

Environmental Justice, Design & Infrastructure: Who Builds, Who Decides?

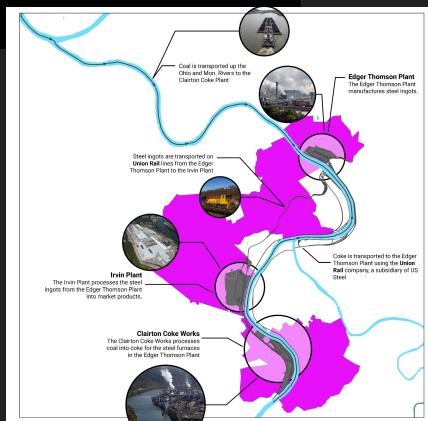
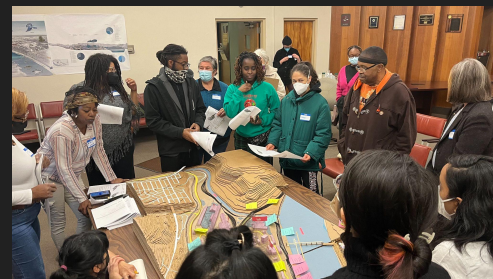
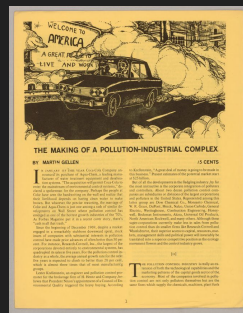
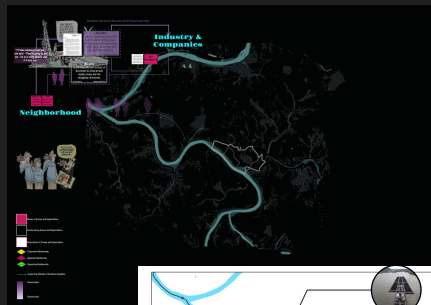
Neighborhood Allies + UpstreamPgh
Wednesday, April 1, 2026

Nida Rehman
Carnegie Mellon University

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Photograph by Edith Abeyta

WELL NAME: STURGEON
PUMP# MIM 003-2004
WELL TYPE: MOUNTAIN
OPERATOR: HERRON OIL CO
OPERATOR NUM: 000-4000
WELL STATUS: ACTIVE



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Environmental (in)justice

Laura Pulido

Environmentalism and Economic Justice

Two Chicano Struggles in the Southwest



Progress report

Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence

Laura Pulido
University of Southern California, USA

Abstract
In this report I argue that environmental racism is constitutive of racial capitalism. While the environmental justice movement has been a success on many levels, there is compelling evidence that it has not succeeded in actually improving the environments of vulnerable communities. One reason for this is because we are not conceptualizing the problem correctly. I build my argument by first emphasizing the centrality of the production of social difference in creating value. Second, I review how the devaluation of nonwhite bodies has been incorporated into economic processes and advocates for extending such frameworks to include pollution. And finally, I turn to the state. It is in fact, environmental racism is constitutive of racial capitalism, then this suggests that activists and researchers should view the state as a site of contestation, rather than as an ally or neutral force.

Keywords
environmental racism, racial capitalism, state violence

I Introduction

We need to rethink environmental racism. The environmental justice (EJ) movement arose in the early 1980s and over the last 35 years activists have succeeded at blocking both new projects and the expansion of existing ones. However, it is questionable if the environments of vulnerable communities have actually improved through EJ. There is compelling evidence that environmental disparities between white and nonwhite communities, what I call the environmental racism gap, have not diminished and that the situation may have worsened (Bullard et al., 2007). EJ scholars have limited at why the movement has failed to achieve substantive results, including industry capture

of the state (Faber, 2008; Livianos, 2012; Hollifield, 2007), state co-optation of EJ activists (Harrison, 2015), and a less oppositional EJ movement (Carter, 2014; Brundage, 2005). Yet, I argue a fundamental problem characterizing both EJ activism and research is the failure to theorize environmental racism as a constituent element of racial capitalism. Numerous problems stem from not conceptualizing the problem accurately, including not giving sufficient weight to the ballast of past racial violence, and

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CHAPTER 1

Anatomy of Environmental Racism and the Environmental Justice Movement

Robert D. Bullard

Communities are not all created equal. In the United States, for example, some communities are routinely poisoned while the government looks the other way. Environmental regulations have not uniformly benefited all segments of society. People of color (African Americans, Latinos, Asians, Pacific Islanders, and Native Americans) are disproportionately harmed by industrial toxins on their jobs and in their neighborhoods. These groups must contend with dirty air and drinking water—the byproducts of municipal landfills, incinerators, polluting industries, and hazardous waste treatment, storage, and disposal facilities.

Why do some communities get “dumped on” while others escape? Why are environmental regulations vigorously enforced in some communities and not in others? Why are some workers protected from environmental threats to their health while others (such as migrant farmworkers) are still being poisoned? How can environmental justice be incorporated into the campaign for environmental protection? What institutional changes would enable the United States to become a just and sustainable society? What community organizing strategies are effective against environmental racism? These are some of the many questions addressed in this book.

This chapter sketches out the basic environmental problems communities of color face, discusses how the mainstream environmental movement does not provide an adequate organizational base, analysis, vision, or strategy to address these problems, and, finally, provides a glimpse of several representative struggles within the grassroots environmental justice movement. For these purposes, the pervasive reality of racism is placed at the very center of the analysis.

THIRD EDITION

DUMPING



IN DIXIE

Race, Class, and Environmental Quality

Robert D. Bullard

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1. Forgotten Places and the Seeds of Grassroots Planning

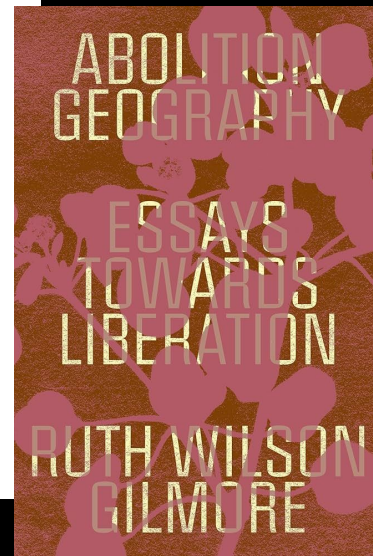
Ruth Wilson Gilmore

THE MIX

Forgotten places are not outside history. Rather, they are places that have experienced the abandonment characteristic of contemporary capitalist and neoliberal state reorganization. Given the enormous disorder that “organized abandonment” (Harvey 1989, 303) both creates and exploits, how can people who inhabit forgotten places scale up their activism from intensely localized struggles to something less atomized and therefore possessed of a significant capacity for self-determination? How do they set and fulfill agendas for life-affirming social change—whether by seizing control of the social wage or through other means? In this chapter I will conceptualize the kinds of places where prisoners come from and where prisons are built as a single—though spatially discontinuous—abandoned region. I will then present three exemplary facets of the process I am trying to think through by doing and writing, in order to highlight the potential of certain kinds of research. Here indeed is where scholars can make a difference: not because we have technical expertise (although that matters) but rather because we have the precious opportunity to think in cross-cutting ways and to find both promising continuities and productive breaks in the mix of people, histories, political and economic forces, and landscapes that make up forgotten places (Moten 2003; Robinson 1983; see also Hart 2002a).

Why prisons and prisoners? I didn’t turn to the topic because I was driven as a scholar to answer some pressing questions. Rather, the issue hailed me in the early 1990s, when I started to work with some prisoners and their families, and persisted as I pursued a PhD in geography and employment in academia. The entire world of premature death and criminalization was not at all new to me: I’ve had family members who have done time, some of us have been harmed by others, and one of us

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Suspending Damage: A Letter to Communities

EVE TUCK
State University of New York, New Paltz

In this open letter, Eve Tuck calls on communities, researchers, and educators to reconsider the long-term impact of “damage-centered” research—research that intends to document peoples’ pain and brokenness to hold those in power accountable for their oppression. This kind of research operates with a flawed theory of change: it is often used to leverage reparations or resources for marginalized communities yet simultaneously reinforces and reinscribes a one-dimensional notion of these people as depleted, ruined, and hopeless. Tuck urges communities to institute a moratorium on damage-centered research to reformulate the ways research is framed and conducted and to reimagine how findings might be used by, for, and with communities.

Dear Readers,

Greetings! I write to you from a little desk in my light-filled house in New York State, my new home after living in Brooklyn for the past eleven years. Today, New York does not seem so far from St. Paul Island, one of the Pribilof Islands of the Aleutian chain in Alaska, where my family is from and where my relations continue to live. Something about writing this letter closes the gap between these disparate places I call home.

I write to you about home, about our communities. I write to identify a persistent trend in research on Native communities, city communities, and other disenfranchised communities—what I call damage-centered research. I invite you to join me in re-visioning research in our communities not only to recognize the need to document the effects of oppression on our communities but also to consider the long-term repercussions of *thinking of ourselves as broken*.

This is an open letter addressed to educational researchers and practitioners concerned with fostering and maintaining ethical relationships with disenfranchised and dispossessed communities and all of those troubled by the possible hidden costs of a research strategy that frames entire communities as depleted.

“For many of us, the research on our communities has historically been damage centered, intent on portraying our neighborhoods and tribes as defeated and broken.”



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“Desire, yes, accounts for the loss and despair, but also the hope, the visions, the wisdom of lived lives and communities.”



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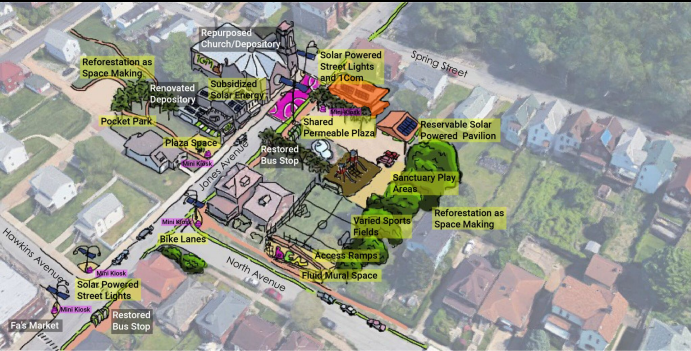
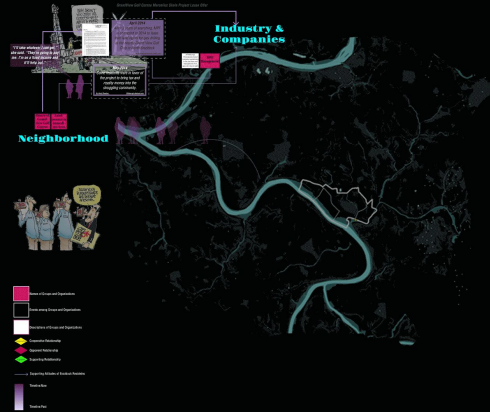
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“Desire is about longing, about a present that is enriched by both the past and the future.”

2021 - Past Harms, Future Visions



ONLINE PLATFORM (2021)
"Past Harms, Future Visions", an action-design research project and online exhibition in collaboration with North Braddock Residents For Our Future. The platform documents and archives efforts to fight for environmental justice in Braddock, North Braddock, East Pittsburgh and surrounding communities.

<https://nbrfof.org/>

Past Harms, Future Visions: Co-narrating Extraction, Toxicity, and Advocacy

Nida Rehman, Edith Abeyta, and Nica Ross

Carnegie Mellon University, North Braddock Residents For Our Future



Stories of Change
A project of Imagining America



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Economic and social disinvestment in towns like Bradford and North Bradford (promoted by the local council and the private sector) has created a systemic racism that these communities are now struggling to overcome. The racism has affected youth along Bradford Avenue, whose estate built over street fronts and cultural facilities has been closed down, leaving the area a desolate and desampere and void. Yet, in this context of racism, the community has been able to build communities that have established a range of local and informal at different scales to tie the gaps in the public services. The community has been able to build food access, and children's recreation and education facilities.

In this section we map and trace on some of these existing community infrastructures and their connections across physical spaces, institutions, and social networks. We also map the existing facilities providing free or subsidised healthcare, education, and employment opportunities and accessibility projects such as Bradford's farms and the community garden, playgrounds, libraries, to name a few. We also map the existing projects and the Free Clinic, community centres, and other community services that provide services provided by the Bradford Community Library, and others. We draw from our literature review and the fieldwork to map these resources and support systems are used to build the community's resilience and to explore ways to help build on and extend these important projects, looking specifically at issues of racism and social disinvestment, and how well as the library's reach across the community.

Economic and social disinvestment in towns like Bradford and North Bradford prompted by the loss of jobs and the decline of the coal and textile industries has left these communities as some of the poorest in the country. The area is affected today along Bradford Avenue, whose entrance overlooks street fronts and cultural life in the heart of North Bradford. The area is a disrepair and decay. Yet, in this context of poverty and despair, the residents of these communities have established a range of local and informal at different scales to tie the gaps in the social and economic fabric. From food access, and children's recreation and education to health care.

In this section we mark and trace on some of these existing community infrastructures and their connections across physical spaces, institutions, and social networks. We explore the ways in which activities provide for or substituted healthcare, education, and recreation. We also explore accessibility projects such as Bradford's farms and the community garden, playgrounds, libraries, to name a few. We also explore the work of the Project and the Free Clinic, community centers, and the role of the community in providing social services provided by the Bradford Community Library; and others. We draw from our interviews with community members and explore these resources and support systems are used to address the needs of the community. We explore ways to help build on and extend these important projects, looking specifically at issues of equity and social justice. We conclude with a call as well as the library's reach across the community.



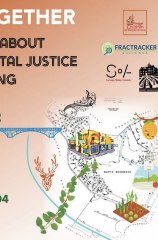
Keyi Chai, Ruoyu Li, Jonathan Pett, and Xiao X.

Bradford and North Bradford have been subject to a history of environmental injustice and pollution. The area has a long history of environmental health as well as local ecology. It is also intimately connected to the history of the coal industry, an industry that has left many scars in the two boroughs we serve. This project explores how ecological science and community could be used to help the community from a framework of environmental justice. The project could help to identify areas that are beneficial to the residents of Bradford and North Bradford, the mitigate and remediate the areas that have been harmed by the history of pollution, and that transform vacant lots into spaces that are beneficial to the community. The project would formal and informal community efforts already underway to care for "vacant" spaces, particularly in the North Bradford area.

The map on the following page was produced to understand and make visible the ecological connections between Bradford and North Bradford for the project's purposes. Each lot that was listed as "vacant" by the bestowee open map (produced by the Bradford and North Bradford Council's property assessment) was mapped and labeled. The map also shows the locations of the following: gardens and gardens and moved lands, terraced rowings. Alongside this, we collected information on the history of the area, including both on scientific resources (such as the geological map produced by the British Geological Survey) and the places of pollution from the Edge Thompson plant and various from the coal industry and mining and resulting in the effects of pollution and the presence of



Family Friendly



Building on insights and through reflection on these different conversations, experiences, and materials, the students worked collaboratively to outline proposals for desired futures for the built environment, spatial policy, and urban action. These proposals were framed around the themes that long-term social and environmental health, decarbonization, equity, and spatial justice. Rather than making a division between research and design, we see "design as part of the research process" and these proposals as a way to prompt questions and advance further explorations about different possibilities for spatially just futures.



Yongwen Dai, Rishu Narang, and Ruoxi Xi

The Edgewood steel works has operated at the heart of the Minneapolis riverfront for over a half a century since its inception in 1872. The decline of the steel industry and the environmental effects of the plant have affected the lives of people in its surrounding communities in various ways. Discussion with community members and attendance at resident-led town halls has shaped our understanding of this plant and its impact on the community. With the help of these interviews we have produced a future vision, which over the course of these long-term ethnographic trips, will transition to cleaner industry, and opportunities to enhance the local ecology, regenerate land, and to create community infrastructures and open spaces. In the following pages we elaborate on these three phases.



2023 - Past, Present and Future: Edgar Thomson Steel Works

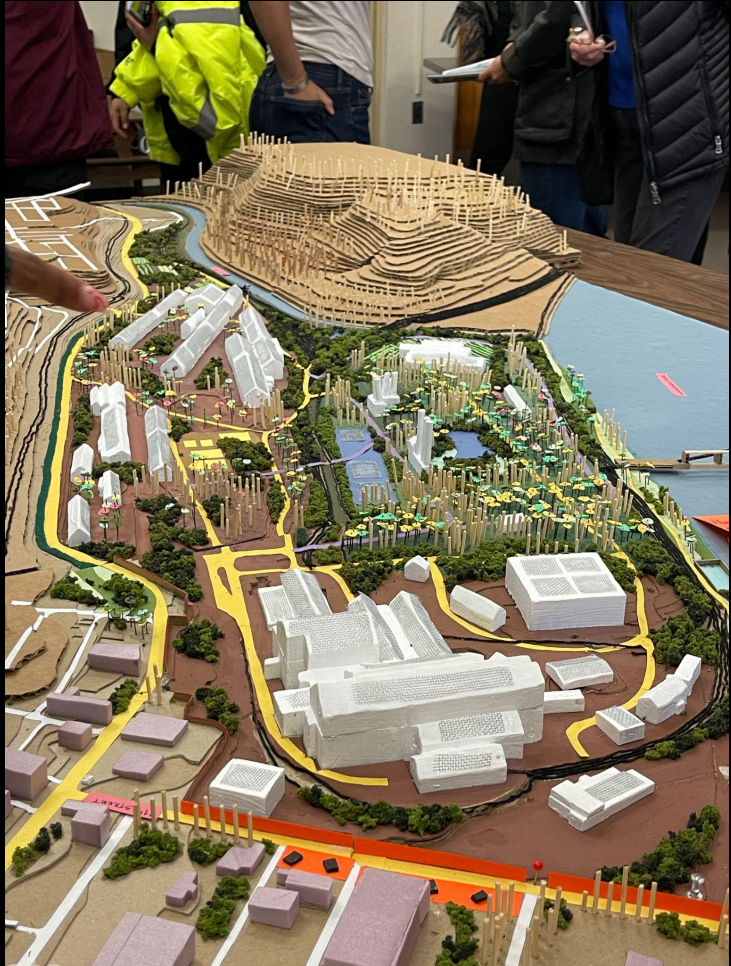
**Community meeting - North Braddock Municipal Building
March 17, 2023**

- Transition to more sustainable forms of industrial production (such as Green Steel)
- Opening a majority of the area for reclamation as an urban forest;
- Creating renewable energy infrastructure for the benefit of the community.
- Reusing buildings on the site
- Activating current boundaries of Edgar Thomson (now) especially along Braddock Avenue and 11th street.
- Move away from a framework of private ownership to collective forms of stewardship.



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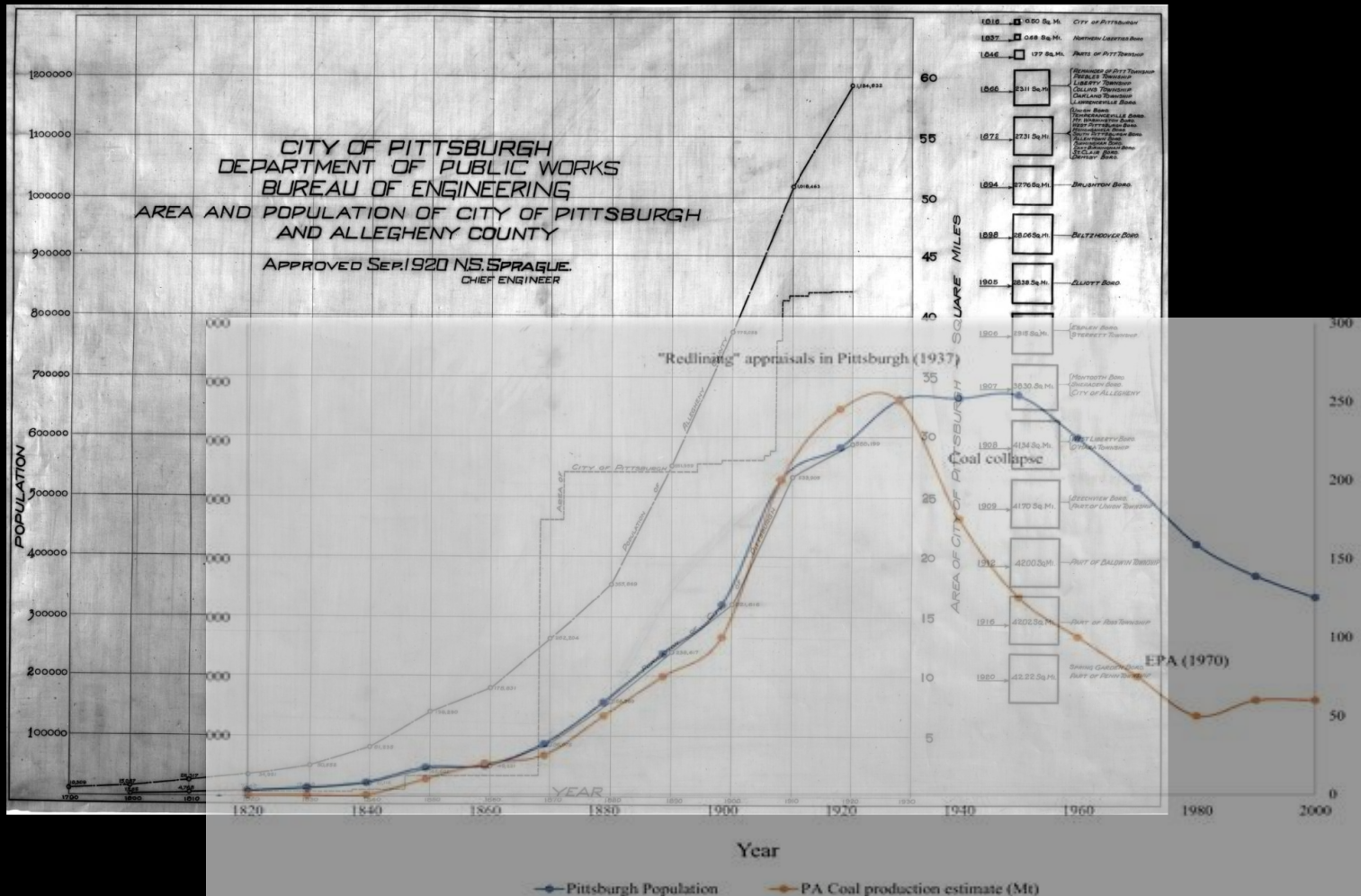
2023 - Past, Present and Future: Edgar Thomson Steel Works



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2024 - Taking back the Air: Collective learning, advocacy, and design for a healthy environment





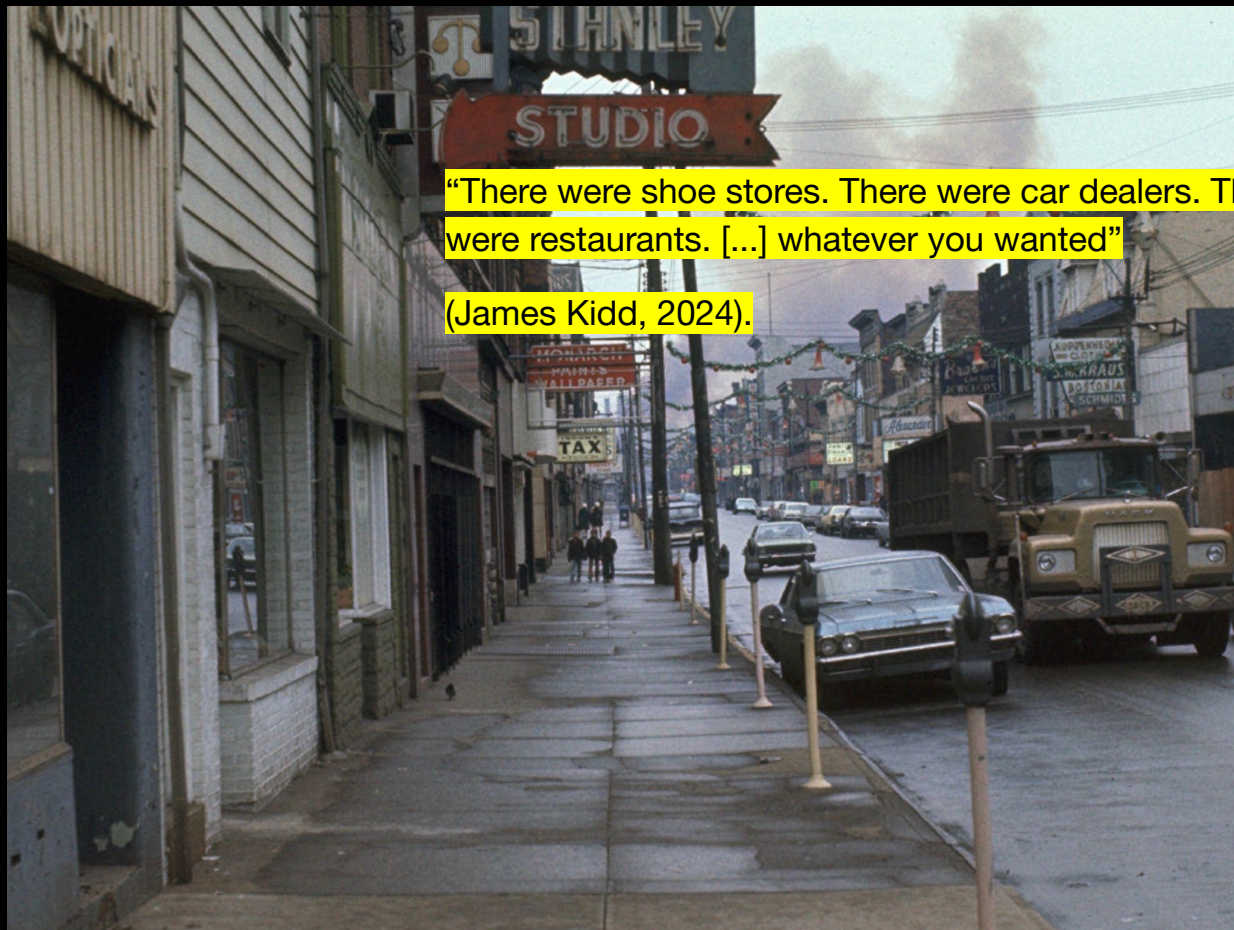


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BRADDOCK, PA

"A long time ago, things got broken here. People got sad and left.
Maybe the world breaks on purpose, so we can have work to do."

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"There were shoe stores. There were car dealers. There were restaurants. [...] whatever you wanted"

(James Kidd, 2024).

Photograph of Braddock Avenue, Tony Bubala ca 1980

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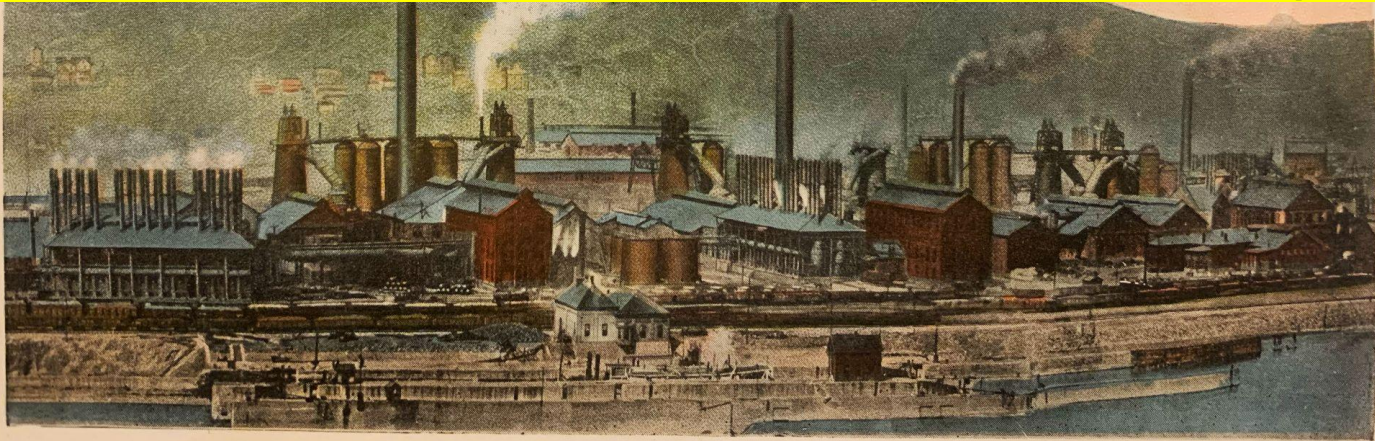
University of Pittsburgh Medical Center is an \$8 billion nonprofit that was paying the CEO 4.5 million in 2008. In 2009 a \$14 million Senior citizen facility was built next to our hospital, but, on Jan 31, 2010 UPMC Braddock closed.

Photograph by Latoya Ruby Frasier



Blast Furnaces, Edgar Thompson Steel Works,
Carnegie Steel Co., Bessemer, Pa.

Boom? Or accumulation, acceleration, and interrupting the futures of capital



Souvenir of Steel Industry Pittsburgh District, 1910; Source: River of Steel, Postcards, Stereoviews, and Lantern Slides Collection.

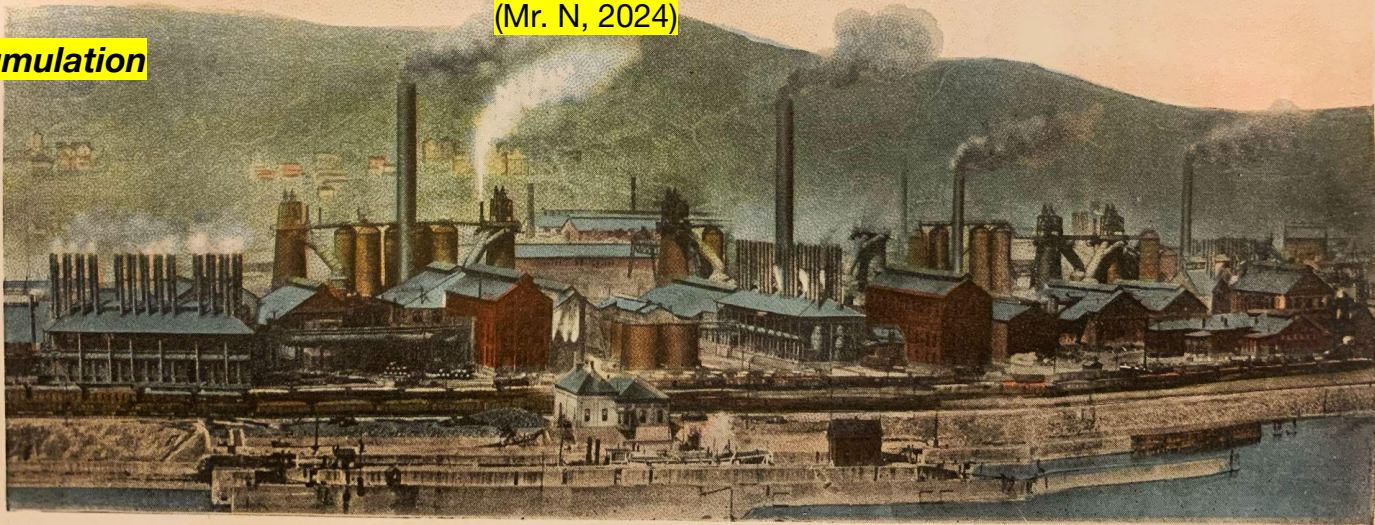
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Blast Furnaces, Edgar Thompson Steel Works,
Carnegie Steel Co., Bessemer, Pa.

"We had to be breathing that in. Man, that was back in the mid-'60s. I was about 10 years old... I seen it on the cars and in the crevices when you walk, you know, the abandoned buildings, the sidewalks."

(Mr. N, 2024)

Accumulation



Blast Furnaces, Edgar Thompson Steel Works,
Carnegie Steel Co., Bessemer, Pa.

“white guys ... in the f[...] library ... excuse me ... they had a place where you could take a shower. Black guys couldn't do it.

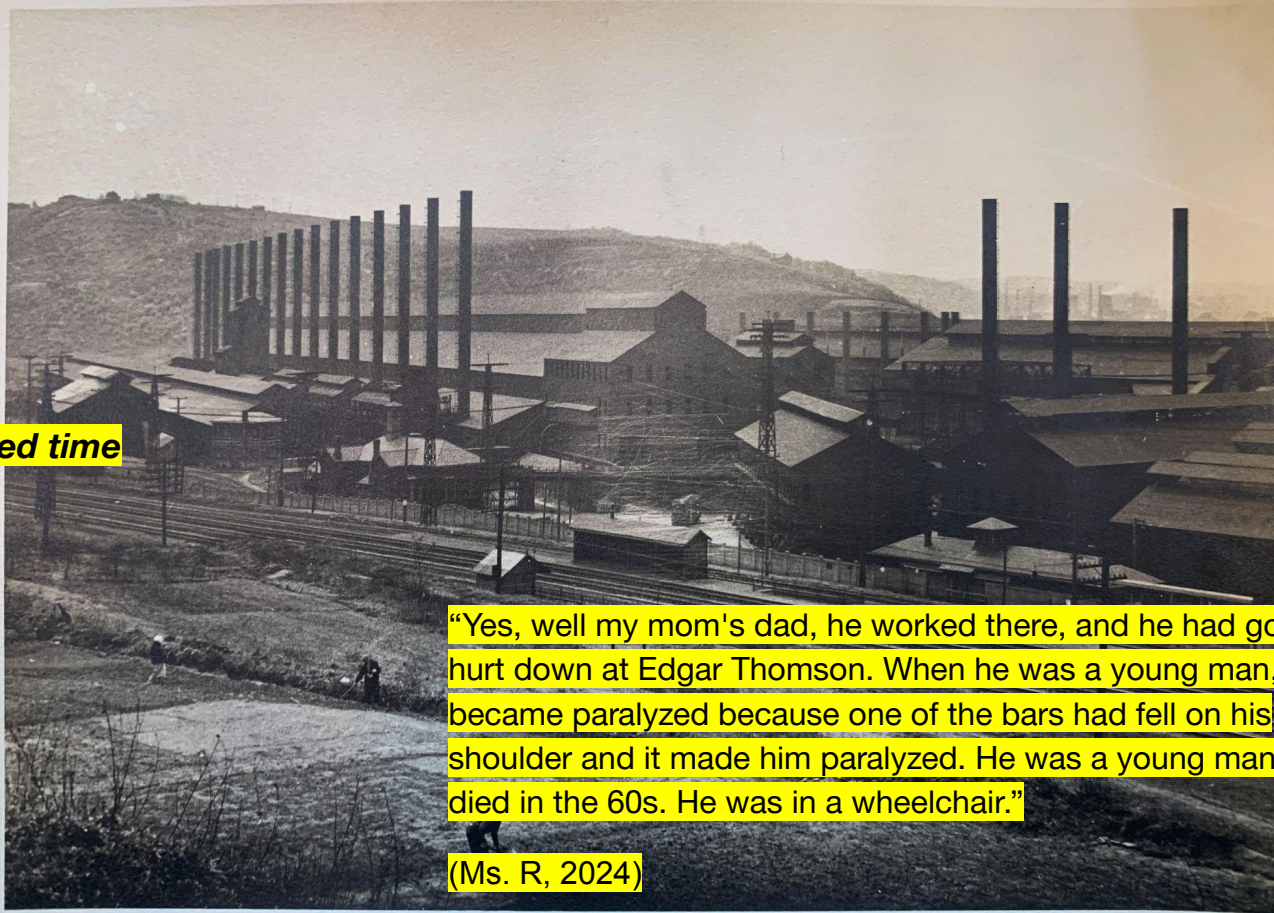
“It [air pollution] was just part of what you grew up with and what you died with.”

(Mr. Kidd, 2024)

Accumulation



Collapsed time



"Yes, well my mom's dad, he worked there, and he had gotten hurt down at Edgar Thomson. When he was a young man, he became paralyzed because one of the bars had fell on his shoulder and it made him paralyzed. He was a young man. He died in the 60s. He was in a wheelchair."

(Ms. R, 2024)

Refusal as interruption

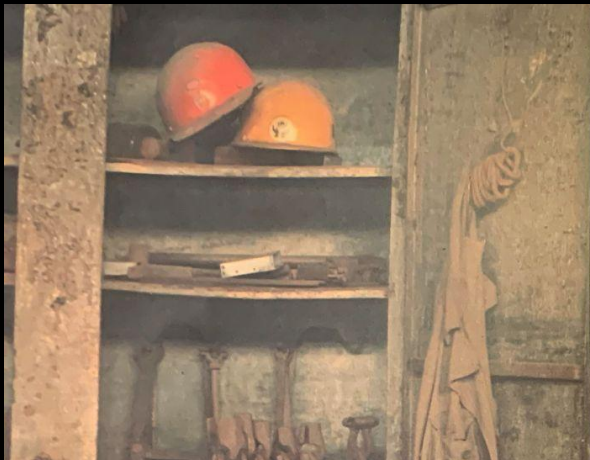
"I'm not coming to work in this damn place."

(Mr. Kidd, 2024)

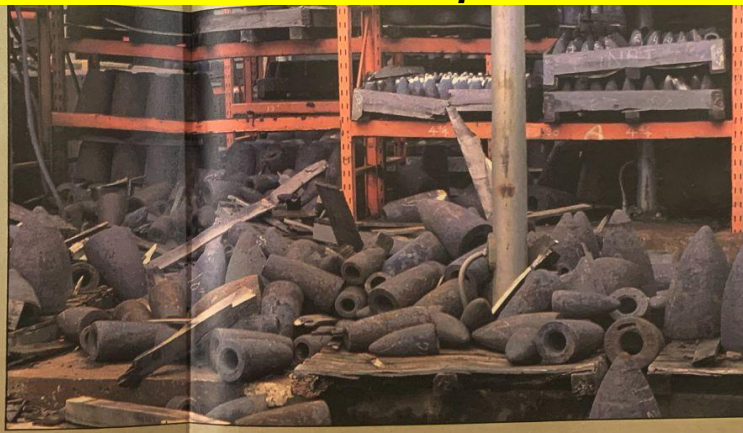
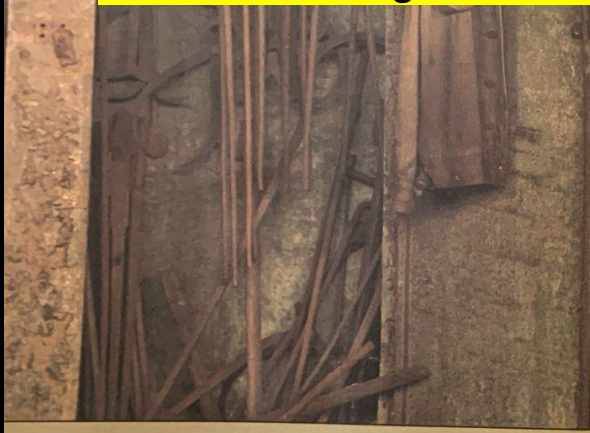


View of Edgar Thomson and Adjacent Farm, ca. 1940s, Thomas Bell Collection, CMU Archives.

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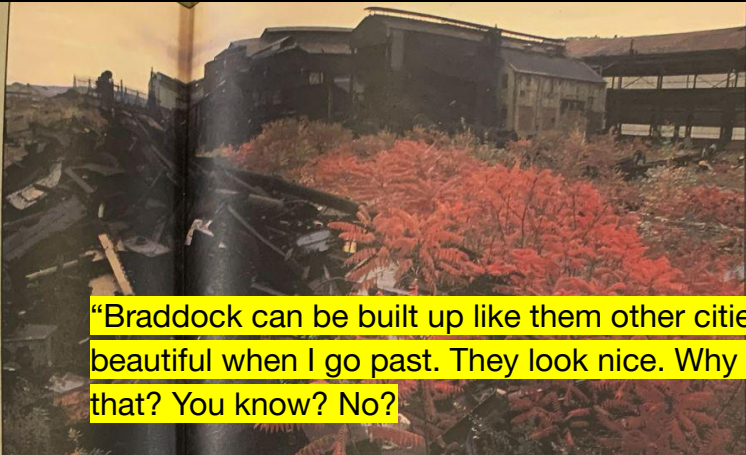
Bust? Or making desirable futures in the multi-temporal “meanwhile”



Views of the former U.S. Steel National Works in McKeesport include a tool cabinet in the Blacksmith Shop, sumac growing amidst the rubble, a welder's goggles on the soggy floor inside the Pipe Mill Building, an abandoned office in the Bessemer Department and piercer shells that were used in the manufacture of seamless pipe during the mill's productive days.



**Going back in time to heal
the future**



"Braddock can be built up like them other cities are. They look beautiful when I go past. They look nice. Why don't our city look like that? You know? No?"

We deserve that. Because our ancestors paved the way. My granddad, people before him, they paved the way. They died."

(Ms R. 2024)



Views of the former U.S. Steel National Works in McKeesport include a tool cabinet in the Blacksmith Shop, sumac growing amidst the rubble, a welder's goggles on the soggy floor inside the Pipe Mill Building, an abandoned office in the Bessemer Department and piercer shells that were used in the manufacture of seamless pipe during the mill's productive days.

**Going back in time to heal
the future**

“I walk on the Avenue often, so yeah when I see it I think of her, and then it just like kind of reminds me of my past, and how everybody used to be so more community oriented.

I really would love to remodel it. Yeah. Or get it renovated and turn it into something, because I like doing hair too, or something like that.”

(J, 2024)

“They need hope. And opportunity. You know, I used to run this program with some of the kids. We’d meet at the playground, and I’d bring snacks, and we’d talk. Just talk. And sometimes, you know, we didn’t even talk about anything serious—just school, what they were watching, music, stuff like that. But I made sure they knew somebody was listening to them.”

**Going back in time to heal
the future**

(Mr. Kidd, 2024)



Sketches by James Kidd, part of a screen-printed book he made as artist-in-residence at the Braddock Carnegie Library,
Source: Transformazium

"I'm getting old. ... I can't wait twenty years, I can't wait twenty years. I want to see this beautiful oasis that y'all are going to put up here."

(Mary Carey, 2024)

Insisting on urgency



Community meeting in North Braddock Borough building, March 17 2023. Photo by Morgan Newman

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- Desire over damage
- Unlearning design, situating expertise
- Recognition and compensation
- Building ongoing commitments and relations
- Beyond research: Achieving tangible results



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Thank you!

Please reach out: nrehman@andrew.cmu.edu

Check out the work here:



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Photograph by Edith Abeyta