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Marian Moss December 12, 2024

Energy violence in a sacrifice zone: keeping the lights on in West Virginia

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An abstract of
a thesis submitted to the Faculty of Emory College of Arts and Sciences
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Abstract

Energy violence in a sacrifice zone: keeping the lights on in West Virginia
By Marian Moss

Faced with the existential threat to coal that is renewable energy, the West Virginia Public Service Commission has attempted to revive coal's economic and cultural value as a last-ditch effort to avert crisis by resuscitating a dying way of life. In this work, I explore how this resuscitation impacts low-income communities, specifically those with a high energy burden, in West Virginia. Using the artifact of the energy bill as a launching point for this research, I first demonstrate how the West Virginia Public Service Commission and broader government engages in sacropolitics by prioritizing coal "at any cost," an energy politics that has life or death consequences for low-income communities.

Then, I examine how a high energy burden might be a matter of life and death, and in what ways this is an effect of sacropolitics: who is being sacrificed in the name of "progress" or "coal," and how do these communities reckon with this economic sacrifice? I argue that the impact on physical health is felt by low-income communities as a form of physical violence. Second, I investigate the environmental costs of coal's continued dominance, focusing on both public health and the mental health impacts on those living in coal-dependent areas. I examine what it means for Appalachia to be labeled an "environmental sacrifice zone" by the EPA, specifically how people envision their role in the economy as a sacrifice population. Finally, I explore the cultural logic of pro-coal support in the wake of these skyrocketing costs to demonstrate how support for coal has shifted from an economic domain and into a moral one.

Because the cultural pressure to support coal extends into certain dominant ways of living more than others, people who live lifestyles that are contrary to a heteronormative and racialized pro-coal directive loudly exist against the norm. Therefore, in my conclusion I argue that the visibility of alternative ways of life that are abundant in Appalachia's culture can be critical to re-orienting the dominant narrative of coal and sacrifice around a more diverse, real, and resilient future, one which resists the narrative of expendability and creates a new narrative of Appalachia.

Energy violence in a sacrifice zone: keeping the lights on in West Virginia

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This thesis is dedicated to my dad, who I thought about every time I wanted to give up. I'd always remember I got a job to do, and I had to do it.

Growing up, getting hoisted all the way from Mom's house, to Dad, then to Mark and Jan, maybe to Aunt Robin, then a night at Hilary's, and finally Grandma (always Grandma), I was told "it takes a village." And they were right – I never could have written this paper without your incredible and unending support. Thank you guys so much, for doing interviews with me at 9pm while Uncle Earl slept in the other room, for pulling out years-old utility bills because I was curious, for reading and re-reading endless copies of my drafts, for doing "emergency support editing" at the drop of a dime. But also, thank you for an absolutely magical childhood. You are what made me love Appalachia. You've always been there for me, and I hope maybe this paper can some way pay back all the years of support and love that made my entire education possible.

Thank you so much, also, to Cindy and Dion, who talked for hours with me about their life. I can't thank you enough for your kindness. I'm so excited to see you at Seeing Hands in the summer. Thank you, also, to Nana and Papap -- you are always so kind to me, and were always so willing to talk about this project. To James, Aunt Robin, Nancy, Zeb, Josh, Mom, Grandma, Uncle Jim, and Junior Walk, thank you so much for doing interviews with me. Every conversation was so eye-opening, and I'm so grateful for your time and lessons. I'll carry those with me forever.

I'm also so indebted to Dr. Phillips' incredible guidance – I'd never wanted to do an honors thesis before I started working with you. It's turned out to be the most helpful and eye-opening project I've done yet. You've encouraged me to think and grow in directions I'd never considered or even thought I could. And to Dr. Nugent, I can't thank you enough for all the edits you've given me over the years. You're the reason I ever considered a major in Anthropology in the first place. To Dr. Blanes-Martinez, thank you not only for your class this semester, but also for being so willing to help me through this process at such late notice. I never thought a side comment could alter the direction of how I think about my hometown, but it did. I also want to thank the Anthropology department for their patience and support over the last few years. Particularly to Heather, Dr. Paul, and Langston – thank you so much. If I ever felt confused or lost, I knew I'd always have you to turn to.

And finally, Kalani and George. To you, I owe everything.

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Introduction

> Those lies the media and people like J.D. [Vance] tell about us have only served to further the interests of the owning and ruling class. They've made it easy for the average American to look at hillbilly people as collateral damage, expendable as long as it serves to keep their lives as comfortable as possible. My family is not collateral damage; the mountains I've spent my life in are not collateral damage.[1]
>
> – Junior Walk

I remember the hour-long bus ride to school in the morning – we'd wince as the bus made *that* turn, the one we knew was far too tight for a school bus with limited vision and crazy kids. We'd hoped it wouldn't hit the pothole and get stuck, as it had a few weeks before. We played games to see how long we could hold our breath as we got closer to the mine, so we could avoid the smell that we'd make childish jokes about. As we turned the corner, I'd imagine myself riding the coal conveyors like a mountain-side roller coaster. I admit, I did try riding it once – it didn't go very well.[2] I used to stare up at the sky admiring the clouds, thinking the coal cooling tower was where clouds came from. I remember feeling important when I saw those structures that stood so much taller than myself. I felt like my small town was a part of something bigger.

[1]Junior Walk, "Commentary: Hillbillies Don't Need an Elegy, but the Mountains Might," *The Daily Yonder*, August 5, 2024, https://dailyyonder.com/commentary-hillbillies-dont-need-an-elegy-but-the-mountains-might/2024/08/06/.

[2] I barely got on the property fence before I was quickly escorted off by my friend's mom.

Figure One: The Tunnel Ridge mine a few minutes from one of the houses I stayed in as a kid.

I was told coal kept the lights on, that we were doing something noble for our country by mining it. I was taught about the importance of Appalachia in the Industrial Revolution and how our coal powered the nation. So I respected those looming, gigantic, smelly structures because to me they represented a necessary sacrifice in the name of progress. I was told that my Papap risked his life in the

mine, and that even though they laid him off one year before his retirement to avoid paying him his pension, we still aught to respect the miners for what they did for us.[3] I was told in school that even though it smelled bad and got ash all over our cars, it'd make us richer. And, if anything, it was a cheap and reliable power source that helps us because we can afford it. Whether you loved or hated coal, there was one thing you couldn't argue with: it was cheap.

But in the last few years, this changed. In my junior year of college in 2022, my Grandma's electricity bills skyrocketed. She went from paying $99 per month in one year to almost $300 the next for electricity. And then in 2023, her bills were anywhere from $600-$800 for electricity. This is a number upwards of four times the national average of $150 each month.[4] My mom's bills followed suit: in the last decade, her electricity bills went from $100 to $300 last year with no increase in her yearly income over that decade. These bills are a clear contradiction to the broader narrative that "coal = reliable energy."[5] For the first time in my life, coal was unreliable and unpredictable. Wanting to understand why brought me to the launchpoint of this thesis. Why is the price of coal fluctuating unpredictably when the primary argument in its favor is that it's cheap, reliable, and predictable?

As I researched this question, it became clearer that coal was not cheap, reliable, and predictable. In fact, coal hasn't been economically competitive with renewables in West Virginia since

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[3] There's currently an ongoing lawsuit against CONSOL, a big mining company, for robbing miners of the lifetime benefits they were promised. This happened to my Papap too. Information about the suit can be found at this source:
Caity Coyne, "Years After CONSOL Ended Retiree Benefits, Judge Finds Merit in Case Claiming Miners Were Defrauded," West Virginia Watch, October 14, 2024,
https://westvirginiawatch.com/2024/10/14/10-years-after-consol-ended-retiree-benefits-judge-finds-merit-in-case-claiming-miners-were-defrauded/.

[4] Eia. "EIA Electric Power Monthly," 2024.
https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a.

[5] National Coal Council. "Coal = Reliable Energy," 2015.
https://www.nationalcoalcouncil.org/Documents/Energy-Education/4-Coal-Reliable-Energy-Final.pdf.

2015. What caused the skyrocketing price of coal in the previous three years was due a combination of the dwindling supply of coal and its out-competition by alternatives, but also a series of decisions made by the West Virginia Public Service Commission (the unelected body of government responsible for utilities, determining electricity rates, and energy sources for the state) that exacerbated the problem. Specifically, they not only refused to switch to alternatives or encourage their development, but explicitly shut down these alternatives, forcing their ratepayers to bear the brunt of this without offering any kind of safety net.

Literature Review

What has caused the rising cost of coal is an example of David Nugent and Adeem Suhail's notion of *sacropolitics.*[6] Sacropolitics refers to the way in which communities have begun to confront the large-scale existential crises of the present. These threats of extinction are everywhere: from the imminent threat of climate change to the extinction of entire ways of life, the 'Anthropocene' forces communities to reckon with the changes required of them to "circumvent our contemporary, collective impasse," because, as Nugent and Suhail write, "at stake is nothing less than the fate of the genus Homo."[7]

Sacropolitics draws from Michel Foucault's biopolitics and Achille Mbembe's necropolitics. Both Foucault and Mbembe were concerned with the ways in which periods of crisis create oppressive forms of top-down governance. In Foucault's analysis, he explores how the state exerts control over its

[6] David Nugent and Adeem Suhail, "Sacropolitics," *Public Culture* 36, no. 1 (January 1, 2024): 119–43, https://doi.org/10.1215/08992363-11121525.
[7] Nugent and Suhail, "Sacropolitics," 121.

citizens through the management of life. Writing in 1976 in *The History of Sexuality,* he introduces the concept of biopower as a mechanism for "protection" of people, though this protection often takes the form of the subjugation of populations on the margins of state power.[8] He argues that the normalization of population control is achieved through the maintenance of institutions that prioritize certain groups as more valuable than others, which reinforces hierarchical social structures. For example, Tania Li explains that Americans on the south side of Chicago are “let die” at around 60 years, while the mostly white, middle-class residents on the city’s northwest side can expect to live until the age of 77.[9]

Mbembe’s *necropolitics* extends Foucault’s *biopolitics* by introducing the politics of death and an examination of the state’s power to determine who may live and must die. He explores how the state and other political entities wield the power to expose certain populations to death, suffering, and violence, often through war, colonization, and the marginalization of vulnerable groups.[10] He argues that in modern forms of sovereignty, especially in postcolonial contexts, political control is not merely about governing life but also about deciding who is excluded from the social body and subjected to conditions of death, dispossession, or extermination. This "death-world" is shaped by regimes of terror, racialized violence, and the structural dehumanization of certain groups, which are positioned as expendable or disposable. Through his analysis, Mbembe critically interrogates the ways in which global inequalities and power structures continue to perpetuate violence, especially in regions affected by colonial legacies and ongoing imperialism.

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[8]Michel Foucault, *The History of Sexuality*, 1976.
[9] Tania Murray Li, “To Make Live or Let Die? Rural Dispossession and the Protection of Surplus Populations,” *Antipode* 41, no. s1 (January 1, 2010): 66–93, https://doi.org/10.1111/j.1467-8330.2009.00717.x.
[10]Achille Mbembe, *Necropolitics*, *Duke University Press eBooks*, 2019, https://doi.org/10.1215/9781478007227.

Sacropolitics draws from biopolitics and necropolitics, yet it diverges in significant ways. Sacropolitics is not concerned with the management of life or the imposition of death, but with bringing dead populations back to life. In this way, the first primary difference of sacropolitics is which body exerts influence over others. For both biopolitics and necropolitics, the state exerts oppressive force over its marginalized population. Sacropolitics, however, is both a form of imposed rule and a "cultural logic" that informs the way in which communities themselves think through their values.

A 'cultural logic' refers to the underlying principles, practices, and belief systems that shape how individuals and groups in a particular society make sense of the world and behave. It is the framework of shared assumptions, values, and norms that govern actions, thoughts, and interactions within a culture. Cultural logic helps explain how people in different societies interpret the same events or objects in diverse ways and make decisions based on their cultural context.

Since sacropolitics is a cultural logic, it informs the perceptions, beliefs, and behaviors of individuals or groups under threats of extinction in ways that can both challenge and reinforce social hierarchies and inequalities; sacropolitics describes how these communities reckon with a future that is both increasingly unknown and incredibly dangerous. Political actions in a sacropolitical landscape are not simply actions aimed at participating in the policy-making process, but are instead desperate, last-ditch efforts to escape from crisis. Those who are engaged in sacropolitics "grasp at whatever elements of trust they can salvage from the wreckage of a world in which they have lost their moorings, in which familiar reference points have all but disappeared and in which those that remain have turned *strange and unfamiliar*."[11]

[11] Nugent and Suhail, "Sacropolitics," 121.

Sara Ahmed discusses familiar reference points turning strange and unfamiliar in her book *Queer Phenomenology,* where she explains how disorientation – the name she gives this experience – is more than a physical shift; she describes it as an unsettling experience marked by violence.[12] In Appalachia, where coal mining and resource extraction have scarred the land, the economy, and the people, she writes that "what remains of people's environment often feels *strange, unfamiliar, and even hostile*."[13] In this context, Ahmed's insight into the way that violence changes our perception of "here" resonates deeply. The land and the home, places that should bring security and comfort, become sites of estrangement, discomfort, and disorientation.

Orientations, Ahmed writes, involve different ways of registering the proximity of objects and others. Orientations shape not only how we inhabit space, but how we apprehend this world of shared inhabitance, as well as "who" or "what" we direct our energy and attention toward. For Martin Heidegger, an influential philosopher of phenomenology, orientation is about the familiarity of the world. Familiarity is what gives the body the capacity to be oriented in one way versus the other. Ahmed explains, "The question of orientation becomes, then, a question not only about how we 'find our way' but how we come to 'feel at home.'"[14] Loving one's home is not about being fixed into a place, but rather it is about becoming part of a space where one has expanded one's body. When we are not 'at home,' we may feel disoriented, or homesick, or both. And, finally, when we get lost, we may need a lifeline to rescue us, to 'point' us in the right 'direction.' Ahmed clarifies: "The lines that allow us to find our way, those that are in front of us, also make certain things, and not others, available. . .

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[12] Sara Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 2006, http://ci.nii.ac.jp/ncid/BA9090822X.
[13] Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 6.
[14] Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 20.

When we follow specific lines, some things become reachable and others remain or even become out of reach. Such exclusions are the indirect consequences of following lines that are before us."[15]

*Dis*orientation, then, occurs when these lines become oblique or bent. This can have negative and even violent consequences. As explored by Pierre Bourdieu in his 1979 book *Distinction,* culturally reinforced values create a framework through which subtle, often invisible ways in which power and domination are exercised through cultural and social means, rather than through physical coercion or direct force.[16] He called this "symbolic violence." This is a form of control that operates by shaping the perceptions, beliefs, and behaviors of individuals or groups in ways that maintain social hierarchies and inequalities. Symbolic violence occurs when dominant groups impose their values, tastes, norms, and ways of thinking as "legitimate" or "natural," which cause them to appear as universal truths. This process leads people to accept and internalize social structures that benefit the dominant group. For example, a certain accent or style of dress might be seen as more "refined" or "educated," while others are considered "inferior" or "unprofessional." Frequently the impact is dire: while not *directly* causing physical harm, symbolic violence reproduces deadly social inequalities by dismissing alternative ways of life.

The recent series of decisions made by the West Virginia Public Service Commission may be considered acts of symbolic, ecological, and economic violence. Faced with an existential threat to coal (the renewable energy transition and coal's rapid economic decline), the West Virginia Public Service

[15] Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 25.
[16] Pierre Bourdieu, *Distinction* (Harvard University Press, 1984).

Commission has attempted to resuscitate coal's economic and cultural value. As a last-ditch effort to avert crisis by resuscitating a dying way of life, this is a form of sacropolitics.

In this work, I explore how this sacropolitics impacts low-income communities, specifically people with a high energy burden, in West Virginia. I used the artifact of the energy bill as a launching point for this research, since the energy bill is the household burden most closely related to the rising cost of coal. First, I demonstrate how the West Virginia Public Service Commission and broader government engages in sacropolitics by prioritizing coal "at any cost," an energy politics that has life or death consequences for low-income communities.

In the first chapter, I examine how a high energy burden might be a matter of life and death, and in what ways this is an effect of sacropolitics. I examine who is being sacrificed in the name of "progress" or "coal," and how these communities reckon with this economic sacrifice. I argue that the impact on physical health is felt by low-income communities as a form of physical violence.

Second, I investigate the environmental costs of coal's continued dominance, focusing on both public health and the mental health impacts on those living in coal-dependent areas. In my second chapter, I examine what it means for Appalachia to be labeled an "environmental sacrifice zone" by the EPA. I explore how people envision their role in the economy as a sacrifice population, and how they are impacted by the sacrifice of their communities. I then demonstrate how this constitutes a form of ecological violence.

Finally, I explore the cultural logic of pro-coal support in the wake of skyrocketing costs. I demonstrate how support for coal has shifted from an economic domain and into a moral one: coal is no longer simply energy to many people in West Virginia; it's a history, an identity, and a source of

power for many low-income and middle class West Virginians. Pro-coal West Virginia government officials frame coal as a symbol of cultural identity, and construct a version of the future that is so dangerous and unpredictable that supporting coal as a last-ditch effort is the only way to ensure a stable future for West Virginia's families and economy. My third chapter takes this up as a form of symbolic violence described by Pierre Bourdieu.

Because the cultural pressure to support coal extends into certain dominant ways of living more than others, people who live lifestyles that are contrary to a heteronormative and racialized pro-coal directive loudly exist against the norm. For this reason, staying in West Virginia as a young person is a political decision. Therefore, in my conclusion I argue that the visibility of alternative ways of life that are abundant in Appalachia's culture can be critical to re-orienting the dominant narrative of coal and sacrifice around a more diverse, real, and resilient future, one which resists the narrative of expendability and creates a new narrative of Appalachia.

Methodology

To begin, I modeled my methodology after Diana Hernandez's, a professor of public health at Columbia, 2016, study,[17] which demonstrated the health impact on households with high energy burden. The key dimensions of sacropolitics emerged using a basic qualitative study originally conducted to research the dimensions of energy burden among low-income families in the Wheeling metropolitan area in West Virginia. This study focused primarily on households with an energy burden

[17] Diana Hernández, "Understanding 'Energy Insecurity' and Why It Matters to Health," *Social Science & Medicine* 167 (August 24, 2016): 1–10, https://doi.org/10.1016/j.socscimed.2016.08.029.

above 6%, and was guided by the following research questions: (a) What are the main elements of life with an energy burden? (b) What are the primary ways low-income families cope with and adapt to high energy burdens? (c) How is the experience of a high energy burden related to the larger economic, political, and cultural landscape of coal in West Virginia?

A convenience and snowball sample of 10 participants were recruited from Ohio and Marshall County, WV. Many participants either knew the author prior to being involved in the study or were referred to the author. All interviewees were currently experiencing an energy burden of at least 6%. Of the ten participants, eight were experiencing a greater than 10% energy burden, and five were experiencing an energy burden greater than 30%. Six of the participants were women, and two of the women were single mothers. Three participants were men, and one participant was nonbinary. Two participants were disabled. Their ages ranged from 24-78. Nine participants were white, and one participant was middle eastern. All participants provided informed verbal consent and were offered $25 in Walmart gift cards. The average individual yearly income among participants was $25,000.

Interview audios and transcripts were coded for emergent themes, including “rent,” “own,” “water,” “gas,” “coal,” “job,” “disconnect,” “work,” and “love.” To lead the interviews, I did a “grand tour” question with listed subquestions, but let the interviewee guide in a participant-guided discussion. Five interviews were conducted in their homes, one over email correspondence due to their personal circumstances, and 4 over the phone. To record my interviews, I used Otter.Ai which assisted in initial transcription but was not relied on for a final transcription. For the final transcription used in this text, I personally transcribed the audio recordings.

How the Public Service Commission prioritizes coal "at any cost"

The West Virginia Public Service Commission plays a critical role in determining West Virginia's energy future. They are responsible for setting rates for electricity, natural gas, and telecommunications. On the West Virginia Public Service Commission's website, their mission statement reads: "The purpose of the Public Service Commission is to ensure fair and prompt regulation of public utilities; to provide for adequate, economical and reliable utility services throughout the state; and to appraise and balance the interests of current and future utility service customers with the general interest of the state's economy and the interests of the utilities."[18] They inspect the properties, books, and papers of regulated companies and ensure their customers receive safe, reliable, and reasonably priced services. Its commissioners include Chairman Charlotte Lane, Renee Larrick, and Bill Raney. Raney is in the West Virginia Coal Hall of Fame and was the previous President of the West Virginia Coal Association, a position he held for 28 years.[19] Lane is an energy industry lawyer and lobbyist, who ran for Congress in 2013 on a pledge to end Obama's "war on coal" and received more than $71,000 from the energy and national resources sector.[20]

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[18] "Mission and Vision Statements - West Virginia Public Service Commission," n.d., https://www.psc.state.wv.us/missionstatement.htm.

[19]"Chairman and Commissioners - Public Service Commission of West Virginia," n.d., https://www.psc.state.wv.us/bios/default.htm#:~:text=William%20B.,Natural%20Resources%20Division%20of%20Reclamation.

[20]Lavelle, By Marianne. "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power Inside Climate News." Inside Climate News, December 5, 2022. https://insideclimatenews.org/news/20112022/soaring-west-virginia-electricity-prices-trigger-standoff-over-the-states-devotion-to-coal-power/.

Despite the commission's lifelong experience in the natural resources sector, their performance fails to meet the standards set in their mission statement. West Virginia was ranked worst in overall utility performance in the 2022 Electric Utility Performance review produced by the Citizens Utility Board.[21] The performance review accounts for several factors, and high among them was the fact that Appalachian Power's West Virginia district ranked in the highest 3% of all 958 utilities nationwide in outages minutes per year and outage minutes per interruption.[22] Additionally, in 2022, West Virginia had the third highest electricity costs as a percentage of household income.[23] West Virginia has the highest percentage of utility costs of any state at 14% the state's median monthly income – and was one of only 4 states that exceeded 10%. A compounding factor for this inequality is that West Virginia is the third poorest state by median salary in the country with the second highest utility cost, demonstrated by the following map:

[21]Cepr, "The Implications of Rate Hikes and Coal Power Domination for West Virginia Household Budgets," Center for Economic and Policy Research, September 16, 2024, https://cepr.net/the-implications-of-rate-hikes-and-coal-power-domination-for-west-virginia-household-budgets/

[22]Tony, Mike. "PSC staff slams AEP utility power outage performance, ready to investigate AEP companies." *WV Gazette-Mail*, 2024. https://www.wvgazettemail.com/news/energy_and_environment/psc-staff-slams-apco-power-outage-performance-ready-to-investigate-aep-companies/article_5cf516c8-8021-11ef-9a77-0f807a160f52.html#:~:text=A%202022%20review%20of%20electric,events%20exceeding%20a%20daily%20duration.

[23] Neal Barkus, "How West Virginia Electric Utilities Stack Up," Conservation West Virginia, August 25, 2024, https://www.conservewv.org/how-west-virginia-electric-utilities-stack-up/.

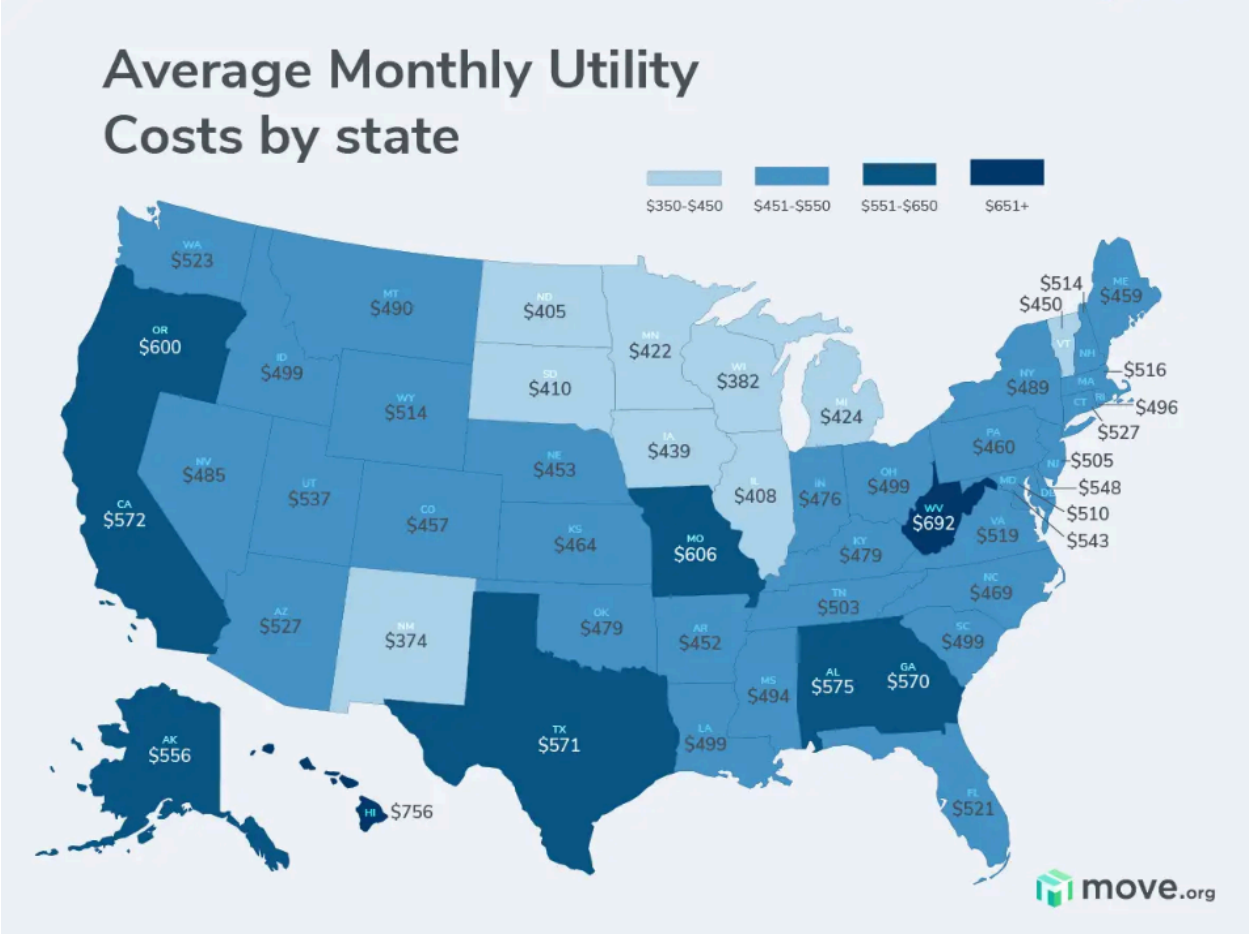

Figure Two. Average Monthly Utility Costs by state[24]

In fact, the PSC has rejected or scaled back proposed utility energy efficiency programs—for example, a plan to expand use of smart thermostats—as too costly[25]. West Virginia's energy-efficiency policy ranks 48th among the 50 states, according to the American Council for an Energy-Efficient

[24]Belle Wong JD, "Average Salary by State in 2024," Forbes Advisor, September 27, 2024, https://www.forbes.com/advisor/business/average-salary-by-state/#:~:text=States%20With%20the%20Lowest%20Average%20Salaries&text=Mississippi%2C%20Arkansas%20and%20West%20Virginia,at%20a%20slightly%20higher%20%2449%2C170.

[25]"Order Cutting Back EE Programs," Public Service Commission of West Virginia, 2018, https://www.documentcloud.org/documents/23311499-order-cutting-back-ee-programs/.

Economy.[26] EIA data shows West Virginia utilities spent about $3 per customer in 2021 on energy efficiency, one-twelfth of the nationwide average of $36.[27]

"Going Cold Turkey on Coal"

The first example of the WV PSC prioritizing coal over the health and future of its low-income population is when they decided to spend more money retrofitting one of the nation's oldest and most expensive coal-fired power plant instead of *saving money* by shutting it down. In 2021, the commission was faced with the option to either upgrade Moundsville's Mitchell Plant – right down the road from where I grew up – to meet new EPA standards for handling coal ash and removing toxic heavy metals from their wastewater. However, the Mitchell plant is one of the oldest coal-fired power plants in the country at 51 years old and is among the nation's most expensive plant to operate.[28] For this reason, AEP calculated it would be more cost-effective to close the plant down rather than retrofit it. Across the country, operators did just that: they announced they would retire over 25 of the 204 coal-fired power plants in the country by 2028 than upgrade them to meet the new requirements.[29] The price to

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[26]"West Virginia | ACEEE," n.d., https://database.aceee.org/state/west-virginia.

[27] "Utility Spending on Energy Efficiency by State," *Https://Www.Documentcloud.Org/Documents/23311514-Utility-Spending-on-Energy-Efficiency/*, 2021, https://www.documentcloud.org/documents/23311514-utility-spending-on-energy-efficiency/.

[28]By Marianne Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News," Inside Climate News, December 5, 2022, https://insideclimatenews.org/news/20112022/soaring-west-virginia-electricity-prices-trigger-standoff-over-the-states-devotion-to-coal-power/.

[29]Michael Rubinkam, "Coal-fired Power Plants to Close After New Wastewater Rule | AP News," AP News, November 22, 2021, https://apnews.com/article/climate-business-environment-and-nature-environment-pollution-eb6010e5e0782d893d47c50b91f53ad8.

upgrade the Mitchell plant to EPA standards was originally estimated at $170 million, a cost to be split with Kentucky and Virginia, which both share oversight of the Mitchell Plant.[30] However, when both states refused to force the outsized cost onto their ratepayers, the price of renovating the plant to keep it open for two more decades – which was already uneconomic – grew to $448 million.

In a statement on the PSC's YouTube channel, where Chairman Lane posts video commentaries, Lane explained the decision to retrofit Mitchell as an act of loyalty to coal. She said, "We will not go cold turkey on coal at the expense of the West Virginia ratepayers."[31] Earlier in the video, she rejected the idea that coal is not a cost-efficient electricity production fuel, saying:

> The fact is that the commission favors lower-cost generation than higher-cost generation. It is often said that coal is not a cost-efficient electricity production fuel, that the cost of renewable resources for all technologies are dead-even with coal-produced energy, and that West Virginians pay a lot more for electricity than customers in many other states. These statements are just not true. The US Energy Information Administration rated WV residential electricity costs in August 2022 as the 18th-lowest out of all 50 states, and WV had the lowest rates in the country for industrial customers.[32]

While it's true that WV residential costs were the 18th-lowest in 2022, as mentioned beforehand, West Virginia had the third highest electricity costs *as a percentage of household income* in the same year.[33] Furthermore, coal-fired power has been consistently more expensive than natural gas

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[30]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News," December 5, 2022.

[31] Public Service Commission of West Virginia, "Coal V. Renewables," November 14, 2022, https://www.youtube.com/watch?v=SXQS4U72UQA, time stamp 4:16.

[32] https://www.youtube.com/watch?v=SXQS4U72UQA, time stamp 0:15

[33]Neal Barkus, "How West Virginia Electric Utilities Stack Up," Conservation West Virginia, August 25, 2024, https://www.conservewv.org/how-west-virginia-electric-utilities-stack-up/.

and wind nationwide since 2015.[34] In West Virginia, this difference is even greater because *Mitchell is one of the most expensive plants to operate in the country.*

Not only is the information Chairman Lane says in the statement misleading, but she uses a metaphor for substance abuse to position attempts to encourage renewable energy development or criticisms of the PSC as "going cold turkey on coal." What's important to the PSC, this statement seems to suggest, is a loyalty to coal; *not* providing inexpensive energy to their ratepayers.

The "69 Percent Solution"

The second example of the WV PSC prioritizing the success of coal over profit is when they passed a directive called the "69 percent solution." In an attempt to bring operating costs down to buffer the cost of retrofitting Mitchell, the PSC argued the best way to *reduce* operating costs is to *burn more coal*. The PSC therefore issued a directive that both environmentalists and AEP called absurd: keep the plants running 69% of the time.[35] For reference, the average amount of time that coal plants run (also known as its capacity factor) in the United States was 47.8% that same year.[36] Mitchell's capacity factor that year was 36%.[37]

They argued that, since the plant requires significant energy to start up and cool down, running it more frequently would reduce operating costs associated with those processes. However, in

[34]"Average Power Plant Operating Expenses for Major U.S. Investor-Owned Electric Utilities, 2013 Through 2023 (Mills per Kilowatthour)," *Eia*, n.d., https://www.eia.gov/electricity/annual/html/epa_08_04.html.
[35]"Affordable Energy in West Virginia Starts With Economic Dispatch," *Utility Dive*, August 9, 2023, https://www.utilitydive.com/news/affordable-energy-west-virginia-coal-plants-economic-dispatch-pjm/690309/#:~:text=West%20Virginia%27s%20energy%20burden&text=In%202021%2C%20the%20average%20monthly,make%20energy%20bills%20even%20higher.
[36]"Affordable Energy in West Virginia Starts With Economic Dispatch."
[37]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

older coal plants like Mitchell, operating costs include not only running expenses but also ongoing maintenance. As aging plants experience more wear and tear, maintenance costs rise – even with reduced usage.

However, this directive dramatically increased costs to ratepayers while benefiting coal companies. The reason this directive benefits coal companies is through something called a coal supply contract, which is an agreement between coal suppliers and utilities that specify goods and services over a certain time at a fixed price, for which the buyer agrees to exclusively do business with the supplier. When these contracts are signed, since the coal is sold at a fixed price, coal supplies try to 'lock in' the price of coal when it's high. When these contracts are signed, the West Virginia Coal Association, which current PSC commissioner Bill Raney presided over for 28 years and is dominated by coal suppliers, profits. The 69% rule is so outlandish that AEP itself protested, warning it would unnecessarily raise consumer cost.[38] It requires coal plants to run even when power isn't needed.

In fact, the WV ratepayers are still paying for the nearly half a billion dollars to retrofit the Mitchell Plant: The last requested rate hike, heard on September 18, 2024, represented an 18% increase for customers using 1,000 kilowatt-hours (kWh), amounting to an additional $28.72 per month.[39] The PSC rejected the request, but only on the basis that it was filed incorrectly, and postponed the hearing for May 29, 2025. If it had gone through, it would have resulted in an $70 increase to monthly residential electricity bills over the last five years, from $128.09 in 2019 to $198.65 in 2024. Per year,

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[38]Quenton King, "Public Service Commission Should Be Doing More to Look Out for West Virginians," West Virginia Watch, August 8, 2024, https://westvirginiawatch.com/2024/08/08/public-service-commission-should-be-doing-more-to-look-out-west-virginians/.

[39]"PSC Appalachian Power Filing to Increase Rates and Charges September 2024," *PSC of WV* (WV PSC, 2024), https://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=629088&NotType=WebDocket.

that's an additional $840, which, for many of my friends and family, is nearly an entire month's income.

Acknowledgment and Inaction

The commission recognizes that coal's prices are rising, but refuses to acknowledge that this has a direct relationship to the increasing cost of coal and decreasing cost of renewables. In the last decade, Appalachian Power increased monthly residential prices by 30% – thirty times the national average increase of 1% in the same decade.[40] At the same time, the median household income in the state only increased by 10 percent:[41] Between March 2019 and June 2024, residential rates for electricity rose from $128.09 to $169.93 per month.[42]

This increase was stark enough that it prompted the PSC to launch an investigation into AEP's high prices. But instead of acknowledging the role that refurbishing the Mitchell Plant or the 69% directive had on these prices, they blamed AEP themselves, calling the high prices 'self-inflicted wounds' that resulted from "allowing coal inventories to decline."[43] The wounds are self-inflicted, they

[40]Cepr, "The Implications of Rate Hikes and Coal Power Domination for West Virginia Household Budgets," September 16, 2024.
[41]Cepr, "The Implications of Rate Hikes and Coal Power Domination for West Virginia Household Budgets," September 16, 2024.
[42]Caity Coyne, "PSC Dismisses 18% Rate Hike by AEP Due to Incomplete Filing; Company Could Refile at Any Time," West Virginia Watch, September 19, 2024, https://westvirginiawatch.com/2024/09/19/psc-dismisses-18-rate-hike-by-aep-due-to-incomplete-filing-company-could-refile-at-any-time/#:~:text=Appalachian%20Power%20customers%20have%20faced,to%20%24169.93%20in%20June%202024
[43]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

say, because of AEP's decarbonization policy: they aren't operating their plants at 69% capacity because they want to reduce carbon emissions. This claim was called "simply not true" by AEP.[44]

The real reason coal inventories are declining is that there simply isn't enough coal to run the plants at a 69% rate.[45] Coal companies in WV that had signed supply contracts with AEP withdrew prematurely in 2021, leaving the company with a over a million-ton deficit in a contract for over 2 million tons. In the lawsuit brief against ACNR (American Consolidated Natural Resources, the emergent company from Massey Energy's bankruptcy in 2019), AEP writes, "As a direct consequence of ACNR Coal Sales' breach, APCO (Appalachian Power Company, or AEP) has had to find other ways to meet its customers' electric needs, including having to purchase energy from the market at greatly increased costs to APCO and its customers."[46]

Chairman Lane nonetheless questioned AEP on its coal reserves at a hearing in 2022, asking, "Explain to me how you can run out of coal for any reason," she said to one company witness. "I mean, isn't it better to have too much coal than not enough coal? And explain to me why you are just sort of going along and just having a minimal amount of coal, and then all of a sudden you need more coal?"[47] Later, when asked whether they had considered the possibility that it'd be uneconomic to run at 69%, commission staff said, "No, I have not."[48]

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[44]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

[45] Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

[46]"Appalachian Power Vs. ACNR Coal Sales, Inc." WV PSC, 2024. Accessed December 11, 2024. https://www.documentcloud.org/documents/23310749-appalachian-power-v-acnr.

[47]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

[48]Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

The PSC also recently signed off on an attempt to save a coal power plant, arguing that not "exhausting every option to save a coal plant" would be "imprudent."[49] Justice promised to do *"any and everything"* to keep Pleasants Power Station running, saying,"Think of the coal miners getting up every day, going to work every single day.[50] Think of the coal miners this is affecting. . . We need it so, so, so badly."[51]

Additionally, in March this year, Justice vetoed a measure that would raise the maximum size for a solar plant operated by state utilities, specifically because it could cause "companies to drop coal-generated power" and "lead to job loss by putting coal mines and generating facilities out of business quickly." His concern was that renewables would produce too much energy too quickly at too cheap a price.[52]

The PSC has not even considered the possibility that they're wrong; to them, coal is to be prioritized *at any cost,* even at the cost of truth and especially at the cost of the ratepayers. In fact, they specifically said this. In a letter to AEP regarding their rate of coal use, they ordered AEP "to maximize their use of fossil fuel generation . . . rather than a policy geared to decarbonization, *at any cost*."[53]

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[49]"E&E News: W.Va. Extends Lifeline to Coal Plant Slated for Retirement," April 25, 2023, https://subscriber.politicopro.com/article/eenews/2023/04/25/w-va-extends-lifeline-to-coal-plant-slated-for-retirement-00093626.

[50] 10,000 coal miners worked in WV in 2021. There are a total of 625,000 employed people in the state. That is 1.6% of the total employed people in the state.

[51]Benjamin Storrow, "As Coal Disappears, Mining States Launch Rescue Efforts," E&E News by POLITICO, March 14, 2023, https://www.eenews.net/articles/as-coal-disappears-mining-states-launch-rescue-efforts/.

[52]Zack Budryk, "West Virginia governor vetoes bill expanding renewable energy to protect coal," 2024, https://thehill.com/policy/energy-environment/4557868-w-va-governor-vetoes-bill-expanding-renewable-energy-to-protect-coal/.

[53] Lavelle, "Soaring West Virginia Electricity Prices Trigger Standoff Over the State's Devotion to Coal Power - Inside Climate News."

When the Public Service Commission claims that we must maximize our fossil fuel generation *at any cost,* there are two things being said: first, they are saying that there is no value that West Virginia's low-income population could provide to the state that would outweigh the value of fossil fuel generation. This is a statement that directly positions low-income West Virginians beneath coal. In other words, even if coal causes the deaths of low-income West Virginians, coal should still be prioritized. Second, this statement says that West Virginia must do everything it can to bring coal back to life – no matter the cost to the people, or the environment, or our future. This is a decidedly sacropolitical landscape.

Narratives such as doing "any and everything" to support coal "at any cost" clearly make statements about who can and can't exist, and *where* they can and can't exist. West Virginia seems to be saying to its low-income population that there is nothing they can do that would sway the opinion of the PSC to support alternatives, and if they don't like that, they should leave. If they don't have the money or ability to leave the area, then they will simply have to "wish" that the PSC will switch to renewables. This is a sacropolitics that actively sacrifices communities in the name of coal; this is an energy politics that has life or death consequences for low-income communities. It disorients the bodily, spatial, and social worlds of West Virginia in violent ways. It is a sacropolitics that says if we cannot afford to leave, then we must learn to manage threats to our health, our home, and our future for ourselves.

Chapter One: Heat or Eat?

> Here's a story: it was Christmas time, and you used to love those little mini fingernail polish things as a little one, and they weren't real expensive. They were like, maybe 90 cents or $1 a piece or something. And I was trying to figure out, like, what I was going to get you to put your stocking and stuff for Christmas. And I was at the checkout line, I was getting a couple of things, just small things, like milk or necessities. And there was this little container full of all those mini fingernail polishes. And I picked out like five of them, because I really wanted to get those for you for your stocking. And I had my checkbook out, because back then, we didn't have, like, debit cards, right? I had to write a check. So I had my checkbook out, and I was looking, you know, like trying to balance what was coming out. And I literally had like, $5 that I could actually spend, and I was debating whether or not to put gas in my car, buy myself lunch for work the next day, or get you those little nail things for Christmas. The guy that was in line, like behind me or in the next line over, he must have seen me really concentrating, and he must have looked in my cart to see what I really had. And I was, like, really focused on this checkbook. I had to have had a pained expression on my face. He came over and he said, "Hey, you have a Merry Christmas." And he shook my hand. And when he shook my hand, there was a $10 bill in it, which covered literally everything that was in my cart. I cried all the way home. That's an example, in Appalachia, of what $10 can do to a person. Never have forgotten that. Never have forgotten it. I still remember his face.
>
> – Mom

When the Public Service Commission claims it will prioritize coal energy over decarbonization at any cost, what they are not saying is that this cost will, in reality, be paid by its ratepayers. The cost is not an abstract notion, nor was it for anyone I interviewed. The cost is the health of low-income West Virginians.

Unfortunately, the impact that high energy burden has on physical health is a gap in energy insecurity literature. In 2016, Diana Hernandez, a professor of public health at Columbia mentioned earlier in the methodology, researched the research gap of energy insecurity in sociology and anthropology. She found that, despite the overlap in housing and energy insecurity, the specific role of

energy has not been taken up as a social or environmental justice issue.[54] In a different article, Hernandez wrote that "the struggle to meet basic household energy needs is a common strain that remains hidden in plain sight."[55] More recently, in 2022, Hernandez wrote that in addition to knowing very little about the experience and prevalence of "energy insecurity," we also lack an understanding of related coping strategies.[56]

This chapter focuses on the physical impact of energy burden, addressing health costs exacerbated by structural issues and the sacrifices individuals make – such as foregoing essential needs like food, water, and medicine – to pay energy bills in a sacropolitical landscape. Energy insecurity is different from energy burden. Energy insecurity is broadly defined as "the struggle to avoid a utility disconnection and/or extreme temperatures inside the home," whereas energy burden refers to paying over 6% of one's monthly income on utilities. If one has a high energy burden, they are therefore energy insecure, but one does not necessarily have to have a high energy burden to be considered energy insecure. For eligibility in this study, I used the economic definition of energy burden because it provided for a more measurable, quantitative similarity between participants.

A high energy burden often signals other potential insecurities. In a study spanning nearly 20 years, a study done by researchers Bohr and McCreery found that households spending 10% or more of their income on heating and electricity faced a 150% to 200% higher risk of falling into poverty

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[54]Hernández, Diana. "Understanding 'Energy Insecurity' and Why It Matters to Health." Social Science & Medicine 167 (August 24, 2016): 1–10. https://doi.org/10.1016/j.socscimed.2016.08.029.

[55]Hernández, "Understanding 'Energy Insecurity' and Why It Matters to Health."

[56] Diana Hernández and Jennifer Laird, "Surviving a Shut-Off: U.S. Households at Greatest Risk of Utility Disconnections and How They Cope," *American Behavioral Scientist* 66, no. 7 (May 8, 2021): page 18, https://doi.org/10.1177/00027642211013401.

compared to those with lower energy costs.[57] Hernandez references Desmond's landmark 2016 study on the social realities of eviction, yet notes that "we still know very little about disconnections in the United States."[58]

While previous literature suggests that low-income families prioritize housing and food bills over utility bills, and use tax refunds, government assistance, and shut-off protections to mitigate utility loss, Hernandez presents "a different possibility and a lesser acknowledged survival strategy – that households use their bodies as buffers against the effects of energy insecurity and by extension poverty."[59] She calls this the "embodiment of hardship," which entails a self-denial of basic needs and comfort before seeking outside resources.

In my research, these strategies were consistently evident across all participants. While some sought outside resources out of necessity, each participant, in some form, initially tried to buffer their energy burden by using their own bodies. This included forgoing food, medicine, and water, as well as enduring unhealthy indoor temperatures. Many participants also resorted to alternative technologies to reduce electricity costs, such as keeping gas stoves running or using wood or coal burners for heat. These strategies presented significant threats to individual and public health. In this chapter, I will examine how the body becomes a resource sacrificed for survival, and how the West Virginia Public Service Commission, and by extension the broader state apparatus, is deliberately overlooking this reality.

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[57]Hernández and Laird, "Surviving a Shut-Off," 5.
[58]Hernández and Laird, "Surviving a Shut-Off," 6.
[59]Hernández and Laird, "Surviving a Shut-Off," 18.

The Body as a Sacrifice: Coping Strategies for Survival

In my research, I identified four primary forms of coping with a high energy burden that demonstrated Hernandez's "embodiment of hardship:" enduring unreasonable household temperatures and other living conditions in the winter and summer, forgoing food, forgoing medicine or using replacements, and forgoing water or drinking water of bad quality.

1. *Enduring unreasonable household temperatures and structural living conditions.*

I sat with James, a 39-year-old construction worker who specializes in concrete, as he grouted the bathtub of his house.

"Where I lose the majority of my money is insulating the house. Insulation is *the* number one. That's what's sad, when you get people already behind on wages they make, then we can't prepare a house for the winter or ever buy a house," he said. James emphasized the importance of having a well-insulated house, and his background as a construction worker and mechanic reinforced this. He explained his yearly winter preparations: each year, he puts duct tape over the perimeter of every window to prevent cold air from coming in and reinforces them with wood. He also goes under his house where the foundation meets the ground, puts a layer of metal sheeting there, and then covers it with stone, wood, and dirt to prevent cold air penetrating the bottom of the house. He spends anywhere from $500 to $1000 each winter to protect the house from cold air, and even then there are issues with gas companies giving proper notice of their work. He explained:

> One time, I was at work working seven days a week in the dead of winter and we work late as hell. Well, they had to do repairs on the gas line so they had to turn it off. But in order to turn the gas back on, you had to be there. I wasn't there cause I was working so much. I came back

> and my house was 30 something degrees inside and I had dogs and I couldn't go nowhere. So I went and bought a bunch of electric heaters and my electric bill skyrocketed just to get through that weekend.

Buying electric heaters or generators are a necessity for many to manage the winter cold, and were a common strain among my interviews. Losing power is a contingency many prepare for in both rural and urban areas of West Virginia, and if the family has pets, the situation can get more dire. In an interview with my mom, a librarian and single mother of two renting a small house, she noted,

> "I keep those solar generators because I can charge them up for free and use them if our power goes out to power a space heater. . . [We lose power] a lot! Oh my goodness, this past winter, we had lost power for like 5 days. And then again in the summer, we lost power for several days. When the dogs were here, we had to take them somewhere else because they were getting overheated. And in the winter time, we basically just had to run space heaters with the generators."

As Whitington and Oguz show in "Mining the Sun," heating older, drafty houses is a concern for low-income folks across West Virginia.[60] They write, "'The young men wanted to hear about real solar installations and whether they worked. They wanted to talk about power inverters and whether those were a rip-off or if they were going to fail in three years or five. . . "A lot of people here are on fixed income, they can't afford any of this," one pointed out. 'People's homes aren't insulated – it's going to take a lot of electricity to heat those drafty houses in the winter.'"[61]

Many of the houses my interviewees lived in required nearly twice as much electricity for heating as it would have if it had good insulation. Whereas the average age of a house in the US is

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[60]Jerome Whitington and Zeynep Oguz, "Mining the Sun: Coal-to-solar Transitions and Energetic Place-making in Appalachia," *Critique of Anthropology* 44, no. 3 (September 1, 2024): 276–93, https://doi.org/10.1177/0308275x241269614.
[61]Whitington and Oguz, "Mining the Sun," 284.

approximately 40 years, the median year in which houses were built in the Wheeling metropolitan area – which includes Triadelphia – was 1948.[62] Jenny, who lives in a downtown Wheeling apartment complex, said, "The ventilation is not adequate. The top and bottom floors of my apartment are 10 degrees different most of the time." My mom echoed that sentiment, and said of the ventilation in her house,

> Oh my god, terrible. It's drafty. Some of the windows were replaced but some were terribly old, they let air in, they let heat out, it's difficult. It's not as bad as the place where grandma lives, because that basement, essentially you'd be paying to heat the garage too because everything rose. It was... a lot there. I think I paid upwards of $200 to pay for heating.

Uneven heating posed a concern not just for those in residential homes, but also for some rural houses that rely primarily on wood and coal burners to provide heating in places with unreliable or nonexistent electricity. A trailer, which is a common and cheap alternative to other housing options, usually has little or no insulation.[63] My Aunt Robin experienced a situation one winter in a trailer with a wood burner where her shampoo froze because it was so cold:

> When me and Dave was married, the wood burner sat here in the living room, and there was a doorway here that went to the kitchen or dining room, which was Matthew's bedroom, and

[62]"Wheeling, WV Housing Demographics," 2024, https://www.point2homes.com/US/Neighborhood/WV/Wheeling-Demographics.html#:~:text=There%20are%2014%2C428%20housing%20units,have%20renters%20living%20in%20them. And Na Zhao and Na Zhao, "The Age of the U.S. Housing Stock," Eye on Housing | National Association of Home Builders Discusses Economics and Housing Policy, February 12, 2024, https://eyeonhousing.org/2024/02/the-age-of-the-u-s-housing-stock/#:~:text=The%20median%20age%20of%20owner,American%20Community%20Survey%5B1%5D.

[63] "What Is the Best Type of Insulation for Mobile Homes? | Koala Insulation ®," n.d., https://koalainsulation.com/resource_detail/what-is-the-best-type-of-insulation-for-mobile-homes#:~:text=Mobile%20homes%20have%20little%20to,you%20and%20your%20family%20uncomfortable.

> clear at the other end of that was another door, and that was our bedroom. Shampoo and conditioner actually froze in the bathroom. So we ended up getting a kerosene heater or space heater to heat our bathroom so our stuff didn't freeze.

In larger houses without a central heating unit, a wood or coal burner provides heat only around the burner itself – it hardly warms up the rest of the house. Nancy, my Aunt Robin's current neighbor, occasionally uses the coal burner for heating when electricity costs are high or when it goes out. She said she sometimes sleeps downstairs, because some nights, "without the fan, you kind of just have to huddle around the fireplace, just getting warm."

Owning a house can be liberatory for many in Appalachia since the payments are often significantly less than monthly rent, but owning a house also puts someone with a high energy burden in a precarious position: if you can't afford to fix a structural problem in your home, it simply cannot be dealt with until finances permit. My mom thought back to our time in one of the bigger houses we'd lived in, saying:

> When you own [a house] on a single income and something went bad, it was expensive. My furnace went out one year: $800. I didn't just have $800 in one sitting, so it took time to fix. There was an issue with water leaking in the basement, so we just dealt with it, which of course led to problems with mold and erosion of the basement.

At this particular house, my mom lived in the basement because there weren't enough rooms for her, my brother and I to stay in. When the basement flooded, so did her room, and when the basement became moldy, she breathed it in. This was of course a significant danger to her health, and

unfortunately an experience many low-income West Virginians tolerate because it is simply less money- and energy-intensive than seeking external sources of help or moving elsewhere.

However, renting also poses its own set of challenges. Responding to a question about the likelihood of fixing ventilation and heating systems in the house she's currently living in, my mom said the landlord would never fix a ventilation issue in the house. She laughed and said, "He would probably say, "I'll get you some cheap supplies" and by cheap he means *the cheapest* you can get." If you can't pay the cost, you simply go without.

Whether it's the constant battle against poorly insulated homes, the reliance on costly and inefficient heating methods, or the financial strain of homeownership, these stories reveal a harsh reality where survival often requires sacrifices of basic needs. The widespread issue of inadequate heating and energy resources not only burdens households financially but also directly threatens their health. The lack of adequate support from both landlords and local utilities further exacerbates these challenges, leaving many to navigate these hardships alone. While many utilities offer programs that prevent shut-offs and can be forgiving when it comes to late payments, that does not remedy the structural burden faced by those weathering the winter cold or summer heat with their own bodies.

Ultimately, these experiences illustrate the urgent need for systemic change in housing infrastructure, utility policies, and support systems to address the root causes of energy insecurity and ensure that all families have access to safe, affordable, and sustainable living conditions.

2. Medicine

In a public hearing at the PSC, Marie Moton of Beckley said she can't afford to pay her power bill *and* her medical expenses at the same time, especially with a disabled daughter.[64] Five of the folks I interviewed reported previously or currently forgoing or delaying their necessary medication or other medical practices to pay their power bill.

My mom told me in her interview that when I was little, we wouldn't have been able to afford my vaccinations without the help of a local doctor:

> When you were little, getting your vaccinations, Dr. Irvin only charged us $25 for all of your vaccinations because I didn't have health insurance for you. And he said to me, 'I don't want you to ever go without medical care for your child.' He was worried, as I was, that you wouldn't be able to be vaccinated because I couldn't afford it.

Cindy and Zion of downtown Wheeling have had their lives dramatically changed in the last four years because of medicine and power costs. In 2020, Cindy contracted COVID. At that time, she was able to bring in most of the money because her husband, Zion, is legally blind with an eye disease that worsens when he's in the sun. However, when she got COVID, she continued to suffer from Long COVID, a chronic condition that occurs after COVID is present in your body for at least 3 months. Cindy said,

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[64]Curtis Tate, "Public Anger Builds Over Appalachian Power'S Rate Proposal," West Virginia Public Broadcasting, August 28, 2024, https://wvpublic.org/public-anger-builds-over-appalachian-powers-rate-proposal/?utm_content=306111416&utm_medium=social&utm_source=facebook&hss_channel=fbp-1425880664324015.

> I'm on several medications with my long covid, and I've been out of my medication for a couple of days because we didn't have the money. I called to find out how much the prescription was, and it was $162. That's for 30 days for one medicine to handle long covid. Covid screwed me up bad. I haven't worked in four and a half years, and that's why I'm volunteering now. Because I'm a volunteer, if I get sick, I can go home and I still have my job. If I'm a paid employee, I get sick and I go home, I worry about my job, which makes me more sick, which sends me home more, rinse and repeat. In the meantime, I can't get any help or support because my husband's part time job makes us too rich.

When I asked what she meant by "too rich," Cindy clarified that the qualification numbers for Medicaid are so low for a family of two in West Virginia that their monthly income put them $30 over the limit during the yearly qualification process, and they were taken off Medicaid and $300 in food stamps for a month.

The place they work, Seeing Hands, is an association that supports the blind and visually impaired with their daily needs but also provides a variety of services, like recreational picnics, bowling events, and workshops that are worked by the blind and visually impaired to support employment. Zion began working there before Cindy, and when he did, his average paycheck was about $300 every two weeks. At the time, this was their primary form of income because Cindy was managing Long COVID. They weren't worried about making the cut-off numbers for Medicaid then because the cut-off for a family of two is $1930 per month. But when Cindy became fully employed at Seeing Hands, it put them $30 over the cutoff limit. "So I'm now working as a volunteer, because I don't dare make a penny," Cindy said. She continued:

> If you don't have the Medicaid backer, you have to pay that copay at time of service, yeah. Well, when you're disabled, you tend to have to go to the doctor fairly often. But on top of being disabled and getting $1,200 a month, minus the Medicare cost, minus your copays . . . It's a lot. But we make too much for food stamps and Medicaid.

Cindy and Zion told me they ultimately moved here because, at the time, Wheeling Hospital had a Long COVID clinic. But when Wheeling Hospital was purchased by WVU Medicine – the state's largest private employer – they closed down the Long COVID clinic right after Cindy and Zion signed their 30-year mortgage.[65] Fortunately, there's a Long COVID clinic in Pittsburgh, just over an hour away from Wheeling. But West Virginia Medicare doesn't cover out-of-state costs. Cindy said,

> It's maddening. It's why we moved here. We moved here so I could go to the long covid clinic. We've been here two and a half years, and I have yet to step foot in the place. It's infuriating because I'm 40 minutes away from the doctors that can help me. I have a state that won't allow me on Medicare because my disabled husband's disability and three day a week part time job makes us too much money.

In fact, West Virginia has the highest rate of Long COVID in the country:

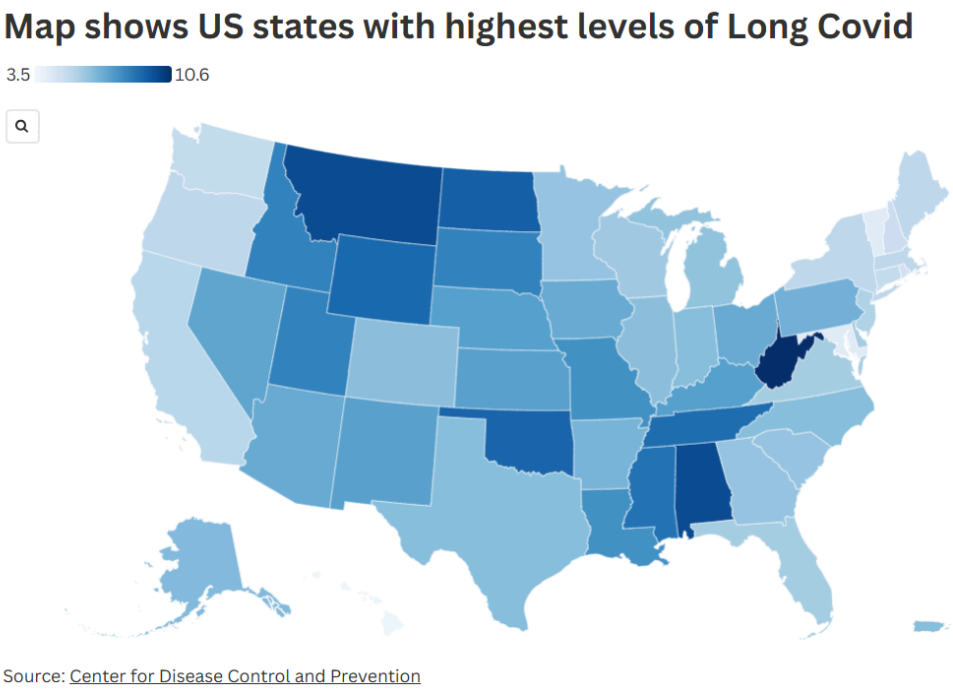

Figure Three. US states with highest levels of Long Covid

[65]WVU Medicine, "About WVU Medicine | WVU Medicine," June 7, 2024, https://wvumedicine.org/about/#:~:text=The%20West%20Virginia%20University%20Health,WVU%20Medicine%20Children's%20in%20Morgantown.

Zion added, "But if I quit my job, we can no longer pay all of our bills, much less eat." Their power bills run anywhere from $300-400 each month, which is nearly half of their monthly income. Should the PSC raise monthly rates by $18%, that would constitute an additional yearly cost of approximately $360, or two weeks of income for Cindy and Zion. Cindy said,

> We had to add two more air conditioners because it's been so freaking hot. And this house was built in 1916 and it has, like, no insulation, so it's hard to keep cool. It holds the heat for whatever fucking reason. It holds the heat in, but the cool just goes right out. Seriously, we have to unplug capitalism from the healthcare system, period. Healthcare should never be for profit. Healthcare is a human right, not something just for the rich. And right now, this country is already for the rich. I can't get care because I'm poor. Healthcare is a human right, not a privilege.

3. Food

Affording food and accessing the correct foods poses a challenge to many low-income West Virginians, even those who are not energy insecure. One in five children face hunger in West Virginia, and the foods that are available are frequently bad quality.[66] West Virginia has the highest obesity rate in the United States at 41.7% of its adult population.[67] 73.9% of the state is either overweight or obese, and 41% of adults in West Virginia, again the highest rate in the county, have high cholesterol.[68]

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[66]"West Virginia | Feeding America," Feeding America, n.d., https://www.feedingamerica.org/hunger-in-america/west-virginia#:~:text=In%20West%20Virginia%2C%20266%2C370%20people,of%20them%2073%2C650%20are%20children.&text=face%20hunger.,to%20meet%20their%20food%20needs.

[67]"Most Obese States in America," n.d., https://www.usnews.com/news/best-states/slideshows/the-most-obese-states-in-america.

[68]"West Virginia Is Again the Most Obese and Overweight State in America," 2024, https://www.wboy.com/news/west-virginia/west-virginia-is-again-the-most-obese-and-overweight-state-in-america/#:~:text=%E2%80%9CIn%20West%20Virginia%2C%2073.9%25,obesity%20epidemic%20in%20West%20Virginia.%E2%80%9D and "Explore High Cholesterol in West Virginia | AHR," n.d., https://www.americashealthrankings.org/explore/measures/High_Chol/WV.

Food insecurity and obesity is a public health crisis in West Virginia. Many low-income folks cannot find the food they need to either stay healthy or to meet their diet restrictions. Cindy expressed a similar concern:

> Because of covid, I had to completely change my diet. I became allergic to everything. I have to eat gluten free, dairy free, corn free, soy free, no nightshade So, no tomatoes, no peppers, no potatoes, and I also have to eat low histamine, which I finally have a medication that's helping with that, which is the one that I've been out of for two days, which was why it was so important I get it filled, right? Because if I eat anything off diet, it makes me sicker. Oh, god, it's just a circle. So my diet, having to eat dairy free cheese, okay, not cheap. I can't use milk, so I get coconut milk. I can't eat anything from a can. It has to be fresh, which is why the garden is my blessing. But because of my diet being so complicated, food is expensive for me, my diet alone is more than the diet for him and his brother, wow, which is two, six foot six, you know, grown men.

Both Jenny and my grandma said they either didn't eat or bought groceries on a tight budget to meet their energy bills for at least one month. My grandma said, "I ate a lot of peanut butter and jelly sandwiches. I cut back on a lot of groceries, and I wanted to save money sometimes to take my grandkids out for ice cream."

My Aunt Robin went without hot food for a period of time living in her trailer because she couldn't afford a microwave or propane for the oven. She said, "I had friends that bought me a microwave and got me a card and said, "This is our mad money. Don't worry about paying it back. That's how I ended up having a microwave." She continued later in the interview:

> I just couldn't afford the trailer on my own. There was no child support because he [her ex-husband] had Matthew, I had Bradly. So between food, electric, gas, water, phone, I couldn't afford it with what my income was. I think I only made $10,000 that year. And because I owned my own business cleaning houses, I couldn't get help.

4. *Water*

It may come as no surprise that West Virginia has some of the worst tap water in the United States. An environmental study in 2019 found that 36 of West Virginia's 55 counties have among the least safe drinking water in the US. In 2014, a chemical spill near Charleston left nearly 400,000 West Virginians without drinking water for a week. The cause of the spill was a chemical spill of over 10,000 gallons of toxic materials into the Elk River.[69] Now, you notice signs everywhere warning you about the water quality. I know many families who only purchase and drink bottled water, including mine, as a result of the 2014 water spill.

Coal plants are also known to contribute to not only groundwater contamination, but also acid rain. The most severe episode of acid rain ever recorded in the United States was in Wheeling in 1979, with a pH of 1.5, a level equivalent to hydrochloric acid in the stomach.[70] The Ohio River is considered one of the most polluted rivers in the United States, ranking as the most polluted inland waterway in the country.[71]

Even so, Zion says regulators will routinely dismiss his concerns about the water quality:

> Water is definitely the biggest issue, not that it's expensive, but because it's so freaking horrible. The water quality is bad. Our water will come out of the spigots brown, and they're like, 'oh, that's normal.' The line is 100 years old and they haven't gone through it yet. There's rust and metal particles and all that crap.

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[69]Emily Allen, "Study Finds West Virginia Counties Among 'Worst in Nation' for Drinking Water Violations," West Virginia Public Broadcasting, September 25, 2019, https://wvpublic.org/study-finds-west-virginia-counties-among-worst-in-nation-for-drinking-water-violations/

[70]"11/10/2003: At 40, EPA's Wheeling Office Still Leads the Way," n.d., https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/51019b8b0e260604852570d60070fe3e.html.

[71]"Cleaning up the Ohio River," Environmental Law and Policy Center, 2024, https://elpc.org/projects/cleaning-up-ohio-river/.

Poor water quality worsens existing health concerns for low-income West Virginians. Cindy added, “At least they’re trying to make improvements. And I have a chlorine allergy so I literally cannot drink tap water. When they super chlorinate the water after a water line break and I wanna take a bath, I'm covered in red spots from being in the water.”

For rural folks as opposed to those who get municipal water, water poses a related but different issue: managing to get it when the power goes out. It’s common for houses in rural areas to get their water from a well, but for low-income rural folks, if the electricity goes out or if they get a shut-off, the pump that pumps water into their house stops working. This isn’t usually a concern for those with municipal water, since city water systems rely on gravity-fed water towers, so the water pressure is maintained by the elevation of the water tower.[72]

For older and disabled folks especially, getting water when the power is out or disconnected is next to impossible. Nancy explained:

> Our well is about 220 feet deep, but it's getting pretty low right now because we've had this drought. So we've been getting water from the creek, and we've been getting water from the grocery store, all that kind of thing, because we're having this drought. So usually, about every eight or nine years we have a real dry spell, and our well goes low. But there's a spring that runs underneath the road, and we use, we have, like a little duck pond that we used to call it duck pond, just not developed anymore, so we get water down there for the dogs and the chickens. I’m not really able to do it anymore, but my husband carries up water to the house everyday.

My Aunt Robin added that when she loses power, she has no water because there’s no pump. This is true, she said, for all of her neighbors. The water is heated with an electric blower heater, which

[72]Summer McAnally, “Can You Use Water When the Power Is Out?,” Harp Home Services, October 27, 2023, https://www.harpcanhelpyou.com/about-us/blog/can-you-still-use-water-during-a-power-outage/#:~:text=Types%20of%20Systems%20Not%20Affected,Showers.

needs a generator when the power goes out. If you can't afford a generator, you either wait it out or, as Nancy said, boil water with the wood and coal combination burner. As electricity prices stand to increase, hot water access to those who can't afford it becomes a privilege. For many, the lack of clean and reliable water isn't just an inconvenience; it's an economic and physical strain that is heightened by the pending electricity rate hikes.

Participants employ strategies like withstanding extreme temperatures, compromising on food, medicine, and water, and resorting to inefficient or unsafe heating methods—all examples of the "embodiment of hardship" that Hernandez describes. These strategies underscore a deep structural inequity, where inadequate infrastructure and the rising cost of utilities leave individuals reliant on their physical resilience to survive, often at great cost to their well-being. The systemic failure to address energy insecurity exacerbates the struggles of low-income households, many of whom own or rent poorly insulated homes that require high energy usage to maintain even minimally safe living conditions. Utility policies, inadequate landlord responses, and limited public resources fail to meet the urgent needs of these households, revealing the critical need for a more equitable and comprehensive approach. Addressing energy insecurity is not just about lowering bills – it's about ensuring that every individual can meet basic needs without risking their health. This requires policy changes that account for affordable, safe, and sustainable energy access, prioritizing the dignity and well-being of all, especially the most vulnerable. Deliberately prioritizing policies that risk the health, safety, and even life of low-income communities in the name of preserving coal as a way of life is not only a form of sacropolitics, but an economically violent act. Economic violence, defined as a form of structural

violence in which specific groups of people are deprived of critical economic resources, has caused households to use their own body as a buffer against energy insecurity.

Disorientation and Reorientation

Many of those I interviewed expressed not only that their physical health was under threat, but they also expressed that their mental health was faltering as a result. Cindy and Zion, for example, expressed that they felt they were betrayed by this system. Cindy said:

> Working outside like we've done for the last 30 years is not something he can do anymore. Welcome to the way America treats its disabled. It was never meant to be this way. And it was supposedly the promise of life, liberty and the pursuit of happiness, whether you find it or not, is your own job. It seemed like that promise has been broken, and we really need more people to stand up and say, hey, you know, why are these qualification numbers for assistance so low when everything costs so much?

This was also the case for my mom, who noted feeling displaced into "an alternate universe" where she wasn't supposed to be after creditors had begun calling her during the night. She recalled feeling stuck, almost duped by what she was told would give her a good future: going to college, getting a job, getting married, and having kids. She said,

> I remember creditors calling me at night. I felt like the poor girl. I remember thinking, I remember crying in my bed at night, thinking to myself, "this is not the life I'm supposed to live." I knew that I had worked too hard to gain the education that everyone told me I needed. I was the first person in my family to do a full four year program. And I just remember thinking to myself, 'this was supposed to pay off for me.' Like, I'm supposed to be living a life better than this. . . And I remember feeling so displaced. I was displaced into an alternate universe where I wasn't supposed to be. I felt *so* displaced. And that was a struggle for a while, because I thought my decisions haven't been that bad. You know? I mean, yes, I had a child when I was

> relatively young, but a lot of people do. But I also, I was divorced from your dad. I couldn't just pick you up and leave three states over, like, legally, I wasn't allowed. I couldn't leave. You can't take a child from the parent unless the parent agrees to it. And there was no way your dad was gonna agree to let me move, you know, 300 miles away. And then I ran into the same issue with Will [my brother]. I would never have wanted to anyway, but still."

My mom's story illustrates how neoliberalism often disregards the structural barriers and systemic issues that prevent folks from achieving financial stability and security, no matter how hard they work. Having done "all the right things" – going to college as a first generation, low-income female student, working hard, and making sacrifices – she still struggled with debt and limited opportunities, bound by circumstances beyond her control. Many of the folks I interviewed felt forgotten about by the system that claims they should be able to "make it" on their own – but it doesn't provide the foundation they need to do so.

The American Dream promises that with hard work and determination, anyone can achieve prosperity, stability, and a sense of belonging. This promise stems from neoliberalism, or the idea that "society's political and economic institutions should be robustly liberal and capitalist, but supplemented by a constitutionally limited democracy and a modest welfare state." The central tenet of neoliberalism is the idea of merit: that in a capitalist world, whoever works the hardest brings home the most. When someone is poor, the logic goes, it's because they haven't worked hard enough.

The core driving philosophy of neoliberalism was best vocalized by Margaret Thatcher in her 'Interview for Woman's Own," where she said:

> I think we have gone through a period when too many children and people have been given to understand 'I have a problem, it is the Government's job to cope with it!' or 'I have a problem, I will go and get a grant to cope with it!' 'I am homeless, the Government must house me!' and

> so they are casting their problems on society. Who is society? There is no such thing! There are individual men and women and there are families.[73]

The proclamation that "there is no society, only individuals" obscures important relationships between people that are fundamental to everyday life. To say there are only individuals puts the burden of failure or success strictly on their own shoulders and completely erases the conditions that one was either born into or forced into by circumstances that limit the resources and opportunities someone has. Furthermore, in Appalachia, where essential services such as childcare, healthcare, mental health support, and housing assistance are often underfunded or nonexistent, it can make it extraordinarily difficult for families to access the support they need – and blaming the individual only serves to obscure this systemic inequality.

Cindy noted feeling this as well, calling attention to the way the system implies certain truths about the people in it, such as being able-bodied. She asked, "People, they don't think about it from the standpoint of, okay, well, I make, you know, $15 an hour. I work 60 hours a week, and I get x amount to spend in a month. But what about the disabled person?" James also considered that not everyone is given a fair starting point in the neoliberal dream, saying, "But it's a lot of work [to be self-sufficient]. You gotta think about everybody. You gotta think, not everybody, for one, can physically do it." Additionally, my mom emphasized the explicit lack of social services or thought put into designing community services and welfare programs:

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[73]"Margaret Thatcher: There's No Such Thing as Society - New Learning Online," n.d., https://newlearningonline.com/new-learning/chapter-4/neoliberalism-more-recent-times/margaret-thatcher-theres-no-such-thing-as-society.

> Not everywhere has after school programs. So the idea of the poor, barefoot, pregnant mom, the reason that that is a stereotype of Appalachia is because there is nothing here to help families that need help. You know, no social services. And even if there are, sometimes they're difficult to get. But as far as, like, there's not enough funding for afterschool programs. There's not enough funding for before care programs like, God forbid, you should try to get a job that you have to be at at eight in the morning because you gotta get your kids on the school bus. You know, before and after, literally, you need something that matches your school schedule with your work schedule, and it just doesn't happen here. Which is why I had to take, and probably a million other mothers who were probably overqualified for all the jobs they're working, had to take part time work multiple part time jobs, because you had to make the schedules work. And, you know, you had to work a four to eight shift, or you had to work an overnight shift, or you had to work a four in the morning till, you know, 8am shift, or something. Or you needed work that you could call someone of a co worker and be like, hey, I need today off. Can you switch with me? Right? Like, can we switch you can't do that in a corporate nine to five, right? Nobody to switch with you. Yeah, you had to work shift work, right? And that's the only way to make it work in a low income, social, economic, suppressed area.

A scarcity of job opportunities, combined with the absence of supportive social services, can make life as a single mother especially challenging and stigmatizing. My mom continued:

> All the time I worried about someone calling child services. . . .The most stigma that I received was from my family. I remember whipping out my EBT card and getting those looks from people like “Those are my tax dollars.” You get that a lot. . . Nobody said anything directly to my face, but you would get this sense of judgment.

There’s a common misconception that single mothers have it easy because they receive "extra" money from child support, as though these funds are simply bonuses rather than essential resources. In reality, child support is intended to help cover the basic needs of the child, such as housing, food, clothing, healthcare, and education. Yet many people overlook the real costs of raising a child, from daycare expenses to extracurriculars, which often exceed what support payments cover. Furthermore, not all single mothers receive consistent or sufficient child support, with many receiving partial

payments or none at all due to enforcement challenges. For those who do receive support, it is often barely enough to offset the high costs of single-parenthood, rather than providing any real financial cushion. My mom explained:

> There was one time I applied and I was $30 over the limit for the benefit because I put child support on there. I was just trying to be honest since I was using it to pay rent and utilities. Here's the thing, everybody's like, "Oh yeah, how much of that actually goes towards the kid? Are you out there buying new clothes with the child support check?" I'm like, first of all, if it were just me, I'd have a one room studio apartment that would probably cost me $400 a month. To have 3 bedrooms, it'd cost me $1000. That child support check pays for your kid to have a room. And then you have higher electricity bills, grocery bills, so even whenever the guys think "they take so much money out of my paycheck," that money doesn't really pay for everything I have to pay for. Somehow it's always seen that "the mother gets the child support and doesn't even do anything, she gets this free money." You have no idea how much it costs! You have no idea. There's a lot of that stigma.

These quotes demonstrate how people feel forgotten about, or as though some promise that was once made to them has now been broken. This is a disorienting feeling, one which is also physically violent as it takes their medicine, health, and ability to perform basic daily household tasks away. People are re-orienting themselves by living their lives without these things, and "adjusting to a new norm" as described by Zion:

> I'm pretty good at keeping track of it, like I'll give you an idea. We got the disconnect for the water today. I have to pay it before Monday morning, and then they shot it off. Yeah, it'll be paid before they'll be paid Friday as late as possible. On a credit card. You know, normal people will probably be like, Oh, my God, it's a disconnect. What the Are we going to do? But we've gotten so used to it. It's like, Oh, we got another disconnect. Okay, what's the date it's got to be paid by? It's become part of the norm.

In my interviews, my participants employed strategies like withstanding extreme temperatures, compromising on food, medicine, and water, and resorting to inefficient or unsafe heating

methods—all examples of the "embodiment of hardship" that Hernandez describes. These strategies underscore a deep structural inequity, where inadequate infrastructure and the rising cost of utilities leave individuals reliant on their physical resilience to survive, often at great cost to their well-being. The systemic failure to address energy insecurity exacerbates the struggles of low-income individuals, many of whom own or rent poorly insulated homes that require high energy usage to maintain even minimally safe living conditions. Utility policies, inadequate landlord responses, and limited public resources fail to meet the urgent needs of these households, revealing the critical need for a more equitable and comprehensive approach. Addressing energy insecurity is not just about lowering bills—it's about ensuring that every individual can meet basic needs without risking their health. This requires policy changes that account for affordable, safe, and sustainable energy access, prioritizing the dignity and well-being of all, especially the most vulnerable.

In *Sacropolitics*, Nugent and Suhail describe how violent transformations of an environment create a fracture in people's daily reality, making what once was familiar feel uncanny or alien. They write, "[People] grasp at whatever elements of trust they can salvage from the wreckage of a world in which they have lost their moorings, in which familiar reference points have all but disappeared and in which those that remain have turned strange and unfamiliar."[74]

This rendering "strange and unfamiliar" of the energy landscape in West Virginia and economic certainty of coal has caused people to sacrifice their bodies as a buffer against economic exploitation. As a result of sacropolitics, sacrificed low-income communities in West Virginia feel

[74] Nugent and Suhail, "Sacropolitics," 121.

disoriented, betrayed, and forgotten about. This physical and mental sacrifice constitutes a form of economic violence that daily threatens the lives and futures of low-income West Virginians.

Chapter Two: Sacrifice and Surplus

> "[West Virginia] is a state where the government kind of just does what the important lobbies want it to do. So let's say you have coal, and coal wants to mine a particular area or set up its transport, set up its center of operations in a particular area. That's essentially going to happen. There are a thousand ways that a coal company can get what it wants - including but not limited to offering the people who live there ostensibly large sums of money to just get out of the way. . . It violates everybody involved on different levels."
>
> – Rain

West Virginia is considered an environmental sacrifice zone by the EPA. Since 1999, it's lost a total land area the size of Delaware to mountaintop removal mining. People perceive the area as, in the words of Zane McNeill and Rebecca Scott, authors of *Deviant Holler*, "a devoid space, a sacrifice zone, a place lost in its backward traditions, a site where people shoot themselves in the foot politically and culturally and a region that produced the Trump presidency."

As Rain, a young, nonbinary West Virginian whose backyard and neighborhood was recently destroyed by a stripmine slurry dam, so acutely explains above, the spatial orientation of WV – where people can and can't live – is something essentially decided by the coal industry. This disruption, or "disorientation," is more than a physical shift; it's an unsettling experience marked by violence, and it impacts how people relate to familiar places. In Appalachia, where coal mining and resource extraction have scarred the land, what remains of people's environment often feels strange, unfamiliar, and even hostile. In this context, Ahmed's insight into the way that violence changes our perception of "here"

resonates deeply. The land and the home—places that should bring security and comfort—become sites of estrangement and discomfort.

What Nugent and Suhail describe when they explain that in the disorienting present once-familiar staples of life are turned "strange and unfamiliar" is similar to Ahmed's disorientation, which she explains is the process of "making the familiar strange." She writes that "disorientation can be a bodily feeling of losing one's place, and an effect of losing a place: it can be a violent feeling, a feeling that is affected by violence, or shaped by violence directed toward the body. At this moment of failure such objects point somewhere else, or they make what is "here become strange." Specifically, those who have been sacrificed by their government have been told their labor and value is extraneous to the needs of capital accumulation. In other words, they are "surplus."

The term 'surplus population' was used by Marx to "highlight the continuous tendency of capital to concentrate labor's productive capacity into labor-displacing technologies," specifically noting rural people who were not fully integrated into capitalist production as an example. To make a profit, the capitalist exploits this surplus value, thereby exploiting the laborer. The worker therefore becomes poorer the more wealth he produces and the more his production increases – the worker becomes an ever cheaper commodity the more goods he creates. Therefore, labor does not only create goods; it also produces itself and the worker as a commodity. Commodities are objects with use-value and exchange-value; in other words, they can be used for things as regular objects but can also be exchanged for other objects.

If a population becomes surplus, then that population is in other words regarded by the state as a group of commodities, to be used and exchanged in the name of capital accumulation. This

population is rendered by the state as a group of objects; they have been objectified. When a group of people are objects, then they can be used or sacrificed without fear of losing something valuable because they are expendable surplus – they are replaceable.

Rebecca Scott in her chapter in *Deviant Hollers* addresses how commodification under neoliberalism can be used to justify the sacrifice of whole communities in Appalachia. She explains,

> Commodification presumes the existence of property rights over processes, things, and social relations, that a price can be put on them and that they can be traded subject to legal contract. In the neoliberal "grid of economic intelligibility," where abstract relations of money, interest, commodities, and value take priority in the name of progress, people are willing to sacrifice communities, job security, and land in the name of economic progress.[75]

An example of this occurs in Vice President J.D. Vance's autobiography *Hillbilly Elegy,* in which he explores how Appalachians suffer from a "culture of poverty" and which neoliberal policies he believes could be written to save Appalachia from itself. It claims to be a 'memoir for a culture' in its subtitle and was revered upon its publication in 2016 for its representation of Appalachian people and for Vance's success in 'escaping.' It presents a monolithic version of Appalachia, one which is both tragic and deserved. "As J.P. Leary (an associate professor of humanities, First Nation studies, and history at the University of Wisconsin) suggests, aided by audiences' faulty assumptions of pornographic truth, images of rural squalor and rotting cities tend to aestheticize, dramatize and romanticize poverty without confronting its origins or offering an alternative account of resilience and

[75] Kandice Grossman, Aaron Padgett, and Rebecca Scott, *Deviant Hollers*, ed. Zane McNeill and Rebecca Scott, *University Press of Kentucky eBooks*, 2024, page 119, https://doi.org/10.5810/kentucky/9780813199290.001.0001.

resistance."[76] Vance's story of Appalachia is the neoliberal presentation of the region: failed because its people suffer from a 'culture of poverty,' which is sad but ultimately deserved. It paints the region as static, dead, and dying. Writing of the book, Ivy Brashear (the Appalachian Transition Coordinator at the Mountain Association for Community Economic Development in Berea, Kentucky) says, "What tends to link books of this type, while they prove incredibly polar, is that their titular subjects almost never exist empirically."[77] As she titles her article, "Keep your elegy: the Appalachia I know is very much alive."

Junior Walk, a man who's spent his life since the age of 19 fighting the industry's destruction of our home, echoes this sentiment. He writes,

> Hillbillies don't need an elegy; not all of us are gone. I'll tell you what could use a good elegy: the once beautiful mountains of West Virginia. So very many of them are gone, dead, murdered for the sake of the mighty green dollar. We still have some of those left, too. Enough worth fighting for. But sometimes that's tough to see through the clouds of blasting dust coming from the barren strip mine above your holler. A man like J.D. Vance wouldn't know the first thing about problems like that.

When communities are constructed as dead or dying, then it justifies sacrificing those communities, because nothing of value was lost. Junior Walk explains this:[78]

> The disenfranchisement of the people here is no accident, just as it is no accident that West Virginia voter turnout has ranked in the bottom fifth of the nation in every presidential election since 1988. Would you vote if you felt so disconnected to and forgotten by the rest of

[76]Zane McNeill and Rebecca Scott, eds., *Deviant Hollers*, *University Press of Kentucky eBooks*, 2024, https://doi.org/10.5810/kentucky/9780813199290.001.0001.
[77]Anthony Harkins and Meredith McCarroll, *Appalachian Reckoning: A Region Responds to Hillbilly Elegy*, 2019, page 141, https://muse.jhu.edu/chapter/2269655/pdf.
[78] Walk, "Commentary: Hillbillies Don't Need an Elegy, but the Mountains Might," August 5, 2024.

> the country? Wealthy interests have seen to it that the people of Appalachia are typecast in this way in order to maintain control and maintain the illusion that when we die from diseases caused by extractive industries, then nothing of value was lost.

Echoing this, Rebecca Scott in her book *Removing Mountains: Extracting Nature and Identity* writes that the Appalachian body is sacrificable: if an area is considered an 'environmental sacrifice zone,' then the people who live there are labeled a sacrifice population.[79] The concept of an environmental sacrifice zone constructs a narrative of a space that fits into the national imagination as sacrificed for the greater good of the nation – a narrative not unlike what I grew up believing.

The rendering of the Appalachian mountains a sacrifice zone has left lasting mental, physical, and emotional damage that frequently goes unacknowledged. Chet Pancake examines how this sentiment is why coal companies often wreak not only physical damage but emotional damage when they destroy any semblance of one's environment, giving little to no warning that it will even begin happening. In his words, coal companies "wait for months or years for normative research or civil lawsuits to 'prove' their personal experience of a traumatizing loss of home that is interlocked with family, land, forest, animals, and ecological context."[80]

Writing on the arboreal blockade of the Mountain Valley Pipeline, Pancake researched critical moments of disorientation that resulted in the activists "leaving everyday life to position their physical bodies in the path of the rural Appalachian natural gas pipeline." He demonstrates in his essay "Arboreal Blockaders" in *Deviant Hollers* how ecological perspectives that derive from "private,

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[79] Rebecca R. Scott, *Removing Mountains: Extracting Nature and Identity in the Appalachian Coalfields*, 2010.
[80] McNeill and Scott, *Deviant Hollers*, 155.

personal, and body senses" carry a primary knowledge. He explores how not only knowledge but entire orientations derive from one's ecological perspective. Pancake writes:

> This would be an alternative view to the idea that our personal senses or feelings are subjective and always fallible and that thus we must seek to find objective reason through scientific study. . . to assert a valid perspective of objective reality to protect ourselves. When an immediate natural ecosystem is experiencing or being threatened by industrial harm, a person's feeling of interconnection with the sensed world can seem to be under a devastating assault.[81]

This was expressed by Rain when they recalled watching their childhood become violently erased and transformed and expressed feeling powerless and disoriented.

> My backyard was once an extremely beautiful overlook. There was once a lake you could see for miles. Well, what happened was that the land. . . for several square miles below the property on one of the sides, the coal company started I believe strip mining. When I say that there was a lake there originally, whatever that was is a drop, and then there's just this giant slurry lake. . . But like, that's an example of taking an environment and completely destroying it and also, not considering, not caring about the people who live there and who you're affecting. . . I felt extremely disoriented. You're obviously going to be extremely disoriented if you are detached from the thing that you love, if you're used to something that you love and you come back to it and it's no longer the same, or you watch it being changed violently- it's just super clear.

As mentioned before, one's "orientation" concerns the intimacy of bodies and their dwelling places The body is the place where central perspective begins within our most immediate dwelling – our home. Our visual and sensual horizons connect back with our bodily senses to construct our reality. So when one's environment is nonconsensually destroyed and someone is powerless to change

[81] McNeill and Scott, *Deviant Hollers*, 155.

it, it is a nonconsensual violation of that intimacy between bodies and their dwelling places. This could cause a rupture in the way in which one relates to their dwelling place.

This disruption, or "disorientation," is more than a physical shift; it's an unsettling experience marked by violence, and it impacts how people relate to familiar places. In Appalachia, where coal mining and resource extraction have scarred the land, what remains of people's environment often feels strange, unfamiliar, and even hostile. In this context, Ahmed's insight into the way that violence changes our perception of "here" resonates deeply. The land and the home—places that should bring security and comfort—become sites of estrangement and discomfort.

Orientations shape not only how we inhabit space, but how we apprehend this world of shared inhabitance, as well as "who" or "what" we direct our energy and attention toward. For Martin Heidegger, an influential philosopher of phenomenology, orientation is about the familiarity of the world. Familiarity, then, is what gives the body the capacity to be oriented in one way versus the other. She writes, "The question of orientation becomes, then, a question not only about how we 'find our way' but how we come to 'feel at home.'" Loving one's home is not about being fixed into a place, but rather it is about becoming part of a space where one has expanded one's body. When we are not 'at home,' we may feel disoriented, or homesick, or both. And, finally, when we get lost, we may need a lifeline to rescue us, to 'point' us in the right 'direction. Ahmed writes, "The lines that allow us to find our way, those that are in front of us, also make certain things, and not others, available. . . When we follow specific lines, some things become reachable and others remain or even become out of reach. Such exclusions are the indirect consequences of following lines that are before us."[82]

[82] Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 25.

In my conversations with Rain, we discussed the feelings of violation that result from ecological destruction and the powerlessness they feel to stop it. They said they believe the first level of violation a coal company does to someone is when they approach the house of someone living on or near a proposed mountaintop removal site, and essentially coerce them unfairly to leave.

> That's kind of like the first level of violation because, I don't know, me personally I think most people don't want to leave their home. They do it if they feel that they have to or at least because they aren't getting paid enough. And then there's the violation of a lot of people who sign away their land don't sign it away by talking to a lawyer, so they get exploited horribly. And it's honestly probably worse with natural gas, but I know it's an issue with coal. And when you're violated by this giant, powerful company. . . it kind of is queerifying your experience.

When I asked what they meant by queerifying their experience, they explained that they don't like the negative connotation that's often associated with the word "queer." Instead, they prefer to see disorientation as something that changes you inextricably, without your consent, but which is not your fault or even inherently bad. It has simply changed your perspective on life by making it odd, or new, or turning once-believed truths on their heads. They continued:

> You're being dominated by something nonconsensually, it's like you're an animal living in nuclear waste, you know? You're being changed inextricably by your environment in a way that you did not consent to, and there's nothing wrong about the thing that you became once that happened, but you simply are that thing, you simply have been changed, warped, by your experience. So I do think that that understanding is really an interesting and new, good way to view what has happened to Appalachia, because it kind of cracks open the understanding of queer. Firstly, it treats what is queer really tenderly- it says "it is okay. This is just simply what happened. We are not judging you. You are simply a product of your environment and there's nothing wrong with that" and acknowledges that. But it also really accurately describes why so many things are so different here than they are in other places. Like, this is a general lesson, anything that impacts you in a significant way to varying degrees of your consent or not could

> obviously have this effect. I just think it is particularly relevant in WV, because WV, Appalachia is *particularly* exploited, *particularly* dominated by these outside forces.

One violation a coal company does to someone is displace them from their home through either nonconsensual destruction of their backyard or coercion with large sums of money, that are likely insufficient funds because many folks don't consult with a lawyer before agreeing to sell their property. But Rain is also concerned with, in their words, "all of the people who are invested in the landscape, not just on an observatory level, but on an emotional level."

Many in Appalachia express deep love for the land. Appalachians have been described as "people of place," as having a sixth sense (a "sense of place"), and being deeply tied to the history of the land. It's important to note, however, that frequently this sense of place is written about in a way that obscures the violent colonization of this land. These narratives obscure the fact that Appalachia only exists the way it does now because it has already colonized its Indigenous population, specifically the Shawnee, Lenape, Mingo, Wyandot, Haudenosaunee, and Cherokee tribes.[83] Furthermore, I want to note that Indigenous people still live in West Virginia and that this colonization is still occuring: they are not dead either. In writing about the ways in which myself, my friends, my family, and my interviewees express love for the land, I want to emphasize the fact that Appalachian settlers are not the first or only people to live on this land or love these mountains.

My mom, for example, said that if she ever left Appalachia, she'd "be so lonely for it." She continued:

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[83]Corey Knollinger, "Wild, Wondering West Virginia: Exploring West Virginia'S Native American History," West Virginia Public Broadcasting, February 8, 2019, https://wvpublic.org/wild-wondering-west-virginia-exploring-west-virginias-native-american-history/.

> It's lovely to think about the idea of going north to the forests of upstate New York or Maine, but I would feel like I'd be relearning the comfort that comes to me here. And I may eventually feel the same way once I've worked enough with the soil and I'd eventually feel connected, but this is everything I've always known. Here, I have a.. I don't wanna say connection because it's more than that. It's part of me.

Rain also noted that despite feeling ostracized by their queerness, they nonetheless feel a sense of community that would be hard to explain to someone who hasn't felt it. They said,

> I don't want to say a sense of belonging but a sense that everyone is a part of something that is just trying to get by, a sense of community, and that's also atmospheric, that sensation of respect, kindness, community all put together. It's a pretty unique feeling, I'm not sure that it's something you can only find in wv, but it does feel pretty unique, and i do think that there's a lot of places where it's like that in wv. . . I think of the mist in the valleys and how it just spreads out very majestically. It can float like a river and it often does. The sun when it touches that mist is just absolutely gorgeous. The mountains themselves kind of fade away and.. They are essentially just different shades of purple as the moisture in the air slowly causes the light to change its... filters out the light, it kind of blue shifts everything. You have this canvass of mountains that get progressively less clear and progressively more purple until they are pretty much just homogenous lumps in the distance. But it's like the entire thing that you're looking at... up and down, up and down.If I had to be very general I would say it's the atmosphere of wonder. You know, you're just kind of looking at something and you're blown away by its beauty.

It is difficult to explain the cultural significance and personal attachment, emotional attachment, and love for the mountains that pervades Appalachia to someone who hasn't experienced it. Ecological violence, for this reason, produces a disorienting effect on those impacted by ecological violence. In nearly every interview, one's loss of environment was lamented as something violent and violating, but nonetheless out of their control. As Rain says, the coal company "will essentially simply get what it wants." The ecological violence that occurs as a result of sacropolitical state-making is

therefore both environmental and emotional. The prioritization of coal at any cost violates not only the natural ecosystems that populate Appalachia but also emotional attachments to that environment.

Chapter Three: Devils You Know

> "I mean punches pulled, holds barred,
> honey pooled, the drinking water of West Virginia mad
> with chemicals and running off in greasy beads.
> The state named for a virgin queen.
> She wore a coat of ermine tails each with a black smudge to prove its whiteness. The ermine'd rather die whilst the coal-smut stoat grieves swartly in the scuttle."
>
> – Joyelle McSweeney

I sat with my grandma as she showed me some old scrip – the currency used to pay the company store in former company towns – she had received from someone she knew who'd worked in the Valley Camp Coal Company, the old Triadelphia mining company. Triadelphia, where I've spent most of my life, is a former company town. My Papap worked there, as did my great grandpap, my great-great uncle, and my great-great grandpap all the way back in the mid-1800s. At least in my own family, coal is generational. My grandma said:

> Grandpa was one of the luckier ones, because he could get a small house. The company houses are still back over on the crick across Middle Creek. Everybody lived in those little coal houses. He didn't get black lung, but he was lucky. I know a lot of coal miners with black lung disease, I know they end up with coal mine explosions, I know a lot of them that lost their lives, and we owe allegiance to those men, you know, for being able to go out there and do that. I feel it's kept us warm and happy and I feel it can keep us warm and happy in the future.

As an important part of my family's history, coal represents wealth, security, and reliability. We're grateful, as my grandma says, that our family worked those undeniably excruciating hours underground to keep the lights on and put food on our plates. Coal is simply "the way it's always been," and it can be difficult to imagine a world outside of that when you're told any alternative can lead to imminent danger. Grandma asked me later how a future was even possible in a world without coal:

> It wasn't very long ago that we had the entire city of New York, Manhattan, Bronx, in complete darkness, no electricity at all. The northeast was in complete darkness, no electricity. So what happens if we do away with bituminous coal? . . . We need to keep that coal energy, because that coal energy is really what's going to keep going. It's going to keep us going. It's when your solar panels no longer work, because the sun isn't going to be out as much as it should be out in the winter time. How are they going to keep things moving if they do away with coal?

The narrative that renewable energy is so unreliable and insecure compared to what they consider as "the backbone of our state's economy" creates an image of a future so uncertain and unstable that any deviation from coal is a direct threat to security. This emotional manipulation has been effective; many people want the return of coal as something that "worked" for them historically because it resonates with the desire for a world where their families and West Virginia more broadly was prosperous.

In fact, the Public Service Commission continues to express the emotional impact that statutes which threaten coal's hegemonic influence over WV have on them. In a short address regarding the EPA's most recent greenhouse gas standards, Chairman Lane said on her YouTube channel in August of this year:[84]

> I confess this latest assault on coal-fired electric energy generation makes me angry. We are talking about the promise that when you go home tonight and flip the electric switch, you will have power to cook dinner, watch television, or use your home computer. It is all well and good to aspire to a higher plane in energy production and to protect the environment. Everyone wants that. But one thing is not getting. Wishing for a cleaner energy supply is doing just that: wishing. You can pass all the laws you want calling on us to switch to cleaner energy, but that won't make cleaner energy more reliable. Until reliability is assured, we realists want to stick

[84] The statute would require aggressive reductions in greenhouse gas emissions from conventional power plants by 2032.# Plants operating after 2038 must capture 90% of their carbon dioxide emissions by 2032, and plants that intend to close by 2039 must reduce their emissions by 16% by 2030.#

> with what we know is a reliable energy source, and that is coal. It is the backbone of our state's economy.

In this quote, Lane portrays the future as unreliable, a future in which one's ability to cook food, be warm, and connect to the internet is threatened. The only way to avoid this threat, she says, is to be "realistic" and "stick with what we know." Furthermore, in this quote she asserts that coal is the backbone of our economy, and this is another reason to continue to stick with it. However, even this is false: the coal industry employed only 10,000 people in 2022. However, the industry provides half as many jobs as the renewable energy sector does, at 17,000. Despite the state's perception (and portrayal of itself) as a coal-loving state, West Virginia was the second-fastest growing place for clean energy in the country in 2022.

In line with the PSC, West Virginia's governor – now senator – Jim Justice also noted he was "angry" in this year's State of the State speech, saying, "So many different people throughout all of the... land and everything have thrown rocks at our natural resource industries, our coal miners and gas workers – it really makes me mad. I don't know how you exist in the state of West Virginia and turn your back on the very industries that have made this state and still continue to do so." Governor Justice is the fourth-wealthiest governor in the United States, a coal mining billionaire with a net worth over $1.5 billion. His primary source of wealth comes from the Bluestone coal mines in McDowell County, the poorest county in West Virginia and fifth-poorest in the country, with a poverty rate 37.6% and per

capita income of around $15,000.[85] The coal mines in McDowell fetch $270 million in wealth for Justice each year.[86]

"I owe my life to this right here," said Jim Justice, West Virginia's governor, in March as he brandished a lump of coal, before signing the latest in a series of bills aimed at propping up the ailing industry. Justice considers mulling a future without coal as "frivolous" and has sought to rescue struggling coal plants and force utilities to retain it as a fuel source.[87]

But of course, this world is changing. No longer is the coal miner the most centrally employed figure in West Virginia, and the average population of the state has only decreased since the 1950s.[88] As the introduction to this thesis demonstrates, the price of energy is skyrocketing at the hands of West Virginia officials. As coal becomes more unpredictable and unreliable, it has a disorienting effect on people who've lived their entire lives around it and whose families historically depended on it. West Virginia government officials, rather than investing in alternatives, have situated the importance of coal as central to restoring a reliable and predictable future, one in which coal jobs return and there is no reason to worry about the future of your family's livelihoods. In this chapter, I will explore how this narrative is an example of symbolic violence, in the sense that one narrative dominates alternative social formations and reproduces social inequality.

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[85]"America's Poorest Counties," n.d., https://247wallst.com/special-report/2024/01/26/americas-poorest-counties/.
[86]Christopher Helman, "The Deadbeat Billionaire: The Inside Story of How West Virginia Governor Jim Justice Ducks Taxes and Slow-Pays His Bills," *Forbes*, April 30, 2022, https://www.forbes.com/sites/christopherhelman/2019/04/09/the-deadbeat-billionaire-the-inside-story-of-how-west-virginia-gov-jim-justice-ducks-taxes-and-slow-pays-his-bills/.
[87]https://www.theguardian.com/environment/2023/jul/31/west-virginia-mining-coal-industry
[88] "West Virginia's Population: Decreasing and Increasing Simultaneously," WV News, n.d., https://www.wvnews.com/news/wvnews/west-virginias-population-decreasing-and-increasing-simultaneously/article_f2533bd8-aa56-11ee-8fb4-170f946bd83d.html#:~:text=The%20overall%20population%20of%20West,peak%20population%20of%20two%20million.

There are three primary dimensions to pro-coal support in the wake of coal's recent price fluctuations: its reliability, its familial and historical importance, and its 'human-ness.' Each of these dimensions, I argue, are attempts made by low-income pro-coal residents to re-orient their lives in the wake of a disorienting experience: the rising cost of coal. As a cultural logic, sacropolitics describes how both the government and communities themselves reckon with pending existential threats to their way of life. One of the ways in which low-income pro-coal communities have reckoned with an increasingly uncertain and dangerous future is by holding onto the dimensions of life that have worked into the past. In the past, "coal has been steadfast," as my Grandma says. Later, she clarified that she still supports coal over alternatives even though she knows coal is harming her because, in her mind, "it's better the devil you know than the one you don't."

The 'human-ness' of coal

The preference of coal over more untried and unknown alternatives was common among people I interviewed. Most people did not like having their energy bill increased and their environments destroyed, but instead preferred to manage the "devil they know" over an elite, technology-led transition. The technological shifts that accompany new energy sources and automation were perceived not only as threats to jobs but also as threats to their autonomy. As Whitington and Oguz argue in "Mining the Sun: Coal-to-solar transitions and energetic place-making in Appalachia," "In coal country the abstract, bureaucratic language of "energy transitions" raises the

specter of the long legacies of underground and mountaintop-removal mining in powerfully intimate and embodied ways."[89]

The fear of automation and economic transition among low-income West Virginians reflects complex concerns rooted in economic insecurity, cultural identity, and a sense of lost autonomy. For a region shaped by coal mining, the shift toward automated and technology-driven industries is not simply about adapting to new job markets. It's a perceived threat to identity, community values, and a way of life that many West Virginians see as intrinsically valuable and irreplaceable. Zeynep Oguz and Mark Goodale note in Critique of Anthropology that "technology-led transitions" often overlook real human relationships with technology, potentially setting them up for failure. They write:

> "People are being increasingly called upon to put their faith in new energy technologies in order to accelerate the process of transition in ways that are blurring the boundaries between human and technological agency. As one group of scholars has put it, the idea that 'technology-led transitions' will lead to "societal benefits" [is] based on unrealistic understandings of people and our relationships with technology and are therefore at great risk of failure.'"[90]

This fear is more than a rejection of technological progress; it represents a desire to retain the values and way of life that coal enabled. The coal industry, while exploitative, also fostered community and mutual support. Songs like Woody Guthrie's Fascists Bound to Lose and Merle Travis's Dark as a Dungeon capture this blend of pride and hardship, reflecting the importance of these values to Appalachia's identity. As Schwartzman notes, calls to "stand by coal" may be thinly veiled attempts to

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[89] Whitington and Oguz, "Mining the Sun," 278.
[90] Oguz, Zeynep, and Mark Goodale. "Introduction: Contesting the Moral Worlds, Scales, and Epistemics of Energy Transitions." Critique of Anthropology 44, no. 3 (September 1, 2024): 209. https://doi.org/10.1177/0308275x241269650.

manufacture nostalgia, but they resonate deeply with communities that have yet to experience the promised benefits of energy transition.

New energy technologies and automated systems present an intimidating shift that seems to prioritize efficiency over human agency. Many in the coalfields of West Virginia are wary of these changes, perceiving them as not only a threat to jobs but also a form of elitism that alienates their values. This sentiment is echoed in the work of anthropologists Zeynep Oguz and Mark Goodale, who argue that faith in "technology-led transitions" can be misplaced, often blurring the lines between human and technological agency. For many in Appalachia, these changes feel like mandates from an outside elite, leaving them with little control over the direction of their lives and communities.

My grandma also questioned the meaning of 'progress' and expressed concerns about an increasingly technological future. She said,

> So we, supposedly, have progressed to the point that everything's easier. Now we have electricity in every house. . . Well, there's no doubt it's made things a lot easier, but it has set our hearts and our minds backward. It's made our physical tasks easier. I mean, I can throw laundry in the washing machine right now, and I can go take a shower all at the same time. Does that make things easier, physically? Yeah, you get a lot more done. And with what you could do way back then it would take a whole day just to do the laundry. So you can do so much more with this progress today, but we've gone backward in what we learned back then, helping our neighbor, compassion, loving one another. Are we going to just become a nation that sits on a computer and tells a robot what to do, gosh, without ever, ever talking to a human being?

As the quote from my grandma hints, alternative sources to coal are perceived as highly technical, elite sources of energy that are inaccessible to West Virginians because, as Jerome Whitington and Zeynep Oguz write in their article "Mining the Sun: Coal-to-solar transitions and energetic

place-making in Appalachia," Appalachia is "a world where other people make decisions that shut down manufacturing, power plants and mining in the region."[91]

Whitington and Oguz clarify that for energy transition experts and elite bureaucrats, their primary considerations are how to roll out renewable energy programs and developments as quickly as possible while, albeit, ensuring social equity and justice in the process. However, what it misses and what my grandma's quote demonstrates is that pro-coal communities feel a loss of agency during this process. Whitington and Oguz write, "From the perspective of this persistent commitment to place-making, however, the question revolves around how people might be able to see themselves in a future they have little control over."[92] My grandma expressed that coal is what was reliable in the past, and therefore because it is human and not technological, we should continue to mine it *and* find more human ways to do so:

> Coal has been... it's been the force of our economy for so many years, and it can be for so many future years, and they decide that they're going to go total electric on everything, with solar panels and made up energy, the windmills, whatever, the fans. We've got too many people now to depend on just solar, and we need to redo, but we need to find better ways, safer ways, and I guess, more human ways to get it. Protecting the human that's getting, that's going, into that mine.

This perspective hearkens back to a nostalgic past, one that has been reimagined to portray West Virginia as once thriving from coal's presence. Coal may have brought jobs, but the wealth generated by this industry primarily flowed out of the state, leaving behind economic instability and underdevelopment. The irony, then, is that while industry leaders and policymakers often call for

[91] Oguz and Goodale, "Introduction: Contesting the Moral Worlds, Scales, and Epistemics of Energy Transitions."
[92] Whitington and Oguz, "Mining the Sun: Coal-to-Solar Transitions and Energetic Place-Making in Appalachia."

loyalty to the coal industry, this call is grounded in a past that is not only idealized but also selectively remembered. It reflects what Derrida might describe as a self-serving "conservation" of history, a way of reconstructing the past to serve present political and economic agendas. As he writes in *Deconstruction and the Possibility of Justice*, this form of conservation uses the past to reinforce certain narratives of identity and belonging, subtly resisting potential for alternative futures or re-orientations.

Masculinities in the coalfields

My grandma's fear of shutting down mining comes not only from an expression of autonomy but also a concern that her ability to live a middle-class life is becoming increasingly unattainable. As Gabe Schwartzman writes in 'Masculinities in the decline of coal,' a chapter in the recently published *Deviant Hollers*, "Neoliberalism, as a system of rationality anchored in conservative family values. . . the maintenance of the middle-class hetero family is culturally exalted and at the same time increasingly unattainable for the working class. As a result, Brown argues, it seems to many that there is 'no future for white men.'"[93]

In a landscape dominated by the coal industry's pasts, presents, and futures, masculinities in the workforce take many forms, but are nonetheless defined by their worth in relation to "real work," which is frequently perceived to be coal mining. Rebecca Scott writes in chapter 2 of *Removing Mountains*, "Miners are not just family men; they are extraordinarily tough guys. Especially in underground mines, local stories suggest, miners daily face physical challenges that would overcome

[93] Schwartzman, McNeill and Scott eds., *Deviant Hollers*.

the average man. The work they do is real work; they have to work hard to keep up with the demands of the company for production and the demands of the nation for energy."[94]

After I had thanked Zion for doing an interview with me at the end of his workday, he said, "Well, we don't work that hard. It's not like we're down in the mines digging coal. We help blind folks work, basically, because I'm not completely blind." This comparison is an example of an orientation – the lines we follow might also function as forms of alignment, or as ways of being in line with others. We are in line when we face the direction that is already faced by others. Following lines, therefore, "involves forms of social investment. Such investments "promise" return – if we follow this line, then 'this' or 'that' will follow, which might sustain the very will to keep going."[95]

In a way, thinking about the politics of "lifelines" helps us to rethink the relationship between inheritance (the lines that we are given as our point of arrival into familial and social spaces) and reproduction (the demand that we return the gift of the line by extending the line). The contours of these lifelines, which exert pressure on people to 'return the gift of the line,' are expressed in expectations of men to be regimented, tough, and with a sense of mastery over environment, and for women to be the caregiver for the man. My grandma, however, noted feeling this pressure but not bending to it:

> My dad really felt that my brothers needed to get an education because they were going to be out there making the money. Well, the woman could be barefoot and pregnant, because she's going to get married, right, and she's going to stay there and raise the kids. Well, that didn't happen in my life. My dad thought that's what was going to happen. No. I went right out there to work, but what was expected of me was barefoot and pregnant. That's a good West Virginia

[94]Scott, *Removing Mountains: Extracting Nature and Identity in the Appalachian Coalfields*.
[95] Ahmed, *Queer Phenomenology: Orientations, Objects, Others*, 24.

> saying. They say that usually the women in West Virginia were barefoot and pregnant. Well, that didn't happen. I had a job and went to work everyday. I brought the bacon home.

Not only is there masculine pressure on women to take care of men, but there is no leniency when men neglect to conform to these standards. As a construction worker in what James, a straight man, called a "very straight, very masculine" environment, James felt this pressure. He explains that, when he expresses the notion of restraint or any small criticism of the environmental impact of the plant [chemical plant he works at], they call him a 'tree hugger.'

> [The plant is] disgusting. There's shit leaking everywhere, whether it's liquids, vapors, everything, it's crazy what this – think about it. People breathe it in everyday. You've gotta wear a full face mask. It's bad when they tell you to pay attention to what you're breathing. And I get called a tree hugger for thinking it's wrong. Way I see it, why do you have to overly harm something if you don't have to? For example, I love diesel trucks, everybody knows that, right? I love all-power diesel, but then because of the soot and all that black smoke they put gas systems in [the truck's exhaust]. There's no reason to run down the highway puffin' all that damn black smoke.

This romanticization of the past and value of masculine labor obscures an important reality: the mines are incredibly dangerous. For Josh, a coal miner I interviewed, the mine is terribly dangerous. A worker on the night shift who analyzes coal samples, said he's always breathing in black dust due to both the insufficient health standards maintained by the mine but also the inherent danger of working there.

> Usually, when I take off my mask, it doesn't do 100% and I have black dust in my nose. Even being in that building I have black dust on my nose. I've been coughing up a lot of phlegm, which I never had that issue beforehand.

Furthermore, not only are the health standards lacking, but the job itself is dangerous. He works as a pulverizer, which is a device that grinds coal into fine particles for combustion in the boiler. “After ten samples I’m just in a plume of coal dust. I just wanna get out of there, but every time I apply somewhere else, I don’t have enough experience.”

Reliability

In addition to threatening the ability to live a middle-class lifestyle, many were worried that the automation of alternative energy sources could be particularly susceptible to harmful acts of cyber or bio-warfare. They felt that if our energy systems were entirely automated, it would leave our grid down and prevent its ability to provide electricity. However, as my interviewees noted, coal is physically available and stockpiled, so it doesn’t really come with that risk. For this reason, my grandma expressed concern about what might happen in the event of a cyber attack that destroys renewables’ ability to provide power:

> It wasn’t very long ago that we had the entire city of New York, Manhattan, Bronx, complete darkness, no electricity at all. The Northeast was in complete darkness, no electricity. What happens if we do away with bituminous coal that has been around for years, and we still have enough in in West Virginia, we have enough coal to last for hundreds of years. West Virginia is the second largest state for coal production, Marshall County is the highest, I believe, and here is the second highest. . . . There needs to be more protection for the miner, but we do keep need to keep our coal, and we need to keep that coal energy, because that coal energy is really what's going to keep going. It's going to keep us going. It's when you're when your solar panels no longer work, because the sun isn't going to be out as much as it should be out in the winter time. how are they going to keep things moving if they do away with coal?

This quote from my grandma above demonstrates that part of their concern around solar and wind is that climate change is not, in reality, the "real" problem; instead, renewable energy is actually a Trojan horse for an alternative agenda that aims to render Appalachians powerless. James, a construction worker, said he prefers self-sufficiency to grid-provided electricity. He expressed that he prefers coal, a rock that can produce energy even when the sun goes down, to solar panels:

> I can't be self-sufficient [with solar panels]. I'd love to not have to rely on those for heat or what if there's some kind of war? Like a cyber war against us? Solar panels, you have to have a battery bank, that's the thing.

I recall my high school bluegrass teacher Mr. Turbanic on the phone with me as I explained this project. He sent me videos and pictures of a coal stockpile along the river near his house, and said it made him feel safer to know that coal is there and *will* be there in the event that the increasingly dangerous future that they've been told about comes about. My grandma expressed a similar concern:

> [The danger] could be somebody in your family, it can be the next door neighbor, it can be a loved one down the road, you don't know who your enemies are anymore. I had a saying the other day that I thought was fabulous, and if I can remember the way it went: 'I want someone who is a friend when I'm in the room or when I'm not in the room.' And I thought, how wonderful that is. So why can't we all be like that?

Sacropolitics, as a cultural logic, takes hold in low-income communities as a way of preserving the economic success, self-sufficiency, and protection that coal provided to them in the past. As the PSC doubles down on the "coal at any cost" narrative, no alternatives are being offered. Because of this the price of coal skyrockets, and the future is painted as increasingly unreliable. The one thing that

offered reliability, security, and safety in the past (despite being acknowledged as harmful) was coal. Pro-coal low-income communities would rather sacrifice their health and income and environment to preserve a way of life that they are at least familiar with as opposed to the frequent elite-led transitions that are feared to remove their autonomy – to preserve "the devil I know."

Conclusion

It is impossible to accurately capture the beauty of the coalfields or the value of the people in them. I value anthropology as a discipline because it has given me the opportunity to be more candid than what is typical in academic work, and I admit at times my writing has been influenced by my own stake in this work. I grew up witnessing firsthand how coal is taking lives. The stories I've briefly included only begin to touch on how West Virginia's sacropolitics has hurt my neighbors, my family, and myself – but at the same time, the stories written here only begin to touch on the vibrancy of life in this region.

Contrary to the political imagination of Appalachia, an imagination which sees Appalachia as in the words of Zane McNeill and Rebecca Scott, authors of *Deviant Hollers*, "a devoid space, a sacrifice zone, a place lost in its backward traditions, a site where people shoot themselves in the foot politically and culturally and a region that produced the Trump presidency," Appalachia is diverse and much more politically progressive than frequently accounted for.[96] In fact, as Dwight D. Billings writes in his essay "Once Upon a Time in 'Trumpalachia,'" Bernie Sanders beat Hillary Clinton in every county in West Virginia and almost all coal counties in the 2016 presidential primaries.[97] Sanders won twice as many votes as Trump in the primary election in many West Virginia counties in 2016: but when the DNC chose to run Clinton – notorious for her "basket of deplorables" comment about

[96] McNeill and Scott, *Deviant Hollers*.
[97] Dwight D. Billings, Harkins and McCarroll eds, *Appalachian Reckoning: A Region Responds to Hillbilly Elegy*, 53.

low-income rural folks – as the Democratic candidate, 43% of registered voters simply did not vote.[98] In McDowell county, West Virginia's poorest county, 73% of registered voters simply stayed home.[99]

Appalachia is a diverse and progressive place not only politically but also culturally. Many projects in Appalachia, like Rachel Garringer's *Country Queers* oral history project, or the Coal River Mountain Watch, or Wheeling's "Friendly City Project" led by one of the first trans city councilmembers in the country, Rosemary Ketchum, demonstrate Appalachia's diversity. The monolithic presentation of Appalachia is not only incorrect, but it is used as a way to further justify extraction and sacrifice. Frank Rich, in his article "No Sympathy for the Hillbilly," advocates for letting Appalachians "reap the consequences for voting against their own interests."[100] Charles Pierce promised he would "never sympathize with regretful Trump voters" because "they brought this disaster on themselves."[101] The headline of a *Daily Kos* article read in 2016, "Be happy for coal miners losing their health insurance. They're getting exactly what they voted for."[102]

When Appalachia is framed as monolithic and *deserving* of sacrifice, it obfuscates existing diversity in the region and also alternatives to new political imaginations. Complicating this narrative is one of the first, yet most important, steps to combating sacropolitics as it has arisen in West Virginia. Personally, I was inspired to undertake this thesis because I grew up here, I love the people, and I find

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[98] Dwight D. Billings, Harkins and McCarroll eds, *Appalachian Reckoning: A Region Responds to Hillbilly Elegy*, 53.
[99] Dwight D. Billings, Harkins and McCarroll eds, *Appalachian Reckoning: A Region Responds to Hillbilly Elegy*, 53.
[100] Frank Rich, "Frank Rich: No Sympathy for the Hillbilly," *Intelligencer*, March 20, 2017, https://nymag.com/intelligencer/2017/03/frank-rich-no-sympathy-for-the-hillbilly.html.
[101] Charles P. Pierce, "Why I'll Never Sympathize With Regretful Trump Voters," *Esquire*, February 28, 2017, https://www.esquire.com/news-politics/politics/news/a53491/regretful-trump-voters/.
[102] "Be Happy for Coal Miners Losing Their Health Insurance. They're Getting Exactly What They Voted For," Daily Kos, December 12, 2016, https://www.dailykos.com/stories/2016/12/12/1610198/-Be-happy-for-coal-miners-losing-their-health-insurance-They-re-getting-exactly-what-they-voted-for.

hope every day in these mountains. I write this thesis because I dream of a future where coal no longer defines my state, and in which we can create our futures for ourselves.

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