

Architectural education and practice exist under the premise of expansion – there will always be more to build and more to design. This thesis seeks to translate the concept of degrowth, the downscaling of production and consumption, into architectural language, for more regenerative, equitable and collectivist futures.

Interior Architecture
Rhode Island School of Design
2022



ADAPTIVE REDUCE

Forging Architectural Futures Through Degrowth

Erika Kane

Adaptive Reduce: Forging Architectural Futures Through Degrowth

A thesis submitted in partial fulfillment of the requirements for the degree Master of Design in Interior Studies [Adaptive Reuse] in the Department of Interior Architecture of the Rhode Island School of Design

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2022

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Thank you Ernesto Aparicio
(Critic, Department of Graphic
Design) for the graphic design
consultation.

Thank you Nick Heywood
(Critic, Department of Interior
Architecture) for your writing and
thesis book advisement.

Thank you Markus Berger
(Professor, Department of Interior
Architecture) for sharing your very
extensive and inspiring knowledge
of repair.

Thank you Paul Mayencourt
(Critic, UC Berkeley College
of Environmental Design) for
the structures and materials
consultation.

Thank you Yaminay Chaudhri
(Assistant Professor, Department
of Interior Architecture) for helping
me get my thoughts moving during
thesis prep.

Thank you Toban Shadlyn
(Strategic Designer and
Researcher, RISD Center for
Complexity) for your thoughtful
feedback, conversation, and
advisment as my Guest Critic.

Thank you Stephen Turner and
Jing Wu (Stephen Turner, Inc.)
for the energy, systems, and
sustainability consultation.

Thank you Ned Connors
(Architecture Historian) for your
enthusiasm and knowledge of 200
Allens Avenue.

Thank you Rachel Robinson
(Director of Preservation,
Providence Preservation Society)
for sharing both documentation and
excitment for preservation.

Thank you Dan Mitrovic
(Providence City Archives) for
helping me find some great historic
photos.

Thank you IntAr 2022 cohort
for making school fun and for
teaching me so much.

Thank you Linda Perri
(President, Washington Park
Neighborhood Association) for
the valuable perspective of a
community organizer and long-
term resident of South Providence.

Thank you Max
for being my greatest confidant.

Thank you to my family,
Aiko, Charlie, Emilie, and Elana for
the support.
応援して ありがとう
ございました!



FIGURE 1

“Imagining the human since the rise of capitalism entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources. Such techniques have segregated humans and policed identities, obscuring collaborative survival.

The concept of the Anthropocene both evokes this bundle of aspirations, which one might call the modern human conceit, and raises the hope that we might muddle beyond it. Can we live inside this regime of the human and still exceed it?”

- Anna Lowenhaupt Tsing,
*The Mushroom at the End of the World: On
the Possibility of Life in Capitalist Ruins*

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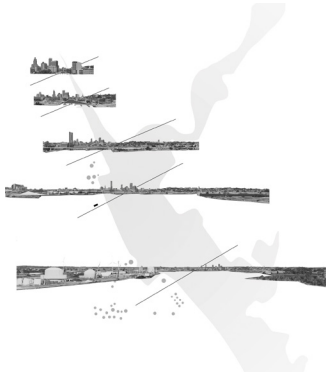
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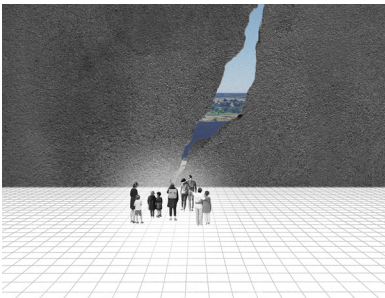


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ABSTRACT

There is widespread awareness of the damage caused by anthropocentric habits in the West, and there have been great strides in development of “green” materials and solutions. But what is the point of building more, though greener, if we are still building endlessly without utilizing the abundance within the built environment that typically gets dismissed as “waste”? This thesis seeks to translate the concept of degrowth, the downscaling of production and consumption, into architectural language, for more regenerative, equitable and collectivist futures.

The following proposal explores how an architecture of degrowth can facilitate sharing within a community and reclamation of the neighboring waterfront through the adaptive reuse of obsolete industrial infrastructure. Situated amidst oil tanks and scrap yards, the former Providence Gas Company Purifier House, built in 1900, is adapted for reuse in a way that opposes its original role within the fossil fuel industry of Providence Harbor. It addresses the qualities of the South Providence neighborhood and seeks to elevate its strengths for its current residents. If the aim of design practice is less focused on economic productivity, architectural design can become a more community-oriented, thoughtful, and contemplative process. Collectively we need to consider how degrowth can pose challenging, enriching opportunities for construction and help architects question priorities while also challenging existing pitfalls of a field that assumes perpetual growth.

Adaptive Reduce

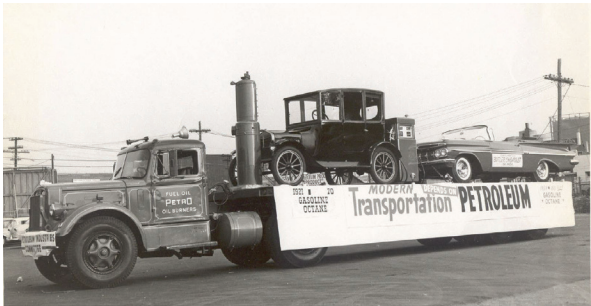
- 1. A term for architecture that acknowledges where architecture is not necessary, making space for resource conservation through the reduction of consumption and production where possible.
- 2. An alternative to the term ‘adaptive reuse,’ which, as a field, is praised for its environmentally sustainable aspects but is now tied to connotations of gentrification and attempts to “redevelop” neighborhoods.
- 3. A term that acknowledges where degrowth can be beneficial and where it can benefit from being more inclusive.

FORWARD

This thesis exists somewhere between speculation and reality. It is at once engaging with industrial growth and development of the past, and the present dangers of its aftermath in the contemporary world.

The industry of Providence Harbor historically shaped the city of Providence into one of the busiest ports in New England for trading and shipping. During the Revolutionary War, the British occupation of Newport brought most of the shipping industry North to Providence¹. In researching the harbor, one will find a variety of the transitions that have occurred. Initially the salt marsh around the harbor was filled to increase the usable land footprint, then it was developed to house water-based industries and eventually to store and facilitate energy production. Eventually the energy standard transitioned from coal to oil, and in the 1960s the highway was built, separating communities and increasing car travel through the area. Today, industrial Providence is a graveyard of past innovation with a nascent appearance of green energy. Nowadays a parade celebrating the petroleum industry would be unheard of, but was once a reality of 70s Providence, celebrating the city’s productive efforts by the water.

FIGURE 2



When thinking through the history of Providence Harbor, one thing becomes clear – the harbor has gone through transitions before and it will go through transitions again.

¹ “History - Providence Working Waterfront Alliance,” Providence Working Waterfront Alliance RSS, 2007, <http://providenceworkingwaterfront.org/index.php/providences-working-waterfront/history/>.

In the field of adaptive reuse, we find ourselves grappling with relics – the toxicity of harmful industries, the ghosts of those displaced, and the physical remains of construction waste and unwanted material. Often adaptive reuse is championed in the field for its sustainable aspects of working within existing buildings and structures. But as I understand it now, “sustainability” concerns much more than the existing environment, it also concerns more systemic conditions, such as community, context, and history. Specifically, we rarely discuss gentrification in the educational space and its broadly detrimental effects on communities. While growth in the past may have looked like the introduction of innovative forms of energy production, it’s harder now to see growth as a “rising tide lifts that all boats,” as famously said by John F. Kennedy. Today it has become clear that growth directly benefits the few by exploiting the majority. Architectural and urban “development” are good examples of this, in a sense of who is benefiting from the gentrification of existing communities as we propose these architectural projects, and who is displaced. Ultimately, the ethics of private property must be turned on its head, shaken, and reconfigured until more equitable conclusions can be derived.

In other words, growth was once a celebrated notion, representing progress, technological advancement, and the accumulation of wealth. We harnessed Nature, extracted from it and learned how to commodify it for our benefit. The industrialization and growth of Providence was the reason it could become this city it is today. But what this growth was missing then was foresight. Within all the excitement of growth lacked the questions of *What comes next? What problems are we creating, and who will clean up the mess?*

Degrowth can have the power to improve our lives if we do not succumb to it through a societal collapse. Now, when we ask ourselves *What comes next?*, we must ask *What will we be proud of?* and *What do we have to redistribute?*

PART 1

DEGROWTH

What is Degrowth?



FIGURE 3

Georgios Kallis defined sustainable degrowth as an “equitable downscaling of production and consumption that increases human wellbeing and enhances ecological conditions.”¹ Our current rates of consumption are testing the biophysical limits of Earth. Reducing these ecological demands is the only way to decrease the rate in which we meet those limits, and in doing so we must also create the conditions for resilient ecosystems and enhancement of life.²

1 Jeremy L. Caradonna, “A Degrowth Response to an Ecomodernist Manifesto,” *Resilience*, May 6, 2020, <https://www.resilience.org/stories/2015-05-06/a-degrowth-response-to-an-ecomodernist-manifesto/>, 2.
2 Ibid., 2-3.

The rise in industrial production was originally celebrated for its innovation, efficiency, and contributions to economic growth. However, these innovations came with many unintended consequences. The multiple crises of our time are a product of what was once assumed to be great success and has turned out to be amongst the greatest failures³. In our quest for unlimited economic growth, a modern economy of greed and envy was created, which in turn has created major disparities in climate. As stated by Schumacher, “The cultivation and expansion of needs is the antithesis of wisdom ... Only by a reduction of needs can one promote a genuine reduction in those tensions which are the ultimate causes of strife and war.”⁴

In most countries, both material consumption and economic output rates are increasing. While GDP is growing, it seems to be reliant on material consumption growth- (it is also growing, but at a rate roughly 50% less than GDP growth). All the while, global use of biomass, mineral extraction, and fossil fuels and metals have all increased⁵. It is clear that an increase in GDP is reliant on an increase in the use of natural resources and materials. Resource and consumption caps will be necessary in reducing material consumption growth, and decreasing the prioritization of capital growth is a core principle of degrowth.

Clearly, the negative environmental impacts of economic growth are detrimental, but Paulson questions whether economic growth is good for humanity at all⁶. Politicians, for example, use economic growth to reinforce the belief that a growing GDP will make citizens happier and healthier. However, the empirical correlation within this belief is weak. Higher GDPs do not always correlate with higher rates of longevity, literacy, equality, mental health, happiness, lower rates of incarceration, suicide, and more⁷. The United States is a prime example of this- despite high GDP per capita numbers, we perform worse on categories such as education, life expectancy, and childhood mortality⁸. Additionally, it has been found repeatedly in studies that, simply put- you can't buy happiness.

3 E. F. Schumacher, *Small Is Beautiful* (London: Blond & Briggs, 1973), 4.

4 Ibid., 20.

5 D'Alisa, Giacomo, Federico Demaria, Giorgos Kallis, and Sylvia Lorek. “DEMATERIALIZATION.” Essay. In *Degrowth: A Vocabulary for a New Era*, 111-13. New York: Routledge, Taylor & Francis Group, 2015, 112.

6 Paulson, Susan. “Degrowth: Culture, Power and Change.” *Journal of Political Ecology* 24, no. 1 (2017). <https://doi.org/10.2458/v24i1.20882>, 4.

7 Ibid.

8 Dan Hill, “Dan Hill – Tilling the Soil,” *Generation C*, accessed December 11, 2021, <https://www.generationc.xyz/dan-hill>.

The pursuit of material abundance in the United States has been accompanied by an undeniable fall in happiness for the majority of Americans⁹. Why, then, have we fallen into this crisis of overconsumption and ecological degradation? As easy as it may be to place the blame on the consumer, it is important to acknowledge the way our capitalist system has conditioned us- generating the desire for new things through propaganda and marketing, as well as making monetary credit the primary driver of demand and the expansion of demand¹⁰. The system exists on the basis of us consuming more than we need to, and us working to afford to sustain the materialistic quality of life perpetuated by the desire for things. Additionally, a society that grows economically cannot also reduce its environmental impact at the same time. Caradonna outlines four examples of instances in which carbon emissions have actually declined: the Great Depression of the 1930s, the recession that followed the second oil shock in the 1980s, the collapse of Soviet economies after World War II, and after the 2008 financial crisis recession¹¹. Therefore, it's possible to deduce a reduction in economic growth is our only hope in reducing our carbon impact, globally or regionally. The society we have built on destruction and globalization is not solvable through “good growth” or “good development,” but may be found within rediscovered frugality¹². By rejecting colonized economism through degrowth and embracing dematerialization and simplicity, we can reach goals of achieving ecological sustainability, as well as social justice¹³.

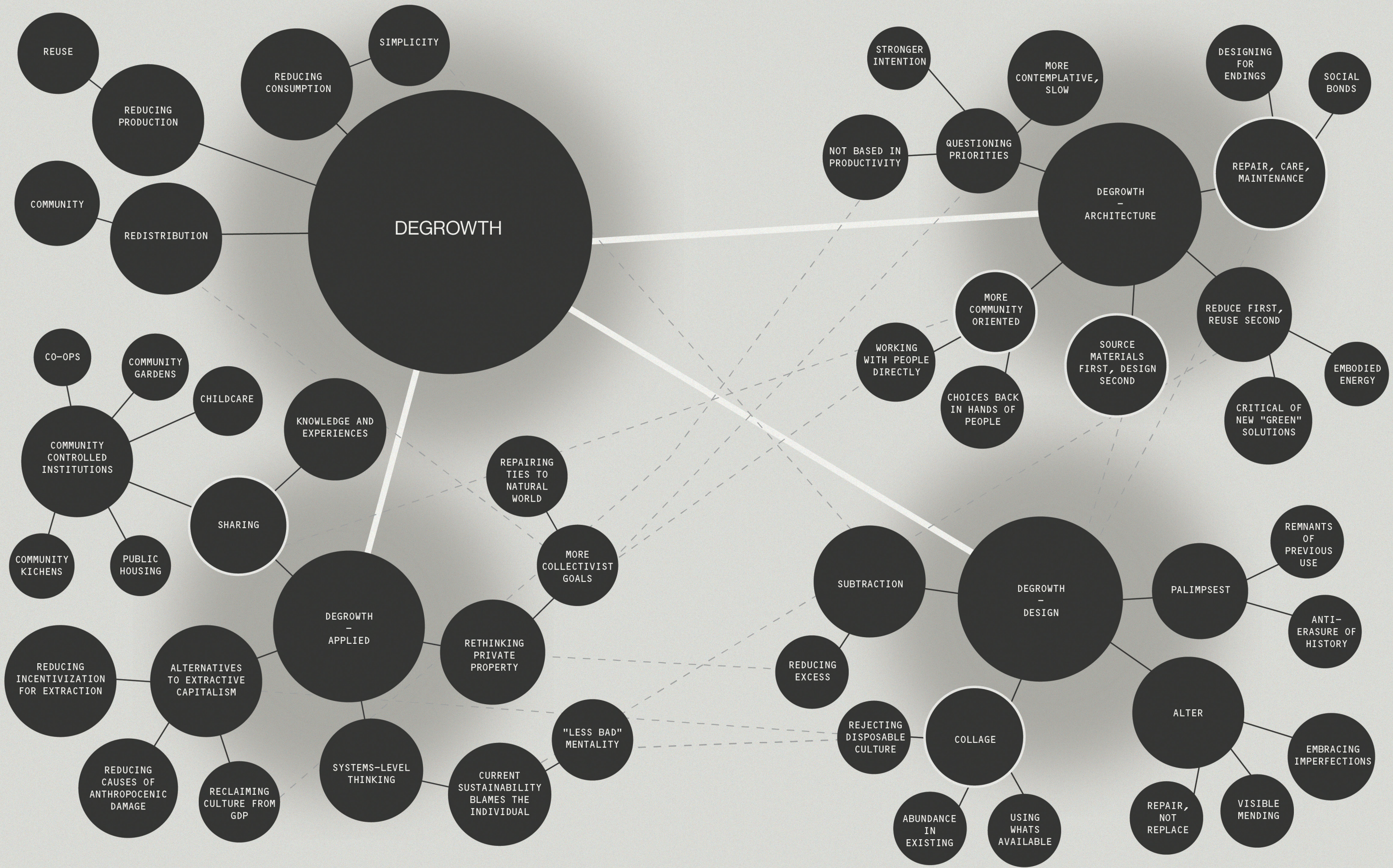
9 Serge Latouche, “Degrowth,” *Journal of Cleaner Production* 18, no. 6 (2010): pp. 519-522, <https://doi.org/10.1016/j.jclepro.2010.02.003>, 521.

10 Kamran Nayeri, “On Degrowth,” *Resilience*, July 27, 2021, <https://www.resilience.org/stories/2021-07-27/on-degrowth/>.

11 Jeremy L. Caradonna, “A Degrowth Response to an Ecomodernist Manifesto,” *Resilience*, December 15, 2020, <https://www.resilience.org/stories/2015-05-06/a-degrowth-response-to-an-ecomodernist-manifesto/>, 3.

12 Serge Latouche, “Degrowth,” *Journal of Cleaner Production* 18, no. 6 (2010): pp. 519-522, <https://doi.org/10.1016/j.jclepro.2010.02.003>, 522.

13 Giacomo D'Alisa, Federico Demaria, and Giorgos Kallis, *Degrowth: A Vocabulary for a New Era* (New York: Routledge, Taylor & Francis Group, 2015), 6.



ANTHROPOCENTRISM AND CARE

In the West, consumption is the basis of our ways of life, so deeply embedded in normalcy and routine that most do not question the systems in place that have contributed to a culture of environmental destruction, human exploitation, and reliance on material goods for satisfaction or to declare status. In doing so, we’ve drastically changed our relationship with nature, viewing it as something we can dominate and use at our disposal¹. This illusion of power, created by mankind and aided by technological advancements which have allowed us to exploit the natural world, has turned nature into an outside source, destined for conquest². How can we live harmoniously with the Earth instead of forcing our anthropometric values onto it? Many societies across the globe already do this. However, all wealthy countries became wealthy by profiting off the commodification of nature. The nature-culture divide in the West is a product of this history, in which nature is expropriated and working people are exploited³. Producing and consuming in different ways, as well as in a decreased scale and more locally, may help heal our pathological relationship with nature, as it aligns more with the culture of reciprocity and gratitude; values that are held by many indigenous peoples and cultures⁴.

We have accepted that good design is design that lasts. What if instead, we accepted the fact that like humans, buildings require regular maintenance and care? If that can be understood, the design process would look different. People would be more involved with their surroundings, countering many values of our current disposable culture.

“ACTION ON BEHALF OF LIFE TRANSFORMS. BECAUSE THE RELATIONSHIP BETWEEN SELF AND THE WORLD IS RECIPROCAL, IT IS NOT A QUESTION OF FIRST GETTING ENLIGHTENED OR SAVED AND THEN ACTING. AS WE WORK TO HEAL THE EARTH, THE EARTH HEALS US.”
- ROBIN WALL KIMMERER, *BRAIDING SWEETGRASS*

DEGROWTH AND SOCIAL JUSTICE

The topic of degrowth must be accompanied with discussion of social justice. Lippard says “sustainability is dependent on empathy and downsizing,” which is a difficult thing to do in a racist capitalist society in which the economic system is based entirely on unsustainable growth and for-profit expansion. Until sustainable justice is accomplished for people and the planet, Lippard advocates for a halt or at the very least, slow growth¹. Degrowth must be discussed within the context of the environment, human experience, and politics, and we must question it within the context of interdependence, and creating more just and sustainable orders through reconfiguring systems and practices that are currently in place².

However, western capitalism has reached a crisis which extends beyond our regional borders. Instead of reducing demand for goods, endless growth and expansion is prioritized and made possible by means of shifting the burden overseas, and exploiting the global south for cheap labor and goods³. The burden of growth also falls on marginalized communities domestically. Growth is thus part of the process that creates injustices. The extraction of resources, job creation, revenue, production of goods, etc, all perpetuate a reliance on economic growth via expansion of production and consumption⁴. Additionally, Anguelovski reminds us that consuming and producing less is not enough -- the distribution of the “less” must be equally distributed, with production processes placed back into the hands of people⁵.

1 Emily Eliza Scott, Subhankar Banerjee, and Lucy R Lippard, “Describing the Indescribable,” in The Routledge Companion to Contemporary Art, Visual Culture, and Climate Change (New York: Routledge Taylor & Francis Group, 2021), pp. 45-51, 50.
2 Arturo Escobar, Designs for the Pluriverse (Duke University Press, 2018).
3 David Pepper, Eco-Socialism : From Deep Ecology to Social Justice (London: Routledge, 1993), http://O-search.ebscohost.com/librarycat.risd.edu/login.aspx?direct=true&db=nlebk&AN=79794&site=ehost-live&scope=site&bv=EB&ppid=pp_iv_2.
4 Giacomo D’Alisa et al, “ENVIRONMENTAL JUSTICE,” in Degrowth: A Vocabulary for a New Era (New York: Routledge, Taylor & Francis Group, 2015), pp. 61-63.
5 Ibid.



FIGURE 4

CRITICISMS TO DEGROWTH



FIGURE 5

Degrowth isn't a simple nor specific solution, and it is therefore easy to criticize. One of the most common criticisms against degrowth is the necessity of growth for the economic well-being of citizens in the West. A reduction of consumption would generate less activity, and therefore it is valid to deduce this may, in turn, create more unemployment and penalize productivity¹. Degrowth isn't typically placed within the context of deterioration of living conditions or unemployment. That is because the opposite of growth is recession, and degrowth isn't presented as the antonym to growth. Degrowth doesn't have a strictly prescribed agenda. According to Latouche, degrowth is not even a concept, but rather a "political slogan with theoretical implications."²

Today, degrowth exists as a theoretical concept as much as an applied one, and with this lack of specificity in application comes several interpretations, misconceptions, and questions that are difficult to answer. Degrowth exists at different scales, and in many cases, this makes it easy for critics to cling to the notion of "choice" or "voluntary simplicity/frugality,"

1 François Fulconis, Gilles Pache, and Emmanuelle Reynaud, "Frugal Supply Chains: A Managerial and Societal Perspective," *Society and Business Review* 14, no. 3 (June 19, 2018), <https://doi.org/10.1108/sbr-06-2018-0059>.
2 Serge Latouche, "Degrowth," *Journal of Cleaner Production* 18, no. 6 (2010): pp. 519-522, <https://doi.org/10.1016/j.jclepro.2010.02.003>, 522.

etc. In these cases, growth appears to be a cultural choice instead of a constraint within a larger system³. It is difficult to identify the "who" or the social actors who will contribute to the effort to end the prioritization of growth, or how to transition society to one that the degrowth movement envisions⁴.

With this in mind, it is important to acknowledge some ways in which Western society has started to adopt some degrowth values in recent years, such as networks for sharing. For example, a major rise in sharing rides, homes, skills, food, and more are increasingly prevalent, as well as the recent popularity of "do-it-yourself" projects. We have a lot to learn and a long way to go, but consciously or not, we are seeing an emergence of re-adopting values of mutual aid, reciprocity, and collaboration within a society that is generally individualistic⁵. Agroecology, urban gardening, work sharing, basic and maximum income, community currencies, debt audit, digital commons and job guarantees are other applicable actions that relate to degrowth⁶. Additionally, there have been several revivals of counter-culture simplicity movements, first popularized in North America and Europe in the 1960s-70s. "Back-to-the-landers," for example, was an anti-consumerist and environmental movement that supported simple living. In more recent years, there have been a surgance of eco-villages, communes, transition towns, and other forms of living that promote sharing and move away from energy intensive, high consumption modalities of living.

These examples in the western world are examples of degrowth, but still exist as an 'escape' from society. They exist as an isolated entity within a larger system of hyper-consumption. Though some exist as valuable case studies (others certainly do not), "alternative" styles of living are not necessarily yet transforming the system at large. Though they may be living the solution in some form, the impact is modest. It is possible that millions of people could adopt these varying forms of alternative individual actions, such as voluntary simplicity, veganism, or recycling and have no impact in decrease in GDP or global societal metabolism⁷. Therefore, the implementations of degrowth do and should exist at multiple scales beyond the individual and/or isolated communities.

3 Kamran Nayeri, "On Degrowth," *Resilience*, July 27, 2021, <https://www.resilience.org/stories/2021-07-27/on-degrowth/>.
4 Ibid.
5 Susan Paulson, "Degrowth: Culture, Power and Change," *Journal of Political Ecology* 24, no. 1 (2017), <https://doi.org/10.2458/v24i1.20882>, 10.
6 Ibid, 10-11.
7 Susan Paulson, "Degrowth: Culture, Power and Change," *Journal of Political Ecology* 24, no. 1 (2017), <https://doi.org/10.2458/v24i1.20882>, 11.

IS DEGROWTH DOOMED TO BE
A EUROCENTRIC PROJECT?

Muradian poses the question, “is degrowth doomed to be a Eurocentric project?” Frugality as choice differs greatly from frugality as a social condition. The degrowth movement is one that primarily exists within conversations of higher-educated, Western middle-class citizens whose values align with the progressive-green-cosmopolitan². “Voluntary simplicity,” was first coined by Richard Gregg, a social philosopher, in 1936, referring to a way of life that is as old as civilization³. This term used in the context of this thesis is intended to reflect a notion defined by Samuel Alexander as a “way of life that involves consciously minimizing wasteful and resource-intensive consumption,” as well as “embracing a minimally ‘sufficient’ standard of living, in exchange for more time and freedom to pursue other life goals.” Choosing to live a simple life is in many ways a romantic idea, conceptualized in American transcendentalism by Ralph Waldo Emerson or Henry David Thoreau⁵. Voluntary simplicity is also evident as a theme in Christianity or Roman Catholicism⁶. The history of voluntary simplicity can be traced back to the origins of Buddhism, in which Siddhartha Gautama gave up the superficial luxuries of his life as a royal family member in his search for spiritual truth⁷. The doubts and criticisms of living a materialistic life focused on possessions and material wealth have been around for centuries.

Muradian believes that in the context of degrowth, voluntary frugality is a naive strategy, and that downscaling consumption and production will not make a social and environmental impact on disadvantaged people in lower income countries⁸. This counters a claim by Nayeri stating capitalist economies are mostly driven by consumer expenditure (though it fluctuates), and uses the United States as an example for having 70% of GDP based in consumer expenditure⁹. Regardless, the value gap between those who advocate for degrowth and citizens of disadvantaged social groups in lower income countries seems to be overlooked within degrowth discourse.

Therefore, when using the term degrowth, we must be cautious in defining the context. Degrowth cannot be used in a global context; assuming it can work anywhere, or using the term without acknowledging the differences in relationships with consumption and production in context to power and wealth imbalances would be a great error. Using degrowth in a very general and broad manner fails to recognize the fact that growth amongst those living in extreme poverty does in fact correlate with improved welfare, health, and education¹⁰. The uneven distribution of wealth and power that leads to these major discrepancies is the problem - not overconsumption. Wealthier countries that have weaponized their power through the outsourcing of their environmental damage and human exploitation for the sake of consumption, should absolutely decrease their consumption where possible¹¹.



FIGURE 6

1 Roldan Muradian, <https://degrowth.descrecimiento.org/documentos/powerpoint/00418.pdf>.
2 Ibid.
3 Giacomo D'Alisa et al., “SIMPLICITY,” in *Degrowth: A Vocabulary for a New Era* (New York: Routledge, Taylor & Francis Group, 2015), pp. 163-165.
4 Ibid.
5 Kamran Nayeri, “On Degrowth,” *Resilience*, July 27, 2021, <https://www.resilience.org/stories/2021-07-27/on-degrowth/>.
6 Ibid.
7 Giacomo D'Alisa et al., “SIMPLICITY,” in *Degrowth: A Vocabulary for a New Era* (New York: Routledge, Taylor & Francis Group, 2015), pp. 163-165.
8 Roldan Muradian, <https://degrowth.descrecimiento.org/documentos/powerpoint/00418.pdf>.
9 Kamran Nayeri, “On Degrowth,” *Resilience*, July 27, 2021, <https://www.resilience.org/stories/2021-07-27/on-degrowth/>.
10 Paulson, Susan. “Degrowth: Culture, Power and Change.” *Journal of Political Ecology* 24, no. 1 (2017). <https://doi.org/10.2458/v24i1.20882>.
11 Ibid.

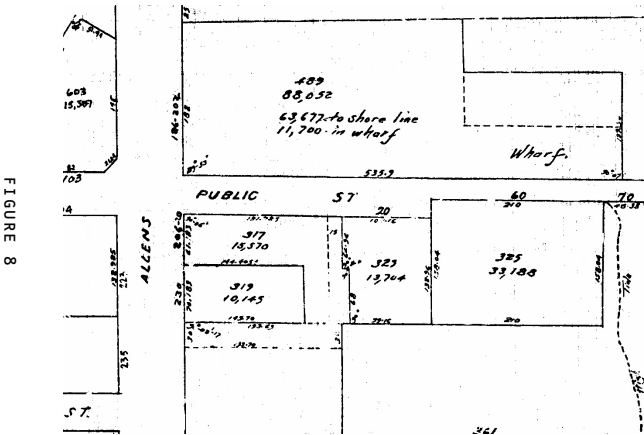
PART 2

SITE

Providence Gas Company Purifier House (1900)



200 ALLENS AVENUE PROVIDENCE, RI 02907	
Historic Functions	Industry- Energy Facility, Gas Purification
Architectural Classification	Late 19th-Early 20th Century Industrial
Architect/Builder	Berlin Iron Bridge Company (1899-1900) C.I. Bigney Construction Company (1925)



A LONG-STANDING WITNESS OF AN EVER EVOLVING INDUSTRIAL WATERFRONT

200 Allens Ave was placed on the Providence Preservation Society's 2022 Most Endangered Properties (MEP) List. The MEP List celebrates places of architectural, historical, and cultural significance vulnerable to loss and promotes good, sustainable preservation solutions that save sites and benefit the communities around them. The property was listed under the threat category of pollution and climate change due to the harmful uses that surround it on the waterfront¹.

The Providence Gas Company Purifier House (1900) is a large, four-story, steel frame, reinforced concrete and

brick industrial building located at the corner of Allens Avenue and Public Street on the Providence Harbor. It is a long, narrow building (41' x 178'), oriented east-west, with an elliptical arched roof and a four-story stair tower in the center of its north elevation².

The building was used by the Providence Gas Company to purify the gas manufactured at the South Station until the plant was closed in 1917. In the 1920s, a new owner modified the interior spaces and exterior skin of the Purifier House so that it now resembles a more conventional industrial building. Through the 1960s, successive owners made several additions, mostly along the south elevation³.

1 Edward Connors, "ProvGasCoPurifierHse_NR_Form," September 2006.

2 Ibid.

3 Ibid.

BUILDING TIMELINE

1847	<p>The Providence Gas Company is chartered and the first manufactured coal gas plant is erected at the corner of Benefit and Pike Streets in Fox Point</p> <p>The consumption of gas is rapidly increasing during this time due largely to the many new suburban houses being built and the rising popularity of the gas stoves</p>
1899-1900	<p>The Providence Gas Co. builds the three-story brick purifier house adjoining their existing purifier house on Globe Street near the harbor</p>
1925	<p>The building was reconfigured for warehouse use both inside and out</p>
1931	<p>The building then housed Whitehall Chemical Company, a manufacturer of soap, and Pilgrim Plush, a textile company after change in ownership</p>
1935-37	<p>Providence Teaming Company occupied the building</p>
1938	<p>A September hurricane sent a tidal surge up Narragansett Bay, flooding the city and devastating the coastline</p>
1940	<p>The combination of economic depression and natural forces left the building unoccupied until it was leased to City Tire Company, a retailer of automobile and truck tires</p>
1950s	<p>The once-active wharves, piers and slips of the 19th-century Providence harbor gradually gave way to extensive fill for parking lots by this time. The construction of Interstate Route 95 which paralleled Allens Avenue and went into downtown Providence compounded the auto industry</p> <p>City Tire Company, the longest tenant of the building (1940-2000) built a number of additions to the building, including a two-story south extension of the retail storefront and a six bay service garage</p>
1995-2005	<p>Ownership of the former Purifier House and its subsequent additions was transferred several times</p>
2007-2012	<p>Patrick Conley poured \$3 million into rehabilitating the building, which he named Conley's Wharf at State Pier No. 1. The building is subleased by Partnership for Creative Industrial Space (PCIS), providing affordable space to artists and small creative businesses on a five-year master lease.</p>
Present	<p>Vacant</p>

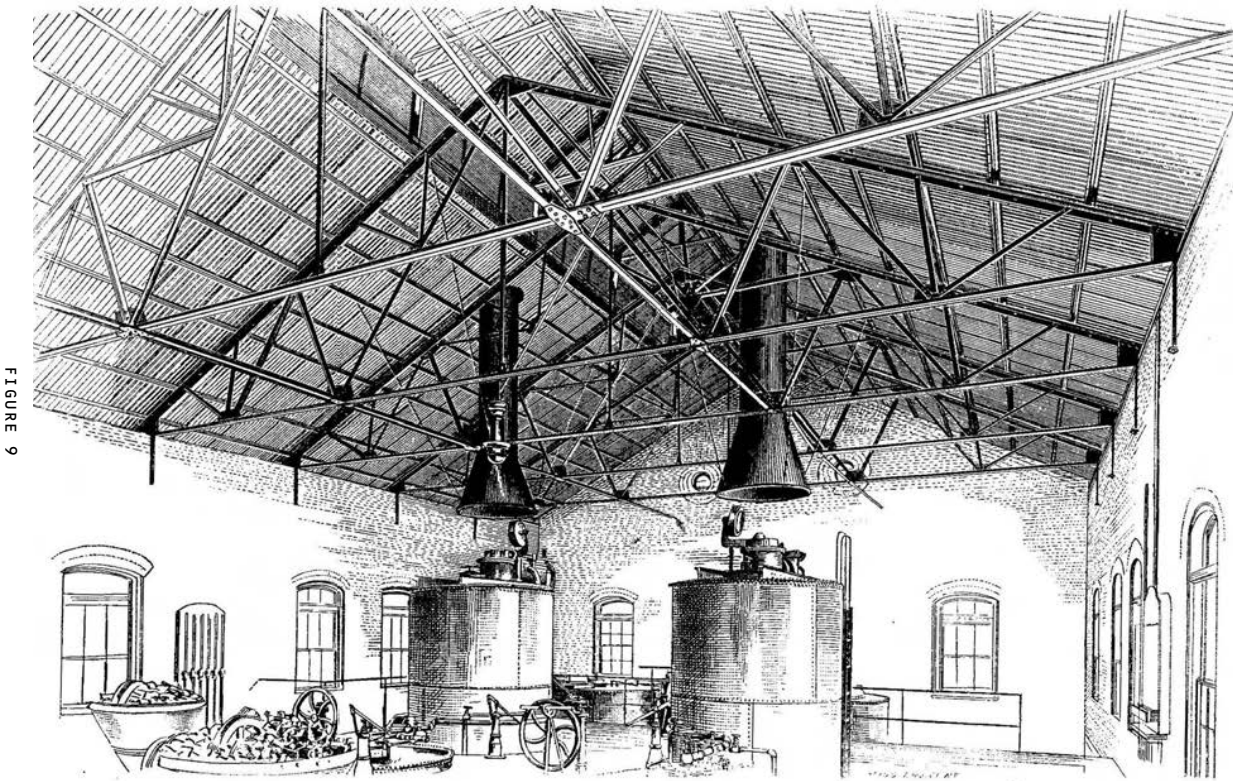


FIGURE 9

INTERIOR VIEW IN GENERATOR HOUSE FOR THE PROVIDENCE GAS CO., AT PROVIDENCE, R. I.

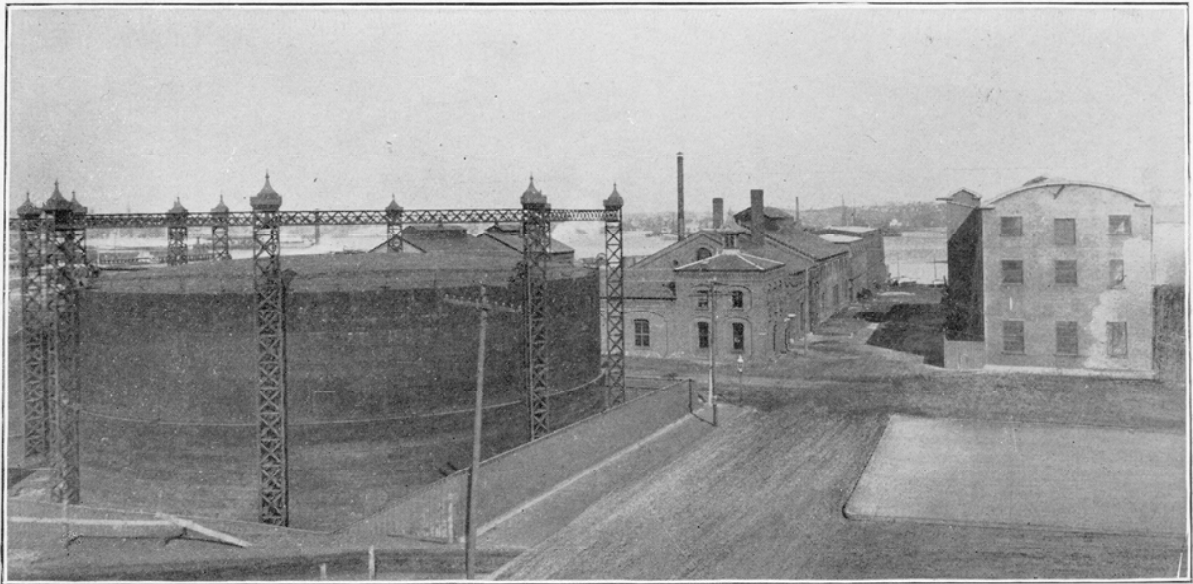


FIGURE 10

Providence Gas Co., South Station.

BUILDING CONSTRUCTION

The Providence Gas Company Purifier House (1899-1900) is a significant example of architectural engineering from the beginning of the era of steel construction. Designed and fabricated by a regional iron bridge maker that expanded into steel building construction in the early 1890s, the Purifier House represents an important category of early steel construction, the special-use manufacturing building, with the special use in this case being part of the coal gas manufacturing process. Of the handful of surviving Berlin Iron Bridge Company buildings in Rhode Island, it is the only Rhode Island example of the Company's "arch truss" roof. Built for one of the earliest uses on the new Providence Harbor, and subsequently adapted for warehouse and light industrial uses, the Purifier House is also significant for its associations with the evolution of Providence's industrial waterfront in the twentieth century¹.

¹ Edward Connors, "ProvGasCoPurifierHse_NR_Form," September 2006.



FIGURE 11

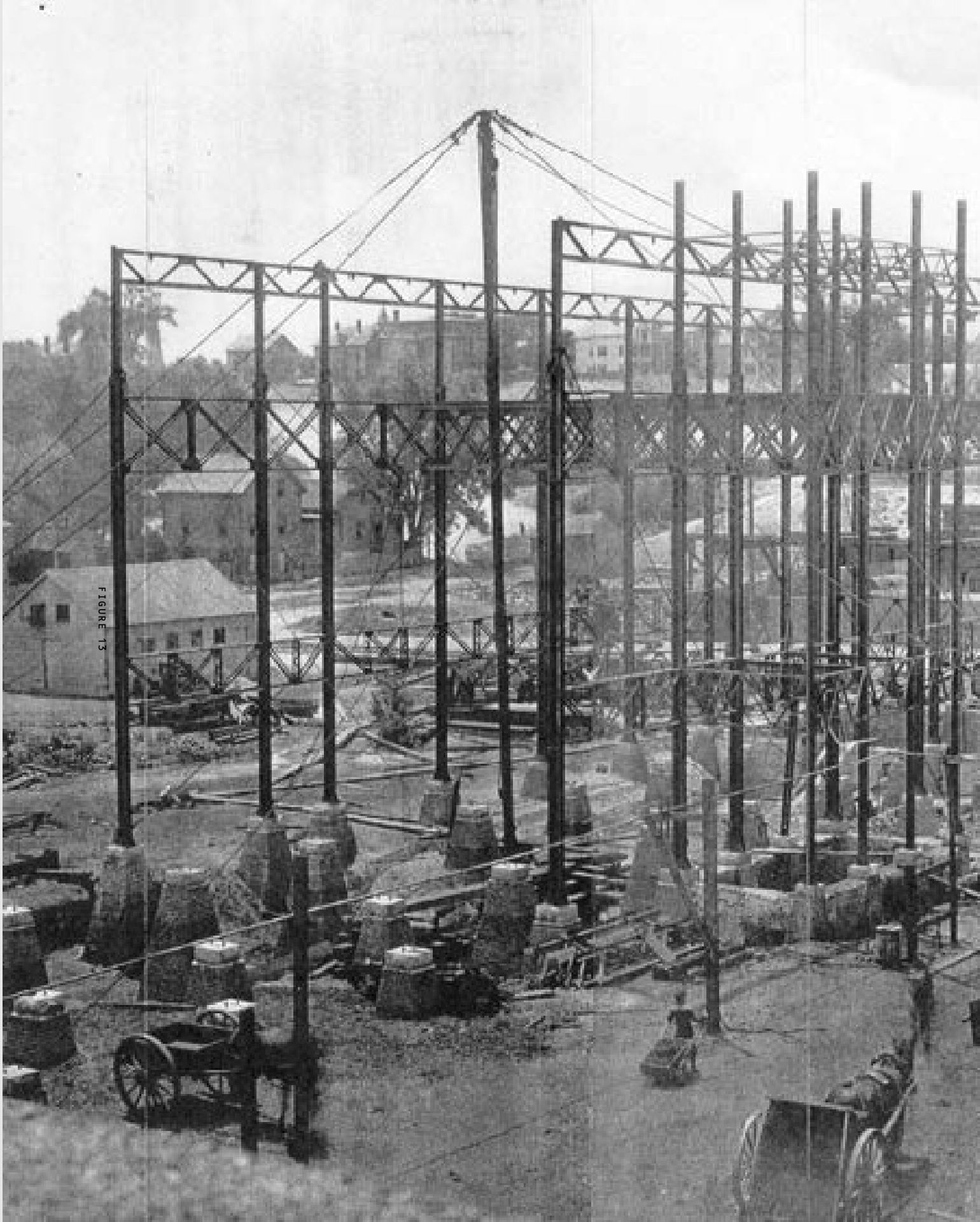


FIGURE 13



FIGURE 12

CONLEY’S WHARF ERA

“Conley’s Wharf Era” is known as a time in the mid-2000s where Patrick T. Conley, (author, attorney, and former professor, and “historian laureate”) had started development efforts in former Gas Purifier House at 200 Allens Ave and the neighboring waterfront. According to documentation found at the PPS, Conley’s plans were intended to “increase commercial activity and economically benefit the South Providence neighborhood.”



FIGURE 14

This development plan, called “Providence Piers” included a hotel, marina, 240 condominiums or rental apartments, a parking garage for 890 cars, a floating restaurant, retail and office space, and green space for festivals, concerts and other outdoor events¹. Conley spent \$6.8 million to rehabilitate 200 Allens Ave into artists’ studios and a conference center, and an additional \$1.5 million to rebuild a sagging dock, which was used by cruise ships and a high-speed ferry that ran between Providence and Newport². When it was in Conley’s ownership, nearly 600 feet of the waterfront and a 776-foot long “Dock Conley” was open to the public. Three of the four floors of 200 Allens Ave were subleased for affordable studio space for artists.

In an op-ed written by Conley (one of many of his articles in the opinion section, including an argument in defense of keeping “Plantations” in the state’s name), in summer of 2021 when the public access point was established, he laments a lack of support for when he and his wife attempted to launch a waterfront project over a decade prior:

1 Elizabeth Abbott, “In Providence, a Waterfront Promoter Finds Opponents,” The New York Times (The New York Times, December 26, 2007), <https://www.nytimes.com/2007/12/26/business/26port.html>.
2 Ibid.

“During the administrations of Mayors Cianci, Lombardi, and Cicilline the Providence Department of Planning spent more than a million dollars devising a plan to make that waterfront land open to the public via mixed-use zoning. That plan, which would have banned scrap yards and salt piles, was endorsed by the Providence Redevelopment Agency in a 9-to-0 vote and by the City Plan Commission with only one dissent.

Then, in the greatest economic blunder in Rhode Island’s history, the Ordinance Committee of the City Council killed the mixed-use rezoning ordinance thereby killing our development project. Such an inexplicable denial left this waterfront land fair game for scrap yards, salt piles and mounds of rubble, placed thereon by companies who have blocked public access to that half-mile strip of valuable waterfront land.

When my wife and I launched our waterfront project, we published an essay in The Journal titled “Take back the waterfront” and even placed that slogan on T-shirts. In that exhortation we stated that our “Providence Piers development may be viewed as an initial beachhead in a campaign to liberate that stretch of Providence’s restricted industrial harborfront for the enjoyment of all our citizens.” Our motto was Carpe portus — seize the harbor. Our vision has been blindsided.

When rezoning was foiled, the new owners of State Pier No. 1 sold the property they had just bought from the state for \$1.3 million to Sims scrap metal company for \$12.6 million — a profit of nearly \$11.5 million during the Great Recession.

In effect, the state gave away Rhode Island’s Ellis Island and replaced it with toxic, unsightly piles of scrap. I now refer to Allens Avenue as the Scrapappalachian Trail!”

1 Patrick T. Conley, “Opinion/Conley: On the Waterfront, Too Little, Too Late,” The Providence Journal (The Providence Journal, August 15, 2021), <https://www.providencejournal.com/story/opinion/columns/2021/08/15/opinion-conley-waterfront-too-little-too-late/5543758001/>.



Dock Conley



4th Floor Conference Room

200 ALLENS AVE TODAY



Washed up sail boat

1



Waterfront access point

2



Used as parking for salt (on left side) and tire garage (right side)

3



Doors blocked from trespassers

4



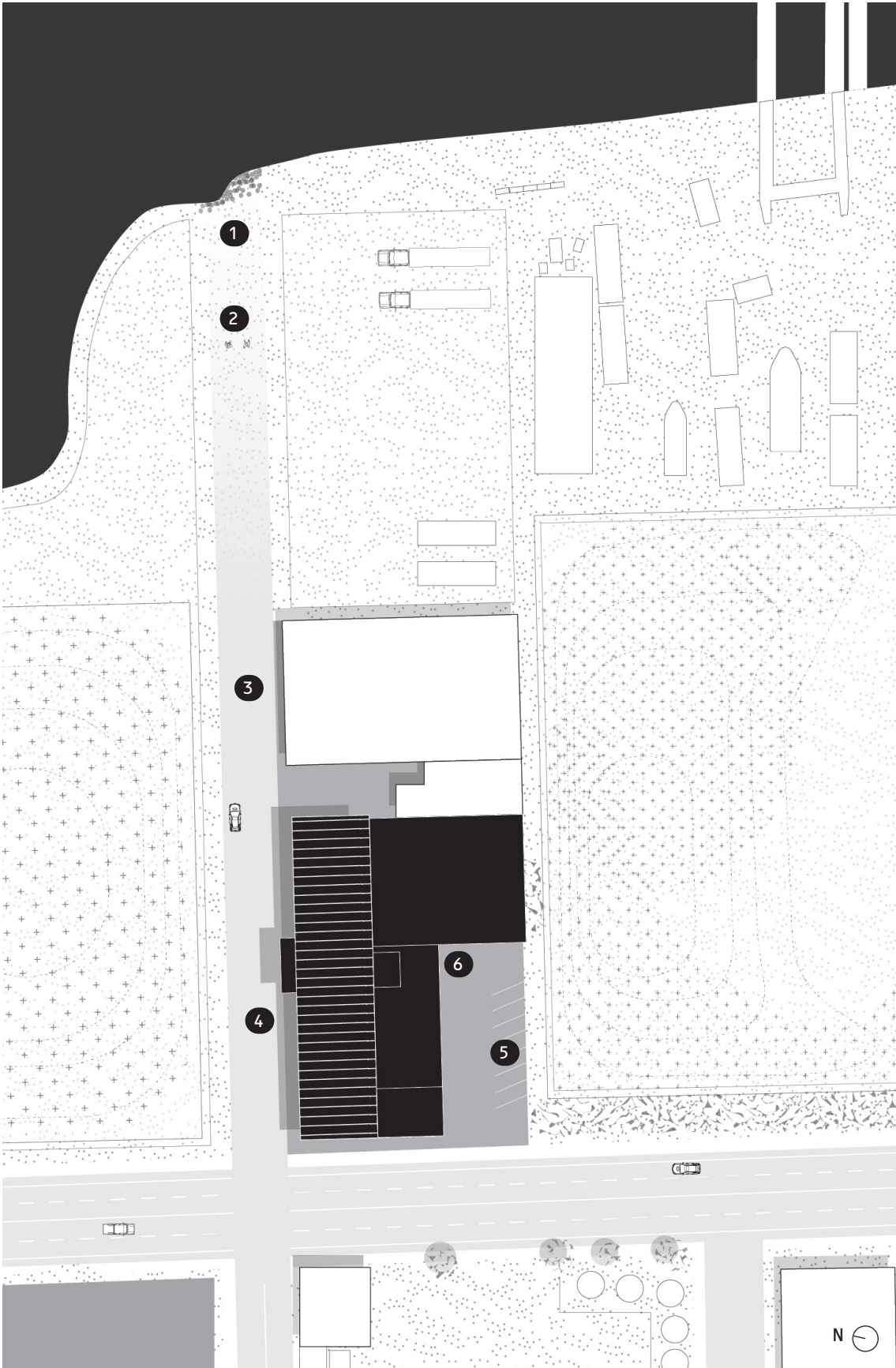
Sims scrap metal pile across parking lot

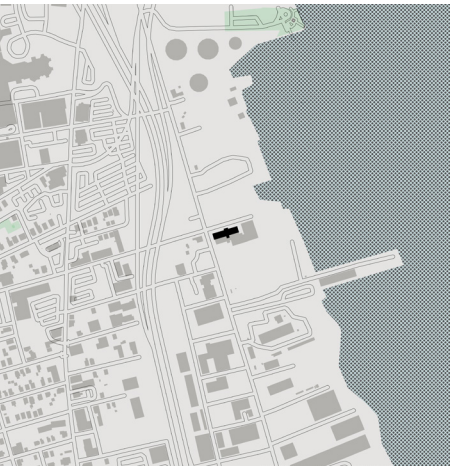
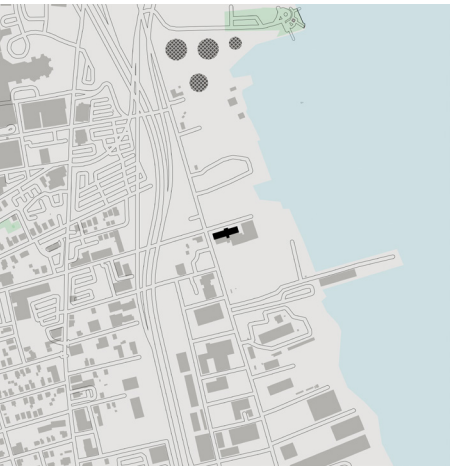
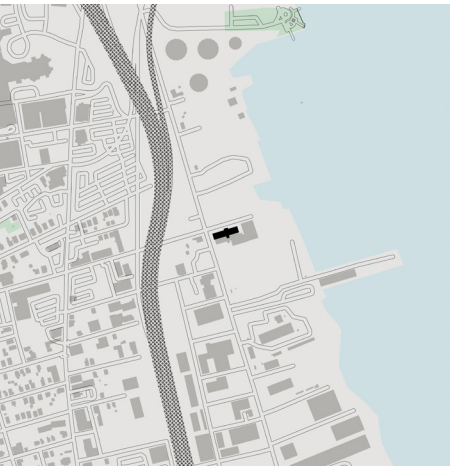
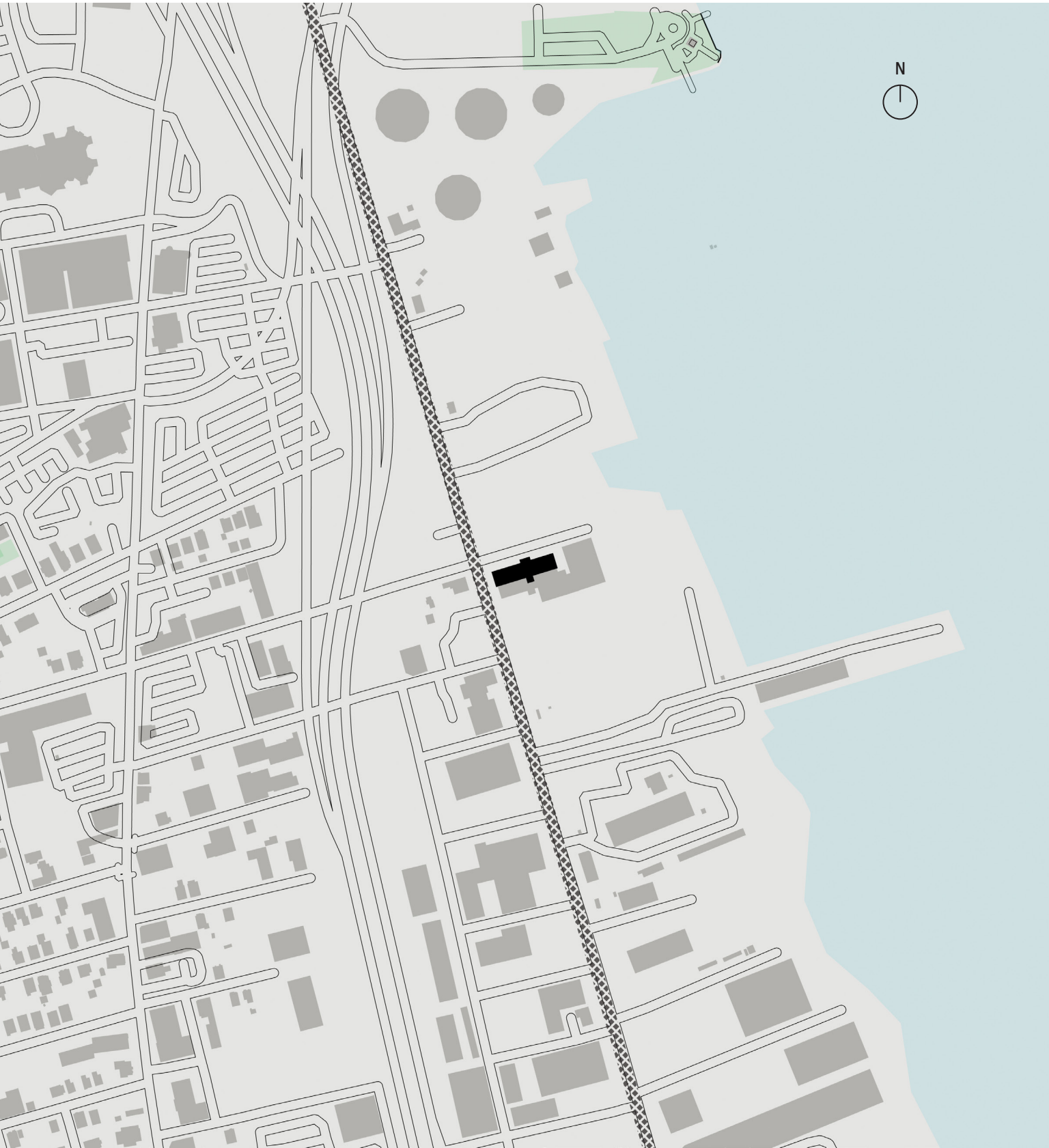
5



Leftover debris

6





I-95

The site is proximate to the I-95, which contributed to the transition of Allens Avenue from an active harbor-based industrial trading port to one that also supported automobile travel, parking, and industry.

OIL TANKS

There are multiple oil tank farms belonging to different companies: Sprague, Shell, National Grid, and Provport. It's zoned as a W-3: Port/Maritime Industrial Waterfront District.

The industry has contributed to many pollution and health concerns, including higher rates of asthma, in residents of the neighboring residential areas.

PROVIDENCE HARBOR

The port of Providence now is home to roughly 20 water-dependent facilities. The current primary import is petroleum, but it also supports the imports of asphalt, cement, and road salt. It's economic importance is still prevalent, as the ocean economy of Providence employed 6300 people, paying \$120 million in wages-contributing to \$220 million to the Rhode Island Gross State Product in 2004¹.

1 "History - Providence Working Waterfront Alliance," Providence Working Waterfront Alliance RSS, 2007, <http://providenceworkingwaterfront.org/index.php/providences-working-waterfront/history/>.



200

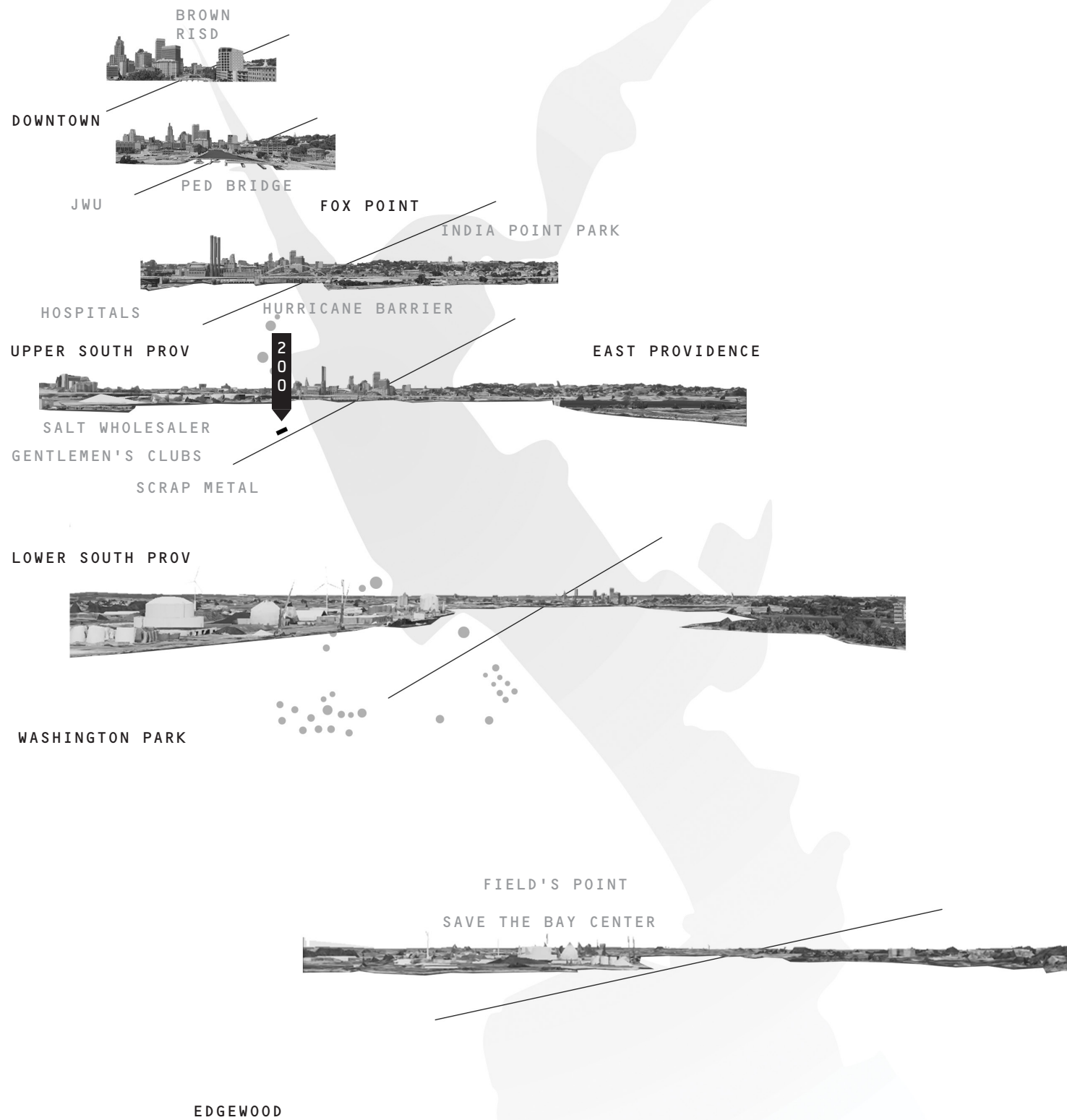


FIGURE 18

Harbor Community, 1893



FIGURE 19, 20



State Pier No. 1 in 1913

FIGURE 29, 30



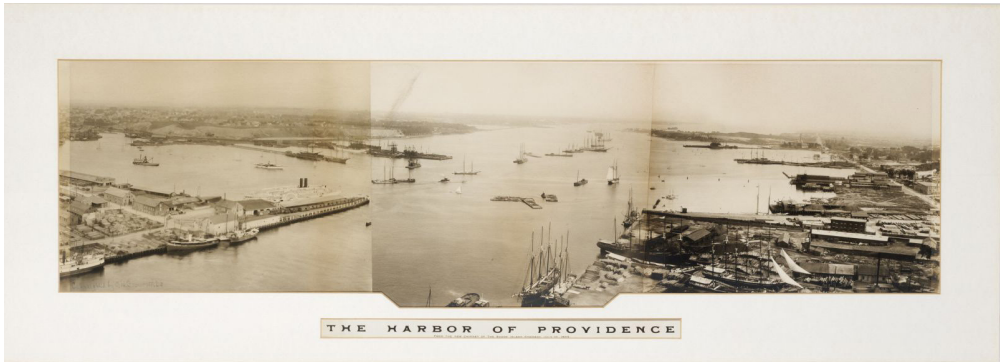
1818
Painting by Alvan Fisher, Providence from across the cove

FIGURE 31, 32



1907
Oil barge afire, Providence River

FIGURE 34



1903
Harbor of Providence

FIGURE 33



1906
The Harbor from Banigan Building, Providence, R.I.



1900
Providence harbor looking north



1896
View of the City of Providence as seen from the dome of the state house.

FIGURE 35



1937-1938
At this point there were no oil Tanks or Route 95.
In those days, Colliers (coal carrying ships), would dock to be unloaded by the three steam operated cranes. Then the coal would be transferred to storage piles via a conveyor-trolley system.

FIGURE 36



1932
Image shows buildings and ship docked along harbor. Point Street Bridge is in background.

FIGURE 37, 38



N.D.
N.D. (-1927?)
Providence River Bridge Construction

FIGURE 39



N.D.
Providence River facing south. Building advertisements include Mason Mafg. CO. Tin Cans, R.I. Co-Operative Coal Company, and Socomy Gasoline.

FIGURE 40



1953
Old conveyor system that moved coal from Sprague's terminal to the former location of Narragansett Electric.

FIGURE 41



1954
The black, oily waters of the Providence River pour through Exchange Place (later renamed Kennedy Plaza), in downtown Providence during Hurricane Carol in 1954.

FIGURE 42



1953
Sprague Providence Terminal, Prov Gas Tank in background

FIGURE 43



1955
Aerial view of Providence Harbor

FIGURE 44, 45



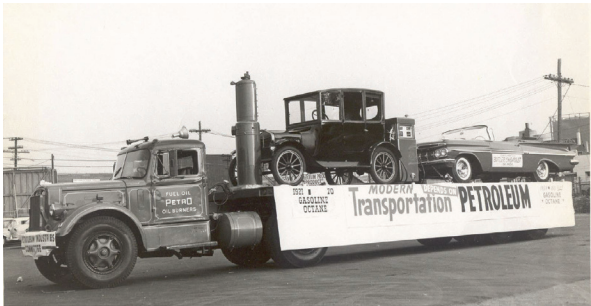
1964
The Fox Point Hurricane Barrier under construction. The rounded, sheathed structures are cofferdams.

FIGURE 46



1970s
Fleet ready for distribution

FIGURE 47



1970s
Petro truck parade

FIGURE 48



1980s
The coal conveyor-trolley system was removed in 1985.

DEMOGRAPHICS

The South Side and West End are more diverse than Rhode Island as a whole. Only 34% of neighborhood residents identify as white compared to 81% statewide. There is also a high percentage of residents who identify as “some other race” at 30% compared to the statewide percentage of 6%. For these neighborhoods, 58% of residents identify as Hispanic or Latino compared to 14% statewide¹.

¹ HousingWorksRI, (Providence, n.d.).

SOUTH SIDE:
CENSUS TRACTS 1-7

WEST END:
CENSUS TRACTS 12-14

NEIGHBORHOODS:
WEST END, ELMWOOD, SOUTH ELMWOOD, UPPER AND LOWER SOUTH PROVIDENCE, AND WASHINGTON PARK

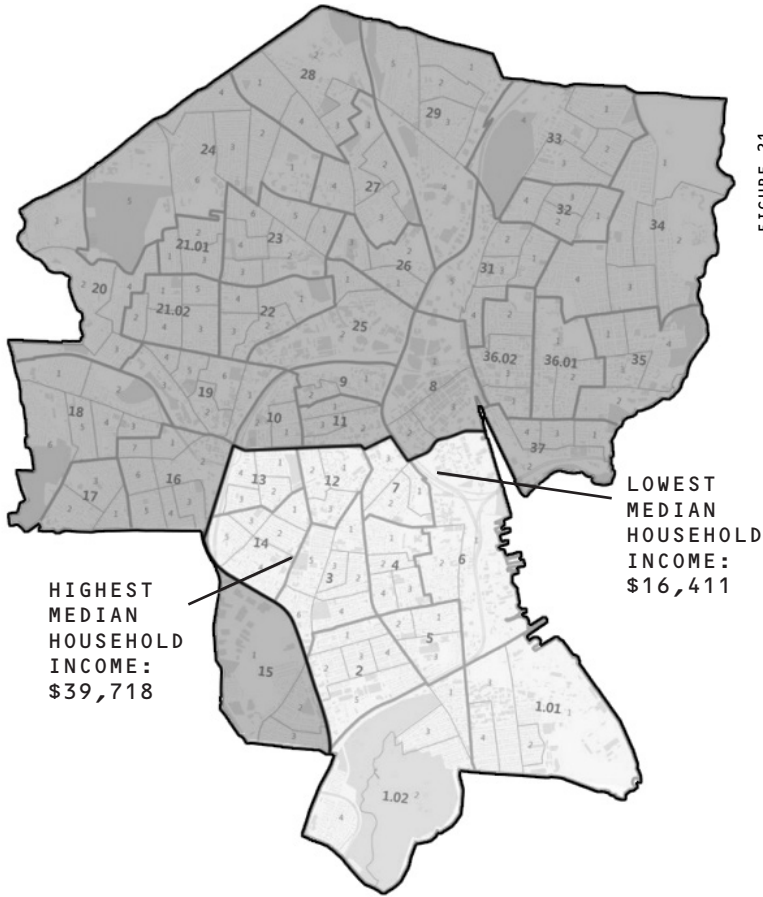
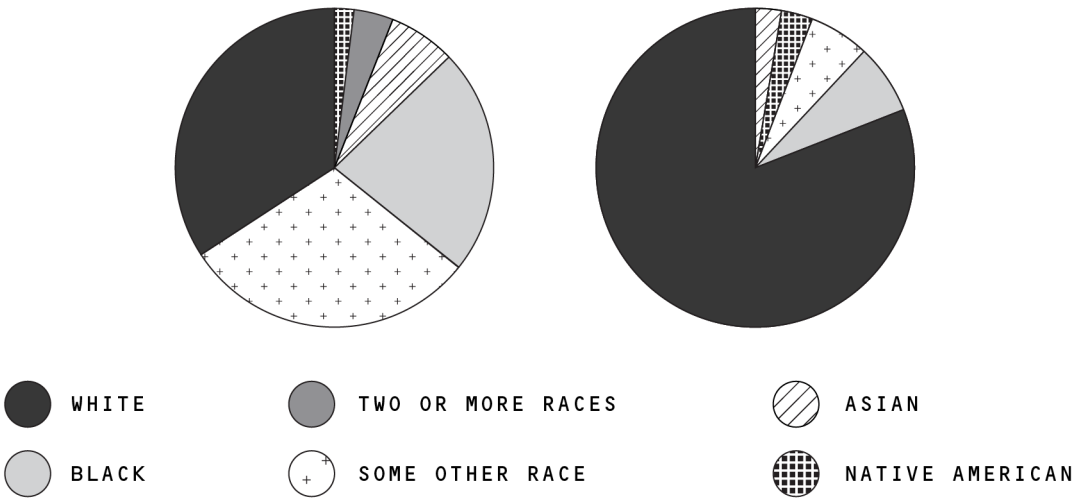


FIGURE 21

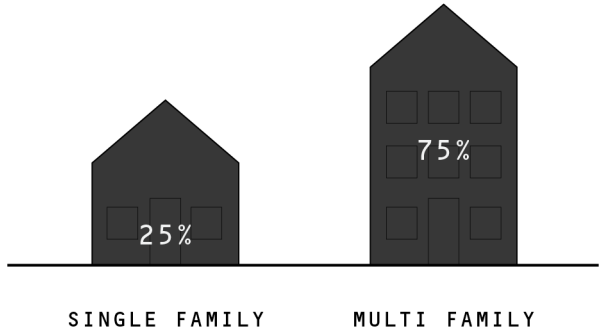
RACE AND ETHNICITY

SOUTH SIDE AND WEST END

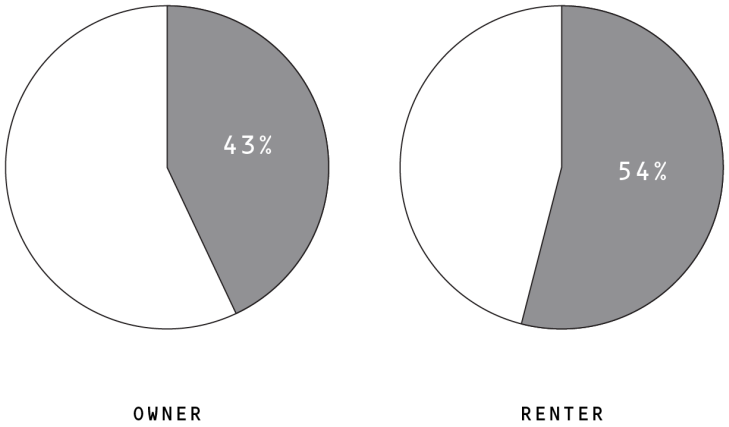
RHODE ISLAND



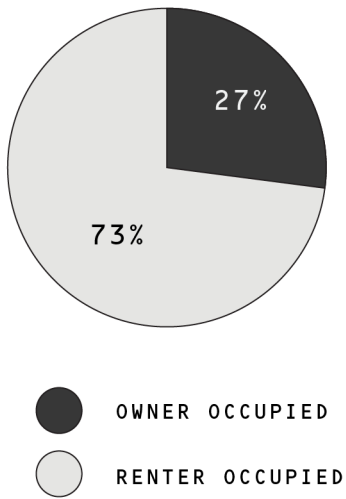
HOUSING STOCK



HOUSING COST BURDEN



HOUSING TENURE



In 2016, the median household income in Rhode Island was \$58,387 while the City of Providence had a median household income of \$37,366. At the census tract level for the South Side and West End, median household incomes ranged from \$16,411 to \$39,718. Within the South Side and West End, 69% of households had an annual income of less than \$50,000¹.

Rates of housing cost burden (the number of households that pay more than 30% of their income on housing costs) are high throughout the South Side and West End. Overall, 51% of neighborhood residents are cost burdened. The average cost of a two bedroom apartment for 2017 in the South Side and West End was \$1,290 which would require a household income of \$51,600 to be affordable².

There are 15,659 households in the neighborhood with an average household size of 3.12, which is higher than the citywide average of 2.69 and statewide average of 2.48. The majority of the housing stock is multifamily and the majority of neighborhood residents are renters³.

¹ HousingWorksRI, (Providence, n.d.).
² Ibid.
³ Ibid.

AN INTERVIEW WITH LINDA PERRI,
PRESIDENT OF THE WASHINGTON PARK
NEIGHBORHOOD ASSOCIATION

Erika Kane: How long have you resided in Washington park?

Linda Perri: Over 40 years.

EK: I see. And how has the area changed within the time that you lived there?

LP: It's changed a lot. It was always a kind of funky place you know, South Providence. I was just listening to a radio show on NPR about redlining with the insurance industry and the black population. We were red lined too. It was South Providence, you know. It still is an industrial area, one of the first post World War II industrial experimental zones in the country. And definitely the first in Rhode Island. It's had its share of crime. And it got really bad for a while. Really bad, and then it got better and then, of course, you know prices went up and people started fixing up their properties. But it's always been a mix of good and bad, gangs this and that, I mean I had drug dealers at one side and drive by shootings across the street. I mean I lived with a lot of ... mayhem, I guess you'd call it. But for the most part, it was manageable and livable. But it's a really interesting location, because it's all workforce housing. Originally it was all immigrant Irish and then it transitioned out of that. And it's always been a mix of you know, a variety of cultures. It's kind of nestled near Roger Williams Park, which was always beautiful and nice to have and on the other side it's always been like the waters, like in Edgewood in Cranston it's pleasant.

So this first waterfront access in South Providence was a big deal. On Public Street it was a big deal. And it's sort of like putting our stake in the ground and having it be ours in South Providence and then slowly, we can kind of build on that.

But it's always been a challenge. I'd say about the past ... eight years I've been like, the really environmentally crazy lady, you know, about cleaning up Allens Avenue. The reality, to recognize the fact that these are really polluting companies, and they're not going anywhere. With the transition off fossil fuels, we have an opportunity now to really change the narrative, change the way things are and could be. Make it more palatable and more healthy.

EK: Can you speak a little more on the demographics and population of the Washington Park and South Providence area?



FIGURE 22

LP: Yeah well, the population of Washington Park, as per the census. They all make under 50 grand, that's why we got a grant to put in the new water lines. And the new water lines that are on the city streets are going in because of the low income demographics that was revealed by the last census. The demographics are mostly black and Hispanic. But it's changed, it's become more investor driven. The past five, six years at least--actually more than that. See, we had the crash and the banks kind of ignored us. And then some people bought houses and fixed them up and then it was bank-owned, in some cases, and now it's been investor-owned. So the investors have bought them up and now the investors are making their money, and they're dumping these houses on the market that are really expensive but people are buying them because there's a lack of housing. Rhode Island should be ashamed of themselves because Governor Raimondo neglected the housing shortage forever. And then, I feel that she was kind of guilty into submission because the Massachusetts governor for two years in a row put a lot of money into his budget for housing, and then Rhode Island sort of caught up with it. We have all this federal money so there's a big push for housing, but there still is a lack of housing. The average person can't afford to pay 15-1800 dollars a month for a two bedroom apartment and that's what they're getting because of the lack of housing. Yeah, the demographics are changing because of the investor issue. There's a lot of boarding houses. That's been the problem with boarding houses in Washington Park, because of Johnson and Wales and people that can't afford to rent an apartment so they're living together. You know, so the demographics are mixed.

EK: I see. And so it's not even simply an environmental issue, there are issues of environmental racism and also gentrification it sounds like.

LP: Yeah well, a lot of people are freaking out like they don't want to see gentrification happening here, but it's already been happening—it's called investors. You know the investors have come in to buy a little house, fix it up, rent it for enormous amounts of money. The average family can't rent it so you get like, three students living together and their parents are paying the bills. Now the same investor owns like eight houses in one block. Selling everything because they can get crazy money and the people that are buying are people from Boston and New York. They're not even families. So this neighborhood is really in flux. There still is a majority family-owned, moderate-income owned. But then there's the people that are cashing out. All the people that are living around us are renting from these investors, and you have the noise from the students, and this and that. There's been problems with just too many people in a small amount of space. One guy bought an empty lot and put up a ugly plastic box duplex. Four bedrooms, two baths each. And then when nobody's looking he turns a two-family into five apartments with no parking. So this is what's going to happen all over the city, in Washington Park, that I see because I look at everything. And I've been here a really long time. Also, here we are at the borderline on Broad Street which has issues with all the nightclubs and the violence that spins off from the nightclubs. Then, on the other side, you have Allens Avenue with the strip clubs. Our police force have their hands full with the issue on Broad Street with all the nightclubs. It's just a horrible mess.

We're in a reactive mode. We're not proactive, we're just reacting to issues.

That's kind of how I feel. So there's a mix of people that live here and a lot of people don't even know—well, everybody knows what's going on on Allens Avenue, and nobody likes it. But a lot of people don't get engaged and don't call their city councilor or their Representative or their Senator. Or call DOT when something is wrong. Do you ever communicate with students in the product development world? Because there's a company in Detroit who took plastic bottles and made eyeglass frames.

EK: Oh I'm familiar actually, I have them!

LP: Oh, alright!

EK: They're called Genusee, Made in Flint.



FIGURE 23

LP: I love that! So why doesn't RISD have something like that? Why don't they have a contest to see what they can do and get some seed money from the state or the feds to start a business and make park benches out of recycled material to save the landfill? Eyeglasses, park benches, I don't know, dishes? Something! EK: That'd be a really great project.

LP: I don't know, recycle mania, you know? Just do something, I think. When I saw that I saved it, I was going to give it to some city councilors because I thought, well that's just brilliant. That's what we should be doing. That's the kind of business that we should be promoting.

EK: Yeah, there's got to be another way to use all of that scrap metal because, from what I understand, they hoard it so they could ship it away and get the money for the metal recycling.



FIGURE 24

LP: The metal stuff gets shipped off to other countries. Sims is owned by a big German conglomerate and so when the ships come in they're working late at night. Again noise pollution, "bang, bang, bang, bang, bang." And then also these trucks that are lined up on Allens Avenue—the other day I took a picture of five trucks on the road, one on the way in, five trucks idling. Waiting. So when you're coming down the street and

they're in front of you, they take up the whole freakin right lane. It's crazy. So, not only are they a traffic hazard, they're a pollution hazard.

EK: So from what I understand, people have very different opinions about what Allens Ave can become. I read that the former Providence Mayor Joseph Paolino wanted it to become a gateway to the capital city through redeveloping the real estate. Some want the port to strictly function as a deep water port and bring more "making" back into the Providence economy. And they're also proposals for it to become a municipal waste processing center, and Sprague wants to expand on their current facilities—Is that correct?

LP: Well Sprague industries has the tanks. The white tanks. And the Attorney General took them to court, and they were fined because of those big ass tanks. They changed the content of their tanks, I think one or two of the tanks they changed to liquid asphalt. That's pretty darn toxic, liquid asphalt. So when they change the content of their tanks, they need to have the scrubbing equipment on the top of the tanks, so it doesn't displace all that funky stinky air into the atmosphere. So, for years, apparently, they changed the content of their tanks and they didn't upgrade their air scrubbers on the top of the tanks. Everybody thought it was the Gas Company, it smelled horrible. This heavy, noxious, toxic smell that, in the heat of the day, or when it was warm outside that smell would just fall down to breathing level and just linger and just float around forever. It would go all the way to the hospital across the highway and go all the way to East Providence. Well, we were getting it worst. We were being seasoned by this. Finally, what happened was I called the Attorney General's environmental unit and I called DEM and everybody. Well one day, the wind was blowing northeast. And all that stale air got into the AG office on South Main Street, and they were gagging and coughing, their eyes were burning. The AG sued Sprague industries. I don't think it was for a lot of money, and they made them change the scrubbers on their tanks. And so they knew. They knew. They're not stupid, they knew what they needed to do yet they didn't do it until the AG forced them to do it. And then there was a little financial settlement. My feelings are they should have paid for 1000 trees within a five mile radius. So, then there was Sims who was fined because they had another operation in Johnston at the landfill and they had a metal crusher of some kind, really loud, really smelly, really awful. And they required an air permit for that because of the fumes it would kick off. And for seven years, they did not have an air permit. Finally, the AG once again goes in. They got fined like \$2 million or a million dollars, a lot

of money, and part of their settlement was for green infrastructure in the area that they dominated and so most of the money went to Johnston and Providence got maybe \$150,000 and that went to green infrastructure which Groundwork, you know Groundwork? They are the recipients of that green infrastructure money and they're putting trees in and around Allens Avenue and South Providence based on that award from another big company who knew better and didn't care. That is just polluting and screwing the residents. There's another fine that's being assessed that is going to be discussed at the port meeting. A large midwestern company was taken to court and was found to be polluting and so Groundwork again is getting another grant to work on green infrastructure in South Providence. So I'm glad that it's all going to green infrastructure. We're kind of running out of bodies to help plant the trees almost. I was just talking to her about bio swales and pocket parks and mini forests, and holding the people in the port more accountable, like outside of Collier Point Park there's a triangle that DOT owns.



FIGURE 25

The Department of Transportation has what they call "adopt a spot." I'm trying to get some of the big polluters on Allens Avenue to adopt that spot and do some green infrastructure there, to make it better, you know. Instead of a dump. I mean, I don't think the DOT was cleaning it up until last year, when I brought it to their attention. So there's a lot we could do. I know Mr. Paolino, he wants to fix it up. But it should be a deepwater port and there is money for port infrastructure. If you talk to the guy who's the director of business for the city, he's working with Chris Waterston from ProvPort and they're looking to expand on their wind turbine business. And that's the kind of business we want. In South Providence and ProvPort, we want green business, clean green business. Because we have this crazy industrial zone where all the freaking strip clubs can hang because they're "grandfathered" in and all these other nasty entities because they're grandfathered in. Just like Narragansett Improvement Company who makes the asphalt. On the water side, it has to be a water dependent business. Like Sims is a water dependent business because they ship out

their stuff. They ship it out to another country, or maybe Sprague gets their delivery by ship, you know they fill up their tanks so that's everything on the water side.

EK: I see.

LP: So there's land there, but we need the right kind of businesses there. It would be great to have wind turbine business there or anything other than freakin scrap metal.

So it's like you take two steps forward and one step back. You never get ahead because of these people. All these connected rich international companies, I don't even think that the State makes a lot of money off of them, but we all suffer. We all suffer from the pollution– the water, the air, the groundwater, everything.

So yeah, we need to change. We need to clean it up and change it. If Paolino could do his magic– he's the master puppeteer. If he wants to do something that's positive for Allens Avenue, I say I would welcome it. I do not agree with Dylan Conley who's a lawyer for the license board, he wanted to put in a 24 hour nightclub district on Allens Avenue.

We already have a problem. The board of licenses is a big problem because A; it's appointed and so you're going to do what somebody wants you to do you know and it has a huge impact on the neighborhoods. Huge, huge impact on the neighborhoods to have a 24 hour nightclub district, you want to dump in our neighborhood in South Providence? I don't think so, nobody wants it, but he still has legislated in the board of licenses the ability for nightclubs to have what he's calling a "soft closing" where, as opposed to clubs closing at one o'clock or two, now they can close at three. Why, I say why, why would you extend it. Why wouldn't you cut it short and make it safer, so instead of having drunk people with guns driving through the neighborhood at two o'clock now they're driving through the neighborhoods at three o'clock.

So it's just making the neighborhood less safe in my opinion, and other people have the same opinion, but they got rubber stamped and it got approved and it's something that all these club owners can ask for. The more you know, the more you don't want to know. And so our little neighborhood is just being kind of

eroded. It's not the neighborhood-y neighborhood that we used to be with kids riding their bikes. It's evolved and it's more dangerous I believe than it used to be, even though there was more crime, but on a different level. I don't know. So we're getting some new sidewalks, we're getting the streets paved, we're getting new water lines, I mean there's a lot going on with all this ARPA (American Rescue Plan Act) money. And getting trees planted it's kind of a balance, you kind of want to keep a good balance, a good, healthy balance. But the Allens Avenue thing is pretty bad. I'm advocating to have Allens Avenue street swept more than four times a year. All the trucks, all the polluting companies that are down there, all the scrap, it needs to be swept.

All those trucks that come in and out and they drag out that stuff onto the road. Even if it's just salt, the sidewalks are such a mess, you can't even ride your bike. It's going to be part of the urban trail. There have been trail networks that come from the beautiful Fox Point in through the Jewelry District, and it comes up Allens Avenue, and it connects to Roger Williams Park, eventually.

But we don't we don't get the same love that some of the other neighborhoods get.

You know, because it's South Providence and because all these companies on Allens Avenue don't want it to be that nice, because they'd have to spend the money.

EK: When you were talking about the waterfront zoning– that's really interesting. That's a conversation that comes up in my field of adaptive reuse because as you know, there's a housing crisis nearly everywhere, and there are so many vacant industrial buildings that have good structure but can't be repurposed for affordable housing because it's in an industrial zone.

LP: That should be changed! You know I've gone before the zoning board so many times. Even old churches that are empty or industrial buildings, we have a lot of them here. I don't mind if the zoning changes from commercial to residential or industrial to residential. But I hate to see when somebody wants to flip a residential zone lot to commercial. We have a housing crisis, we should look really hard at allowing anybody to flip it out of residential. We should be promoting housing. At some point we will be at a critical stage where we got to really start changing the zoning laws. You know, to accommodate more residential. There's no empty lots left.

EK: Considering the really strict enforcement of waterfront dependent zoning use like you mentioned;

what does that mean or symbolize for the community to have regained access to this harbor access point on Public Street? Do you think it could become part of something bigger?

LP: Yes, I do because I actually think that on the north side of Public Street there's those empty lots that have those salt piles on it. And for like, three years I've been talking to Save the Bay and my city councilor, "The city should buy that land. It's owned by National Grid, we should buy at least one of those giant lots because we could have parking for the waterfront access." Does anybody do it? No. I don't know why. Now, nobody wants that shit in the Back Bay in Boston anymore. It used to be there, but land is too expensive and there's now hotels and condos. So they come to Providence. Again, cheap land, let them pollute it. "Who cares, it's just South Providence." Well you know what, we care. We don't want it there.

You know, the city's got all this money, let them work out a deal with National Grid and just buy it for the people. Buy it for the community and then, by the way, buy the Sims building for a Community Center of some kind. Now, then you have a destination.

You got the whole street. You got the building on one side and the other for parking. Years ago they used to be able to catch the ferry to Newport from there. It was a parking lot where there were food trucks, and you could buy a ticket and take the ferry to Newport. I mean it was nice.



FIGURE 26

EK: So what is the community asking for and what would they like to see this Public Street harbor access point

become? Currently it's not very inviting.

LP: No, I know. Now there's an abandoned boat. Did you see the sailboat that was washed up? There's always something, right? Next door behind the chain link fence, the new owner had leased it to some dumpster company. Some garbage company and one day I was there last summer and all these old used dumpsters were stored on that land. Again, not a water dependent business, right? Shouldn't have been there. Let it be a parking lot or whatever but don't put your dumpsters there. So what we'd like to see, and I think that Fatema [Maswood] had worked on some design layout. I know that the city had allocated some money for that destination. I haven't seen the blueprint for it yet, but you know Fatema's very creative. I think about a pocket Park, just something that's more palatable, more inviting down there. And then we'd have to get an easement from National Grid to kind of access the back part of it and have a boardwalk maybe. Because I know that land is contaminated and you can't really dig into it. But you could have a boardwalk and some benches just to sit and look at East Providence. That I guess is part of the plan. I know that the City Council has allocated money for paving to put in a sidewalk down from Allens Avenue down some and I think that they should eliminate the entrance into the salt piles from Public Street. I think once you put a sidewalk up and you make it more pedestrian friendly you have got to get rid of the trucks.

So you have the tire company, you have Conley's Wharf building, 200 Allens Avenue– and there's something funky going on inside because they've taken out like, 100 mattresses out of that building.

EK: Oh, really?

LP: Yeah, and it wasn't a hotel. So what we'd like to see is something that's inviting. It's a tough row to hoe, if you will. How do you make it inviting? Well, I guess that's Fatema's gig. She could come up with something that's pleasing and manageable, but it is a dirty dead end. But legally, we could go there and what it does by de facto it makes it illegal for the other people to abuse the space. So by that alone, it's a win, win– even though we won a dump. It makes it illegal for them to put their tractor trailer trucks there, park their abandoned cars there, and leave their dumpsters there.

The city is slowly trying to reclaim the space and get the illegal activity out, get them to go. Then we can focus on something that is usable by the public. Even if we just get pots and flowers and stick it on the end you know. Actually, I went there with a friend of mine and I took all these wild flower pods from my driveway and I planted

them along the fence that goes down to the water. So hopefully they'll come up. They're these really pretty stocky perennials. I just had a bunch in a bag and I just said let's just dump it on here and see what happens.

EK: Well, thank you so much for this conversation. I really appreciate the time that you took to speak with me.

LP: Sure. Where did you get your glasses from?

EK: Oh yeah they're from that company called Genusee. I think they're the ones that you were talking about, made out of recycled plastic.

LP: Yeah is that possible we could create a conversation with RISD?

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Our conversation ended with talk of a potential RISD industrial design collaboration for the creation of a product, similar to Genusee's glasses frame model, that could create jobs while confronting the plastic waste issue. Our talk brought me back to reality and helped me consider the necessity for transitions within speculative design, and helped me get a better understanding of the hopes, qualms, and strengths of the South Providence community.

Thank you, Linda, for a both inspiring and informative conversation. Your perspective, as a community organizer and long-term resident of South Providence, was most valuable.

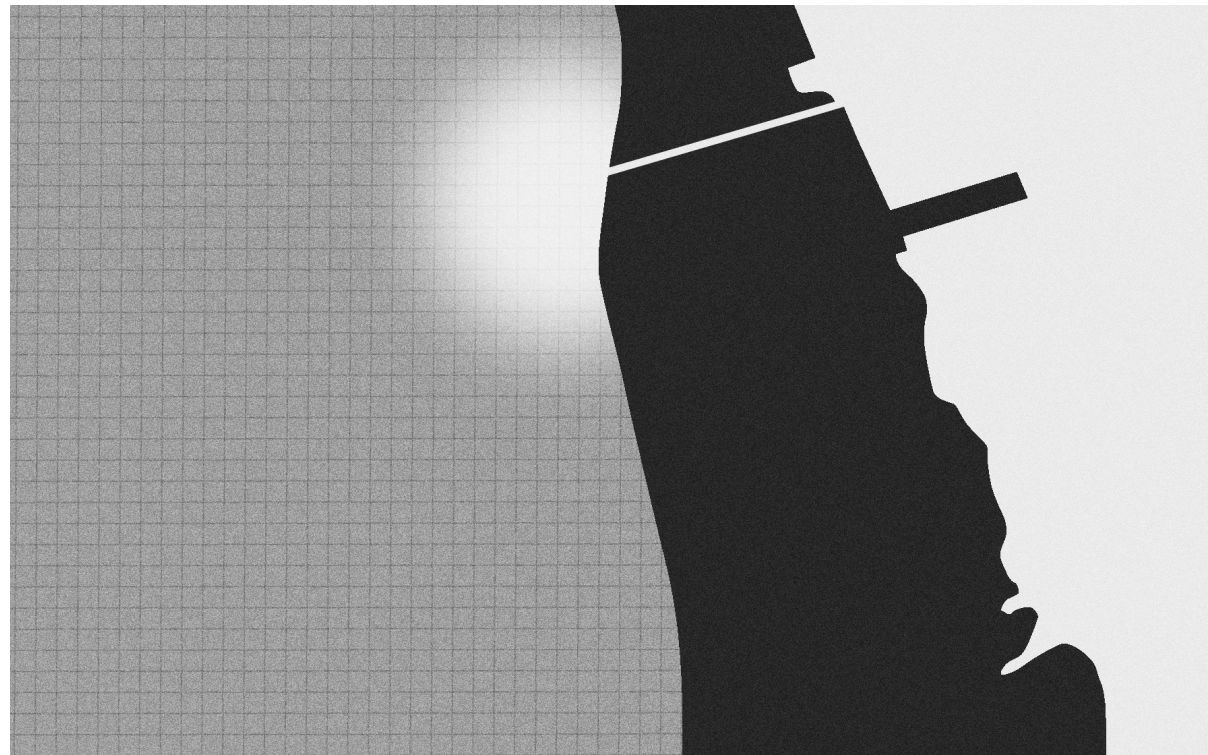
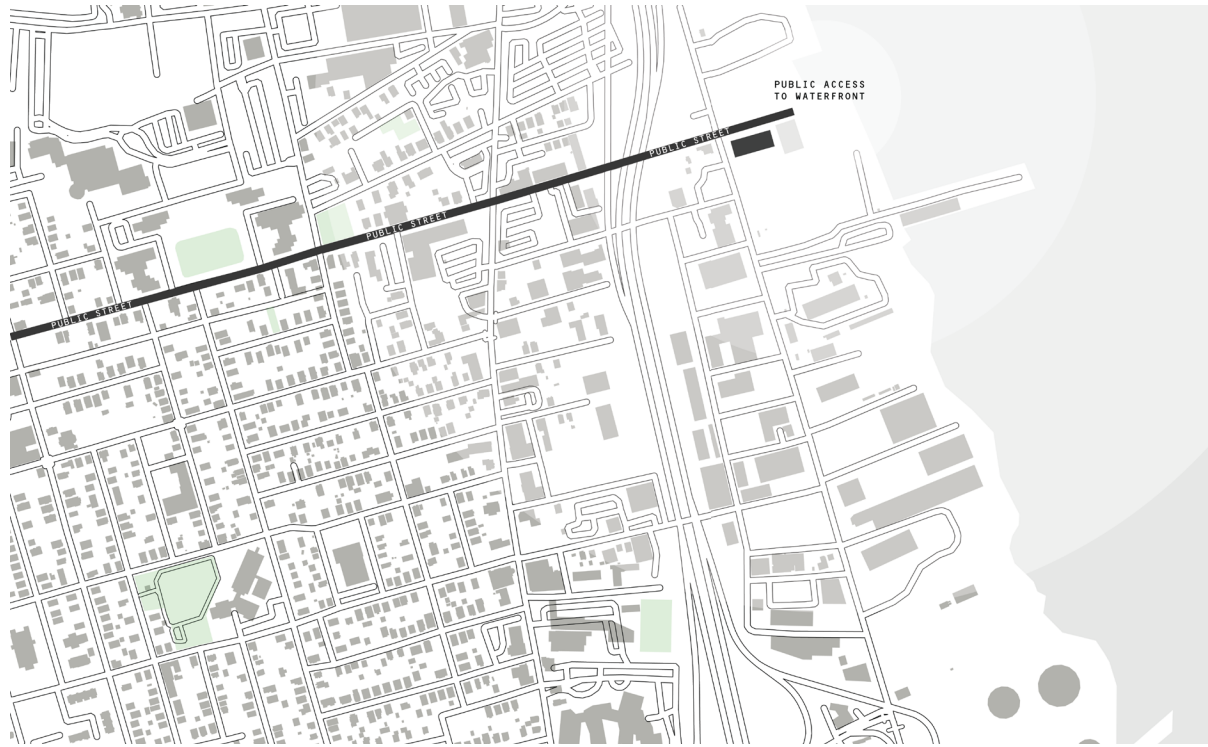
FIGURE 27



FIGURE 28

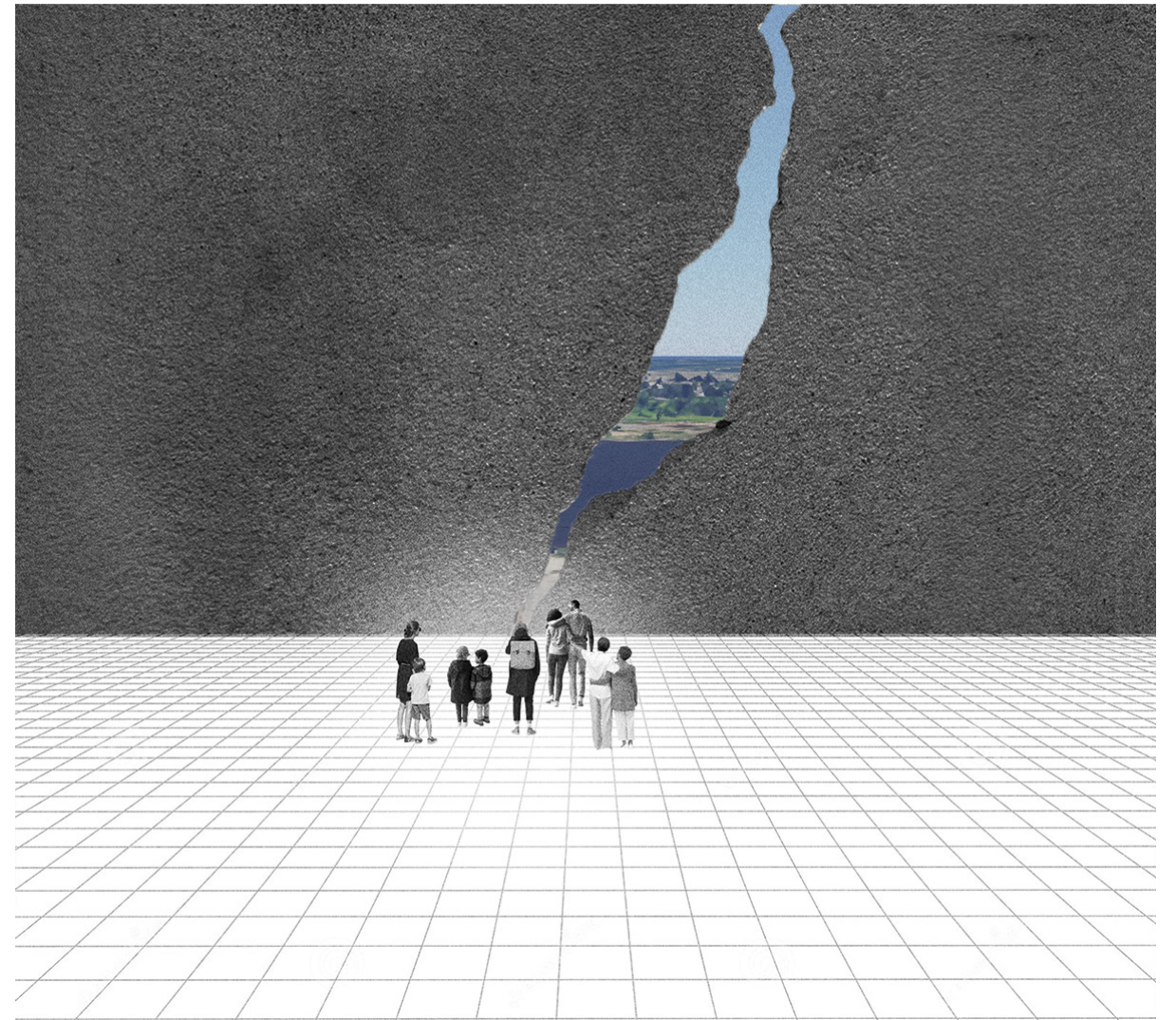


Excavation for I-95 and Thurber's Ave , 1963



PUBLIC ST. PUBLIC ACCESS

The best intervention would be a total reclamation of Providence River, where oil is replaced by cleaner forms of energy production. But considering the fact the community is still protesting Shell's expansion on the harbor, the ability to gain public access to the waterfront via Public Street was a major win. This public access point (one of three along the harbor, the only one in South Providence) to me symbolizes a crack in the wall. Similarly to how a crack exposes where the whole wall can be torn down, it is an opportunity to see how things can be different – a catalyst for change.



A crack exposes where the whole wall can be torn down.

PART 3

INTERVENTION

MATERIALITY

Subtract, alter, collage, and palimpsest. These are words I associate with degrowth applied to the design process. To me, degrowth is not about deprivation; it is about acknowledging the abundance hidden within the materiality of the everyday.

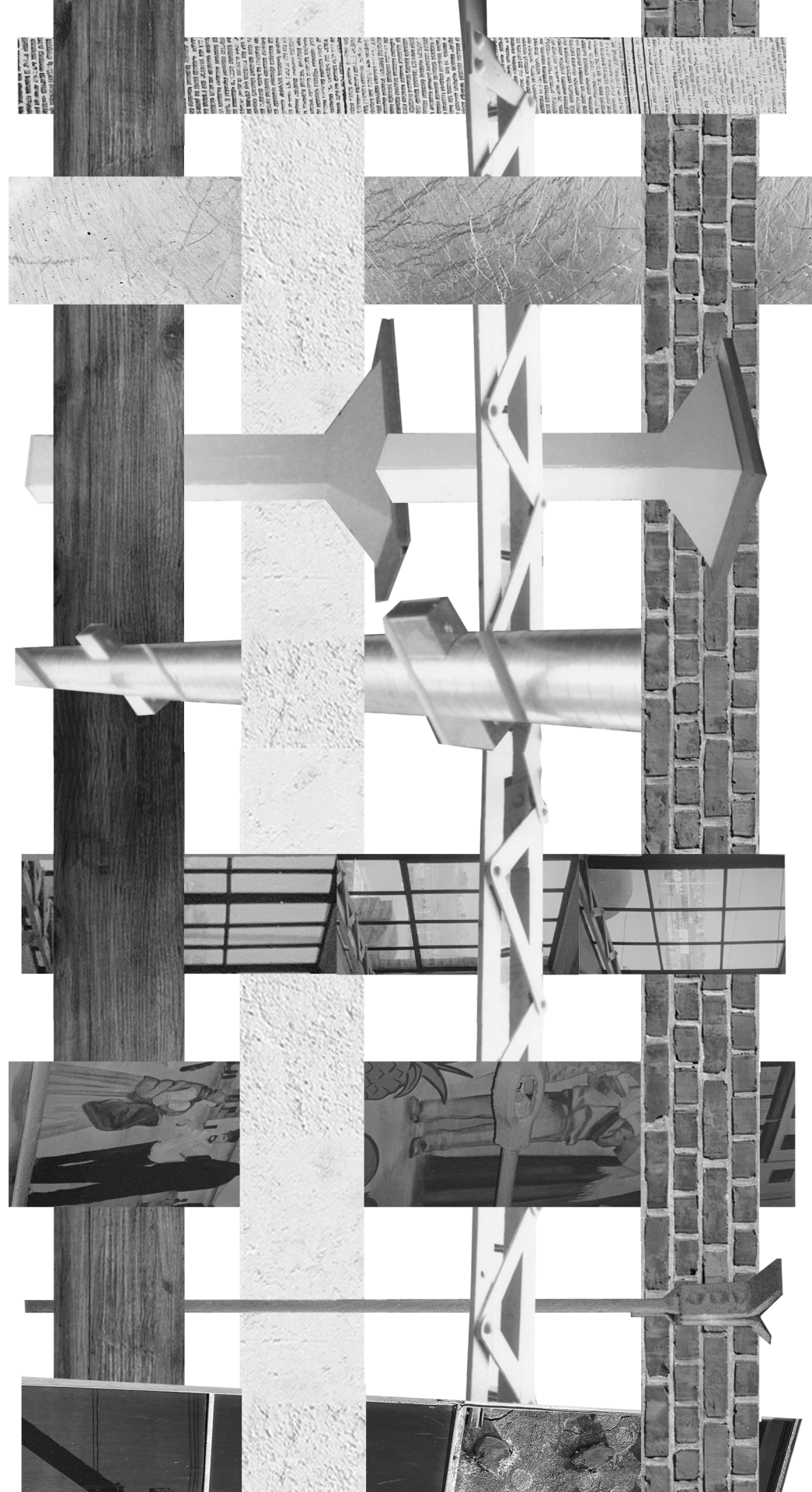
Designing for degrowth may be misinterpreted as anti-design. In my interpretation, rather, it works as a tool for thought. It asks the questions: *What is necessary? What is excess? What have we accepted as the norm without question?* It helps us reevaluate what we waste resources on, how to be more intentional with our surroundings, and how to find alternatives to extractive practices that are fundamentally unnecessary and harmful.

Subtract- to take away without ruining, working with material of the removed.

Alter- to fix what's broken instead of replacing it, rethinking what's no longer serving it's current purpose.

Collage- to collect what has value, utilizing what is available.

Palimpsest- to embrace history, celebrating relics and imperfections without covering them up.



IS SCARCITY A MYTH?

We live in an age of widespread understanding of the environmental destruction of the waste we produce, just as new ways of creating and building are at the forefront of the design world. New bio-materials, new technologies, new “green” solutions – all of which rely on consumption, perpetuating and mimicking the same destructive systems already in place, with only a slightly lighter impact.

The “greenwashing” that occurs is described as “eco-bling” by Liddell, and includes technologies such as costly photo-voltaic cells, hot-water solar collectors and personal wind turbines¹, technologies that are still inaccessible to many and resource-heavy to produce. The inefficiencies caused by the hastiness of growth-inspired architecture would be much better off with more thoughtful planning for orientation, material choice, and actionable plans for maintenance. Additionally, contemporary sustainability standards for buildings and objects, such as LEED, measure success by meeting a certain level of “sustainability.” By doing so, it distracts us from considering whether or not the building or object needs to be created in the first place. Regardless – the buildings have been built. And what do we do with them now?

We must begin to search for alternatives to newly mined resources before we transition out of necessity. “Urban mining” is a term used to describe the use of deconstructed/demolished building material to mitigate the need to produce new construction materials from natural resources. This has the potential to save the large amount of embodied energy expelled in the extraction process².

When resource mines dry up we can look to the material typically discarded as waste. Where buildings and structures cannot be saved for new use, they can be seen as materials depots. Abundance can be found everywhere, if we put more time and care into the end of life of urban buildings³.

“WASTE IS SIMPLY MATERIAL WITHOUT AN IDENTITY”
- THOMAS RAU

¹ Howard Liddell, *Eco-Minimalism: The Antidote to Eco-Bling* (London: RIBA Publishing, 2013).
² Hebel, Dirk E. “Three Ways We Will Build the Cities of the Future from Waste.” *The Guardian*. Guardian News and Media, June 19, 2015. <https://www.theguardian.com/sustainable-business/2015/jun/19/three-ways-we-will-build-the-cities-of-the-future-from-waste>.
³ Wainwright, Oliver. “The Case for ... Never Demolishing Another Building.” *The Guardian*. Guardian News and Media, January 13, 2020. <https://www.theguardian.com/cities/2020/jan/13/the-case-for-never-demolishing-another-building>.

DESIGN → SOURCE MATERIALS → MANUFACTURE

SOURCE EXISTING → DESIGN → MAKE

FLIPPING THE DESIGN PROCESS

Wood pallets are easily found next to nearly any dumpster around the city- a relic of disposability, carbon-intensive heavy shipment, and consumption. This project was an attempt to reframe the typical design process, which consists of designing a piece, sourcing materials for that design, and making that design. Instead, existing material was sourced first, then the design was created based on the existing geometries and conditions of the found material. With subtle nods to traditional woodworking techniques but not outcomes, this piece embraces the imperfect material quality of a “disposable” wood pallet and celebrates it instead of covering it up.



POST-FREIGHT SHIPPING STOOL
11"x18"x16", 11"x9"x8"
SPRING 2022



DESIGNING FOR ENDINGS

A CONVERSATION WITH TOBAN SHADLYN, STRATEGIC DESIGNER AND RESEARCHER AT RISD CENTER FOR COMPLEXITY

Erika Kane: Can you describe your current research in designing for endings?

Toban Shadlyn: I have been circling around this topic of endings for a few years now, and I sort of stumbled into it. I was reading other people's work online, who are doing some really fascinating and important work. And then it started to really resonate and relate to the work that I was doing and things that were bubbling to the surface in my work and research, specifically looking at addiction and systems of care and drug use and those sorts of themes. I have been thinking about this idea of endings from many different perspectives and entry points, but it's just interesting how much it kind of seeps into a range of different things that I've been exploring.

So it started a while ago, but then, with the pandemic happening it also came up again full throttle with the world shutting down. At the time, we didn't know how long the pandemic was going to go on for. It was a big, unknown question mark, and we weren't sure how temporary these shutdowns and closedowns were. As time went on, it became clear that it would go on for a while, and now there came a question of *what will survive during all of this?*, and through the likelihood of an acceleration of endings. So this idea of endings came up again, at a global scale.

In particular there's a few people I've been following who've been writing and thinking about it—Joe Macleod wrote a book recently about it called *Ends*, and he was looking at it from the perspective of how we design products and services, and why we don't design for endings when it comes to products and services. We do such a bad job of that. He's taken it also from a design perspective of how to get better at designing endings of products and services and goes through the context of that. The other person I was following closely who was writing a lot about it during the pandemic is Cassie Robinson. She comes from the perspective of organizations and institutions and thinking through how to ethically and consciously wind down or end organizations, either because they're just sun-setting, because they can't make it, or because they're irrelevant, or whatever the many reasons are. Again, we tend to not think or design the ending part in that spectrum.

And it got me thinking about our field— we're both studying or have studied interior architecture. What's interesting is I don't think we talked about it that explicitly, or use that terminology in interior architecture. But our program focuses on adaptive reuse, which is different from other architectural programs that are maybe more focused on 'capital A' architecture or new development. Our work starts from the idea or acceptance that we're starting with something already there and we're adapting and reusing it. So embedded in that discipline

is already an idea around endings. Whether because the program no longer suits it, or it's vacant, or outdated, or worn down, or decrepid, or whatever it is — our practice already is contending with this idea of transitioning something. Generally, I don't think we are consciously thinking about endings in that way.

EK: I agree, I think in many ways adaptive reuse is more of designing for new beginnings and transitions. The conversation around endings doesn't happen as often as it should, especially within adaptive reuse, which as a field concerns itself with the full life of a building.

TS: Right, I sometimes think we don't confront it as head on as we could. The questions for me around interior architecture and adaptive reuse are — *What is the relationship between adaptive reuse and architecture and endings?* and *How do we close down or decommission buildings?* But also from a material perspective, which I think is a very obvious one — *How do we take apart buildings— materially, economically, safely?*

I've also been thinking about the experience of winding down or transitioning from this to that, whether it's from this building or this program to a different one, and how we design that experience. The experience piece is a bit different than just the materiality aspect of reusing material when you're taking a building down, brick by brick or wood by wood or whatever it is, there's a lot of examples like that. There is an example in Providence I think I mentioned a while ago. The Fogarty building, which was a loved-hated brutalist parking garage in downtown Providence. They demolished it to put up a hotel. But what the community did is they decided to host a funeral for the building. The day that it came down, people stood around and had a funeral.



FIGURE 49

Part of the reason was to bring attention to a larger conversation around Rhode Island's relationship with preservation, and what kinds of architectural history the state values or wants to protect. It just started making me think, *Are there rituals and experiences that*

we can be thinking about in terms of designing things that are ending? Whether it's buildings or programs or architecture or things like that. I don't have an answer for it, but I think I'm just more attuned to it now, looking for examples of how others are approaching that or thinking about that. What about you? What's your entry point into endings?

EK: It definitely started in a conversation I had with you earlier this semester. Before, I've thought about endings in terms of designing for deconstruction or waste as both a byproduct and a design flaw. I was thinking about it purely from an architectural perspective. But the example of the Fogarty building is so interesting because for the death of people there are many rituals that we make space for. But that's a much bigger question, how we could be thinking of endings beyond literal waste.

TS: Exactly. The waste piece is probably one of most dominant and important – as it should be. This may be a sweeping generalization so I'll try to keep it grounded in my own experience, but I grew up with a very Western perspective. I grew up in North America, and what I've noticed is that part of living in that culture, there's a lot of *grow grow grow and more more more, consume consume consume, new new new* – that mentality. In addition to that, I've also found there's a weird awkwardness in talking about death. There's just a lot of avoidance around the topic for families and society. That's not the case everywhere, and so growing up in Western culture, it's not super surprising that we've sort of avoided those conversations in other areas too. But I think it's shifting because of environmental reasons, because of climate change, because of resource scarcity, because of just cultural shifts in understanding of things, such as not avoiding conversations around talking about endings and dying and those sorts of things. I think there is now a lot more attention around it. But now work needs to be done when thinking about it from a design context and design perspective. And then even further when thinking in the architecture or infrastructure scope.

EK: The natural world exists simply as cycles and death, and I think there is a lot we could be referencing there that is missing. Biomimicry is very big in architectural and design conversations right now. I would love to see that extending to designing systems of endings. Natural decay is one way we could be thinking about endings. Anna Tsing writes in *Mushroom at the End of the World* about how there will always be new life even in the most toxic environments where it seems impossible. I feel like somehow we could be referencing natural systems of death and decay in architecture as well.

TS: Yeah there's a sort of bursting appreciation for fungi and mushrooms and what used to be seen as the gross, toxic, moldy, unsexy part of nature. And then lo and behold, we have a lot to learn from it, and it's actually really cool. Oh my god, it's amazing. It's very subtle and it's very invisible a lot of the time. There's a lot to learn from it and it reminds me actually of a quote by Anab Jain of Superflux, a speculative design firm in the UK.

"I realized that *Mitigation of Shock* (an exhibition or piece of work they did recently) gave birth to new relationships as we moved from just making things to making things that grow. Of course, foresters grow trees, and farmers grow wheat. But within our world of design, the focus on the product or the artifact has always been the embodiment of the outcome. Here instead we began to focus on the organism rather than the artifact. By suspending pots with seeds in basins of nutrient fog, we saw how roots were born, how they were formed and grew into these delicate ecologies. How they transformed and died, or grew incessantly. Of course I had grown things before, but this one was different, a sort of slow epiphany."

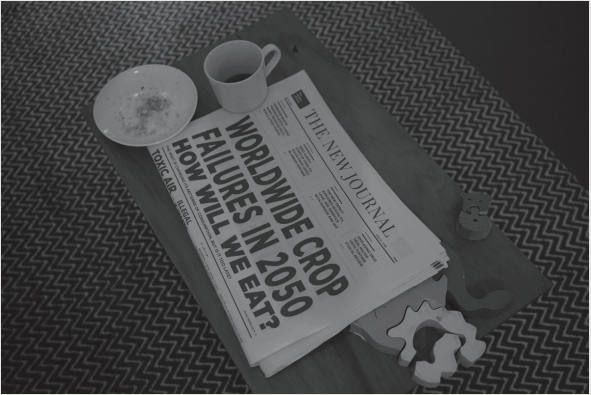


FIGURE 51

She has a bunch of writing about this whole sort of philosophy around more than human-centered, which is looking at nature and organisms and species as a way to sort of shift because, the 'human' is always sort of the

dominant, the all-power. And to your point, I think there is a lot to learn about looking at other things, organisms, species, and nature, and what is happening in their growth and life cycles. I think there's a lot to learn and pull from that in the work that we do.

EK: I think additionally, we are just so obsessed with permanence in the West. Both in the materials we use for architecture and also generally in the ways we live. If you look at other cultures who didn't have the same private property laws, or were just more nomadic, it's clear there are ways to move with nature and work with nature in ways that were more aligned with natural cycles instead of a strict rigidity based in our obsession with permanence and attitude towards nature as a disconnected, foreign entity. We don't work with nature in ways that other societies learned how to do so long ago, and now we're finally realizing what an issue that is.

TS: Yeah. I know you're exploring this in your thesis and I'm wondering how this stuff, whether it's private property or ownership or nature, is coming through or how you're exploring it through the entry point of your thesis site. How else are you expanding on it or experimenting with those thoughts?

Erika Kane: So my building is located on the harbor, which is largely dominated by harmful industry and fossil fuel industry. And then the site is located right next to the newly re-established public access point to the harbor, which is a really big deal. But what came through more so in the research I've been doing is the idea of building care and maintenance, and how that could be a more social aspect or ritual by putting the role of landlords or property managers back into the hands of people and reconnecting ties to spaces we inhabit by playing larger roles through care, as we do in our relationships with people. Material reuse has also played a large role in my thesis, and there was a really great example that I wanted to share. Have you heard of the Madaster Material Passport? It's basically this online registry for building materials and products for when you are constructing a new project. This is a project that started in 2017 in the city of Amsterdam where you have to register what building materials you're using and where they came from in new construction projects. Essentially what that will do in the future is keep documentation of use of all the materials used, that way if the building does get taken apart in the future, you'll know exactly what's in the construction and what can be reused or recycled. That can hopefully create a shift in the way that we approach new material use in the future in addition to repurposing and salvaging material now.

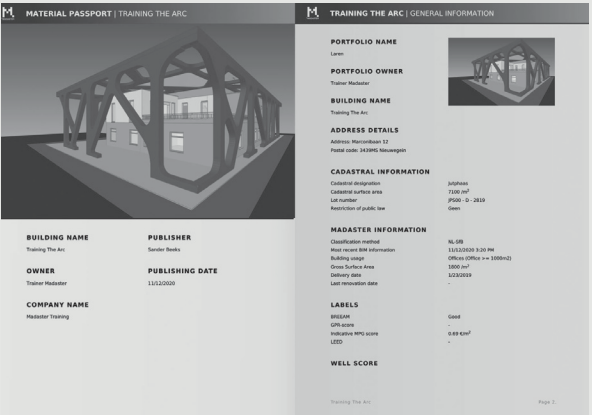


FIGURE 52

TS: Yeah, making that visible and transparent and holding them accountable in the sense that now we can document it and hopefully use that in the future. There's a lot of work being done to push economies towards a circular economy model and with that requires so much shifting. If I just think about buildings and the architecture industry, it's everything from how we extract or grow different kinds of materials and how to keep them in and through the life cycle. On one hand, there is the need to create new technologies and new materials, like R and D (Research and Development) around using mycelium as a material to build stuff with, or algae and or whatever other materials we're exploring. They are a part of that circular economy model, but then you also, on the other hand, have all the existing shit. It's true we need to build and develop new materials that are not going to become landfill waste, that you can go back into the earth and regrow, but then there's also cities and countries that have so much built material already. Like the bricks and steel and wood.

So there's balancing the adaptive reuse part of it and the new development part of it. I think it's important to focus on both of those because both are a reality.

Thinking about a registry or more interventions like that – how do we learn or inform or understand how we use the existing? How can they, if not for rebuilding buildings, be used in other ways, and just kind of keep them in the life cycle until they can't be anymore? I don't know.

EK: Throughout this process I've found myself frustrated in ways, not just with greenwashing necessarily, but with the amount of new materials that are coming up that are

more “sustainable” in terms of material sourcing and stuff like that, but they still mimic the same systems and same design processes that got us into this mess. We’re still creating new things, we’re still going to have to dispose of it at the end of its life. I think incorporating the ending, if we are designing new things instead of repurposing, is important. I guess maybe a lot of that responsibility does fall into the hands of the designer as opposed to consumers.

TS: Just to add on to that, I always sort of swim in the land of systems and thinking about things from a systemic perspective. I was doing a project around circular economy models with Vietnam. The UN was thinking about how Vietnam could shift from a linear to a circular economy over the next however many years. What was surprising about doing some of that work – I mean when we think about these things systemically, we see – yes, it is up to designers. But ultimately there’s all these systems that are in place that make it really hard. Some of these systems are incentivizing, whether it’s because of profit, whether it’s because of tax incentives or tax cuts or material resources or competition. There’s all of these systems that are designed in such a way that make it hard for designers to want to switch focus and take on the accountability and design around endings. Partially because, *Is there a market for it? Is there money for it? Is there demand for it? Are there clients for it?* There are a lot of things that need to change in how we set the conditions to enable that work to happen or enable industries or designers to shift that way. So I kind of ‘zoom up’ often to think about why this isn’t happening or how the system is set up right now to either incentivize or de-incentivize it, or make it easier or harder.

The systems are not designed to incentivize sustainability and reusing materials – that’s not a very profitable model. So there’s a lot that needs to change at this systems level to trickle down to allow industry and design practice and architecture practice to change as well.

EK: It makes me wonder when we could start factoring monetary growth out of the equation to prioritize other things. And if that’ll be possible, ever.

TS: Yeah, I think it’s happening in a couple ways, from top-down and bottom-up. We’re seeing that right? There are governments that are top-down level who are trying

to think about shifts at a very large systemic scale. We’re also seeing it happening at a very, very micro-scale, whether it’s individuals, studios, neighborhoods, cities. So it’s hopeful at some point those things scale down, and across, and up. But it has to be both.

EK: How do you think an industry that considers the full life cycle of a product or building differs in design process from the typical model?

TS: I’m a big believer that it’s hard to start new things from scratch. We have these systems in place, whether it’s industry or profession or institutions or organizations that are part of the ‘existing’. I think it’s about finding what is good about what’s happening in those spaces and institutions and finding what to redesign within that to shift towards something different. It takes a long time and it’s hard to start new things. I think a lot of the work is redesigning what’s existing, which again, goes back to our practice of adaptive reuse. I don’t know about you, but I find that even though my practice has shifted away from adaptive reuse of architecture per se, I think a lot of the notions and ideas and philosophies embedded in that kind of thinking of adaptive reuse applies to thinking about what we adapt and reuse in institutions or in industry or studios or whatever. I sort of come at it from like the question of ‘how’ in terms of How does it shift? And I don’t know. It’s a big question mark. In the work I’ve been exploring in my current practice, I’m questioning *How do you change or shift a health care system?* I mean, you could start a new health care system in the US, I don’t know how successful it would be. You have this current health care system that’s fraught and not working very well. So how do you start redesigning within that system, for example. I think what I’ve learned so far is that it takes a really long time. For good and for bad, it just takes a lot of time. Especially coming back to your point about the industry of architecture and buildings and environments,

Unfortunately, it takes a long time. And at the same time we don’t have a lot of time. Time is one of the constraints right now. The world is warming, and the climate is changing. We’re seeing that right now happening all around the world, and so there’s this weird tension between the time it takes to do systems change and to shift industry, to fix ideology, all that stuff – and yet

at the same time we don’t have the fortune of that much time before shit gets fully crazy. Which is a really dark space to begin to think about. But that’s the reality.

Some of the other ways that I’ve been thinking about it in my work, because I don’t necessarily come at it from a material vantage point or an architectural one, is endings in the sense of, *How do we manage endings of frameworks that are wrong or ideologies that aren’t holding up anymore?* Or in the way that we have understood things about the world that aren’t right anymore because we learn new things, and then what we thought we knew isn’t true anymore. What I’m finding in the work that I’m doing in addiction is we’re still learning a lot about addiction and drug use. There’s all of these embedded narratives and frameworks in our mind in the ideology we’ve been conditioned to, because of politics and policy and history and racism, that are turning out not to be true anymore. And were never true. I’m realizing that it’s really hard for a lot of people that I work with because it’s very unsettling to find out what you knew isn’t true anymore, or that you have to end a thought or a way of understanding the world to learn something new, or be told that it was wrong. That whole process is very, very unsettling for people to go through. I watched the discomfort that people have with that, and so a lot of what I’ve been thinking about how to manage letting go and ending frameworks and knowledge that just aren’t accurate or true anymore.

And the other sort of related piece I often think about too is that the work that I do is very community-engaged. If I decide to leave that field of work or decide to leave that community and move somewhere else, what are the ethical responsibilities and accountabilities of ending that work and those relationships? How do you wrap that up or how do you exit that ethically and not cause harm in doing so? I say that because in a lot of my work I tend to spend three, four plus years building relationships and engaging in the work meaningfully, but from an architectural perspective, it depends, right? Some architectural projects can be 1 year, 5 months, or 10 years. But similarly, architects jump from project to project.

It’s hard to talk about in the abstract and in sweeping generalizations and questioning the role and responsibility of working on projects, especially if you are working on projects that are much more community-embedded. I think about your thesis project, and some of the intervention proposals that you’re thinking through are very much community-organized, community-

empowerment, socially-engaged, all of those sorts of things. What is the role of the designer and thinking through designing spaces for that kind of purpose? I was listening recently, a friend of mine, Germane Barnes who’s part of the Black Reconstruction Collective, was saying that as an architect, he moves into the communities and neighborhoods that he’s designing and building for, for however many months, just to be a neighbor and be a part of the actual neighborhood that he’s building in. For him, being part of the community and living with them is the only way that he can design.

EK: Everything you said is really important to hear, especially being in an academic space. We are constantly picking up projects and dropping them at the end of the semester.

TS: Well, I think that’s the nice thing about thesis. It gives you this time and space to think about these things. At least for me, I think carving out this time and space to explore these questions is what makes a good thesis. And this is my bias, but this is the time to question fundamental things about the industry and the profession and the discipline. That’s how I sort of think about thesis. It’s not just a project for proposing a new intervention and idea into a space. It’s a vehicle for really thinking about your practice as a designer once you leave school, and I think you’ve given yourself the space and time to explore these things through your thesis.

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Designing for endings is such a fascinating topic that I feel lucky Toban introduced me to. In addition to “endings”, this conversation helped me consider how systemic issues limit designers in practice, and how we can include systems-thinking into our process of designing.

Thank you, Toban, for sharing your research and expanding my thoughts. I really appreciate the time and feedback you’ve provided throughout my thesis process.



FIGURE 52

COLLAGE HOUSE
S+PS ARCHITECTS
NAVI MUMBAI, INDIA
MATERIAL REUSE



FIGURE 53

HAKA RECYCLE OFFICE
DOEPELSTRIJKERS
ROTTERDAM, THE NETHERLANDS
MATERIAL REUSE



FIGURE 56

RESOURCE ROWS
LENDAGER GROUP
COPENHAGEN, DENMARK
BRICK FACADE REUSE

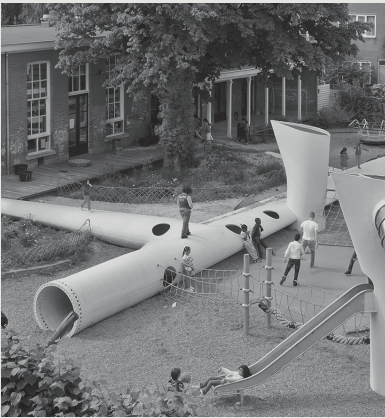


FIGURE 57

BLADE MADE PLAYGROUND
SUPERUSE
ROTTERDAM, THE NETHERLANDS
INFRASTRUCTURAL REUSE



FIGURE 54

SALA BECKETT
FLORES & PRATS ARCHITECTS
BARCELONA, SPAIN
SALVAGE MATERIAL CATALOGING



FIGURE 55

COLLAGE HOUSE
S+PS ARCHITECTS
NAVI MUMBAI, INDIA
MATERIAL REUSE



FIGURE 58

GREEN ENERGY PLANT
IBA HAMBURG
HAMBURG, GERMANY
NAZI BUNKER CONVERSION



FIGURE 59

ILFORD COMMUNITY MARKET
WEBB-YATES ENGINEERS
ILFORD, ENGLAND
DESIGN FOR DECONSTRUCTION



FIGURE 60

URBAN ECO-COMMUNITY
ANUPAMA KUNDOO ARCHITECTS
AUROVILLE, INDIA
COLLECTIVE LIVING, CO-HOUSING



FIGURE 61

TOOL LIBRARY
BERKLEY, CALIFORNIA
TOOL LENDING SYSTEM FOR
COMMUNITY MEMBERS



FIGURE 64

MULTIPLO
STUDIO GISTO
CASE STUDY AND RESEARCH,
FLIPPING THE DESIGN PROCESS



FIGURE 65

CIVIC SQUARE
RESEARCH
PUBLIC SQUARE AND
NEIGHBORHOOD ECONOMICS LAB



FIGURE 62

LIBRARY OF THINGS
BARRINGTON, RHODE ISLAND
LENDING OF EQUIPMENT, TOOLS, AND
TECHN GADGETS IN LIBRARY SYSTEM



FIGURE 63

COMMUNITY BUILT ASSOCIATION
NON-PROFIT CONNECTING DESIGN
PROFESSIONALS AND COMMUNITY
VOLUNTEERS FOR COMMUNITY PROJECTS



FIGURE 66

THE LIBRARY, OSLO TRIENNALE
INTERROBANG
KNOWLEDGE-SHARING INFRASTRUCTURE
DEGROWTH EXHIBITION

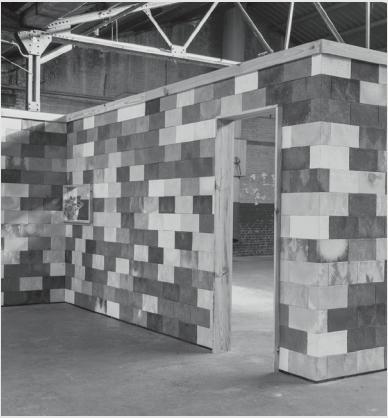


FIGURE 67

PRECIOUS PLASTICS
OPEN-SOURCED COMMUNITY
BUSINESS STARTING FROM
PLASTIC WASTE

Collective Culture

PROBLEMS

GOALS

- Living with less is Un-American
- Individualism, every man for himself

STRENGTHS

- South Prov is home to many community-empowering institutions, including libraries, religious orgs, community gardens, and more.

- Facilitate space for sharing both belongings and knowledge
- Normalize collective approach to ownership

Housing Access

PROBLEMS

GOALS

- The housing crisis and capitalism are inextricably linked
- Housing cost burden
- Gentrification causing rent cost increase

- Propose alternatives to the pursuit of private property through co-housing models

- Recent win of Public St. harbor access point declares power of community organizing
- Reestablishes the opportunities that may be present to take back the waterfront and consider rezoning

Reclamation of Waterfront

PROBLEMS

GOALS

- Private ownership of surrounding area makes it uninviting
- Area is zoned for Waterfront Industrial use only
- Fossil fuel industry has negative health effects on nearby residents

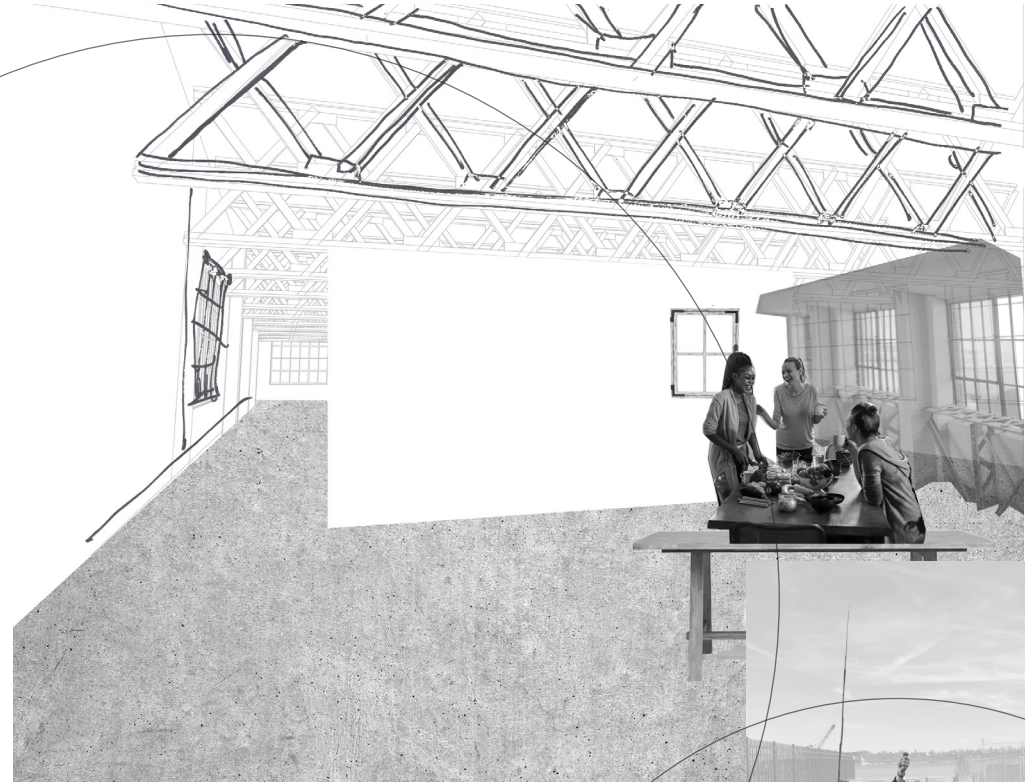
STRENGTHS

- Provide place for distress, reflection
- Nuture importance of human connection to water
- Provide space and shared resources for recreation (kayaking, fishing, etc)

COLLECTIVE
CULTURE



HOUSING



RECLAMATION OF
WATERFRONT

WHAT IS A LIBRARY?

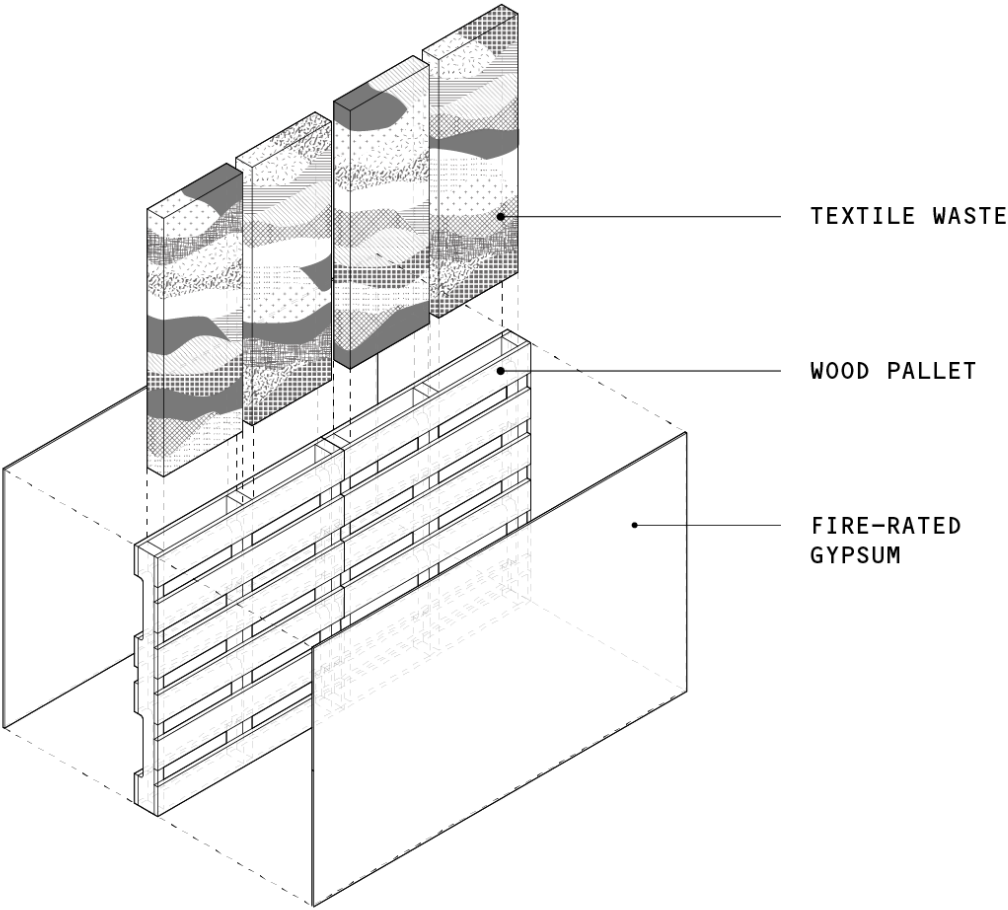
Despite a major societal shift to online search engines, libraries remain a prominent form of public infrastructure that hold the ability to empower communities and provide a safe, free space for learning. Libraries are a great example of a widely accepted form of socialism in the West. Libraries have been around for centuries, and their system of borrowing, without any form of monetary exchange, is not questioned. If we can accept these institutionalized forms of lending, use, and non-ownership of books, we can surely extend the contents of libraries beyond books, magazines, and movies to promote a culture of sharing. Here, collective ownership is not limited to land but also belongings.

We all have belongings we buy and use only a few times a year – from specialized kitchen gadgets to power tools, gardening equipment to spare bedrooms, “things” that sit in dark corners of closets, or even set away in storage. The Library of Things is proposed as a community-controlled institution that would operate in a donation-based manner, with 2 primary goals:

- 1. Normalizing borrowing from your community members, thus rethinking modern Western narratives of self-sufficiency, possessive ownership, and unnecessary consumption
- 2. Making goods and equipment more accessible

I don't believe sustainability falls in the hands of individual actions but we are very clearly living in a culture of excess. While minimizing personal waste through a reduction of consumption on the scale of the individual may seem to have minimal impact, we must consider the role capitalism plays on the larger socio-cultural scale, encouraging individualism through material possessions. Moreso, it enacts the idea that we need more and more things to stay happy and keep our attention occupied. Instead, we could look to activities that aren't economically productive and spend more time nurturing one another. In other words, how can we reclaim culture from GDP?

INTERIOR WALL PARTITION DETAIL



HOUSING AND DEGROWTH

The housing crisis and capitalism are inextricably linked, and viewing housing through a degrowth lens reveals several fundamental issues: first; the fact that to pay for shelter, renters must remain in an inescapable cycle of working, and second; the aspirational nature of private property ownership in our society makes home a status symbol that is achievable by few. Therefore, we must explore alternative forms of living and reframe what “home” and “housing” really mean.

The privatization of property began as a dominating outcome of settler colonialism that violently forced Indigenous peoples out and turned land into possessions tied to contracts and exploitation¹. The erasure of Indigenous political systems and seizure of their control in the US deserves much more attention than I am touching on here, but it is an issue with a much larger scope. Our current lack of land stewardship is visible in cultural norms of all scales, from the energy-intensive maintenance of the manicured green lawn, to the environmental laws that keep fracking and pollution legal, to the discomfort of sharing bathrooms. In the narrative created by colonialism, land is silent, passive, and available for exploitative resource extraction, and sharing is overshadowed by the normalization of privacy.

The meaning of housing must be reworked and taken out of the context of our current model of living that is based in patriarchal histories and supports capitalist economic systems. The housing market and mortgage debt plays an important role in the economic growth paradigm², as it is a major and necessary incentive for people to continue working in unfulfilling circumstances. The framing of private property ownership as a financial investment is valid in this economy where the pursuit of accumulated generational wealth is a societal norm, but in a society where we would strive for more collective forms of ownership, housing becomes less of a consumerist goal and more of a node for meeting human needs and shelter for convivial, collectivist experiences.

The idea of what a home can be opens up when taken out of the context of being a very private place that acts primarily as a resting place between days of working long hours. The idea of home as a node for more communal, societal transformations can change the ways homes are designed and conceptualized. This ties into the degrowth principle of care, where architecture becomes a much more personal experience. Redistributing the role and power of landlords and property managers can help people re-engage with the personalization and maintenance of their living spaces, making the home a physical experience instead of a consumerist act³.

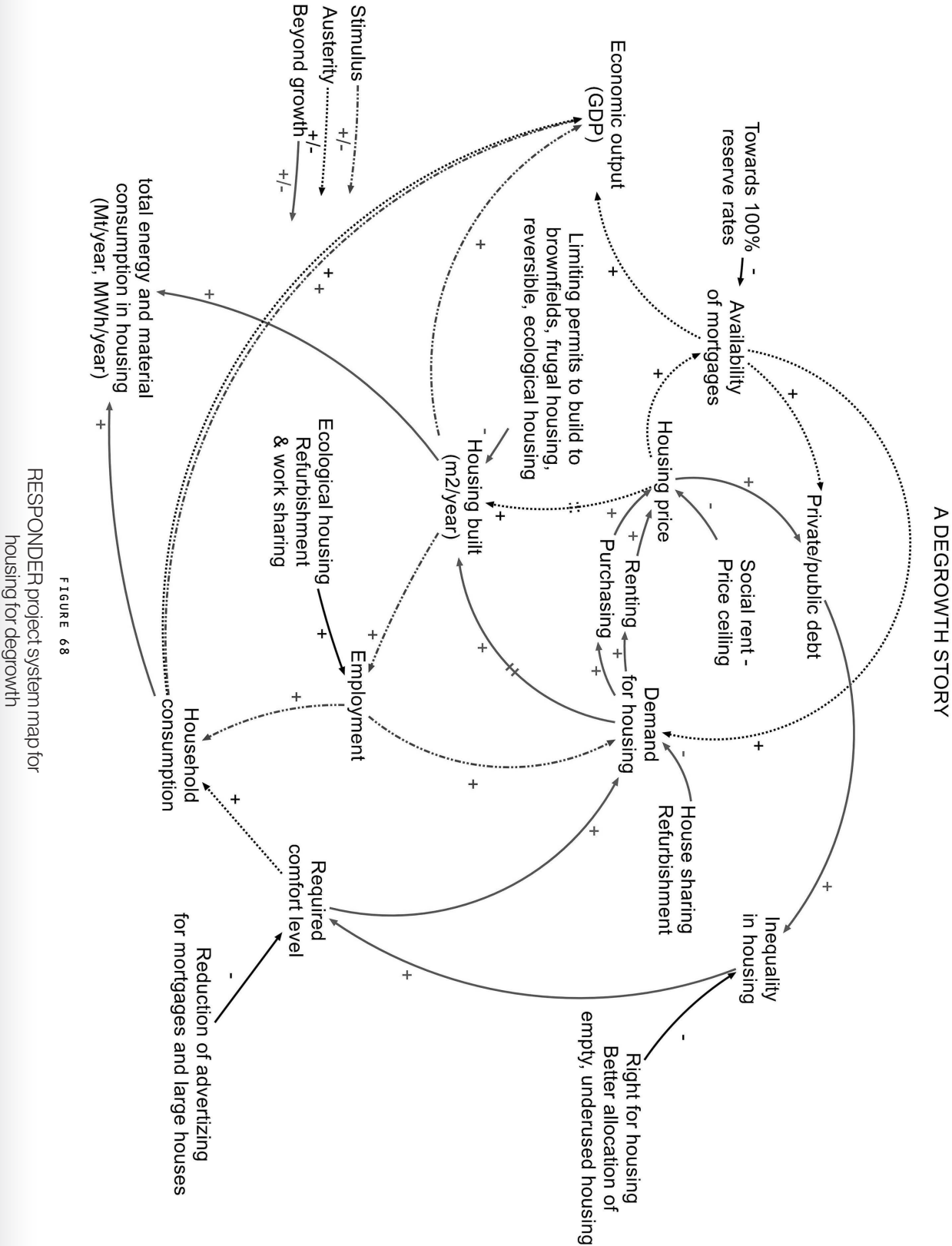
On top of it all, we must also take into account the unsustainable nature of new construction and development that goes into creating housing. Sustainable options for homes are coming up more frequently than ever- from green technologies and materials to smart devices that will turn your lights off for you- a “sustainable” home, in eco-modernist contexts, is achievable to some. But what about the countless number of vacant homes and properties? There is nothing more “unsustainable” than a building that sits without occupants.

As such, housing for degrowth would also require policy change. As rent prices increase everywhere it is harder to find affordable housing options. There is irony in the countries with highest GDPs having so many citizens who experience houselessness. The ability to renovate old buildings on a systemic level will require the rezoning of previously industrialized areas for residential use⁴. It will also require remediation of the land to make these spaces ethically habitable by people. Through degrowth, we can imagine cities that stop growing in size. A cut back on commercialization can help fill the demand for space in existing buildings and structures. Ultimately, de-industrializing areas by cutting back on production has the potential to be transformative for both planetary health and housing justice.

“HERE, THE ‘MUNDANE’ IS MADE POLITICAL .. WHERE COOKING COMMUNAL DINNERS OR INVITING STRANGERS TO DINE TRANSFORMS A KITCHEN TABLE INTO A PLATFORM FOR CULTURAL EXCHANGE” -PERNILLA HAGBERT

1 Dark Matter, “Property Rights / Property Wrongs: Micro-Treaties with the Earth,” Medium (Dark Matter Laboratories, July 15, 2021), <https://provocations.darkmatterlabs.org/property-rights-property-wrongs-micro-treaties-with-the-earth-9b1ca44b4df>.
2 Anitra Nelson and Schneider François, Housing for Degrowth: Principles, Models, Challenges and Opportunities (Routledge, 2019), 8.

3 Ibid, 63.
4 Ibid, 19.







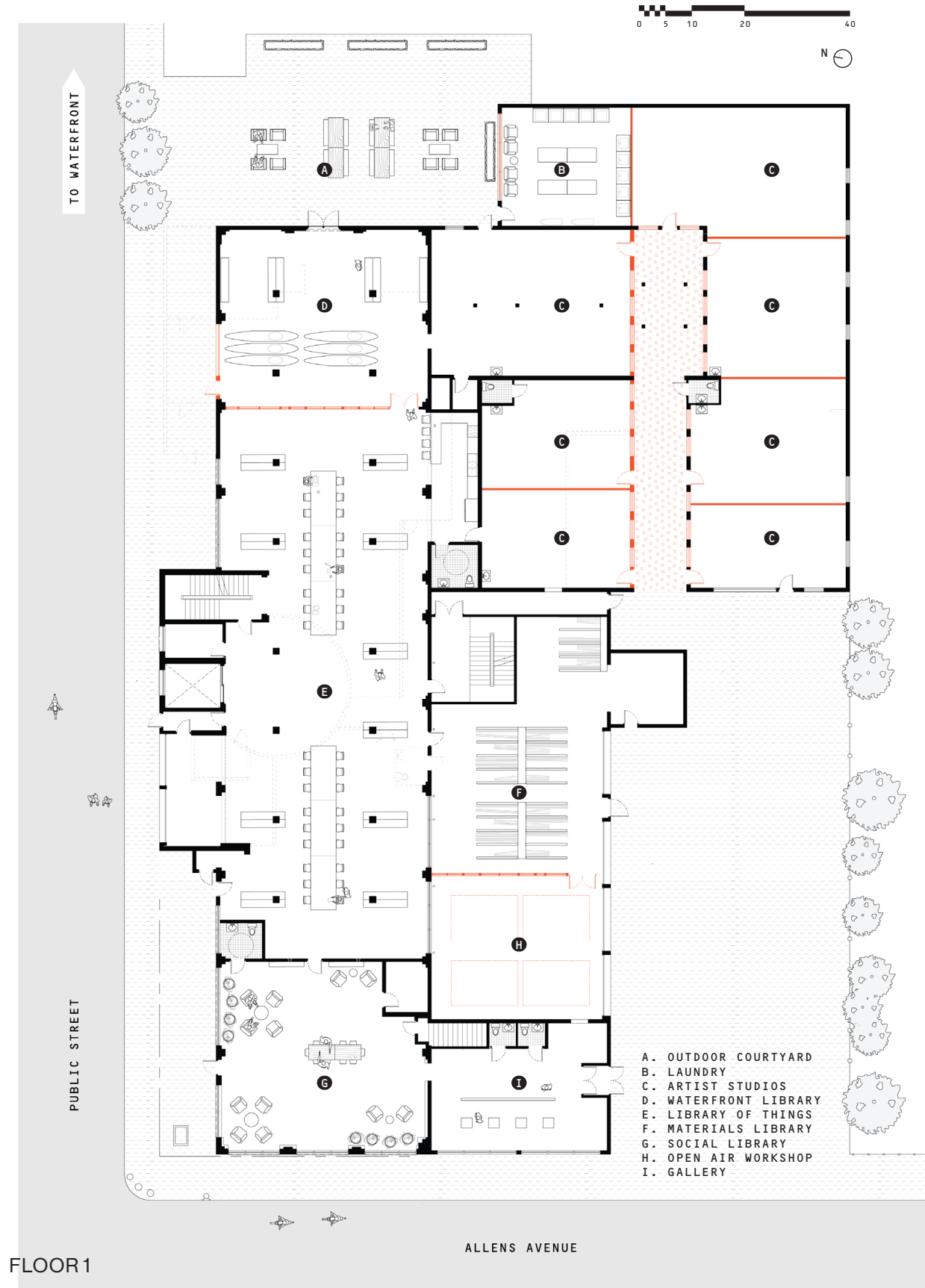
FIRST FLOOR
LIBRARY OF THINGS



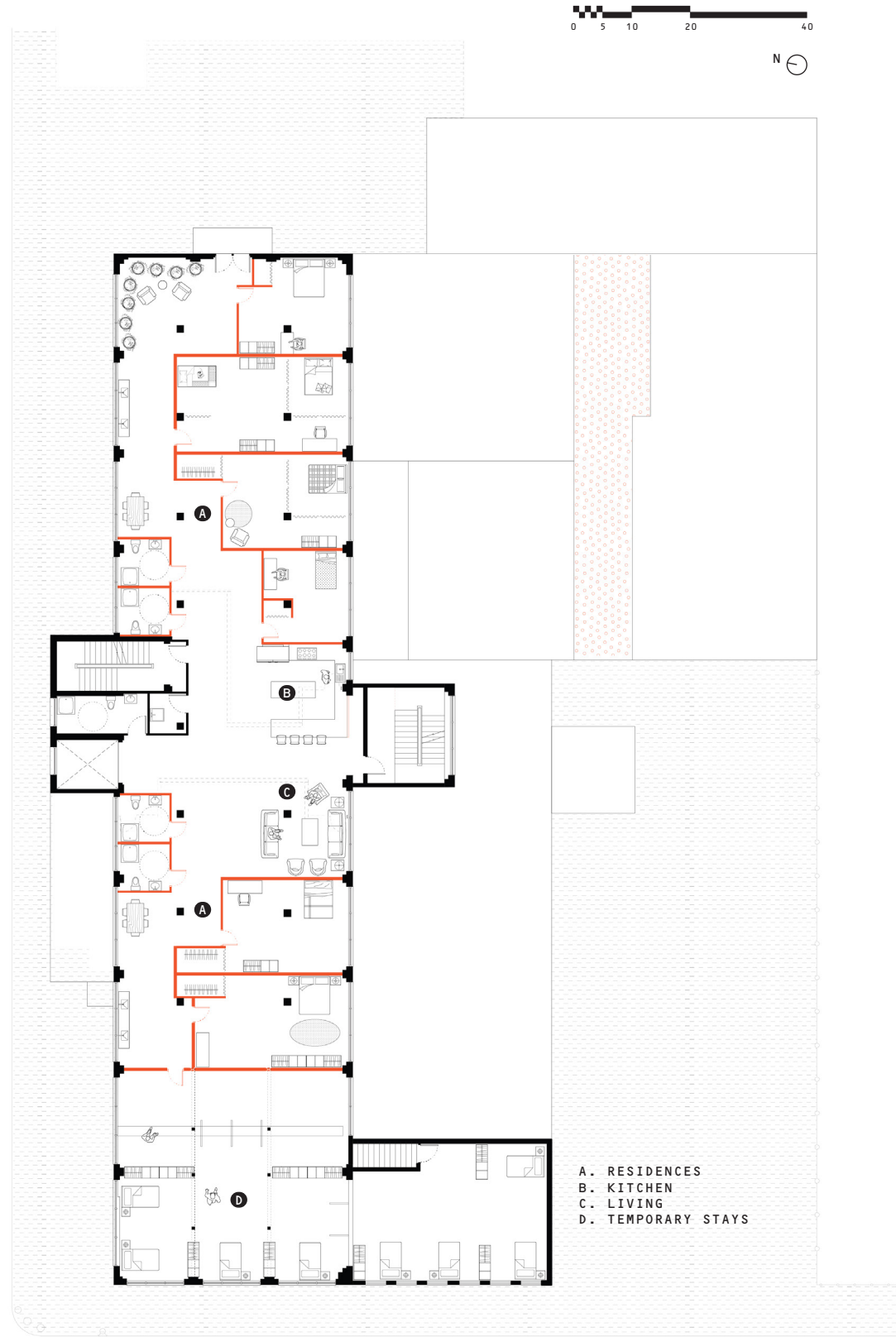
THIRD FLOOR
SHARED KITCHEN AND LIVING SPACE



FOURTH FLOOR
COMMUNAL DINING ROOM

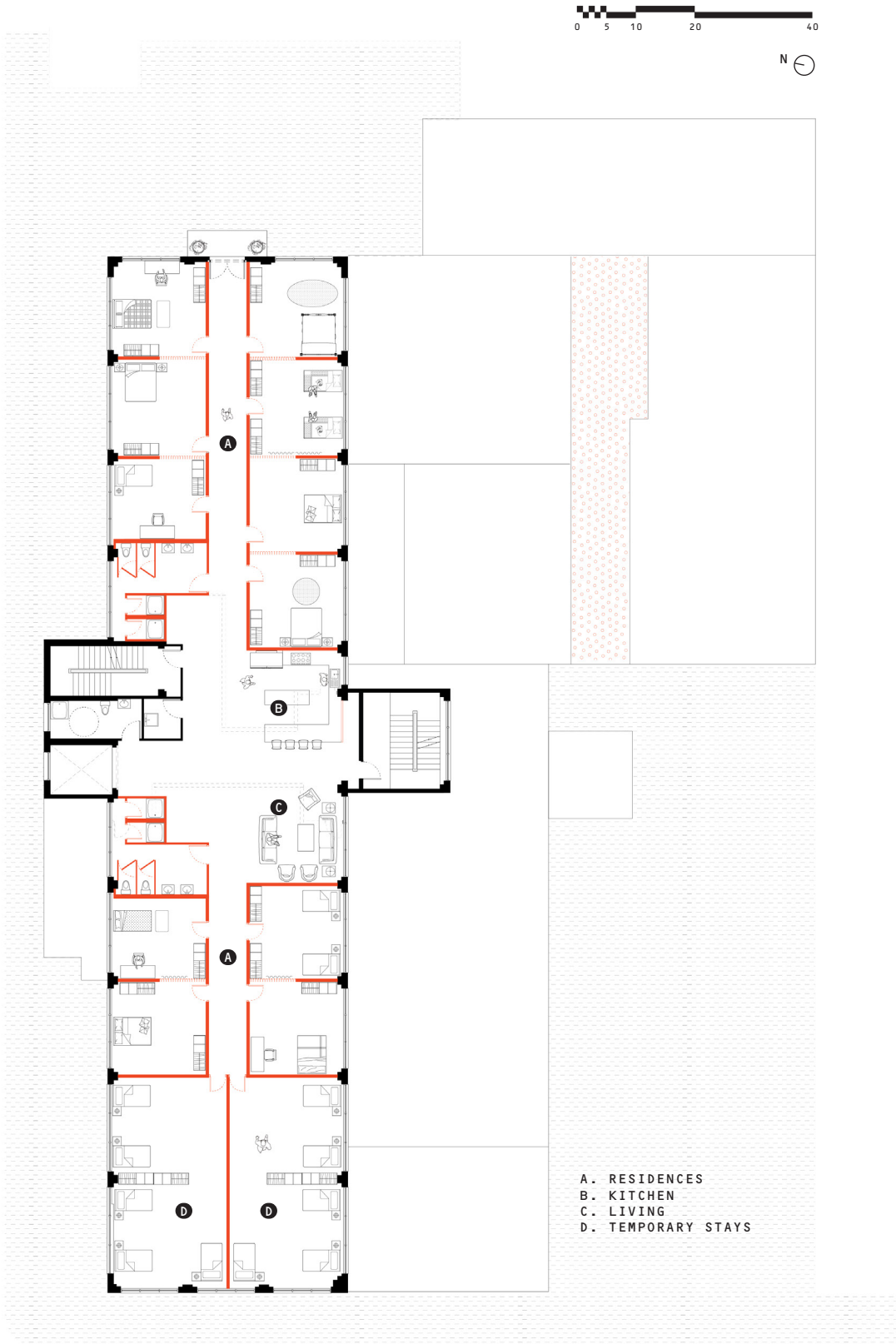


FLOOR 1

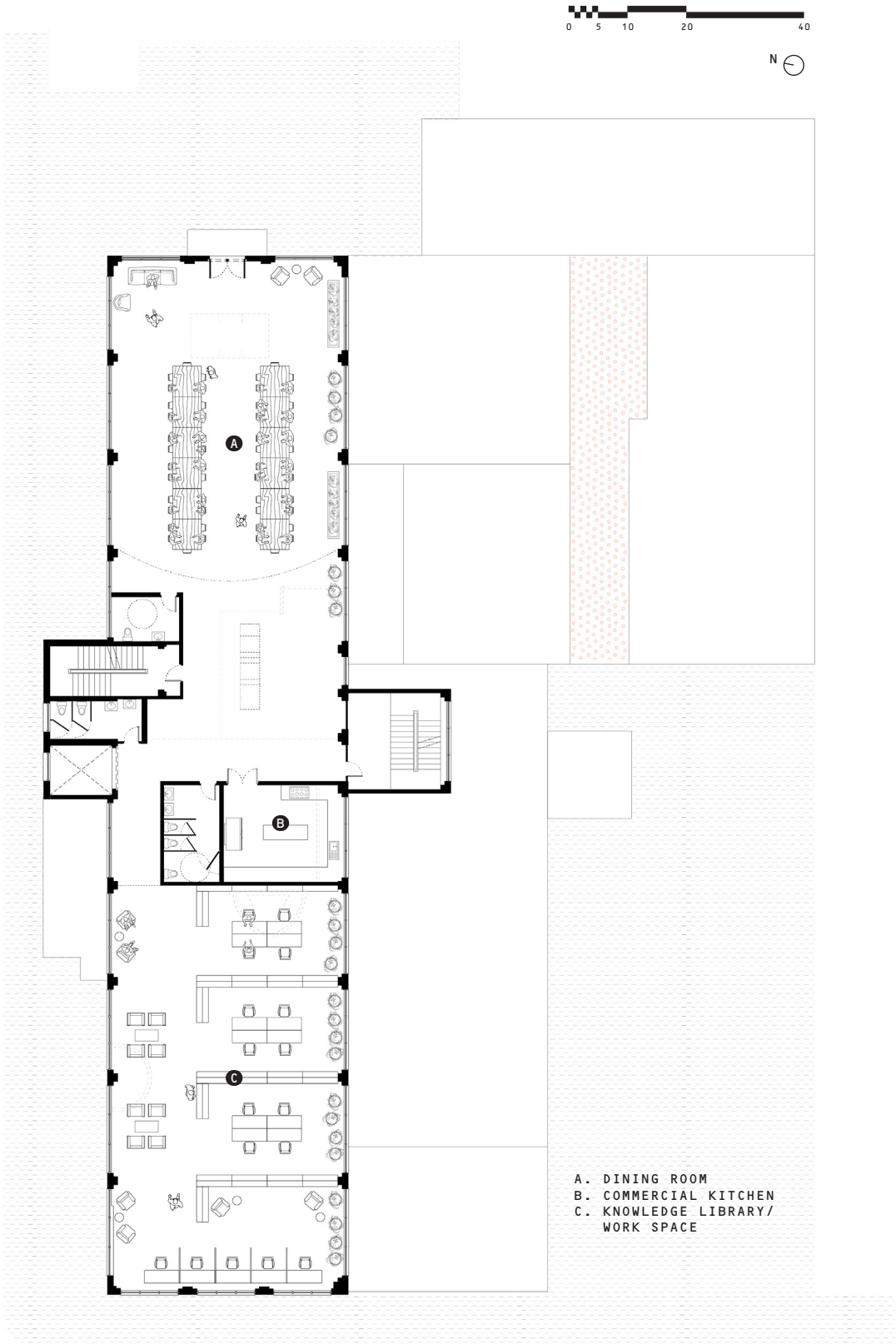


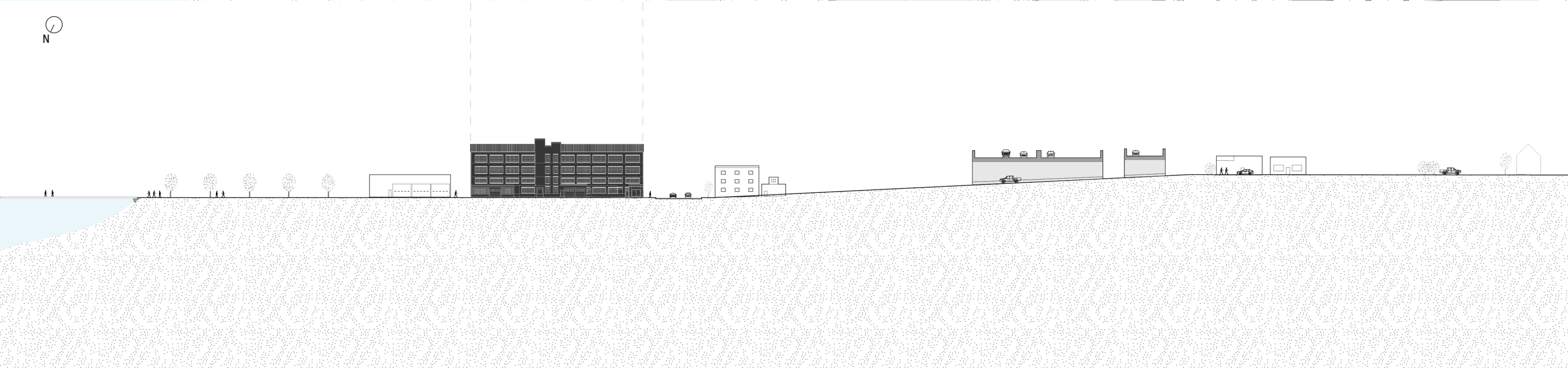
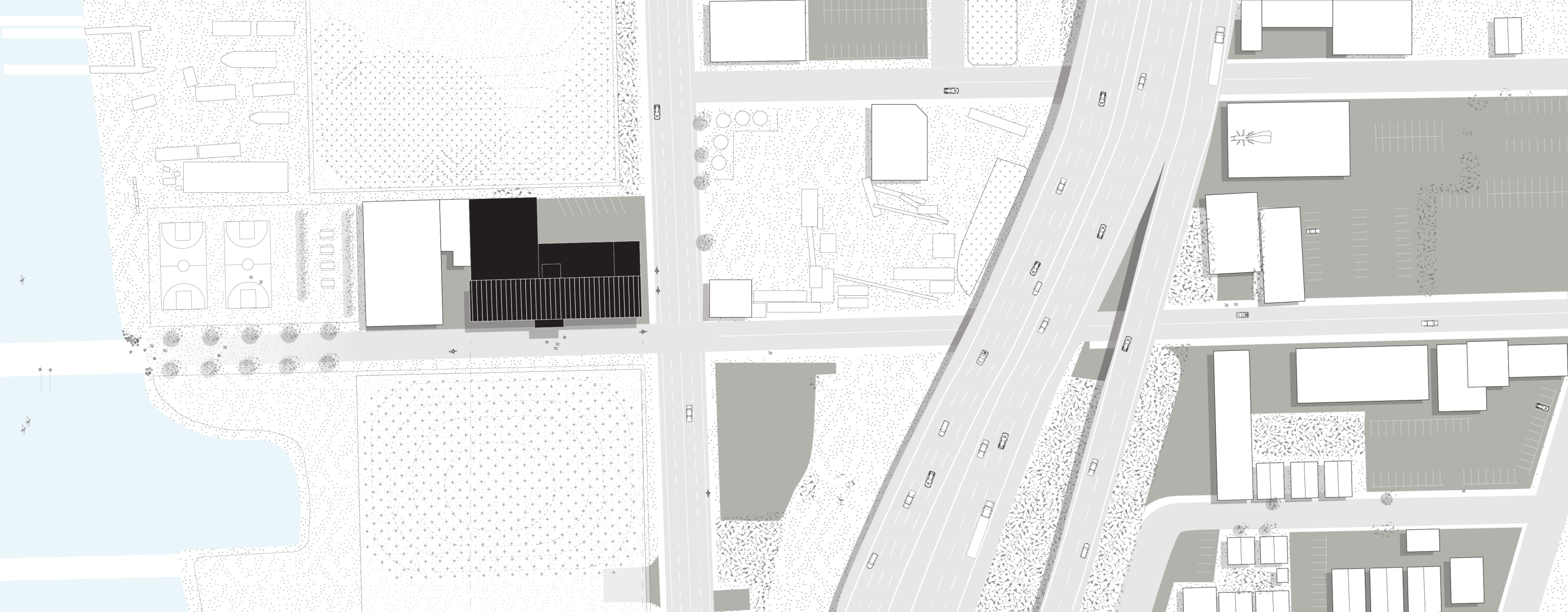
FLOOR 2

FLOOR3



FLOOR4





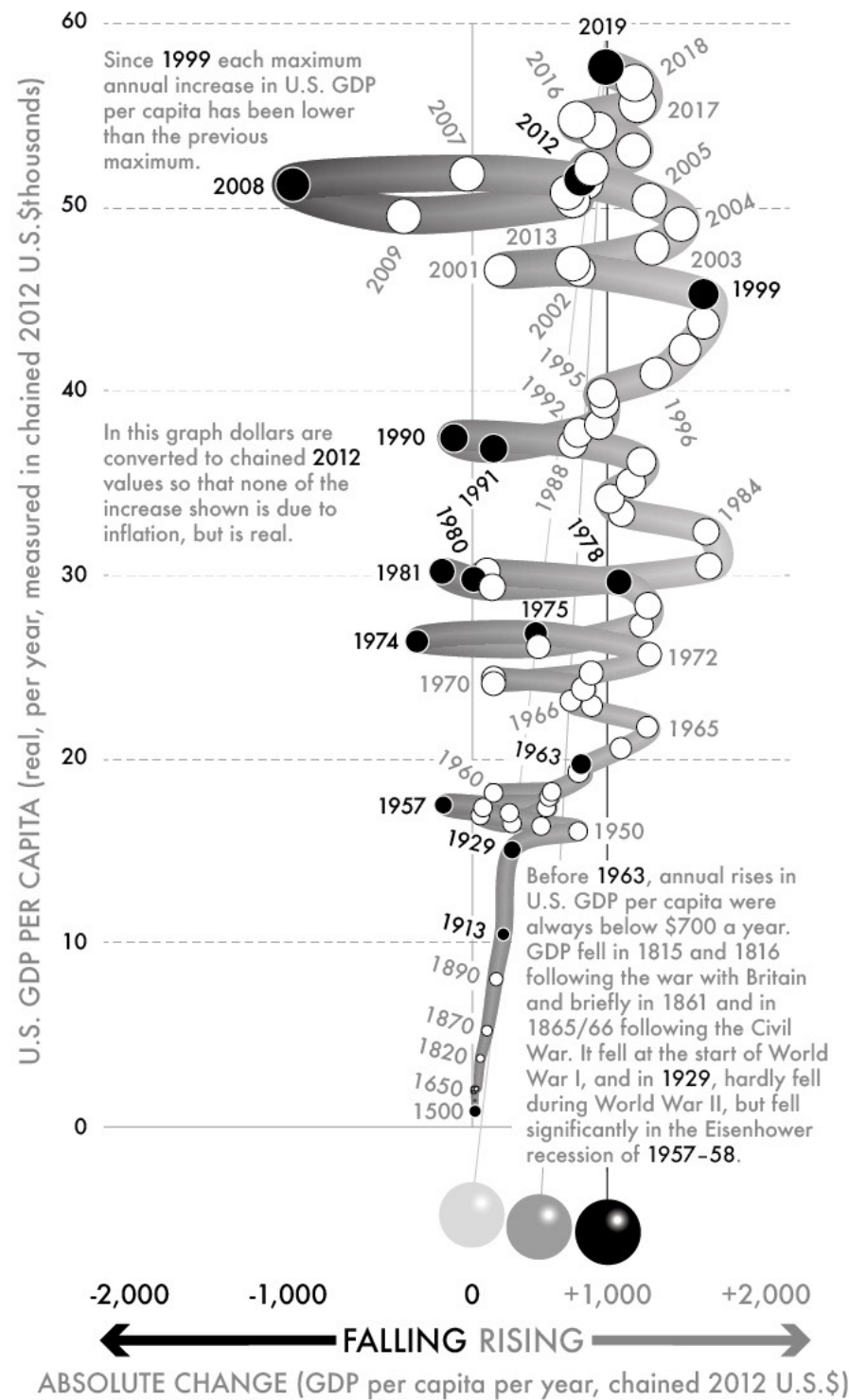


FIGURE 69
World GDP per Capita, SLOWDOWN
Danny Dorling

CONCLUDING THOUGHTS

I would like to add that within a future projection, designers (including myself) often fail to consider the present context. Despite researching degrowth, I have to acknowledge that there is a real desire for jobs outside of fossil fuels in the South Providence community. However, while I still advocate for harmful fossil fuel industries to leave the harbor, in today's context, I understand how many people still rely on these industries for work and how important it is to be realistic while thinking radically.

Within a degrowth context, one might speculate how we can reduce consumption of energy use as a whole, without relying on "green growth" solutions. I also recognize there is a need for transitions, and for now that still looks like a shift to more renewable forms of energy. Ideally, this would occur in ways that would allow those working in the energy industry to keep their jobs and possibly help create opportunity for new ones. In fact, even more jobs will be created to help clean up the messes of our current pollutive shortcomings. Though fossil fuel energy production took a dark turn in the past century, the fact remains that we have a valuable deep water port in Providence and it should not be taken for granted. Localizing production shouldn't mean a total reduction of trade, and a degrowth society shouldn't be one that makes the world smaller by cutting off global ties completely. Trade is still a necessary aspect to keeping the world connected, though most would agree it would benefit South Providence to see more than oil, asphalt, and scrap metal come or leave the port.

The choice of the former Providence Gas Co. Purifier House for my site was a deliberate one in giving a convivial new life to one that played a critical role in the fossil fuel industry. I think there is great symbolic and functional value in transforming old energy infrastructure into social infrastructure. My thesis is a speculative project within a system where much larger, structural change needs to occur. Though this thesis remains critical of green growth, I am hopeful for how it will benefit the South Providence community with their transition toward a cleaner future.

I believe there is still room to speculate whether a degrowth future is forthcoming, whether we choose to do it through redistribution or succumb to it through a societal collapse. Though there may be a fundamental misalignment between degrowth and the fabric of American values today, a transition away from overconsumption, greed fueled by modern capitalism, and prioritization of economic growth is critical.

According to Dorling's slowdown 'phase portrait' graphs, global population, GDP per capita, life expectancy, fertility rates, technological development, megacity growth, etc, are all actually in deceleration phases (outliers include CO2 emissions and global temperature, which are accelerating in rate¹). Though a deceleration is not synonymous with degrowth, nor the end of capitalism, this data represents the potential early stages of a shift - possibly a more widespread recognition that our capitalist system is failing and is unstable without economic growth. This "slowdown" could lead to genuine social progress. For example, income inequality is now falling in more countries than it is rising, and if wealthier societies slow down, it may enable poorer countries to catch up². Additionally, during the earlier stages of the COVID-19 pandemic, the Chinese government didn't set a GDP growth target goal for the first time in decades, instead prioritizing ensuring living standards and stabilizing employment³. What does this say about systemic prioritization of a sufficient standard of living? And of the pursuit for GDP growth?

Over time, unlimited economic growth will fail to keep the Earth in a condition in which it can provide us with our basic resources and cope with our degree of interference⁴. The only way we can move away from the growth-addicted, human-centered ways and toward mitigation of ecological destruction is to reduce economic activity, downscale our consumerist values, and rethink the systems that got us this deeply disconnected from nature and communal ways of living⁵. Degrowth is not about halting the economy, or simply decreasing consumption and production. It is also not eco-facism, forcing unwilling citizens to sacrifice freedoms and individual interests⁶. Degrowth is rather a cultural transformation of our economies with new goals and measurements for well-being, livelihoods, and politics. Degrowth is possible when we can redefine abundance as quality of life and stronger ambitions for more regenerative, equitable and collectivist futures.

1 Danny Dorling, "Slowdown Data," Data | SLOWDOWN, accessed December 11, 2021, <https://www.dannydorling.org/books/SLOWDOWN/Data.html>.

2 Dan Hill, "Dan Hill - Tilling the Soil," Generation C, accessed December 11, 2021, <https://www.generationc.xyz/dan-hill>.

3 Ibid.

4 E. F. Schumacher, *Small Is Beautiful* (London: Blond & Briggs, 1973).

5 Jeremy L. Caradonna, "A Degrowth Response to an Ecomodernist Manifesto," *Resilience*, December 15, 2020, <https://www.resilience.org/stories/2015-05-06/a-degrowth-response-to-an-ecomodernist-manifesto/>, 2.

6 Paulson, Susan, "Degrowth: Culture, Power and Change," *Journal of Political Ecology* 24, no. 1 (2017), <https://doi.org/10.2458/v24i1.20882>, 16.

Thank you for reading.

FIGURE CITATIONS

Intro

1. Oil Barge Afire, Providence River. Photograph. Providence, 1907. Providence Public Library.

2. Petro Truck (Parade) - 1970's. n.d. Photograph. Flickr . <https://www.flickr.com/photos/workingwaterfront/>.

Degrowth

3. Edward Connors, Providence Gas Company Purifier House, n.d., photograph, n.d.

4. Edward Connors, Providence Gas Company Purifier House, n.d., photograph, n.d.

5. Edward Connors, Providence Gas Company Purifier House, n.d., photograph, n.d.

6. Edward Connors, Providence Gas Company Purifier House, n.d., photograph, n.d.

Site

7. Edward Connors, Providence Gas Company Purifier House, n.d., photograph, n.d.

8. Boundary Justification , n.d., photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

9. Interior view of Providence Gas Company Generator House, roof built by Berlin Iron Bridge Company. From undated, ca 1895, Berlin catalog. photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

10. Providence Gas Company South Station (1877) with new Purifier House at right From Biographical History of the Manufacturers and Businessmen of RI (1901) View east from Public Street across Allens Avenue toward waterfront. photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

11. Purifier House as built (1900), view southwest Courtesy, National Grid. photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

12. View of south elevation (1900) Courtesy, National Grid. photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

13. Steel frame of Purifier House under construction (1899) Courtesy, National Grid. photograph, NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM , n.d.

14. Architectura, Providence Piers , n.d., photograph, Architectura, n.d., http://www.architecturainc.com/prov_piers_PLAN.html.

15. Providence Piers - Dock. photograph. Providence, n.d., Providence Preservation Society.

16. Conference Room and Mezzanine Area - Fourth Floor. photograph. Providence, n.d., Providence Preservation Society.

17. Google Earth. Aerial view of South Providence. <https://earth.google.com/web/@41.80804893,-71.40280049,5.02271599a,354.20895044d,35y,71.97814202h,0.72890365t,360r>.

18. Batten Row (Kay St.). photograph. 1893, Providence City Archives.

19. State Pier: Harbor & Docks, Providence, RI, Board of Trade Journal. 1913, Providence City Archives.

20. P-2 State Pier: Harbor & Docks, Providence, RI, Board of Trade Journal. 1913, Providence City Archives.

21. South Side & West End Neighborhood Housing Summit, Neighborhood Statistics. n.d., HousingWorksRI. https://www.housingworksri.org/Portals/0/Uploads/Documents/PVD%20Infographics/SouthSideSummit_English.pdf.

22. Google Maps. Aerial view Allens Ave. <https://www.google.com/maps/place/Allens+Ave,+Providence,+RI/@41.8025975,-71.4040719,16.560x89e4455ea29ebe39:0x29d2425925af35dc18m2l3d41.8030664!4d-71.4014192>.

23. Public Street Was Blocked off to the Public. Now It's Becoming a Coastal Right-of-Way. July 27, 2021. Photograph. Providence Journal. <https://www.providencejournal.com/story/news/local/2021/07/27/coastal-access-crmc-public-street-providence-right-way/5384116001/>.

24. Alaniz, Rebecca. Genusee. n.d. Photograph. Vogue. <https://www.vogue.com/article/genusee-eyewear-flint-water-crisis-upcycling-indiegogo-ethical-fashion>.

25. Google Earth. Aerial view of Collier Point Park . <https://earth.google.com/web/search/ark,+Providence,+RI/@41.8132652,-71.4021674>

26. North Facade with Parking Lot. photograph. Providence, n.d., Providence Preservation Society.

27. Lenscraft Photos, Inc. Rt I-95 Excavation. 1963. Photograph. Providence City Archives.

28. Lenscraft Photos, Inc. Excavation for Thurber's Ave Curve. 1963. Photograph. Providence City Archives.

Archive

29. Rhode Island Historical Society. Alvan Fisher Painting "Providence from Across the Cove. 1818. Photograph.

30. Providence Journal. Providence Harbor in 1896. 1896. Photograph.

31. Oil Barge Afire, Providence River. Photograph. Providence, 1907. Providence Public Library.

32. Providence Harbor Looking North, photograph (Providence , n.d.), Providence Public Library.

33. The Harbor from Banigan Building, Providence, R.I., photograph (Providence , n.d.), Providence Public Library.

34. Providence Working Waterfront Alliance. Aerial View of the Sprague Providence Terminal Circa 1937-1938. n.d. Photograph. Flickr. <https://www.flickr.com/photos/workingwaterfront/1332658978/in/album-72157601901434388/>.

35. Providence Harbor . Photograph. Providence, 1932. Providence Public Library.

36. Sprague Conveyor System, n.d., photograph, Flickr, n.d., Providence Working Waterfront Alliance , <https://www.flickr.com/photos/workingwaterfront/1332657852/in/album-72157601886712401/>.

37. Providence River Scene. Photograph. Providence , n.d. Providence Public Library.

38. Rhode Island Development Council, Providence River Bridge Construction, photograph (Providence , n.d.), Providence Public Library.

39. Providence Working Waterfront Alliance. Sprague Terminal Time Line Photo - Allen's Ave Early Date. n.d. Photograph. Flickr . <https://www.flickr.com/photos/workingwaterfront/1331770819/in/album-72157601886712401/>.

40. Stevens, T. The Black, Oily Waters of the Providence River Pour through Exchange Place (Later Renamed Kennedy Plaza), in Downtown Providence during Hurricane Carol in 1954.

41. Photograph. Rising Threat . The Providence Journal. <https://stories.usatodaynetwork.com/risingthreat/home/>.

42. 1953 - Sprague Providence Terminal, n.d., photograph, Flickr, n.d., Providence Working Waterfront Alliance , <https://www.flickr.com/photos/workingwaterfront/1332657852/in/album-72157601886712401/>.

43. Aerial View of Providence Harbor, photograph (Providence, n.d.), Providence Public Library.

44. Raymond Ball, H. The Fox Point Hurricane Barrier under Construction in July 1964. 1964. Photograph. Rising Threat . The Providence Journal. <https://stories.usatodaynetwork.com/risingthreat/home/>.

45. Lord, Avery. Providence Gas Co. Photograph. Providence, n.d. Providence Public Library.

46. Petro Fleet In Front of Office - 1970's. n.d. Photograph. Flickr . <https://www.flickr.com/photos/workingwaterfront/1331767309/in/album-72157601886712401/>.

47. Petro Truck (Parade) - 1970's. n.d. Photograph. Flickr . <https://www.flickr.com/photos/workingwaterfront/1331770819/in/album-72157601886712401/>.

48. 1980's - Sprague Providence Terminal. n.d. Photograph. Flickr . <https://www.flickr.com/photos/workingwaterfront/1331767309/in/album-72157601886712401/>.

Intervention

49. Scully, Christian. Members of the Fogarty Building Funeral Procession Played Kazoos as They Walked . April 19, 2017. Photograph. National Trust for Historic Preservation. <https://savingplaces.org/stories/plan-a-building-funeral-in-six-steps#.Ynf7XujMJPZ>.

50. Superflux. MITIGATION OF SHOCK: THE INSTALLATION. Photograph. Superflux. London, 2019. <http://superflux.in/index.php/work/mitigation-of-shock/#>.

51. Madaster. Material Passport. n.d. Photograph. Madaster. <https://madaster.com/material-passport/>.

Precedents

52. S+PS Architects. Collage House . n.d. Photograph. ArchDaily . https://www.archdaily.com/786059/collage-house-s-plus-ps-architects/571948b3e58ece905d000019-collage-house-s-plus-ps-architects-photo?next_project=no.

53. Ralph K  mena, Haka Recycle Office , n.d., photograph, DoepelStrijkers, n.d., https://www.doepelstrijkers.com/en/projects/haka_recycle_office/.

54. Adri   Goula , Sala Beckett / Flores & Prats, n.d., photograph, ArchDaily , n.d., <https://www.archdaily.com/799128/sala-beckett-flores-and-prats>.

55. raumlaborberlin. OFFICINA ROMA . n.d. Photograph. Raumlaborberlin. <https://raumlabor.net/officina-roma/>.

56. Mikkel Strange, Resource Rows, n.d., photograph, The Guardian , n.d., <https://www.theguardian.com/cities/2020/jan/13/the-case-for-never-demolishing-another-buildin>.

57. Guzzo, Dennis. WIKADO PLAYGROUND, ROTTERDAM. June 9, 2019. Photograph. Behance . <https://www.behance.net/gallery/53635933/WIKADO-Rotterdam-by-SUPERUSE-STUDIOS>.

58. Grimmenstein, Bernadette. Abandoned Concrete Bunker Converted into a Green Power Plant by IBA Hamburg. February 14, 2014. Photograph. Dezeen. <https://www.dezeen.com/2014/02/14/abandoned-concrete-bunker-converted-into-a-green-power-plant-by-iba-hamburg/>.

59. Webb Yates Engineers, "Ilford Community Market," Webb Yates Engineers - Creative London Based Structural Engineering Design Practice, accessed February 14, 2022, <https://www.webbyates.com/projects/ilford-community-market/>.

60. Anupama Kundoo Architects, Creativity Co-Housing, n.d., photograph, Anupama Kundoo Architects, n.d., <https://anupamakundoo.com/portfolio-item/urban-eco-community/>.

61. A Busy Day at the Tool Library. Photograph. Berkeley Public Library, Berkeley, n.d. <https://www.berkeleypubliclibrary.org/locations/tool-lending-library>.

62. Barrington Public Library. Photograph. Ocean State Libraries. Barrington, n.d. <https://www.oslri.org/libraries-old/barrington/>.

63. Photograph. n.d. Community Built Association. <https://communitybuilt.org/>.

64. Matteo Giustozzi and Alessandro Mason, Multiplo: Transformation in DeReSign (s.n., 2019).

65. Public Square. n.d. Photograph. CIVIC SQUARE. <https://civicsquare.cc/about/>.

66. Virag , Istvan. Exhibition View of The Library at The National Museum. October 4, 2019. Photograph. The Architect's Newspaper . <https://www.archpaper.com/2019/10/2019-oslo-architecture-degrowth/>.

67. Precious Plastic. Brick Wall . n.d. Photograph. Precious Plastic. <https://preciousplastic.com/solutions/products.html>.

Intervention

68. Anitra Nelson and Schneider Fran  ois, Housing for Degrowth: Principles, Models, Challenges and Opportunities (Routledge, 2019), fig 2.1 RESPONDER project system map for housing for degrowth.

69. "Figure 60. World GDP per Capita, Log Scale, 1  2018." Figures | SLOWDOWN. Accessed May 8, 2022. https://www.dannydorling.org/books/SLOWDOWN/Illustrations.html#_.

BIBLIOGRAPHY

Abbott, Elizabeth. "In Providence, a Waterfront Promoter Finds Opponents." The New York Times. The New York Times, December 26, 2007. <https://www.nytimes.com/2007/12/26/business/26port.html>.

On Conley's Wharf.

Caradonna, Jeremy L. et al "A Degrowth Response to an Ecomodernist Manifesto." 2015. Resilience. May 6, 2015. <https://www.resilience.org/stories/2015-05-06/a-degrowth-response-to-an-ecomodernist-manifesto/>.

On the possibility of life within biophysical limits of Earth through equitable downscaling of production and consumption. Must create the conditions for resilient ecosystems and enhancement of life.

Conley, Patrick T. "Opinion/Conley: On the Waterfront, Too Little, Too Late." The Providence Journal. The Providence Journal, August 15, 2021. <https://www.providencejournal.com/story/opinion/columns/2021/08/15/opinion-conley-waterfront-too-little-too-late/5543758001/>.

On waterfront access, written by Conley.

Connors, Edward. "ProvGasCoPurifierHse_NR_Form." Edward Connors and Associates, September 2006.

National Register of Historic Places Registration Form.

Dark Matter. "Property Rights / Property Wrongs: Micro-Treaties with the Earth." Medium. Dark Matter Laboratories, July 15, 2021. <https://provocations.darkmatterlabs.org/property-rights-property-wrongs-micro-treaties-with-the-earth-9b1ca44b4df>.

On private property as a product of colonization and indigenous erasure.

Demaria, Federico & D'Alisa, Giacomo & Kallis, Giorgos. (2015). DEGROWTH: A Vocabulary for a New Era (E-BOOK).

On degrowth as rejection of colonized economism and goal to achieve social justice and ecological sustainability. Relevant topics include critiques of development, dematerialization, peak-oil, and simplicity.

Demos, T.J., Scott, E.E., & Banerjee, S. (Eds.). (2021). The Routledge Companion to Contemporary Art, Visual Culture, and Climate Change (1st ed.). Routledge. <https://doi.org/10.4324/9780429321108>

On the way values from the great depression, such as frugality and scaling down are difficult to voluntarily adopt in the US but necessary. Sustainability is dependent on empathy and downsizing.

Escobar, Arturo. 2018. Designs for the Pluriverse. Radical Interdependence, Autonomy, and the Making of Worlds. New Ecologies for the Twenty-First Century. Duke University Press.

On how design should avoid commercial and modernizing aims and instead advocate for collaborative and place-based approaches.

Hebel, Dirk E. "Three Ways We Will Build the Cities of the Future from Waste." The Guardian. Guardian News and Media, June 19, 2015. <https://www.theguardian.com/sustainable-business/2015/jun/19/three-ways-we-will-build-the-cities-of-the-future-from-waste>.

On urban mining and rethinking waste as a design opportunity.

Hill, Dan. "Dan Hill – Tilling the Soil." Generation C. Accessed December 11, 2021. <https://www.generationc.xyz/dan-hill>.

On how and where society is no longer in a growing period but instead a "slowdown" or deceleration phase.

"History - Providence Working Waterfront Alliance." Providence Working Waterfront Alliance RSS, 2007. <http://providenceworkingwaterfront.org/index.php/providences-working-waterfront/history/>.

On history and context of Providence Harbor.

HousingWorksRI. "Southside & West End Neighborhood Summit ." Providence : Roger Williams University , n.d.

On neighborhood housing and demographic statistics.

Kimmerer, Robin Wall. 2015. Braiding Sweetgrass. Minneapolis, MN: Milkweed Editions.

On the return to true values of stewardship through indigenous wisdom in opposition to capitalist values and Western science. Particularly relevant chapters include Sitting in a Circle, the Sacred and the Superfund, Windigo Footprints, and Defeating Windigo.

Latouche, Serge. (2010). Degrowth. Journal of Cleaner Production - J CLEAN PROD. 18. 519-522. 10.1016/j.jclepro.2010.02.003.

On how our society of destruction and globalization and not solvable through "good growth" or "good development." Hope in a post-development area may be found within rediscovered frugality.

Liddell, Howard. Eco-Minimalism: The Antidote to Eco-Bling. London: RIBA Publishing, 2013.

On how "sustainable" buildings are too often greenwashed and should rather be developed through an "eco-minimalism" approach, in which building science is truly ecological and affordable for all.

Muradian, Roldan. "Frugality as a Choice vs Frugality as a Social Condition. Is De-Growth Doomed to Be an Eurocentric Project?" Universidade Federal Fluminense Brazil. Lecture, n.d. <https://degrowth.descrecimiento.org/documentos/powerpoint/00418.pdf>.

On whether degrowth is doomed to be a eurocentric project.

Nayeri, Kamran. "On Degrowth." Resilience, July 27, 2021. <https://www.resilience.org/stories/2021-07-27/n-degrowth/>

On effects of capitalism on consumer attitude and voluntary frugality.

Nelson, Anitra, and Schneider François. Housing for Degrowth: Principles, Models, Challenges and Opportunities. Routledge, 2019.

On communal living, private property, and home as a node for transitions.

Paulson, Susan. "Degrowth: Culture, Power and Change." Journal of Political Ecology 24, no.1 (2017). <https://doi.org/10.2458/v24i1.20882>.

On whether is economic growth good for humanity.

Pepper, David. Eco-Socialism : From Deep Ecology to Social Justice. London: Routledge, 1993. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=79794&site=ehost-live&scope=site>.

On production as the basis of material life on Earth. To change our relationships with nature, we must change our ways in material and economic life.

Schumacher, E. F. Small Is Beautiful. London: Blond & Briggs, 1973.

On effects of capitalism on our attitudes toward nature.

Scott, Emily Eliza, Subhankar Banerjee, and Lucy R Lippard. "Describing the Indescribable." Essay. In The Routledge Companion to Contemporary Art, Visual Culture, and Climate Change, 45–51. New York: Routledge Taylor & Francis Group, 2021.

On where degrowth values already exist and where they can be added.

Wainwright, Oliver. "The Case for ... Never Demolishing Another Building." The Guardian. Guardian News and Media, January 13, 2020. <https://www.theguardian.com/cities/2020/jan/13/the-case-for-never-demolishing-another-building>.

On material passports and buildings as material depots.

