. Specific questions give way to lengthier conversations about local events, restaurants, churches, and our own experiences growing up in Central Appalachia. Everyone seems to know everyone else in the environmental justice movement and I'm constantly reminded of this as my interlocutor tells me what they've heard about my work from others. The flow of the dialogue is periodically interrupted by reminders of our distance: video or audio lag, microphone difficulties, and the constant

presence of pets. That last interruption is met with laughs and then a short break while we hunt down all of our nearby animals and introduce them through the camera.

I have to consistently remind myself of where to focus on my computer screen. Looking directly at my camera is most effective at simulating eye contact but it prevents me from actually seeing what my interlocutor is doing. Along the same lines, my interlocutor occasionally apologizes as they check their second monitor, phone, or other device. As we reach the end of my questions, I ask whether they have any questions for me. They ask about my research and future plans, always wondering if I'm planning to stay in the area or move away from Appalachia. We wrap up our conversation with promises of meeting for coffee when things are safer and as they log off, I begin to relisten to the past hour and a half, transcribing as the recording plays on.

Chapter Overview

The first chapter of this thesis introduces the reader to current environmental justice issues facing Central Appalachia as well as the sociopolitical and economic trajectories that created them. It also outlines the theoretical frameworks that will be used in this analysis and the methodological strategies employed to gather data. Chapter two provides a comprehensive discussion of existing literature and its contributions to the topic and explains the current theoretical gaps and how this research will help to close them.

Chapter three elaborates on the chosen methodological strategies and explores how the praxis of these strategies adhered to or differed from their theoretical

implementation. Ethnographic fieldwork requires innovation, improvisation, and interpretation and this research was no different. Each interview was uniquely shaped by their own branching lines of inquiry and the resulting variation is detailed in this chapter. It will also walk the reader through the experiences of volunteering for a day at the health clinic so that they can better understand the environment in which participant observation occurred. Chapter four includes both the analysis of the data and the discussion of how to understand the data within a larger theoretical and practical context. The last chapter, chapter five, will conclude this research and offer suggestions for how this research and activism can be advanced and improved up in the future.

“I just think it’s so important to remember that it’s the people you never hear of who really do the work, who really make the change happen... I guess I just want people to know that a lot of work has been done that they don’t know about and just because they don’t know about it doesn’t mean it isn’t being done. Just because it doesn’t affect them, it doesn’t mean it isn’t being done.”

Silas House, Appalachian writer and activist, Jan. 20, 2022

CHAPTER TWO READING APPALACHIA

'We have a conversation with the land here. The land will talk to us. It will tell us things. Nothing comes easy for people in the mountains...And we are tired of being collateral damage, a sacrificial zone for rich people and other people to be comfortable in their life... are either going to be an activist or we are going to be annihilated. And I am tired of seeing my people being annihilated. So we are fighting back.'

Larry Gibson, Appalachian activist (Eller 2008:260).

It is hard to do justice to all of the literature that has informed this research, especially considering the wide scope and consistent overlap of different works. There has been an intense push in anthropology and related disciplines to create coherent and consistent theories of agency, subjectivity, and structure that would give deeper meaning to the terminology that is so often used in these fields. The need for a conceptualization of people as agents and subjects that accounts for the duality and constant negotiation of those identities has created a rich body of works that discuss this theoretical dilemma. On a more regional scale, so much of Appalachian literature on environmental justice has merged the personal and the scientific to create compelling narratives that incorporate ethnography, oral history, geography, geology, history, media studies, and more.

Additionally, the ability of anthropology to apply global trends to local patterns and visa versa means that there are a wide range of ecological, sociopolitical, and economic case studies that can inform views on Appalachian environmental justice, even if the research occurred on the other side of the world. These regional stories and case studies flesh out the theory-based foundational structure of this work and give life to the

more abstract academic concepts that provide a different way to see these realities. This chapter will begin by exploring the different theoretical frameworks for agency, subjectivity, and structure that have impacted this research. It will then briefly outline the quantitative works and case studies that contribute to understandings of how these theories play out in practicality within the environmental justice movement in Appalachia.

Appalachians as Agent and Subject

Over the past few decades, social theorists such as Pierre Bourdieu, Anthony Giddens, Sherry Ortner, and William Sewall have attempted to expand upon the meanings of common terms such as ‘agent,’ ‘subject,’ and ‘structure.’ It is necessary to pin down exactly what is meant by each of these terms in order to fully understand how and why the processes discussed in this work have unfolded in certain ways. Agency and subjectivity generally refer to the ways in which people can affect change or be affected by the structures in which they reside. Bourdieu’s idea of *habitus* provides a rough mechanism for discerning how people are acted upon by their environment and culture but falls short in a few key areas. Although it provides mechanisms through which humans can bring about change, *habitus* is deeply internalized and has not been incorporated into large-scale temporal practice theory. This perspective does not reflect the reality of person-to-environment interactions, which are characterized by slowly-unfolding interactive and dynamic negotiations of power, motivations, and actions.

A slightly adjusted conceptualization of agency can be found in Sherry Ortner's work, in which she defines agency as "... that which is made or denied, expanded or contracted, in the exercise of power. It is the [sense of] authority to act, or of lack of authority and lack of empowerment. It is that dimension of power that is located in the actor's subjective sense of authorization, control, effectiveness in the world... agency represents the pressures of desires and understandings and intentions on cultural constructions" (Ortner 1997: 146). Ortner builds upon Bourdieu's work by using practice theory to examine agentive possibilities in contemporary America to conceptualize agency. By recognizing the legitimacy of such subjective qualities (i.e., an innate sense of authority as opposed to holding a socially sanctioned position of authority), we can move away from a dichotomous viewpoint that simply sees the powerful and unempowered and instead understand the complex workings of the negotiations of power.

The force of these subjective qualities became clear over and over again throughout this research: citizens in all three counties working with local organizations to amplify their voices and experiences; interlocuters' feelings of ownership over the land that they know like the back of their hand; or simply the knowledge that by being aware of how you are stereotyped, you have the authority and tools to resist such shallow categorization. Furthermore, it must be acknowledged that agency does not exist in a classless, unracialized, and ungendered vacuum; the recognition and manifestations of agency is influenced by imposed sociocultural categories and thus will vary on an individual basis. One interlocuter, a young, white, gay, and cisgender male, spoke of how

a particular interaction he had in eastern Virginia at a political fundraising event spurred his activism.

“I’ll never forget this one lady. I’m sure she didn’t mean to be so rude, but she was talking to my boyfriend at the time. And she said, you know, like, where are you from? He said, ‘Oh, well. We’re from southwest Virginia....so you know, along the 81 corridor, blah, blah, blah.’ And she said, ‘Oh, my goodness.’ She said, ‘The suicide rate must just be so high there.’ Oh my god. I was just kind of floored. ... I was speechless. Really. And I just thought, you know, we do so well. Particularly millennials and Gen X, like our generations have done so well in terms of kind of combating stereotypes and creating a more inclusive society....The one weakness of that is we do not do a very good job of making sure that the rural identity is not just thrown into the stereotype heap still. Like yes, it’s small. It’s like a microcosm of the greater world but there’s such a diverse and unique experience happening in rural America. It’s not just all the stereotypes of everybody must be on drugs and killing themselves. Like that’s not the reality of here... so yes, it definitely makes me want to present a better narrative and just make people see that.”

Conceiving of people as agentic beings in this way then raises the question of how to categorize any unintended consequences of intentional acts of agency. Although it could be argued that any unintended consequences should be seen only as a reflection of the structure in which they occurred, these events give us an opportunity to analyze the agentic responses to them. Instead of an intentional act leading to unintended results which are confined by their surrounding structure in a kind of waterfall effect, these occurrences can be seen as more of an agentic tennis match. The ball of agency is temporarily bounced into the structural court but then is returned to the actors as they decided how to respond.

The idea of structure was heavily influenced by sociologist Anthony Giddens (1984), who argued that structures are rules or resources that do not necessarily occupy

any kind of concrete space but instead exist “virtually.” This framework provides a solid basis for recognizing the fluid and impalpable forces that shape human interactions and decisions while also accounting for the consciousness of agentive actors. Structure and agency are not oppositional forces but rather, agency is a part of structure and so they must be understood together. Sewell (1992) incorporated practice theory to flesh out Giddens’ theory by contending that structures are comprised of virtual human resources and physical nonhuman resources. Both types of resources can be shaped by people in unpredictable ways, as evidenced by Sewell’s argument that “In the world of human struggles and strategems, plenty of thoughts, perceptions, and actions consistent with the reproduction of existing social patterns fail to occur, and inconsistent ones occur all the time” (Sewell 1992: 15). In the context of this research, virtual human resources can be seen in the sociopolitical alliances that enable both the environmental pollution and the mobilization of groups who fight it in order to save their nonhuman resources, such as their land and homes.

Accounting for the duality of agency and structure also ties in to working through popular conceptions of Appalachia and the tendency to view it as an internal colony, which can be seen in works such as Robinson’s “An Exploration of Poverty in Central Appalachia: Questions of Culture, Industry, and Technology.” There are facets of internal colony theory that can prove useful when considering identity and power in Appalachia; many people take pride in their Appalachian identity, which is created by regional residents through a sense of unity with other people living in the region. By tying the luck of geographic placement together with “the “colonization of daily life” and the

“financialization of daily life,” internal colony theory can help us expand upon the ways in which “...radical geographical variation of life chances in the United States—as well as the “revanchist” claiming of urban spaces by gentrification—are linked to the systematic operation of colonial logics in a way that foregrounds racial capitalism and the attendant practices of expropriation” (Adamson 2019: 355). Appalachia has been shaped by long-term economic and environmental exploitation, justified by capitalist logics promoted by powerful players. This exploitation was aided by the othering of Appalachian people which simultaneously moved national attention away from the uneven development of the region while shifting the responsibility of developmental disparities onto the residents. It also serves as a way to bring attention to the very real issue of absentee landownership and the resulting alienation of the control of the means of production from the people who live and work there.

However, there are a slew of theoretical and practical problems that accompany the application of this theory to Appalachia. The internal colony label is well-known among activists, so much so that it elicited eyerolls from many of the interlocutors who mentioned it. Referring to the Appalachia of the past 150 years as an internal colony erases the prior colonization that displaced the indigenous residents and allowed the current structures to develop in the first place. Additionally, the development and treatment of Appalachia lack some of the necessary criteria for a region to be classified as an internal colony, including a different language, physical appearance, and the racism that so often accompanies internal colonies. While it is therefore clear that Appalachia does not fit the framework of internal colony theory, it is important to note that many of

the aspects of that theory (namely, sustained economic exploitation, cultural othering, and uneven development) do represent the history of modern Appalachia.

This slightly adapted perspective on internal colonies can be seen in works like Silas House's "The Road Back: Appalachia as Internal Colony," in which he makes the argument that while Appalachia might not be an actual internal colony, it is often portrayed as such by people unfamiliar with the region (House 2016:65). As Smith and Fisher (2016) note, viewing Appalachia as an internal colony oversimplifies the dialogue around identity to a dichotomy between 'insiders' and 'outsiders' and ignores the complex dynamics of class and race that transcend geographic borders (Smith and Fisher 2016). They also argue that it overemphasizes the importance of absentee landownership and that the existing wealth and power inequalities that enable the absenteeism is much more important. While the larger enabling dynamics are vital to understanding and analyzing absenteeism, the geographic residence of landowners is pertinent to this discussion.

Landowners who reside in or near communities where they own land are subject to local laws and regulations, they are more socially accountable for their actions (i.e., they have a much higher chance of interacting with the people whom they may have harmed), and they are much more likely to be invested in the area on a personal basis. Tyler Hughes, a city councilman for the town of Big Stone Gap, spoke with me about the importance of personal ties post-jog in his living room. His voice growing more animated with every word, he explained that "I want my money to go to my neighbor who will then spend it inside of this community. Now, you can't always avoid sending money outside

of the region, but you have so much more resiliency in your economy if you can keep things tighter.”

Portraying Appalachia as an internal colony also erases the identity of current residents, especially those who are stereotypically portrayed as Appalachian, as colonizers themselves. Appalachia is a colonized territory, as is the rest of the United States of America. However, the colonized peoples are the indigenous groups who were killed or forced out of the land, not the colonizers who just settled on their territory. There is no possibility of a colonial liberation for Appalachia because we already exist as citizens and largely as descendants of a colonizing nation. The notion of an internal colony also heavily implies a large amount of internal population homogeneity and extreme differences between the internal and external populations. These trends simply aren't present in Appalachia; Imposing a blanket identity onto all residents hinders recognition of their agency and individuality and creates sociocultural and political divides that play into 'othering' stereotypes but that don't reflect reality.

Reimagining forms and acts of agency also necessitates reimagining the impetuses of such responses, including the manifestations of violence that require resistance. Rob Nixon's work, *Slow Violence*, provides a new way of examining acts of environmental violence, as well as resistance against them, that occur gradually in marginalized areas. He states that violence is typically seen as "...as a highly visible act that is newsworthy because it is event focused, time bound, and body bound" (Nixon 2011:3). Slow violence can stem from rapidly occurring violent events, like a war or a slurry slide, but it does not end with the same rapidity, nor does it equally affect all

people. Instead, it slowly leaches the livelihoods of people who have been relegated to the outskirts of societal care.

Nixon's work has been built upon by geographer Thom Davies in "Slow violence and toxic geographies: 'Out of sight' to whom?", in which Davies argues that slow violence is not necessarily characterized by a lack of testimonies, but rather an active discounting of existing evidence enabled by power disparities and a prioritization of capitalist profit over human well-being. Overemphasizing how pollution goes unseen "...risks downplaying the political agency of frontline communities, and is myopic to the many mechanisms, embodiments, and formations of informal knowledge that allow communities to recognize and live with pollution" (Davies 2019:11).

Thus, the further one delves into conceiving of Appalachia, the more complex the overlaps between manmade social and physical constructs becomes. The intersection of othered regions, systemic violence, and the duality of human-nature relationships can be seen in Catherine De Almeida's chapter in *Landscape Citizenship* (2021), titled "Unearthing Citizenships in Waste Landscapes." As a landscape, Appalachia has been designated as a sacrificial piece of land, a topographical battery whose perceived value lies in its ability to give power to others. Almeida terms relationships with landscapes like this "waste landships," and places their creation squarely in the hands of all the actors who interact with them.

"Waste landships are individually and collectively practiced, but they are not fixed. Landships emerge, evolve, vary, and at times are indeterminate. In some cases, people have agency to voluntarily develop landships, and in others, people are involuntarily subjected to toxic lands

that slowly and violently kill them and their families...Landships are practiced, formed through acts of becoming, driven by the ever-shifting sociocultural, political, and economic contexts in which we experience, create, and change landscapes. Active practices make waste visible and continually verify landships, thereby reinforcing emotional connections and place attachments. Whether those relationships are voluntary or involuntary, and whether the waste is benign or toxic, informed citizens use their bodies and minds to imagine and practice new realities that challenge or strengthen belonging. In all these cases, landships affirm that experience is knowledge.” (Almeida 2021: 35)

In the case of Appalachia, there is a popular perception that its status as a waste landship is permanent and that there have either been no attempts to change it or that such attempts are futile. Residents both voluntarily create their relationships with the land, through land-tending practices, outdoor recreation, etc. and at the same time, are often forced into proximity with unsafe lands. When describing his wish to be close to home and the formation of his Appalachian pride, Silas House mentioned that there is also “...a deep sadness and feeling like the place doesn't love us as much as we love the place.” Although this statement was made in the context of sociopolitical dynamics, it can also be applied to these relationships with place; There is a deep, strong love of the earth and yet, the earth has been made into a weapon against its residents. An approach that centers the agency of those frontline communities and highlights the embodied experiences and nonacademic knowledge as equally legitimate forms of data is necessary to understand the full effects of environmental injustices.

Merging Theory and Regional Studies

With the broad theoretical foundations of humans as agents and subjects acting with a degree of freewill within a structure that is both physical and virtual laid out, this section will situate regional and quantitative studies within those frameworks. These studies help deepen our understandings of the structures that create Appalachia and thus, that exist in a mutually impactful relationship with each other. This section will be subdivided into discussions covering access to resources, the effects of pollution, and Appalachian works.

Creating Structure Through Resources

Examinations of poverty and differential resource access in Central Appalachia take a wide range of theoretical approaches, thus providing a strong background for approaching the topic. Haynes (1997) uses a Neo-Marxist framework to argue that the neoclassical economic basis used to develop the region has resulted in an above-average amount of surplus labor, leading to sustained class struggles and wealth disparities. In comparison, Eller (2008) takes a more multifaceted approach and examines the intersection between culture, environment, politics, and economy. By traditionally classifying Appalachia as an underdeveloped region instead of a depressed one, politicians argued that the only way to improve the region was by capitalist industrial development, resulting in Haynes' observation about the abundance of surplus labor. Absentee land ownership, corrupt local elections, and aid funds that disproportionately flowed to northern and southern Appalachia compounded the displacement, disenfranchisement, and exploitation that led to the extreme poverty of the area (Eller 2008:190). Through this process, we see

how powerful players used human resources to create an economic narrative. That narrative then shaped the nonhuman resources that could be used by both the more and less powerful. Robinson builds upon this and examines the role of technology, which also has value as both as human and nonhuman resource, in exacerbating the divisions caused by poverty. She states that the “...divide is evident in three areas – technology (type of equipment, capabilities of internet connection type), proficiency (skills/knowledge of available tools and how to use them online), and opportunity (outcomes of internet use – financial investment, employment opportunities, knowledge building)” (Robinson 2015:81). These three works allow for an analysis that combines historical and recent trends of material accumulation, as well how the uneven distributions of labor and resources are rooted in deliberate economic choices made by those in power.

Cultural and behavioral case studies also shed light on how people in Appalachia have acted within their own, more localized social structures to create change in ways that have been traditionally unrecognized as agentive. Such an approach is the basis for Gaventa’s (1980) “three-dimensional” perspective, which explores the strengths and shortcomings of traditional measures of action, such as voting as the primary indicator of political involvement. For example, Lucaks, et al. (2016) analyzed how watershed protection groups organized and utilized “neighboring acts” to protect their local water sources. By compiling neighborly acts, such as watching a friend’s house while they are away or proactive intervention and viewing such acts as agentive and tied to larger social activism, more intentionality can be ascribed to social behaviors. That is to say, a person doesn’t mindlessly agree to watch their neighbor’s child because it is dictated by a cultural

script, but rather they recognize the value that the resulting free time has for their neighbor and actively choose to help.

Effects of pollution

In order to position these practices within the larger environment, we must first lay out what environment is. Environment, especially in Appalachia, has traditionally and popularly been framed as the natural elements that create one's surroundings, be it larger landmarks such as mountains or rivers or other features like an area's flora and fauna or weather patterns. The idea of a pristine wilderness, an area that has escaped relatively unscathed from human harm and that offers an escape that allows a return to the simple, rugged roots of humanity, has persisted in the social narrative. However, an environment does not exist in an inevitably homeostatic and isolated state, but instead is changed by the living beings that reside in it and in turn, changes those beings as well. Manmade features, like roads and coal mines, become part of the environment, and thus mandate further behavioral adjustments on behalf of the existing residents. This process can be seen in the anthropogenic water pollutants that have created residents' struggles to obtain clean, safe, and affordable drinking water. (Krometis et al. 2017; Schiber 2005).

The anthropogenic alterations to an environment stem from complex and varying decision-making processes that reflect more general sociocultural values, goals, and power dynamics. A person or group might act on their environment out of necessity for survival; out of a spiritual or religious desire to interact with nature; as a way to gain or assert social status; or as a way of accumulating wealth and material resources. In Appalachia, people have interacted with the environment for all of these reasons at

different points in space and time, but the reason most relevant to the environmental issues in this research is acting on the environment to extract resources and accumulate wealth. The creation of Appalachia as a region and Appalachian otherness, as well as the social values placed on material wealth and ascending the social ladder through accumulation, created the basis for forming the economic and infrastructural realities in Appalachia today. As Shapiro (1978) writes, “In whatever way we define reality as an abstract or philosophical concept, ...the fact remains that because of the way men see the world determines how they act in it, any act of seeing may be said to involve a functional determination of reality. A new way of seeing will thus necessarily involve the creation of a new reality, in terms of which future action will develop” (Shapiro 1978: 113-114). Appalachia began as a sociocultural invention and the resulting perceptions of it then determined how it was developed into a reality.

It has been shown that industrial and extractive industries have significant impacts on soil and water quality, including an increased concentration of metals and sediments that can be up to 3-4 orders of magnitude higher than before extraction (Batty 2010:70). In a region like Appalachia, where many people rely on water from private wells and grow a significant amount of food in private gardens, the health effects can be slow growing, yet inescapable. In China, mining activities led to levels of metals in cultivated vegetables that were 8.5 times higher than the legal threshold for contaminants. The consumption of this contaminated produce has led to the occurrence of “cancer villages” in eastern China, thus demonstrating a clear medical link between industrial pollutions and physical health (Lu 2015:10).

There are several articles and reports from the 1960s and 1970s that contain quantitative data on the types and amounts of water pollution from mining in Appalachia, as well as the ecological and legal ramifications of such pollution (Acid 1969; Begley and Williams 1976; Biesecker and George 1965). These sources provide valuable information about water quality at a pivotal time when the consequences of pollution were being brought to the attention of the general public. They do not simply serve as scientific records; the reports are evidence of the level of knowledge that people in power had about the effects of extraction and their subsequent inaction that then resulted in the current environmental justice movement. They also provide a set of data points with which to compare recent water pollution information to see how the nature of water pollution may have changed. The most publicized water safety issues are often seen as being the most pressing even though that assumption often is not supported by facts. Madison Mooney, the community engagement coordinator for Martin County Concerned Citizens, chuckled and adjusted her Alice Lloyd Eagles baseball cap as she recalled that “...There was a YouTube video that I recently watched regarding a student making a report about Martin County and saying that our waterways are toxic from the sludge spill still but that’s not true. Just wanted to throw that out there.”

Appalachian Works

By far, the existing works that provide the most personal insight into sociopolitical, cultural, and environmental movements in Appalachia are the works written by and in collaboration with Appalachian residents and scholars. In addition to the theoretical works and case studies discussed above, literature written by Appalachian

people provide a glimpse into the lived experiences and values of the people who breathe life into the region. Some of these works focus on local sociocultural patterns and institutions, while others address wider misconceptions or lay out new ways of seeing an area that has been largely defined by those who have spent little to no time there.

As mentioned earlier, paths of resistance and choices of agency are shaped by the subjectivity of individuals and communities. Therefore, this research will also draw heavily from works that center those who occupy positions at the unique intersection of different types of culture, community, and marginalization. Appalachia and its residents have been racialized in distinctive ways that can be traced back to the American eugenics movement, the large immigrant populations in coal camps, and the popularized notion of the ‘poor white’ as a separate race than the ‘middle-class white.’ As McCarroll (2018) argues, Appalachians have been stereotyped as “unwhite,” a label that confines white Appalachians to a specific and alienating form of whiteness that is excluded from the traditional white community while still allowing them to draw upon their white privilege. This helps address the complex racialized dynamics that have shaped perceptions of Appalachia as being both a predominantly white region and yet one that is inhabited by “othered” people. These externally imposed labels do not exist within a sociocultural void; people in Appalachia are very cognizant of these perceptions and agentively tailor their own actions in response to them.

Recognition of the racialization of white people in Appalachia does not detract in any way from the very real and socially significant racial dynamics against people of color in the region. Both Dr. William Turner, in *“The Harlan Renaissance: Stories of*

Black Life in Appalachian Coal Towns,” and Dr. Karida Brown, in “*Gone Home: Race and Roots through Appalachia,*” produced narratives that centered the experiences and memories of African American people in Central Appalachia. The racialization of Appalachians has been written about, but these works moved beyond the racialization of white people and explored the lives and encounters of a group who has been historically alienated in multiple ways. Through a combination of their own memories and interviews with past and current residents, they highlight cultural institutions, social organizations, and acts of agency that have been traditionally ignored in portrayals of Appalachia.

Literature discussing resistance in Appalachia also sheds light on the actions, strategies, and motivations of people who participate in the environmental justice movement. Books such as *Something’s Rising*, by Silas House and Jason Howard, and *Our Roots Run Deep As Ironweed: Appalachian Women and the Fight for Environmental Justice*, by Shannon Elizabeth Bell compile interviews with Appalachian activists and contextualize the broader environmental injustices in the region. Their choices to amplify the direct words of the activists allow for all of their acts of resistance to become visible; That is, House, Howard, and Bell did not simply write about acts that fit within the more common narrative of resistance, but instead incorporate all actions, including ones that might not often be seen as resistance. This approach helps to counteract the existing Appalachian representation disparity by broadening the range of actions that was previously confined to what those in power deemed as resistance. Such an example can be seen in Turner’s *Harlan Renaissance*, discussed above, which also includes discussions of resistance. He explains that he always heard Lynch, the name of the town

in which he was raised, pronounced as “Lanch” and eventually realized it was because of the fear and pain associated with the act of lynching (Turner 2021: 157). Although Turner does not explicitly label this as an act of resistance, an active effort to rename a hometown to remove any connection with an act of racist violence is an act of reclamation and one that has not been previously applied to Central Appalachia. Although this particular example is not strictly related to the environmental justice movement explored in this work, it serves as an example of how community’s subjectivity, created by both intangible social and legal codifications and tangible acts of racism and violence, then shapes their acts of agency.

Other works by Appalachian writers have focused on how Appalachia has changed, both in reality and in national discourse, or on some of the individual pieces that create the patchwork of Appalachia. *Appalachia in Regional Context: Place Matters*, edited by Dr. Dwight Billings and Dr. Ann Kingsolver, and *High Mountains Rising: Appalachia in Time and Place*, by Dr. Richard Straw and Dr. H. Tyler Blethen, blend history, culture, and identity and situate the diversity within Appalachia within a more common context that relies on a shared attachment to family and to the land. While acknowledging the weaknesses in viewing Appalachia as a discrete geographic realm, these works make space for the bonds between Appalachian people and the mountains themselves and emphasize that while Appalachia isn’t just geographic, the geography and geology is an important component of Appalachian identity. This historical relationship between the environment and its residents provides a framework with which to advocate

for sustainable paths forward, such as bringing back the idea of the Appalachian commons (Newfont 2021).

Moving Onward

Thus, we have worked through the abstract theoretical bases on which Appalachia and Appalachians have been conceptualized and now can consider how these may be applied to more concrete, localized case studies and cultural patterns. Appalachia has been created as a region that is widely perceived by the rest of the nation as an ‘other,’ an unfortunate geographic, cultural, and economic stepchild to the rest of the country and yet, is also painted as one of the last remnants of the great American wilderness and a place of pristine nature and beauty. These perceptions have become part of the structures in which Appalachians live their lives, with Appalachianiness serving as a human resource that both exoticizes and dehumanizes the people and the resulting policies shaping how nonhuman resources are distributed and exploited.

Critically examining how and why these identities are constructed allows us to see the interactions between the concept of Appalachia, Appalachians, and the rest of the country as an ongoing negotiation instead of as a dichotomous power struggle between ‘insiders’ and ‘outsiders.’ An approach that only sees a homogenized group resisting a discrete set of actions by another homogenized group in prespecified ways will inevitably fall short of creating a comprehensive understanding of the unpredictable and multitudinous ways in which identities, structures, and agency interact. It is necessary to look beyond preconceived notions of identity and acts of resistance to fully appreciate the

diversity of the positions and responses within the Appalachian environmental justice movement.

“Understand that Appalachia is not a homogenous place with homogenous people that is 900 miles long, you know. That it is culturally very different depending on where you are, that there are many, many, many, many, many different ways of speaking Appalachian and many, many dialects. I really, really believe that the best portrait of the region comes through in its art, its music, its literature...I would want people to know to look beyond the problems. Every place has problems, and we are so much more than that. Do we have them? Yes, absolutely, but there’s so much more that outweighs that, I think.”

Dr. Amy Clark, professor and co-director of the Center for Appalachian Studies at UVA
Wise, Jan. 10, 2022

CHAPTER THREE MATERIALS AND METHODS

*'In the coming of springtime we planted our corn
In the ending of springtime we buried our son
In the summer come a nice man saying everything's fine
My employer just requires a way to his mine
Then they tore down my mountain and covered my corn
Now the grave on the hillside 's a mile deeper down
And the man stands a talking with his hat in his hand
While the poison black waters rise over my land'*

Jean Ritchie, Appalachian musician, 'The Mother of Folk,' *Black Waters*

Translating Theory into Practice

Ethnographic research is one of the hallmarks of cultural anthropological praxis and as the field of anthropology has developed, so have the discussions surrounding ethnographic work. The purpose of an ethnographic approach is to place the researcher within the social milieu that they are examining so that the voices and perspectives of interlocutors can be heard over the researcher's own voice. Instead of engaging in a simple question-and-answer interview or observing people from afar, the ethnographer engages more deeply with their interlocutors to gain a more comprehensive sense of the complex set of beliefs, practices, desires, and motivations that create a culture.

Emerson et al. (2011) writes that ethnographic research is composed of two activities: entering and familiarizing oneself with a social setting and then creating a written work that draws upon their experiences in that setting. Such written works play multiple roles, serving as descriptions, inscriptions, and narrations, so that the

ethnographer may “reveal the multiple truths apparent in others’ lives” (Emerson, Fretz, and Shaw 2011:4). While the ethnographer is always labelled as such, the other parties in ethnographies have been variously called ‘subjects,’ ‘participants,’ ‘consultants,’ ‘informants,’ and sundry other descriptors. I have chosen to use the term ‘interlocutors’ in order to establish the dialogical nature of this work.

In this work, I strive towards a self-reflexive, activist, and collaborative ethnography. Lassiter (2005) argues that although all ethnographies are inherently collaborative, a conscious approach is necessary to center the collaborative relationship instead of relegating it to an afterthought. A truly collaborative approach “...invites commentary from our consultants and seeks to make that commentary overtly part of the ethnographic text as it develops. In turn, this negotiation is reintegrated back into the fieldwork process itself” (Lassiter 2005:16). Undertaking collaborative fieldwork raises questions about the types and extent of labor that an ethnographer can fairly request from their interlocutor. In a truly collaborative project, not one marked by empty assurances of equal power, the interlocutors would be involved from the very beginning in creating the project, deciding what research questions should be addressed, developing and carrying out the methodology, and analyzing and disseminating the data.

However, in most cases, the people who choose to work with us have their own lives, commitments, and concerns, and cannot be expected to contribute such a vast amount of work. With that in mind, collaborative practices were built into the framework of this research and there were optional opportunities for additional collaboration, if the interlocutor was interested. For example, during my preliminary fieldwork, I asked my

interlocutors about their environmental priorities and their concerns when engaging with researchers such as myself. Their answers shifted the trajectory of my inquiries, as well as opened my eyes to the ways in which my own presence and position complicated our relationships. This collaborative act required no extra work outside of the meeting in which they had already agreed to participate and yet allowed me to reconsider my work and center their voices and concerns within my paths of inquiry. In an incredibly nerve-wracking process, I also made the final draft of this thesis available to any interlocutor who wished to read it and revised it based on their critiques. The feedback I received was unfailingly kind and productive and this thesis is stronger for it.

Choosing the Sites

With the increasing anthropological awareness of the interconnected nature of groups of people and the fluid nature of borders, three sites were chosen for this project instead of just one. Although political borders can inform the vulnerabilities of different people, environmental hazards do not simply stop at the county line. They are subject to a higher influence: the land itself. Water pollution both permeates the underground water table within a given area and also flows into rivers and streams, only to pass on down the waterways into new communities. Additionally, in the case of Central Appalachia, different geographic sites are tied together by common threads of political and economic history, marginalization, and extractive industrialization. As Marcus (1995) writes, taking such a multi-sited ethnographic approach “...acknowledges macrotheoretical concepts and narratives of the world system but does not rely on them for the contextual architecture framing a set of subjects” (Marcus 1995:96). Focusing on a single site would

have been inadequate in addressing both the transboundary nature of pollution and the systemic conditions that enable such environmental injustices.

The three counties examined in this work were chosen because of the different natures of their respective environmental issues, outlined earlier in this thesis. They also each occupy unique temporal positions in the narrative of extractive pollution. Harlan County began to be industrially mined over a century ago and so its sources of pollution have existed for a longer period of time than the other two sites. The source of pollution in Scott County, Foote Mineral Plant, began contaminating its surroundings in the middle of the 20th century and therefore provides a slightly more recent example of mining pollution, as well as one that can be clearly traced to a specific company and specific mines. The majority of the current pollution in Martin County stems from infrastructural issues but much of the sociocultural distrust of the water system stemmed from a recent and discrete source: the 2000 slurry spill enabled by Massey Energy. Thus, it offers an interesting mix of discrete and systemic pollution and the resulting responses to each.

Creating a Dialogue

While studying up on differently data-gathering strategies during the planning of this project, it became increasingly clear to me that I wanted to avoid more impersonal methods, such as surveys or online questionnaires. These techniques can be extremely beneficial if a researcher is trying to gather a vast amount of data that lends itself to being quantified from a large number of sources. However, not only is the necessary information for this research inherently qualitative, but I was also not working with enough people to

necessitate such a remote approach. Examining agency and resistance within a large hegemonic context cannot be reduced to numbers; Being able to state that a certain number of people participated in a certain number of protests or town hall meetings is useful data, but it offers an extremely shallow view of the reality of these actions. It does not tell you who the participants are, why they are participating, their own thoughts on their participation, how they relate to each other, or any of the rich particulars that breathe life into anthropological studies. Attempting to understand cultures, behaviors, and sociopolitical movements requires more than the ability to rattle off dates or statistics. It requires interpersonal communications, growing relationships, and accepting the intangible as valid and in fact necessary data.

Although I did not take an explicitly psychoanalytic approach, I believe that Robert Levy's views on interlocutors as both 'informants' and 'respondents' is useful for remembering the complex roles that they hold, as well as the depth of detail that can be gleaned from their interactions. When discussing his own open-ended interviews, he writes that "...personal [experiences] are probed by such questions as 'How did you feel about that?';... 'What did you do?'; 'Why?' and the like. Such interviews produce rich material on feelings and understandings about feelings and their transformations throughout various stages of life, on learning, on fantasy, on stress and anxiety, on moral ideas and emotions, on self-concept, and on other such personally centered dimensions of experience" (Levy and Wellencamp 1989:224).

Alpha, Beta, Gamma, Delta, Omicron: Working Through COVID-19

The fieldwork for this project was shaped around the ongoing coronavirus pandemic, which began prior to the development of the project and continued throughout its duration. During the planning stage of this research, I had hoped to be able to carry out most of the interviews in-person, but the new COVID-19 variants and repeated waves of increased infections necessitated virtual interviews for the safety of my interlocutors and others with whom I had regular and sustained contact. During preliminary fieldwork, the Delta variant had just appeared, bringing with it increased transmissibility and more severe symptoms. Contemporaneously, COVID vaccinations were being made available to the public, which provided a brief respite before the much more contagious Omicron variant emerged.

In an attempt to stick to traditional ethnographic methodology, I conducted fifteen semi-structured interviews with open-ended questions throughout my fieldwork. While a few of these interviews occurred with current residents of my sites, ten took place with Appalachian activists and academics who reside in other locations but who have worked for environmental justice in the sites. Out of the fifteen interviews that were undertaken during fieldwork, thirteen were carried out over Zoom, one was conducted over the phone, and one was done face-to-face. In many cases, the pandemic acted as both an obstacle and an opportunity for building connections; COVID-19 provided a common experience for discussion and in a few cases, necessitated the disclosure of personal medical information, such as vaccination status, that are normally off-limits when interacting with new people.

In-person interviews are preferable for a multitude of reasons, including the increased sociability, the immersive experience, and the ability to notice nuanced behaviors such as body language and countertransference (Ewing 2006). Although video interviews allow each party to see the other, they are a much more impersonal mode of interaction and are often plagued by poor internet connections and outside distractions. However, the ability to speak with these interlocutors at all, instead of simply having to cancel any interview with them, was greatly welcomed. The in-person interview was conducted while masked and socially distanced, which also affected non-verbal communications but still allowed for a more personal experience, surrounded by pet toys and the feel of a home.

“Health Wagon at Wise, this is Emma, how can I help you?” Volunteering in Healthcare

Participant observation was also conducted at the Health Wagon clinic in Wise, Virginia. The Health Wagon, which is the oldest mobile clinic in the country, operates in multiple locations throughout Southwest Virginia with two stationary clinics and a mobile unit. It serves as a vital healthcare resource within the surrounding communities in multiple ways: It primarily serves uninsured and underinsured patients, and its mobile nature mitigates the accessibility issues brought about by the existing healthcare desert in Central Appalachia. I was permitted to volunteer with the clinic and conduct observations every Monday from 9 am-5 pm over the course of three months. During this time, the clinic was continuing to cope with the extreme stress caused by the COVID-19 pandemic while still maintaining their normal services.

From Dialogue to Data

The in-person and phone interviews were recorded on an Olympus DS-40 digital voice recorder with both the written and recorded consent of my interlocutors. Interviews conducted over Zoom were recorded using the software's own recording features. Recordings were then run through a transcription software and edited by hand and the transcriptions were encrypted with VeraCrypt software and kept on a private, password-protected laptop. The transcriptions then underwent a round of open coding, using NVivo software, in which I identified themes of interest such as cadence, place, and community outreach. This process allowed me to "...name, distinguish, and identify the conceptual import and significance of particular observations" (Emerson, Fretz, and Shaw 2011:175) and gain a better understanding of the ways in which my interlocutors see the world.

Once it was clear to me that community outreach and collaboration were the emergent themes, I was able to begin focused coding, in which I reanalyzed the transcriptions and specifically looked for topics that were tangentially related to the central themes. This proved to be a slightly easier and yet much more time-intensive task than the initial open coding. Although I already had a thematic framework to which I could connect these new topics, there were an incredible number of connections to be made and new links continually emerged throughout the process. I was also very cognizant of one of the core issues of ethnography brought to my attention by Lassiter in the first few pages of his book: the possibility of drawing connections and creating conceptual representations that simply were not really there. Each new connection was accompanied by an intense amount of second-guessing and rechecking my notes to make sure that there was truly enough data

present to support such a link. A chart showing my parent codes and the child and grandchild codes is available in Appendix B.

“So much of what is often characterized as uniquely Appalachian is true of most rural marginalized places, particularly ones that have been a focal point for an extractive economy and a lot of the dynamics that people, you know, see as unique are actually things that you find almost any place where you have the same confluence of factors... In fact, so much of what we think of as Appalachian culture now is a descendant of the melting pot that was created by the industry...So this question of like what is Appalachian culture, I think it's always you know, well, what do you mean by that?”

Mathew Louis-Rosenberg, activist, Jan. 21, 2022

CHAPTER FOUR
**“THREE GOOD THINGS IN APPALACHIA: BOURBON, HORSES, AND
WOMEN”**

*Look how they've cut all to pieces
Our ancient poplar and oak
And the hillsides are stained with the greases
That burned up the heavens with smoke
You used to curse the bold crewman
Who stripped our earth of its ore
Now, you've changed and you've gone over to them
And you've learned to love what you hated before
Once I thanked God for my treasure
Now like rust it corrodes
And I can't help from blamin' your goin'
On the coming, the coming of the roads*

Billy Edd Wheeler, Appalachian songwriter and author, *The Coming of the Roads*

Setting the Scene

Attempting to gain a deeper understanding of the forms of agency exerted by people in Appalachia requires tracing the complex contextual threads that form the communities engaged in activism. All of the units of analysis should be reexamined closely so that underlying assumptions can be recognized and if necessary, remedied. The idea of Appalachia and perceptions of the region shaped the motivations and strategies explored in this thesis and thus, hold an indispensable position in this research.

“There’s Some Kind of Cadence:” The Creation of a Community

If you ask thirty environmental justice activists in Appalachia about what Appalachia is, you’ll get thirty-one different answers. The multidimensional answers are due to several factors; The definition of an area is dependent on the context in which the

definer is operating. A professional definition or description by a single person is going to be markedly different than their personal description of the same thing. For something like landscape and place, which occupy multiple spaces within a heart and mind, it is difficult to pin down a single definition. There is also an awareness that definitions hold power and a sense of responsibility towards the area being defined. When there are so many definitions of a region like Appalachia, and all of them are heavily weighted emotionally, culturally, and politically, a multi-faceted definition goes a long way in combating stereotypes and addressing the convoluted conception of Appalachia.

When asked how they would define Appalachia or what Appalachia means to them, almost all of the interlocutors disavowed the Appalachian Regional Commission's definition. While it was acknowledged that the ARC's definition provided a stable geographic definition that was easy for people outside of the region to grasp and somewhat enabled political and economic action, such as the allocation of funds, the definition homogenizes and simplifies a vast and diverse geographic and cultural area. Instead, there was a heavy emphasis on topography and the rhythms of human interactions. Given that Appalachia gains its name from the Appalachian mountain range that runs along the length of the region, the strong association with the mountains is not surprising. However, the mountains are not passive entities that simply serve as landmarks. Rather, several interlocutors spoke at length about their personal relationships with specific mountains within the larger range and the ways in which the mountains helped cement their bonds with the land and their subsequent interactions with the entities who damage them, such as extractive companies or prisons. There was also often

a distinction drawn between the coalfield area of Central Appalachia and the region in general, with reasons for such a distinction including the unique economic histories, increased stereotyping, and specific landscapes and harms.

Many drew attention to the cultural aspect of creating Appalachia within peoples' minds. For many people, mentions of Appalachian culture evoke mental images of canned goods, rockers on the front porch, and strumming on a banjo or dulcimer. As Mooney relayed from a conversation she had previously had, a local man had sworn that there were three things that were good in Appalachia: bourbon, horses, and women. While none of the participants rebutted these cultural components, a few emphasized that those were more superficial aspects of what makes Appalachia. More prominently, you can see Appalachia in the ways the people interact with each other. Silas House used the term "cadence" when describing spoken patterns that he recognized as Appalachian and that word works well when attempting to relay the flow of human interactions. That is, each interaction won't fit into a cookie-cutter script but there is an underlying meter that can be identified. House used the example of a visit to his hometown dentist to explain the differences in interactions, while Louis-Rosenberg, in his dryly humorous way, gave an anecdote about one of his early exchanges with a well-known environmental activist.

"This is a thing that I learned very early on, right, like if someone's [telling you tall tales], which they like to do, especially older folks...people will tell you things that aren't true, and if you don't figure it out, they never give away the joke. Right, like that's very unique, like other places people want their 'Gotcha' moment, like at some point they'll give up the ghost to be like 'Haha, fooled you.' Not here man, I remember when I first moved here there was one, I can't even remember what it was now, but I just remember having this realization and I think it was Larry Gibson and I just realized like a

month and a half later, I was like 'Wait a minute, he was just fucking with me that whole time.' And he just never said anything and he [was never] going to. I mean that's like a little small example, but like those are the things that actually feel like they make up Appalachian culture to me, that stand out as different from where I came from."

I couldn't help laughing while he related this story; it was such a spot-on example that fit perfectly with several of my own interactions with storytellers in Appalachia. While the nuances and specificities of these cultural scripts live only in Appalachia, the more general patterns of socialization, shaped by sociohistorical happenings, echo globally in small mountainous communities.

Motivations and Priorities: Environmental, Social, Activist

Some are born into environmental justice activism and others have such activism thrust upon them. Given Central Appalachia's rich history of environmental and labor activism, it is not uncommon for activists whose families have resided here for decades to be the second, third, or fourth generation of hellraisers. Those who have moved to Appalachia often come from backgrounds of activism in other places and were drawn to the region by the ongoing environmental and social harms. When asked about what drew them to fight for environmental justice, most of the answers were based in emotion and a love of the area. An awareness of the inaccuracy and superficiality of incorrect perceptions combined with personally witnessing or experiencing environmental degradation and sparked a burning desire to fix both of those problems. As one of the interlocutors succinctly and understandably put it, "It just made me mad a lot."

These reasons create a fascinating juxtaposition with common conceptions of behavior and motivations in Appalachia. During one interview, the conversation turned

towards the ways in which the political and cultural trajectories in the region tend to be explained; as a hot-headed reaction to stereotypes or the so-called 'liberal media,' as developmental stagnation resulting from a strict adherence to fatalism and tradition, or as the unfortunate consequence of extremely polarized political parties with little common ground. Viewing behavior, be it from an individual or a group, as a rash response to another's imposed conceptions erases any strategy, thought, agency, or self-determination from the perceived entity. While outsider stereotypes and misconceptions do act upon decisions surrounding environmental justice activism, they do so in a much more nuanced and strategic way. Specific goals and strategies such as increased education about environmentalism, citizen science, and political lobbying are direct and extensively thought-out responses to incorrect beliefs about Appalachian identities, including illiteracy, apathy, a lack of critical thinking, and an inability to plan and act tactically.

A striking feature of the environmental activism in Appalachia is the centrality of the land. Environmental justice movements always involve the land in some sense, but usually the land occupies a role as a middle actor within an anthropocentric perspective: an extractive capitalist economy damages the land which in turn harms the human residents. While that pattern of harm holds true in Appalachia, the land isn't seen as collateral damage but rather a living entity in and of itself that inherently deserves protection regardless of its impact on humans. One interlocuter mentioned standing on the edge of a mountaintop removal site and recognizing that they were standing on a graveyard. While that sentiment encompassed the death of the living wildlife, it also included the actual mountain itself: the layers of rock and soil that had been molded for

millions of years. Understanding the intrinsic right of the land to be protected, instead of positioning the land as an unfortunate and unintended player within a human-centered story sets apart the motivations and priorities of Appalachian environmental activism.

Dominant environmental concerns fell into three main categories: extractive industries, such as coal mining, fracking, and chemical plants; the accessibility of safe water; and sustainable economic development. Although mountain top removal (MTR), strip mining, and deep mining have all generally declined over the past decade due to the nonrenewable nature of coal, they are still very present in daily life. The anti-MTR movement reached a high point around 2005, spurred by changes in the 2002 Clean Water Act which changed the definition of fill material. Shifts within the Environmental Protection Agency and overall attitudes toward environmental preservation brought on by the Obama Administration helped to slow MTR and strip mining and anti-MTR activists began to turn their attentions elsewhere. Intertwined with the primary focus on coal were concerns about fracking and pipeline expansion through Appalachia, black lung, and fallout from chemical plants, such as the Eastman Chemical Company in Kingsport, Tennessee.

While discussing these concerns, six interlocutors brought up the same two events unbidden. The first was the 2004 death of Jeremy Davidson, a three-year old child who was killed when a boulder dislodged by a strip-mining operation near the town of Appalachia rolled through the side of his house and over his bed. The boulder almost claimed the life of his eight-year-old brother as well, stopping just at the foot of his bed.

The second was the 2014 Elk River chemical spill in West Virginia, in which approximately 10,000 gallons of chemicals were released from a Freedom Industries facility, affecting around 300,000 residents. The chemicals were a mixture of 4-methylcyclohexanemethanol (MCHM), dipropylene glycol phenyl ether (DiPPH), and propylene glycol phenyl ether (PPH), which are typically used for cleaning coal. (NTP 2016). Echoing the series of previous disasters that preceded the Martin County slurry spill, this was the third major chemical accident in the Kanawha Valley in three years (Gabriel and Davenport 2014).

There was a palpable sense of anger, frustration, and grief surrounding these tragedies; anger at the lack of consequences for the responsible mining company, who were fined \$15,000 for killing Jeremy; frustration at the knowledge that both events could have easily been prevented and yet, there are still no adequate mechanisms in place to prevent them from happening again; and grief at the loss of a child and the sense of being a disposable resource for the rest of the nation. These accounts embody Davies' (2019) argument that environmental injustices exist in the forefront of local residents' minds and that the enabling factor lies not within an apathetic or unaware community but rather in systemic power differences that allow for the communities to be erased from the narrative. When Davidson was killed, I was six years old and my school would regularly brought in machine operators to talk to us about being safe around mining equipment. Looking back, I am struck by the disconnect between the tragedy and the response; any number of lessons teaching Davidson about not playing under a bulldozer would not have made a difference. It was not Davidson's actions that caused his death and yet, the

responsibility for safe conduct continues to be placed on bystanders and not those who create the unsafe conditions.

Access to clean and safe water also repeatedly arose as a prominent concern. Discrete polluting events such as the slurry spill in Martin County or the above-mentioned Elk River chemical spill brought temporary national attention water conditions, but rising rates, ongoing toxic contamination, and failing infrastructure continue to create systemic and worsening problems for local residents. The cumulative nature of these issues is clear in Martin County, where the water pipes are in such bad condition that they alternatively let water out and soil contaminants in, resulting in contaminated water and high rates for residents who are paying for water that never reaches them.

Nina McCoy, one of the leaders in the movement to fix the water situation, explained that

“...they are trying to raise the rates, we’re one of the highest rates in the state. And they are still losing... last month they lost 79% of the water that they pumped out of the river. So, what that means is they are pumping, they’re using electricity, which costs a lot of money, to pump water out of the river, pump it into the reservoir, pump it from the reservoir into the plant where it is cleaned. And then it is chlorinated, and you know, a lot of chemicals to make sure that it’s working, you know, that it will be okay as it goes out. And then it is pumped out into the whole county. The lines are so old and so leaky that it’s losing anywhere from 65% to 75% to almost 80% of the water every single day, all the time. So that means that we are having to pay for water that ends up going into the dirt. But it also means if the water pressure decreases, those holes in the lines allow dirt to get into the lines. So, if the water pressure goes down, people get dirt actually into their homes. So, they have to maintain the water pressure high to keep it going but there’s still that...that feeling of what’s in the dirt around the lines. And it also means that we’re having to pay for a lot of water that is wasted.”

Water rates are also being raised to help pay down some of the debts of struggling municipal water systems, which formerly relied on coal severance money to stay afloat.

The final category of concern, sustainable economic development, was typically brought up with the most hesitancy. There was an acute awareness that environmental conservation and sustainability is often placed in direct opposition to economic development in popular discourse. For several interlocutors, there was also a deep recognition, rooted in personal experiences, that economic development was the lynchpin on which the development of sustainable growth hinged. Each of these conversations called Maslow's Hierarchy of Needs to mind. It's all well and good to talk about the necessity of protecting the earth but a community cannot begin to think about that until they have secure access to food, safe water, medical care, and the luxury of the time to participate in environmental justice actions. The prioritization of basic needs over more abstract concepts like environmental justice has often been translated as a cultural lack of interest, ignorance, or outright act of self-destruction. However, as Tyler Hughes, a city councilman for Big Stone Gap, argues,

"We really misunderstand just how difficult it is for working people to get involved. Like if you just are the average middle-class parent who lives in southwest Virginia, like more than likely you're working absolutely almost every minute you can make ends meet and then you got to come home and take care of house and kids and pets and all of that. And if you have an hour free on a weeknight, you're not going to spend it in a town council meeting or board of supervisors meeting, you kind of like watch Netflix or something. And there's nothing wrong with that. You have to realize like you have to take care of yourselves. You know, there's many times where like, I don't want to know what's going on either. So, I just like take an evening and pretend that nothing exists outside of the walls of this house. Yeah. So, I don't blame people for that. But I do think that's probably a

huge problem is like some people are just simply worked, like overworked to the point that they can't take part in things."

All of the concerns voiced were tied to land reclamation and rehabilitation.

Central Appalachia is rich in two resources, both legacies of the previous coal monopoly: Empty buildings in downtowns and large, flat spaces which were formerly used for mining. Hughes spoke about his own work revitalizing unoccupied buildings in Big Stone Gap so that new businesses could reside in existing structures and not continue to expand the town's footprint into the natural areas on the outskirts of the town. Other interlocutors wearily recounted how mining sites are typically used as sites for prisons or other industrial buildings typically owned and run by outside companies. Not only do these actions not contribute to environmental rehabilitation, but they also hardly contribute to economic rehabilitation (Gilmore 2007:23); As Hughes and others pointed out, companies with no personal ties to the area lack a sense of responsibility to the land and the surrounding communities, making it easy to provide low-paying, short-term employment before pulling out when tax incentives run out. More permanent employers, such as prisons, are often touted as economic boosters despite the fact that multiple studies have failed to locate their financial benefits (Gilmore 2007:22).

Economic plans that are focused on the environment, such as ecotourism, are also seen with a sense of apprehension. There was a widespread consensus among interlocutors about the unique beauty and environmental value of the region, with several mentioning the sheer age and biodiversity of the mountains. Such a setting would be ripe for an ecotourism economy, especially in a time when there is a growing awareness of how easily vast swaths of land can be ruined. However, increases in human traffic are

accompanied by increases in man-made damages, ranging from litter to significant erosion caused by recreational vehicles (Smith 2021). A shift from a mono-economy based in coal to one based in incarceration to another mono-economy based in ecotourism would not result in the economic diversification that so many interlocutors stressed.

Indigeneity and Race

The racialization and whitewashing of both Appalachia and the environmental justice movement were brought up by five individuals. Acknowledgement of the initial colonization was visible in verbal qualifiers such as “European development” and “secondary colonization,” referencing the ways in which coal corporations exerted control over local communities and the land. Several more also spoke of the incorrect perceptions of Appalachia as culturally and racially homogenous and explicitly rebutted the notion that Appalachians are “...just poor, white, Protestant people.”

Indigenous groups and people of color have often led the fight for environmental justice, as four interlocutors, including two with experience as professional organizers, pointed out. Experiences working with indigenous groups, such as Matthew Louis-Rosenberg’s work in the tar sands out in the southwest, helped build relationships that strengthened their organizing in Appalachia. Although often excluded from popular narratives about environmental justice and activism, there is no shortage of examples of indigenous and other marginalized groups working in Appalachia or with Appalachian organizations. The organizers I interviewed discussed the work of the Lumbee Tribe in fighting the Atlantic Coast Pipeline, a member of the Eastern Band of Cherokee Indians

organizing in Floyd County, Kentucky, and the solidarity and collaboration between Appalachians and indigenous communities that have also been impacted by extractive economies, such as the Diné and Pueblo who live in coal and uranium rich areas in the southwest.

Race also underlies the transition towards a prison-based economy in Appalachia. Twenty-nine state or federal prisons were constructed in Central Appalachia between 1989 and 2016. The large, open spaces left by mountain-top removal and strip mining, along with the economic vacuum created by the bust of the coal industry and legislative loopholes regarding land rehabilitation, created a ripe environment for the expansion of the carceral state. In the rest of the country, the War on Drugs and a general enthusiasm for punitive justice had resulted in an enormous increase in incarcerated individuals, from 24,640 people in federal prisons in 1980 to 206,597 in 2015 (Perdue and Sanchagrin 2016:211).

The systemic racism and disproportionate sentence severity for marginalized groups that the carceral state was initially built upon also fueled its expansion into Appalachia. Furthermore, the racialization of white Appalachians as a category of “unwhite” made it acceptable for Appalachia to be used as a storage area for the people that the justice system deemed unfit for free living in society. The sites on which the prisons are built are often unsafe, either due to physical land instability or toxicity from previous mining activity. There are also logistical issues with supplying basic necessities: Nina McCoy spoke about the issues with USP Big Sandy, located in Martin County and built upon a mountain-top removal site.

“I will tell you this, that what we have discovered is that flat land on top of a plateau, on a halfway cut off mountain, is a difficult place to get water to. Because you have to pump that water up the hill, the water flows down into the creeks and the valleys. And so right now, what we have in this county is a federal prison. And one of the things that we were promised, about 18 years ago, when they built it was that we, Martin County, would be able to supply the water and that would help our water system because they would be a customer that would be using a lot of water in a small space. The only thing is, we can't get it up the hill. And so half the time, we actually lose money, because the next county gives them the water and we have to pay that county for the water that ends up being supplied to some of our people. And so having that mountaintop removed has not made a lot of flat land as if they acted like it was usable land.”

A Day at the Health Wagon

The following account is a composite account of a day spent volunteering and doing participant observation at the Health Wagon. I have opted to not name the individuals with whom I interacted out of respect for their privacy.

I step out into the frigid air and hurry to my car, turning on the defrosters and cranking the heat up as high as it will go. Highway 58 is never busy, but at this time of day, it's positively deserted save for the occasional deer or unfortunate skunk. The sun begins to peek out from the mountainous horizon as I drive the hour-and-a-half commute to the Health Wagon clinic in Wise, Virginia. The Wise clinic, one of four stationary Health Wagon branches, sits back behind a barbed-wire fence in a compound that also includes the Wise County Sheriff's Office and the Office of the General Registrar. At nine in the morning, when the clinic opens its doors, patients are already parked in the lot. Signs on the outside of the building remind employees and visitors alike that the parking

lot was made possible by a generous donation from Alpha Energy. COVID-19 safety measures mean that most patients are seen over telehealth or in their vehicle outside; very few actually set foot in the clinic.

Inside, everyone is already hurrying around, focused on their tasks at hand. After checking in, which includes taking my temperature and recording it, I am sent to the Nurses' Station, a small room outfitted with desks, computers, and jars of candy. White footprints from the road salt outside show the most-travelled paths around the hallways. While the original plan had been to train me to scan patient files to help consolidate their database, the pandemic has created such a dire need for labor that there is no one to train me and so I get tasked with answering the phone. I share the space with four nurses, one of whom refers to herself as a "floater" because she gets sent around to whatever clinic branch needs her.

Most of the calls are from friendly patients who are asking about getting a COVID-19 test, COVID-19 isolation protocols, or for the COVID-19 test results. There is a fair amount of confusion among both the patients and healthcare providers on the protocols; the recently changed CDC guidelines have thrown a wrench in understanding safe behavior and a shortage of tests exacerbates the issue, as many patients need test results before returning to work or school. There are also routine requests for prescription refills, patients trying to reach other branches, and the occasional grumpy caller complaining about wait times or poor lab results.

Everyone else is almost constantly on their feet and moving, which throws my own stationary position into sharp relief. The nurses and I keep up a steady engagement, sharing stories and asking questions, such as this acerbic question from the nurse who identified as a “floater”: “Are you studying us hillbillies around here?” There is a deep collaboration between the workers, with the nurses always offering to take care of tasks that their fellow nurses would rather not do, and a steady stream of chatter. Topics of conversation range from the patients to frustrations with other clinic branches to TikToks and how inflation is affecting the cost of food. The day passes unsteadily, flying by when there is an onslaught of calls and patients and then slowing to a crawl during slow periods. By five p.m., when the clinic officially shuts its doors, there is both a sense of relief and of anticipation of the work to be continued tomorrow.

Actors, Subjects, Agents

Learning about how the interlocutors had affected change was vital to understanding the ways in which the actors in this research were shaped as subjects by their surroundings and acted as agents within that context. Their goals and strategies all differed, although they were tied together by common themes of community outreach and collaboration. Three were focused on education, which included incorporating teaching practices that privileged students’ cultural backgrounds and fighting for the ability to teach kids about environmental justice. Eight were involved in strategic community organizing and legal work to change the underlying public policies that enabled the injustices and to uphold the existing laws which were being violated. There was widespread agreement about the need for a multi-pronged approach that would empower

local communities and target the systemic political and economic issues that have upheld the existing power disparities. Longstanding experiences with being ignored by local political representatives or being overpowered by financially dominant corporations have reified this understanding. As Kirby, who has an extensive work history in Appalachian nonprofit organizations, put it, "...building community and collective power is more dangerous to the powers that be than operating within their incremental shifts."

These efforts have had tangible impacts that have resonated throughout the overlapping sociocultural circles of Appalachian activist movements. Kirby created a radio program, "Calls From Home," during her time at Appalshop, an educational media center in southeastern Kentucky. The program allowed the families of incarcerated individuals to call into the station which would then broadcast their messages to the prisons, where prisoners would tune in to listen. When it was conceived, it was meant to reach the eight major prisons in nearby counties and play a dual role: facilitating contact between prisoners and their loved ones and raising awareness of the humanity of people who are painted as less-than and unredeemable.

It began with Kirby speaking to the listeners but after a caller requested to speak directly to an imprisoned family member, the dynamic shifted so that callers were able to communicate with the loved ones themselves. Prisoners were able to get radios through the prison commissary and if they were unable to get a radio or out of their cell on the night when the show aired, other prisoners would hold their own radios up to the vents or remember the messages to give to them later. Topics ranged from birthday messages to wedding proposals to information to organize hunger strikes, all passed through a

solidary network of prisoners. The impact of the program wasn't limited to the prisoners; Kirby was told by a former prison employee that the nights the program aired were the most desired by the workers because the prisoners were all in their cells and focused on listening.

Still on-air years later, "Calls From Home" showcases a non-traditional use of agency and power to create change. On a personal basis, it has a weekly impact on the families who are able to reach their loved ones, the prisoners who are able to receive messages, maintain contact with the outside world, and leverage their limited bodily autonomy into bargaining power, and the prison employees whose shifts are made quieter and more predictable. On a broader scale, it enables communication and personal relationships in a way that empowers the communities that it reaches and raises awareness of the problems within the prison industry in a human-centered way. Furthermore, the individuals involved in running the show formed the Letcher Governance Project, a movement which successfully fought against the construction of a new prison on the basis of the negative environmental and economic consequences.

In another example given by Willie Dodson, the Central Appalachian Field Coordinator for Appalachian Voices and vocal advocate for the value of Appalachian residents' lived experiences, older residents' generational knowledge of local, unmarked cemeteries was used to reduce the size of a planned mine. This deep attachment to place stands in stark contrast with the stereotypes of "intelligent" people leaving Appalachia and the remaining residents being apathetic or passive observers to the destruction of their homes. The knowledge that could only be gained by living in a place for decades

and having deep-rooted familial ties became a tool that was successfully weaponized against a mining company with many more capitalistically valued resources.

Acts of agency often occur in contexts in which powerful players are actively working to withhold information or mislead the actors in ways that would seemingly eliminate any need for agentive action. Critical consciousness, or what Paulo Freire termed *conscientizacao*, is a necessary catalyst for questioning and upending the social order. This reality means that those in power, whether they are termed oppressors, the bourgeoisie, or the dominating class, put forth incredible effort to prevent actors from recognizing the problems inherent in their current system. As Freire writes, “A deepened consciousness of their situation leads people to apprehend that situation as an historical reality susceptible of transformation. Resignation gives way to the drive for transformation and inquiry, over which men feel themselves to be in control... The means used are not important; to alienate human beings from their own decision-making is to change them into objects” (Freire 2014: 85).

Two examples clearly demonstrate such efforts: the Division of Water’s decision to decrease water testing locations from four test sites to two in Martin County and the deliberate efforts by a company to mislead a property owner about the land reclamation process post-mining. In 2017, Martin County Concerned Citizens, represented by the Appalachian Citizens Law Center, were permitted to intervene in the Public Service Commission’s investigation into the deficiencies of the Martin County Water District. It was the third such investigation since 2002. During this process, the Division of Water changed their methods for adding chlorine to the water, which meant that they were

testing in fewer locations, thus reducing the amount of data that local residents used to gauge the safety of their water. Furthermore, as Nina McCoy recounts, "...what we heard is that what they would do in one of those locations, at least, they would go and they would say, 'Now flush the system. And then that way, you'll get good results.' And you know, we just don't trust anybody at this point. So now since that change was made, they have not been out of compliance with disinfection byproducts." This was a radical shift from the testing results for the past several years, which consistently showed high rates of chlorinated hydrocarbons, trihalomethanes, and other disinfection byproducts. The testing decisions made by the Water Board reveal the deliberate processes that enable slow violence and although the rumors of flushing specific water lines are unconfirmed, the very existence of these rumors speak to the community's mistrust of the Division of Water. This distrust directly correlates with increased citizen science efforts which are carried out by individuals who are not only trusted by the community, but who themselves have a personal interest in obtaining accurate data.

In the second example, Willie Dodson spoke about his recent work with a woman in the coalfields who owns land that is about to be mined under as part of a larger operation. This process will include approximately 650 acres of forested land being "totally razed, totally stripped" and then hydroseeded as part of the reclamation process. Hydroseeding involves creating a mixture of seeds, mulch, and fertilizers that can then be sprayed over wide swaths of land to replant vegetation. During his time with the woman, Dodson was able to show her part of a nearby mine that had been reclaimed, which stood out as a bald, grassy slope among the surrounding hardwood forests. Dodson states that

the woman "...[was] like they told me that it would be just the same and that it would be better than before." The company was aware of the woman's dedication to the landscape and made the choice to both inadequately resow vegetation and misrepresent the final product of their land reclamation process. Similarly to the decrease in water testing sites, these decisions highlight that the damages caused by powerful actors are not the unfortunate result of sheer ignorance but rather the strategic choice to withhold knowledge to obtain their desired outcomes.

The unavailable and misleading water safety data and the lies about forest reclamation are part of a larger effort to manipulate residents into accepting the infringement of their rights as inevitable and possibly even as the way things should be. However, although accurate and accessible knowledge is a vital part of the critical consciousness necessary to exert agency, that knowledge can come from a variety of sources. People with polluted drinking water or inadequate water infrastructure do not require official reports to tell them that there is a problem; They see it when they turn on their taps and discolored or smelly water comes out. They feel it when it affects their physical bodies. They hear about it when they talk with their friends and families. Similarly, the bald patches of grass that mark former mining sites are visible to those who know what they are, despite attempts to mine only in locations not visible from major publicly accessible areas.

That knowledge spreads through conversations like Dodson's or water-testing projects like the one in Martin County and the people who are "...exposed to the slow violence of toxic pollution are replete with testimonies, experiences, and bereavements

that bear witness to the brutality of gradual environmental destruction” (Davies 2019: 14). Armed with the cumulative knowledge of their personal experiences, they use their agency to construct realities that exist in tension with the realities imposed by the powerful players. Instead of accepting the official test results that the water in Martin County is safe to drink, the actors in Martin County, aided by groups such as the ACLC and the University of Kentucky, participated in legal proceedings, recruited participants for water testing, and raised awareness of the systemic issues within their water system. These acts of agency do not align with traditional measures of citizen involvement and determination, such as voting, but rather draw upon communities’ unique strengths and needs to create individualized and effective strategies.

“You know, my role in [the Calls from Home radio program], that was a pebble, right? Like it was just a pebble that started something rolling...you don’t know what your outcomes are going to be. You just have to keep nudging pebbles and sometimes, ten years later, something is really different because of that.”

Amelia Kirby, Appalachian activist and business owner, Jan. 13, 2022

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

“When you care about something deeply all you can hope for is to reach one person. So, if I go into a room of 500 people and I’m talking about environmental justice, if I can change the mind of one person, that’s worth my trip. That’s worth all the energy put into that because then that one person, you know, reaches somebody else.”

Silas House, Appalachian writer and activist, Jan. 20, 2022

The environmental justice movement in Appalachia is not declining in tandem with the decline of the coal industry. Although it has historically followed the boom-and-bust trajectory of coal, as seen with the peak of the anti-mountain top removal movement in the mid-2000s, the systemic and entrenched nature of ongoing environmental injustices means that there are decades of work ahead. Additionally, the legacy issues that follow the withdrawal of extractive industries necessitate continuing work that will address the damages caused by companies who have long since declared bankruptcy or left the region.

Creating a successful and just transitioning economy is already well underway in the coalfields, with organizations like Appalachian Voices working towards increasing the presence of solar energy in the region. Communities are bringing in grants and other funding to help diversify and revitalize their downtowns, with a focus on supporting local businesses that have a personal stake in the community. As coal companies continue to exploit legal loopholes and use bankruptcy as a way to escape all financial and legal responsibility for their damages, private citizens are stepping in to prevent such an easy exit. Grassroots and citizen organizing continue to be the most effective ways of pursuing

environmental justice. As Steve Brooks, the associate director of the Clinch Coalition puts it, “When we feel something needs dealt with, getting the locals behind it is really what can make a difference.” People continue to band together and use their local knowledge and resources to strategically decrease the amount of land that is able to be mined by the companies still in business.

The worsening climate crisis looms large in the consciousness of many of the people interviewed. Eight brought up climate change as one of the largest environmental threats facing the region, with references to increased flooding, changes in weather patterns and forest fires, and an influx of climate refugees into the region. Central Appalachia is fairly insulated from the most extreme effects of climate change due to its distance from the coast, temperate climate, and the mountain’s protection against tornadoes. Louis-Rosenberg explained how city planning departments have already begun to account for mass migration into the area, stating that “We’re already seeing explosive population growth in Knoxville. It has some of the highest rates of gentrification measured by increase of cost of living anywhere in the country. And Asheville, right, people are already priced out of Asheville and there will come a day when people are like ‘Oh, Charleston. You know, what’s so bad about Charleston?’” As an affordable city that is predicted to be fairly insulated from the worst effects of climate change, Charleston would provide a home for climate refugees who had previously not considered it a desirable location.

Climate change also plays a role in the ways that others view Appalachia and more specifically, coal miners and their families. As multiple interlocutors pointed out, it is not

uncommon to hear people express the view that black lung, poor employment, addiction issues, and the overall marginalization of the people are fair retribution for the role that coal industries have played in creating the climate crisis. With rising global awareness of the high price of climate change, there is also an increasing desire to identify and blame the responsible parties. With the popular conflation of all of Appalachia and the coalfield region and an oversimplistic understanding of the coal industry, the miners who actually produce the coal that contributes to climate change are a frequent scapegoat.

This is clearly shown in the abundance of social media responses to the currently striking Warrior Met Coal miners: Mocking comments about the miners being stuck in the Stone Age, musings about why workers are wasting their time on a dying industry, and judgements on miners' intelligence and ethics abound. There is no distinction drawn between the types of coal mined (Warrior Met mines metallurgical coal, which is still necessary for steel production) or the actors involved the process. These seemingly inconsequential thoughts from social media commentators contribute to the incorrect assumptions that in turn shape Appalachia in others' minds: The idea that Appalachia is coal, that miners and companies are equally powerful actors, that one's employment indicates ethics or intelligence and not simply the necessity of income for survival. As the climate crisis worsens, it is imperative that these assumptions are quickly and powerfully rebutted and that the complexities of extractive industries in Appalachia are fully recognized to prevent further animosity towards an entire region and its diverse peoples.

Table 2. Recommended sources on Appalachia by participants.

Authors and Poets	Media
Wendell Berry	Black in Appalachia
Denise Giardina	Dopesick (2021)
Amy Green	Harlan County, USA (1976)
bell hooks	Hillbilly (2018)
Silas House	Martin County (2019)
Ron Rash	The Buffalo Creek Flood: An Act of Man (1975)
Carter Sickels	Black by God
Lee Smith	Up the Ridge (2006)
James Still	
Frank X. Walker	
Crystal Wilkinson	
Crystal Good	
William H. Turner	

This process can most effectively happen through education and community collaboration. Although a political approach is necessary to elect representatives who will maintain or progress effective environmentally just policies, the entrenched and systemic power disparities make it difficult to change the political status quo. The protection afforded by both policy and power lies with the people engaging in environmentally damaging and unjust behavior, not with those who are bearing the burden of the consequences. Additionally, political conceptions of Appalachia, such as the Appalachian Regional Commission's definition of the region, provide a shallow picture of Appalachia that is incapable of supporting sustainable and effective change. Instead, turning to the local communities provides the most powerful mechanism for fixing existing harms and creating a tenable transition past coal and a mono-economy. There is immense power within these communities: the power of lived experiences; the power of familiarity and love; the power of solidarity; the power of knowing how to effectively communicate and educate. These powers might not always result in changing elected officials or quickly passing new laws, but they do hold the key to long-lasting community organizing and creating changes from the ground up.

The research undertaken for this thesis was constrained by time, resources, and the COVID-19 pandemic and as a result, barely scratched the surface of agency in Appalachian environmental justice movements. First and foremost, future research should include more extensive interviews, both with more people and multiple rounds of interviews with each interlocutor. After ending each interview and reviewing the transcripts, I found myself with twice as many questions for the interlocutors as when I

started. Additionally, several interlocutors referred me to several new individuals, all with unique experiences and perspectives on the topic. There is immeasurable new information still available, as well as an ethical duty to include as many voices as possible.

Further exploration of the ways in which these organizations and communities play off of each other would also be extremely valuable. My time spent in the New Economy Network meetings helped me appreciate the multitude of organizations all working on the same common theme of environmental justice, conservation, and reclamation. Each organization has their own slightly different focus, geographic area, strategic approach, and resources. They are effective individually, but when acting together, they turn into a truly formidable team with an extremely wide range of influence. However, these efforts also come with the typical shortfalls: an occasional lack of clear leadership; difficulties communicating; repeatedly relying on the same individuals' labor to the point of burnout; and generally slow progress. A deeper involvement in multiple organizations would be able to shed more light on the strengths and weaknesses of a conglomeration of organizations and thus provide possible solutions to maximize their abilities to achieve common goals.

Appalachia, especially Central Appalachia, is not an isolated, homogenous, or discrete entity unto itself; It cannot be defined or measured and it cannot be reduced to a scapegoat or stereotype. For the people who have made Central Appalachia their home, Appalachia is present in the mountains, in a sense of place and family, and in the cadence that characterizes their daily interactions. Their choices to fight for environmental justice

stem from their personal experiences, their love of the land, and a recognition that others' incorrect assumptions about Appalachia have tangible consequences in the policies, portrayals, and overall treatment of local people and communities. These fights don't simply look like political lobbying or laying down in front of a bulldozer; They take the shape of new K-12 educational programs; citizen science; cooperation and camaraderie between movements both within and outside of the region; creating art that represents the diversity of the cultures and peoples; and most of all, constantly asserting the inherent value of an area that has long been seen only as a power source for the rest of the nation.

Working people, mountain people, oppressed people are probably some of the most critically aware people there are because every day they get up and understand how to navigate through the issues that are given to them. So that's my first thing is that, just because people aren't active in the ways that we believe activism takes shape, there are people who actively, every day, subvert systems, subvert power and in their own ways have the ethical and moral outlook to be change-makers.

Robert Kells, New Economy Program Manager at Appalachian Voices, Jan. 28. 2022

LIST OF REFERENCES

- Adamson, Morgan. "Internal Colony as Political Perspective." *Cultural Politics (Biggleswade, England)* 15, no. 3 (2019): 343–57.
- "Acid Mine Drainage in Appalachia." *Appalachian Regional Commission*, 1969.
- Begley, J.T. and Williams, John Philip. "Coal Mine Water Pollution: An Acid Problem With Murky Solutions," *Kentucky Law Journal* (64) 3, 1976.
- Biesecker, James E., and J. Richard George. "Stream Quality in Appalachia as Related to Coal-Mine Drainage, 1965." Report. Circular, 1966. USGS Publications Warehouse. <https://doi.org/10.3133/cir526>.
- Billings, Dwight B., and Ann E. Kingsolver. *Appalachia in Regional Context : Place Matters*. Lexington, Kentucky: The University Press of Kentucky, 2018.
- Boles, Sydney. "Residents in Kentucky's Martin County Face Escalating Water Bills." National Public Radio, 2019.
- Bourne, Joel K. "Coal's other dark side: Toxic ash that can poison water and people." National Geographic, 2019.
<https://www.nationalgeographic.com/environment/article/coal-other-dark-side-toxic-ash>
- Brown, Karida. *Gone Home: Race and Roots through Appalachia*. Chapel Hill: The University of North Carolina Press, 2018.
- Comprehensive Environmental Response, Compensation, and Liability Act: Public Law 96-510. United States Congress, 1980.

- Davies, Thom. “Slow Violence and Toxic Geographies: ‘Out of Sight’ to Whom?” *Environment and planning. C, Politics and space* (2019): 239965441984106–.
- Eller, Ronald. *Miners, Millhands, and Mountaineers: Industrialization of the Appalachian South, 1880-1930* 1st ed. Knoxville: University of Tennessee Press, 1982.
- Eller, Ronald. *Uneven Ground: Appalachia since 1945*. Lexington: The University Press of Kentucky, 2008.
- Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw. *Writing Ethnographic Fieldnotes* 2nd Ed. Chicago: University of Chicago Press, 2011
- Evans, Thaddeus B. *Mining methods and costs at the Sunbright Limestone Mine, Foote Mineral Co., Sunbright, Va.* University of Michigan Library, 1957.
- Ewing, Katherine. “Revealing and Concealing: Interpersonal Dynamics and the Negotiation of Identity in the Interview.” *Ethos* 34, no. 1 (2006): 89–122.
- Fleenor, Lawrence. “Foote Mineral @ Sunbright.” *Big Stone Gap Publishing*, 2017.
- Friere, Paulo, and Myra Bergman Ramos. *Pedagogy of the Oppressed: 30th Anniversary Edition*. 3rd ed. New York: Bloomsbury Academic and Professional, 2014.
- Gabriel, Trip, and Coral Davenport. “Calls for Oversight in West Virginia Went Unheeded.” *The New York Times*, 2014.

- Gaventa, John. *Power and Powerlessness : Quiescence and Rebellion in an Appalachian Valley*. Urbana: University of Illinois Press, 1980.
- Giddens, Anthony. *The Constitution of Society : Outline of the Theory of Structuration*. Cambridge: Cambridgeshire: Polity Press, 1984.
- Gilmore, Ruth Wilson. *Golden Gulag : Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkely: University of California Press, 2007.
- Harkins, Anthony, and Meredith McCarroll. *Appalachian Reckoning: A Region Responds to Hillbilly Elegy*. West Virginia University Press, 2019.
- Haynes, Ada. *Poverty in Central Appalachia: Underdevelopment and Exploitation*. New York: Garland Pub., 1997.
- Krometis, Leigh-Anne, Julia Gohlke, Korine Kolivras, Emily Satterwhite, Susan West Marmagas, and Linsey C Marr. "Environmental Health Disparities in the Central Appalachian Region of the United States." *Reviews on Environmental Health* 32, no. 3 (September 26, 2017): 253–266.
- Levy, Robert I., and Jane C. Wellenkamp. "Methodology in the Anthropological Study of Emotion." In *Emotion: Theory, Research, and Experience*. Vol. 4: The Measurement of Emotions. R. Plutchik and H. Kellerman, eds. New York: Academic Press, 1989. 205-232.

Lucaks, H., N.M. Ardoin, and E. Grubert. “Beyond Formal Groups: Neighboring Acts and Watershed Protection in Appalachia.” *International Journal of the Commons* 10, no. 2 (2016): 878–901.

Marcus, George E. “Ethnography In/of the World System: The Emergence of Multi-Sited Ethnography.” *Annual review of anthropology* 24, no. 1 (1995): 95–117.

McCarroll, Meredith. *Unwhite : Appalachia, Race, and Film* Athens: The University of Georgia Press, 2018.

“National Electric Coil Co./ Cooper Industries Site Profile.” Environmental Protection Agency, 2017.

<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0405125#bkground>

Newfont, Kathryn. “Understory Environmental History: Learning from the Appalachian Commons.” *Environmental History* 26, no. 1 (January 2021): 29–38.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press, 2011.

NPR. “‘Hillbilly Elegy’ Recalls A Childhood Where Poverty Was ‘The Family Tradition.’” National Public Radio: Fresh Air, 2016.

“NTP Research Program on Chemicals Spilled into the Elk River in West Virginia.” National Toxicology Program: U.S. Department of Health and Human Services, 2016.

- Ortner, Sherry B. *Anthropology and Social Theory: Culture, Power, and the Acting Subject*. Duke University Press, 2006.
- Ortner, Sherry B. "Thick Resistance: Death and the Cultural Construction of Agency in Himalayan Mountaineering." *Representations (Berkeley, Calif.)* 59, no. 1 (1997): 135–62.
- Perdue, Robert, and Kenneth Sanchagrin. "Imprisoning Appalachia: The Socio-Economic Impacts of Prison Development." *Journal of Appalachian Studies* 22, no. 2 (2016): 210–23.
- Ray, Joseph A, James S Webb, and Phillip W O'Dell. "Groundwater Sensitivity Regions of Kentucky." Kentucky Department for Environmental Protection, Division of Water, Groundwater Branch, 1994.
- Robinson, Cara. "An Exploration of Poverty in Central Appalachia: Questions of Culture, Industry, and Technology." *Kome (Budapest)* 3, no. 2 (2015): 75–89.
- Satterfield, Jamie. "Duke University testing shows Kingston coal ash uranium at triple report levels." Knoxville News Sentinel. 2020.
<https://www.knoxnews.com/story/news/local/tennessee/tvacoalash/2020/05/17/duke-testing-shows-kingston-coal-ash-uranium-triple-report-levels/5035210002/>.
- Scheper-Hughes, Nancy. *Saints, Scholars, and Schizophrenics : Mental Illness in Rural Ireland*. 20th Anniversary Edition. Berkeley, CA: University of California Press, 1979.

- Sealey, Geraldine. "Sludge Spill Pollutes KY, W. VA. Waters," ABC News. 2006.
- Senior, Jennifer. "Review: In 'Hillbilly Elegy,' a Tough Love Analysis of the Poor Who Back Trump." The New York Times, 2016.
- Sewall Jr., William. "A Theory of Structure: Duality, Agency, and Transformation." *The American Journal of Sociology* 98, no. 1 (1992): 1–29.
- Shapiro, Henry. *Appalachia on Our Mind: The Southern Mountains and Mountaineers in the American Consciousness, 1870-1920*. Chapel Hill: University of North Carolina Press, 1978.
- Shiber, John. "Arsenic in Domestic Well Water and Health in Central Appalachia, USA." *Water, air, and soil pollution* 160, no. 1 (January 2005): 327–341
- Singh, Gopal K, Michael D Kogan, and Rebecca T Slifkin. "Widening Disparities In Infant Mortality And Life Expectancy Between Appalachia And The Rest Of The United States, 1990-2013." *Health affairs (Project Hope)* 36, no. 8 (2017): 1423–1432.
- Smith, Barbara Ellen, and Steve Fisher. "Internal Colony—Are You Sure? Defining, Theorizing, Organizing Appalachia." *Journal of Appalachian Studies* 22, no. 1 (2016): 45–50.
- Smith, Walter. "Remote Detection of Disturbance from Motorized Vehicle Use in Appalachian Wetlands." *Virginia Journal of Science* 72, no. 3 (2021): 1–20.

- Straw, Richard, and H. Tyler Blethen. *High Mountains Rising: Appalachia in Time and Place*. Urbana: University of Illinois Press, 2004.
- Sweet, Palmer C. "Industrial Rock and Mineral Resources in Virginia." *Virginia Minerals*, vol. 28 (1). Division of Mineral Resources, 1982.
- Sweet, Palmer C. "Mining and Processing By-Product Resources in Virginia." *Virginia Minerals*, vol. 44 (2). Division of Mineral Resources, 1998.
- Turner, William Hobart. *The Harlan Renaissance: Stories of Black Life in Appalachian Coal Towns*. First edition. Morgantown: West Virginia University Press, 2021.
- Vance, J. D. *Hillbilly Elegy : a Memoir of a Family and Culture in Crisis* First edition. New York, NY: Harper, an imprint of Harper Collins Publishers, 2016.
- Waterman, Ted, Jane Wolff, and Ed Wall. *Landscape Citizenships : Ecological, Watershed and Bioregional Citizenships*. Abingdon, Oxon: Routledge, Taylor & Francis Group, 2021.
- Welch, Wendy. *Public Health in Appalachia : Essays from the Clinic and the Field* Jefferson, North Carolina: McFarland & Company, Inc., 2014.
- Weller, Jack E. *Yesterday's People; Life in Contemporary Appalachia*. Lexington: University of Kentucky Press, 1965.
- Williams, John Alexander. *Appalachia : a History* Chapel Hill: University of North Carolina Press, 2002.

APPENDICES

Appendix A: Interview Prompts

- 1) Can you please introduce yourself for the recording and state your consent to being recorded?
- 2) Can you tell me how you came to live in this area?
- 3) What kinds of work did/do you do?
- 4) Based on your experiences, how would you describe or define Appalachia?
- 5) How would you say others define it?
- 6) What are the most pressing environmental issues facing the area?
- 7) How have you or your organization worked to remedy these?
- 8) Who else is addressing these and why or why not?
- 9) What do you think are the most effective ways to address these issues?
- 10) How have you seen these issues affect local communities?
- 11) What created these problems?
- 12) How have you seen Appalachia and these problems specifically represented in popular media?
- 13) Have these representations affected you or your work? If so, how?
- 14) Can you walk me through a particular instance of creating change, i.e., obtaining land for solar panel usage, organizing a river clean-up, etc.?
- 15) What would you want others who are ill-informed on activism in Appalachia to know?
- 16) Do you have any questions for me?

Appendix B: Coding Trees

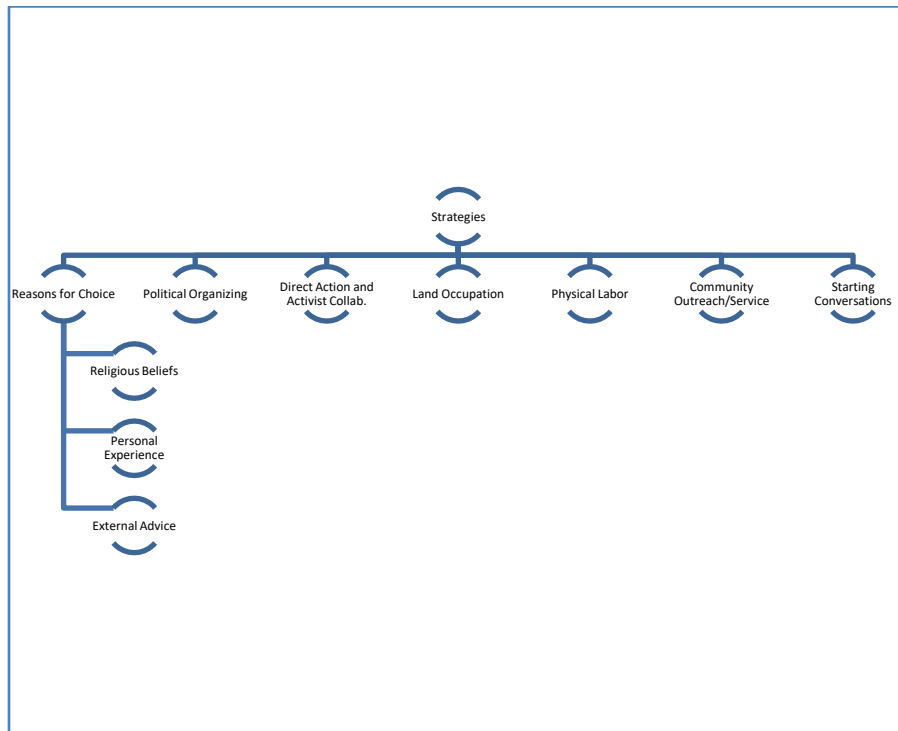
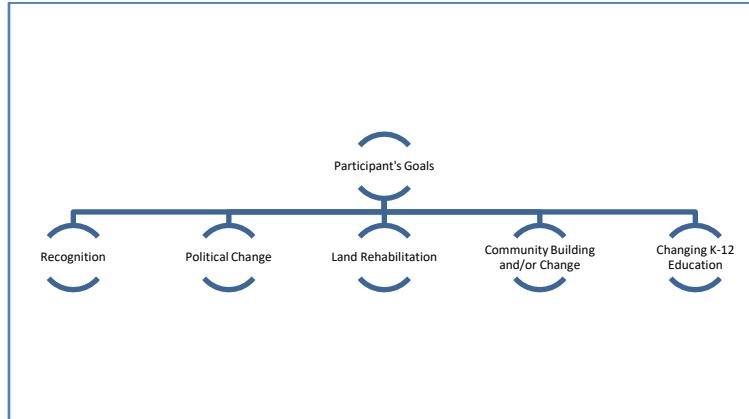


Figure 2. Parent, child, and grandchild codes used during quantitative analysis.

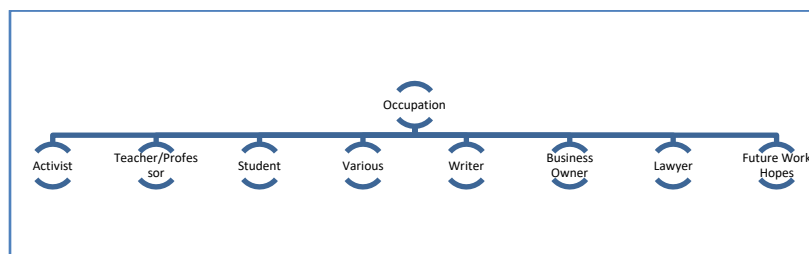
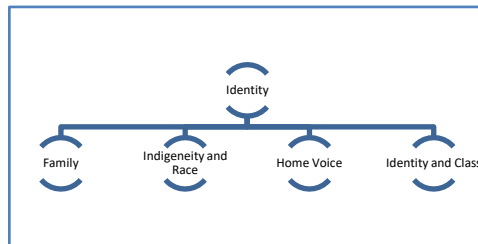
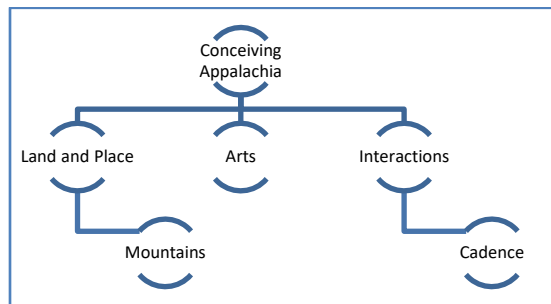
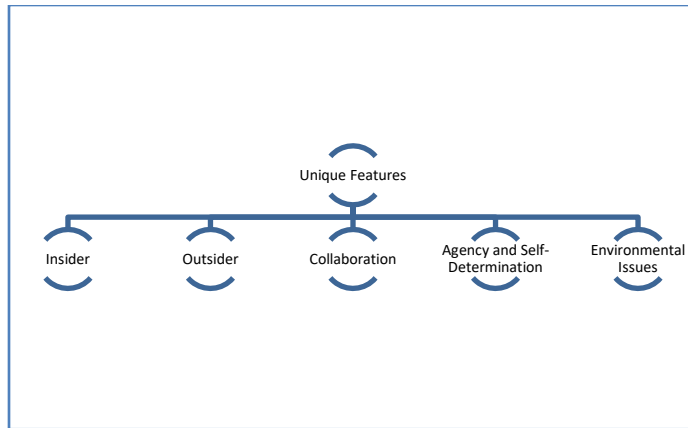


Figure 2 Continued.

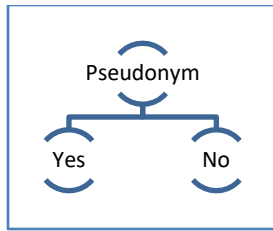


Figure 2 Continued.

VITA

Emma V. Kelly, née Wiley, was born on the Blue Ridge Parkway in Virginia and raised in Middlesboro, Kentucky. She attended the University of Tennessee as an undergraduate and graduated in 2019 with an anthropology major and the departmental Disasters, Displacement, and Human Rights concentration. As an undergraduate, she became increasingly aware of the persistence of misconceptions about Appalachia and shifted her research focus to human rights and identity in Appalachia. Over the course of this degree, she has served as a teaching assistant under Dr. De Ann Pendry, interned for the Register of Professional Archaeologists, and learned from the wonderful people working in Central Appalachia. She has spent her time during this degree making frequent visits to southwest Virginia, where her husband and parents live, and spending time with her cat, Pippin.