'SURVIVAL FIRST, HEALTH SECOND': GEOGRAPHIES OF ENVIRONMENTAL RACISM AND THE M(OTHER)WORK OF PROMOTORAS DE SALUD

by

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DISSERTATION ABSTRACT

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The Port of Long Beach is one of the biggest polluters in majority Latinx communities of color in Long Beach, California, and the biggest funder of local promotora de salud (community health worker) led childhood asthma education programs. Promotoras de salud are an indispensable component of the state's public health response to asthma and other health effects of environmental racism in the Los Angeles Harbor region of Southern California. This study asks: How are promotoras de salud called upon by the state to remediate and resolve environmental racism in their own communities? And, What roles do promotoras de salud perform in the regional response to environmental racism in Southern California? I draw from my experiential knowledge of working with promotoras de salud in Long Beach from 2010-2013. I share my testimonio as a means to render visible the fragmentation and unfulfilled promises of working toward social justice as a public health worker. Second, I analyze the public record of promotoras in public health literature, state and nonprofit records, news media, and more to construct a digital archive of local promotora presence in Long Beach between 1995-2016. In my archive I read for the silencing and dispossession of promotora agency, and theorize the ways that state power operates on the ground. I also

iv

read for every day resistance, and intersectional approaches to social reproductive labor and care that promotoras enact in their communities.

This project makes two interdisciplinary interventions. First, I argue that the public health arm of the state should be understood as a site of struggle for environmental justice. The public health state apparatus depends on funding from racial capitalist enterprises to fund community health projects. Simultaneously, it relies on the subjugated labor of promotoras de salud to attend to the health needs of Latinx communities. Despite the limitations of state public health models, I also argue that promotora care work cannot be encapsulated by the neoliberal frame of health equity due to its grounding in the struggle for collective resistance and survival.

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ix

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TABLE OF CONTENTS

Chapter	Page
I. LA RAJADURA / THE CRACK: DRIVING TO WORK	1
II. INTRODUCTION	5
The Port of Long Beach Air Pollution Mitigation Grants	13
Childhood Asthma in the Los Angeles Harbor Region	18
Struggling for Environmental Justice through a Public Health Paradigm	29
Promotora Praxis and Chicana and Latina Feminisms: Toward a Latinx Geographies Paradigm	38
The Stakes and Structure of the Study	45
III. PAPELITOS GUARDADOS, TESTIMONIO Y INTERSTICIOS: A CHICANA FEMINIST METHODOLOGY FOR CRITICAL HUMAN GEOGRAPHY	
Testimonio: A Nepantlera Perspective on Methodological Development	52
Overview	56
Papelitos Guardados: Experiential and Embodied Knowledge	58
Papeles Guardados: The Register of Promotoras de Salud in the Public Record	64
Intersticios and Intersections: Reading for and within the "Cracks of the World"	69

Chapter

84

IV. UNA FISURA / A FISURE: DEFINING EXPERTISE AT A COMMUNITY MEETING

An Evidence-Based Intervention	93
Inputs and Outputs of a Promotora Asthma Intervention	97
Tracing the Genealogy of the Promotora Model as the Solution to Latinx Childhood Asthma in Southern California	101

Opening the Black Box: Promotoras de Salud, and	
the Internal Complexities of the Model	109
1	
The Network Helmon	111

The Natural Helper	111
Promotoras as Bridges: Teaching Asthma Control	

Tomotoras as bridges. Teaching Astima Control	
as an Upstream Intervention	116

Toward a Chicana and Latina Feminist Perspective on the Promotora Model..... 121

VI. UNA ABERTURA / AN APERTURE: THE HOME VISIT	

VII. THE M(OTHER)WORK OF SURVIVAL:

Promotora M(other)work: Temporalities and Spatialities of Community Mothering	138
	1.4.6

Chapter

Cracks in the World	150
Everyday Acts: Intersectional Praxis within the Interstices of Time and Space	153
Promotora Topographies	160
VIII. CONCLUSION	164
REFERENCES CITED	174

Page

LIST OF FIGURES

Figure

1.	Figure 1. State of California Environmental Protection Services Air Resources Board, Air Quality Management Districts. The South Coast Air Quality Management District is the regulatory agency responsible for improving air quality for Los Angeles County, Orange County, Riverside County, and San Bernardino County. The region is home to more than 17 million people, about half the population of the entire state of California in 2010	8
2.	Figure 2. Geographic Preference Zones from Port of Long Beach Round 1 Health Care and Senior Facilities Request for Proposals, Mitigation Grant Program. Facilities or programs serving children or seniors within 1 mile of the Port are in Zone 1; 2 miles Zone 2; 3 miles Zone 3. Prevailing winds coming from the Port head north and east, therefore facilities in Zones 1a, 2a, and 3a were given priority over 1b, 2b, and 3b	16
3.	Federally Qualified Health Centers, Medically Under-Served Areas, and Zip Code boundaries overlaid on major roadways and freeways in the Los Angeles Harbor region, including Long Beach, California. Map from the United States Health Resources and Services Administration	20
4.	2010 U.S. Census map of Latinx population in the city of Long Beach, California. The darker the green, the higher the concentration of Latinx population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area	22
5.	2010 U.S. Census map of Asian population in the city of Long Beach, California. The darker the fuchsia, the higher the concentration of Asian population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area. Long Beach has one of the largest Cambodian refugee communities in the United States	23

Figure

6.	2010 U.S. Census map of the Black population in the city of Long Beach, California. The darker the orange, the higher the concentration of the Black population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area	24
7.	2010 U.S. Census map of the white population in the city of Long Beach, California. The darker the purple, the higher the concentration of the white population according to census block. Highest concentrations are mostly outside the Port of Long Beach 2010 mitigation area	25
8.	Pediatric asthma hospitalizations by Zip Code in 2009. Long Beach Community Health Assessment, 2013. Dark Green indicates the highest rates of hospitalization per Zip Code	27
9.	Los Angeles County Service Planning Areas monitored by the Los Angeles County Department of Public Health	28
10.	An overview of a promotora de salud "model" for addressing health disparities in Latinx communities	92
11.	Social Determinants of Health, as modeled by the Centers for Disease Control and Prevention, 2021	94
12.	Asthma Action Plan by the Asthma and Allergy Foundation of America.	98
13.	Primary Characteristics and Values of Promotores put forth by The California Endowment (2011)	125

Page

LIST OF TABLES

Table

 Three out of ten health care programs funded by the Port of Long Beach in 2011 based their air pollution mitigation activities on the public health promotora de salud model of health education and home environmental management. *Two of these promotora programs focused on children's asthma management efforts. \$1,536,387 of Port of Long Beach Air Pollution Mitigation Grants. Round 1 funding went toward children's asthma management hinging on the familial-scale intervention of promotoras de salud.. 17

LIST OF ACRONYMS

AQMD	Air Quality Management District
CDC	Centers for Disease Control and Prevention
СНС	Community Health Center
CLFT	Chicana and Latina Feminist Theory
СМ	Chicana M(other)work
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
EJ	Environmental Justice
EPA	United States Environmental Protection Agency
FQHC	Federally Qualified Health Center
HHS	United States Department of Health and Human Services
HRSA	Health Resources and Services Administration
HUD	United States Department of Housing and Urban Development
LACDPH	Los Angeles County Department of Public Health
LBACA	Long Beach Alliance for Children with Asthma
MUA/P	Medically Underserved Area/Population
POLB	Port of Long Beach
TCE	The California Endowment

I. LA RAJADURA / THE CRACK: DRIVING TO WORK

\ '**krak** \

intransitive verb: 1. to make a very sharp explosive sound 2. to break, split, or snap apart noun: 3a. a narrow break 3b. a narrow opening 8. an attempt or opportunity to do something

"What cracked is our perception of the world, how we relate to it, how we engage with it. Afterward we view reality differently—we see through its rendijas (holes) to the illusion of consensual reality. The world as we know it 'ends.' We experience a radical shift in perception, otra forma de ver."

-Gloria Evangelina Anzaldúa, Light in the Dark/Luz en Lo Oscuro: Rewriting Identity, Spirituality, Reality

"Levántate, rise up in testimony."

-Gloria Evangelina Anzaldúa, Light in the Dark/Luz en Lo Oscuro: Rewriting Identity, Spirituality, Reality

On a weekday morning in 2011 I was driving to work on the 405 freeway South, from Los Angeles to Long Beach, California. That morning my eye was keen on the mixed-use industrial landscape view I had from my car, as I sat in stop and go traffic. In between the off-ramps, shopping centers, hospitals, apartment buildings, schools, and neighborhoods I observed the active and idle oil rigs that dot the Southern California landscape with renewed interest. I also seriously contemplated the persistent emissions from the vast array of smokestacks in my sightline from the freeway in a way I never quite had taken in before. I watched the mix of water vapor and particulates billow into the air, then disappear into the haze of smog that lingered above Los Angeles County's sprawling urban landscape. I was on my way to an off-site meeting that morning. I merged from the 405 onto Interstate 710 and braked heavily as my 2005 Saturn Ion

became sandwiched between big-rig diesel container trucks in front, behind, and on either side of me. Bumper-to-bumper on the main freeway used by the Port of Long Beach truck drivers to move goods straight from the harbor to inland distribution centers. Start. Stop. It was late-March and that morning it was already so warm outside. Sitting in traffic on hot days like that you can watch the diesel exhaust mix with the heat radiating off the concrete. Sitting on the freeway with the windows up, A/C blasting and recirculating in the car, there is a false sense of security that you are breathing in clean air.

We crawled along the freeway. I noticed the sound walls blocking views of neighborhoods where I knew folks in the community lived. My mind drifted to the meeting I was headed to, and I thought about the promotora de salud program, "Bridge to Health," that I was supposed to talk about. The clinic I worked for had recently been awarded a large, multi-year grant from the Port of Long Beach. The grant money became available as a concession to community push-back against the inevitable pollution that would be produced during a multi-year, multi-million Port expansion project. This concession was forced upon the Port of Long Beach before their project was unanimously approved by the publicly-appointed Harbor Commission. Two percent of expansion project funds were dedicated to community-led efforts to alleviate air pollution in the surrounding community. My organization was in the midst of launching our funded program. And, that morning, I had a devastating thought: This was blood money.

I felt panic rise up from my gut. Was it? I tried to play "devil's advocate" with myself. There were so many good people who were working on grants from the Port, people I knew who cared deeply about their community, and who worked hard to serve others. As I sat there in traffic, I listed all of the *good* this money was doing, and would

be put to: preventative medical care for children and adults with asthma, asthma education to prevent asthma attacks, prevent death. Yes, the two percent was being put to good use. But yes, it was blood money.

Why had this not occurred to me, in this way, much sooner? That morning, divorced from the hustle and bustle of the clinic—putting out fires, running from meeting to meeting, trying to prove my capabilities and leadership at every turn--I was able to think outside of the public health frameworks that made me grateful for the little funding we did get to provide community health education and outreach. It was clear. I was driving through the actual landscape of the geographic boundaries that the Port of Long Beach used to determine what agencies would receive funds, and how much money per organization. We had received the largest individual grant in that round because we had proposed the widest possible reach and impact, dependent largely on the efforts of just two promotoras de salud. To what extent was our asthma education program able to tip the scale toward community good health? Minimal at best, it seemed. We had rooted our promotora de salud education program in evidence-based public health best practices, and we were building up a program that had been in the community for many years. The promotoras I worked with were experienced, passionate, and effective in their roles. Nevertheless, what might be recognized as an epitome of an "upstream solution" in public health practice was a short-term Band-Aid at best. We weren't preventing people from falling into the river upstream, we were teaching them to float after—*if*—they had survived the journey through the rapids.

The thing was, you would not necessarily know *how* daunting a challenge it was to improve the community's health, judged from the dedication, energy, passion,

expertise, and purpose with which the women I worked with poured into their work. Of course, the promotoras had been educating their community for a long time before I arrived at the clinic, and have continued on since I left. Before I departed the organization, I had many conversations with them about why they did the work, and what drove them to serve their community. One promotora distinctly said that for her, it was more than a job: it was her *calling*. For the promotoras it wasn't necessarily, or only, about hitting all the medical benchmarks of good health, but rather it was about individual, familial, and community survival.

II. INTRODUCTION

"This will not be a disinterested, objective study, nor a comprehensive one--partly because such studies are impossible for anyone, partly because I have stakes I want to make visible (and probably others as well)."

–Donna Haraway, Primate Visions: Gender, Race, and Nature in the World of Modern Science

On April 13, 2009 the City of Long Beach Board of Harbor Commissioners voted unanimously in favor of the proposed \$750 million Middle Harbor Redevelopment Project at the Port of Long Beach. The plan proposed a ten-year phased project to renovate and expand three middle harbor piers, expand cargo capacity and rail lines, and rehabilitate and replace old machinery with cleaner technology. Less than two weeks prior, on April 2, the Port of Long Beach released the final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the project, in accordance with the provisions of the California Environmental Quality Act. The 1,500-page document responded to hundreds of public comments made during an 80-day public comment period on the previous draft EIR in 2008. The final EIR/EIS was released to the public with just ten days for additional public comment period before the Harbor Commissioners would vote on it. After a nearly six-hour, contentious public meeting on April 13, 2009, the Commissioners voted to approve the project (Board of Harbor Commissioners Meeting, 2009). This was not surprising since the Board President had been quoted in local news coverage the week before, saying: "It's our very own economic stimulus package. We believe it will be approved" (Sahagún, 2009, April).

The project was first proposed by the Port of Long Beach (POLB) in 2003, but at the height of the Great Recession in April 2009 with local and regional unemployment

around 11%, the Port's promise of 1,000 new construction jobs for ten years, and 14,000 new permanent jobs in the Southern California regional goods movement industry was especially attractive to City of Long Beach officials (Port of Long Beach, 2009a). The POLB's siting on City-owned lands and the State jurisdiction the waters it operated in would financially benefit the City of Long Beach and the State of California, as well as investors, industry leaders, labor unions, and other business stakeholders along the local and regional logistical routes of the global goods movement. The Port, made aware of community concerns regarding recent studies that showed diesel fine and ultrafine particulates had a severely negative impact on human health, also promised to "be a responsible environmental steward."

In his presentation to the Board of Commissioners, the Managing Director of Environmental Affairs and Planning at the Port of Long Beach, Dr. Robert Kanter acknowledged the EIR/EIS shortcomings. He stated:

After the application of all feasible mitigation measures, however, significant and unavoidable impacts remain. The air quality impacts of construction will exceed some of the Air Quality Management District's thresholds, both at the project site, and off-site. And even though those construction impacts are temporary and shortterm, there would be residual impacts. Therefore, we are asking the Board to adopt a statement of overriding considerations. This statement finds that the economic, legal, technological, and other benefits of the project outweigh its unavoidable environmental impacts.

Despite the Port's argument that "the economic, legal, technological, and other benefits" *outweigh* the "unavoidable" environmental and public health impacts, in their final proposal to the Board of Commissioners, the Port included \$10 million toward environmental mitigation funds for community projects. Dr. Kanter stated:

To minimize the impact to air quality, the Board recently adopted two California Environmental Quality Act mitigation programs. Through these two programs we will offer grant funding to the groups most sensitive to the impacts of air pollution: children and seniors. We will also offer grants to health care facilities. These programs are entitled: Schools and Related Sites Guidelines for the Port of Long Beach Grant Program, and health care and Seniors Facilities Guidelines for the Port of Long Beach Grant Program. We are recommending that the Port of Long Beach contribute five million dollars to each of these grant programs, based on our analysis in the environmental document.

The Port of Long Beach, and those who spoke in favor of approval for the harbor expansion project touted the Port's claims that it would "double capacity and cut emissions in half," citing claims in the EIR/EIS that much needed improvements in the Port's plans to streamline operations with upgraded technology would make it the "greenest" port in the nation. Susan Nakamura, Planning Manager at the South Coast Air Quality Management District where the Port of Long Beach is located, and is overseen by the California Air Resources Board as part of the State of California Environmental Protection Agency (see Figure 1) spoke against approving the project as it was proposed. She warned that the POLB's proposed actions for reducing greenhouse gases and pollution density for neighboring communities were not sufficient, namely the proposed practices for marine vessel emissions and contributions of greenhouse gases, and that the Port's claims of "cutting pollution in half" were falsely asserted.

Environmental justice advocates who attended the meeting spoke out against the Port's greenwashing of their proposal, accusing the Port of overstating the sustainability of the proposed project. Activists warned that such "PR stunts" endangered people's lives. Dr Gisele Fong, a local mother and activist, spoke on behalf of Communities for Clean Ports, a non-profit, public education campaign based in Long Beach. "Long Beach is where I call home, and where I am raising two small children...The Middle Harbor EIR is emblematic of the contradiction between the Port's public presentation of itself as an



Figure 1. State of California Environmental Protection Services Air Resources Board, Air Quality Management Districts. The South Coast Air Quality Management District is the regulatory agency responsible for improving air quality for Los Angeles County, Orange County, Riverside County, and San Bernardino County. The region is home to more than 17 million people, about half the population of the entire state of California in 2010.

environmental innovator, and the policies and actions it continues to pursue." Dr. Fong cited that the Port's expansion proposal to create a clean air action plan and implement stringent pollution mitigation measures *in the future* contradicted promises they had made *several years earlier*. In short, she argued that it was the Commissioners' responsibility as a public agency to protect the public's health.

She stated that the Board must hold the Port responsible for previous promises made to reduce pollution *before* allowing for expanded operations in the Los Angeles Harbor, because increased truck and train activity would harm fenceline communities already suffering from environmental injustice. She stated: "We are asked to take on faith, the Port's promises that these mitigation measures in this EIR will somehow result in the criteria pollutant reductions needed to significantly reduce health impacts and ensure our region meets national air quality standards." Dr. Fong, and other environmental justice activists from various local organizations and initiatives not only in Long Beach, but from throughout the Southern California region impacted by the global goods movement, spoke out against expanded operations with expressed concerns for the public's health. They argued that the Commissioners had a responsibility to make sure the Port of Long Beach implemented ambitious, measurable, and accountable mitigation actions to protect the health of their communities.

The meeting that day is a significant, but not unique, instance where environmental justice (EJ) activists in Southern California have been forced to translate the many challenges of living and breathing in the smog-filled shadow of the global goods movement, to local regulatory agencies that fail to hear, understand, or begin to contend with all it is they are trying to convey. It is the way that life-lived amidst

environmental injustice, and environmental racism, gets translated as an appeal to the state's *responsibilities* that I am particularly interested in: public health. "Public health," broadly construed, was a thematic appeal of the majority of environmental justice activists who spoke out against the Port expansion that day. It was also a major theme, along with more detailed data on asthma prevalence and hospitalizations, and the impact of diesel pollution on human health, of the public comments on the previous EIR/EIS (Port of Long Beach, 2009b). Such organized and expressed public concern for the impact of Port pollution on public health influenced the Port to propose minor mitigation measures for schools, senior centers and housing, and health care services for the two most medically vulnerable populations: children and older adults. Their 2009 proposed mitigation measures were, at a minimum, an appeasement to broad public concerns about health and safety, in order to get their plan approved by the Commissioners.

In this study I examine the public and community health mitigation programs funded by the Port of Long Beach Middle Harbor Expansion. The City of Long Beach's support for the Port expansion project is representative of the state's multi-scalar investments in and reliance on the system, power, and profits of racial capitalism, and projects that seek to expand that system. The Port's investment in community health measures "to mitigate the effects of air pollution" (Cameron, 2011) largely relies on the public health arm of the state to actively address the prevalence and complications of pollution-associated asthma through a highly individualized and labor-intensive intervention implemented by promotoras de salud, or community health workers. At the juncture between the expansion of the global goods movement in Southern California, and the material effects of concentrated pollution on the body and in the lives of people

who live on the frontlines of this pollution, are the interventions that make pollutioninduced illness more manageable, and the community support systems that make life more survivable: promotoras de salud. In this study I ask, first, how are promotoras de salud called upon by the state to remediate and resolve environmental racism in their own communities? And second, what roles do promotoras de salud perform in the regional response to environmental racism in Southern California? Promotoras are widely considered to be an integral component of community health strategies in Latinx communities. Yet, the public and community health roles they perform in relation to achieving environmental justice are understudied and undertheorized in EJ studies. Further, promotoras de salud as actors themselves, their practices, their history, their lived experiences and struggles, are an underrepresented group in Chicana/x and Latina/x studies.

I argue that the strategy to achieve environmental justice must include a more critical analysis of the role that public health frameworks serve the state's investment in racial capitalism, and perpetuate geographies of environmental racism. I observe that as classed, gendered, and racialized state-workers promotoras de salud occupy a liminally prescribed space and temporality to implement neoliberal state interventions. However, I also contend that within those liminal geographies promotoras enact geographies of care that not only enable community survival, but serve to expand the boundaries of the margins where their communities are otherwise relegated. Thus, their temporalities and spatial praxes serve as a critical rupture to state-sanctioned violence.

The goal of this project is to make two overarching interventions and contributions. First, I aim to expand the parameters of "the state" in critical

environmental justice studies beyond the regulatory state, which usually is focused on the United States Environmental Protection Services Agency, as well as regional regulatory agencies (i.e., South Coast Air Quality Management District) and the U.S. justice system. This project makes a case for including the public health arm of the state as "a site of contestation, rather than as an ally or neutral force" (Pulido, 2017, p. 1) as it operates on local, state, and federal scales. Second, I build an explicitly Latinx geographies paradigm through rigorous engagement with Chicana/x and Latina/x feminist theory in my analysis of promotora care work. I examine the role of promotoras as state workers, and analyze the spatial and temporal dimensions of their practices, and interpret some of the theory that emerges from their positionality and labor. Further, I recognize their community leadership in the struggle for environmental justice in Latinx communities, and address the absence of scholarship on their contributions in both Chicana/x and Latina/x studies and environmental justice studies.

In this Introduction I delineate a brief health geography of the Los Angeles Harbor region, the port and its regional networks, and the role of Port mitigation funding used to address the health impacts made on majority Latinx communities of color. I draw on majority public health data from the City of Long Beach and Los Angeles County, as well as some other local, grassroots sources to describe the problem of childhood asthma in the region. I do so not only to geographically situate my case study, but also to highlight the (un)usefulness of public health data from official from *verified sources* to describe and convey the community burden and trauma of environmental racism that EJ activists are perpetually asked to *prove*, and that state asks promotoras to remediate and resolve. Then, I examine the disproportionate burden of childhood asthma in Long Beach

and the Los Angeles Harbor region in the broader historical context of the EJ movement and EJ studies. I lay out a critical environmental justice framework to clarify the relationships between the regulatory state, racial capitalism, and the public health arm of the state with focus on the prominence of promotoras de salud as a solution to racialized asthma disparities. I outline four foundational dimensions of Chicana/x and Latina/x feminist theory (CLFT) that ground the theoretical imperatives of this project and its interdisciplinary contributions toward a Latinx geographies paradigm. Finally, I specify the stakes of this project in my own experience working as a public health professional with promotoras in Long Beach, and provide a roadmap for each piece of stand-alone testimonio, my methodology and each empirical chapter, and an invitation for the reader, at the end.

The Port of Long Beach Air Pollution Community Mitigation Grants

The City of Long Beach Board of Harbor Commissioners voted to grant the permits requested, and approve the EIR/EIS so that the Port of Long Beach could move forward with the Middle Harbor expansion ten-year project, beginning in 2010. The Commissioners did, however, respond to some concerns raised during public comment by the project's opponents, and approved the project with a few caveats regarding issues raised about air pollution mitigation. The Commissioners directed the Port, in good faith, to expand mitigation measures in the coming months, and add an additional five million dollars to their \$10 million community mitigation funds to specifically mitigate greenhouse gas emissions, as well as address concerns about community input by implementing a community board to advise on how the mitigation funds are dispensed.

In a September 2009 press release, the Port of Long Beach announced that the Port grant programs "are designed to offset the cumulative air quality and noise impacts future Port projects will have on the surrounding community, and to reduce greenhouse gases. The \$15 million will be divided equally among three separate funds to assist schools and related sites, health clinics and senior centers, and greenhouse gas projects" (Port of Long Beach, 2009, September). In 2009, the self-anointed "Green Port" set aside two percent of the proposed budget for a project that would secure its status as one of the busiest ports in the world. The Port of Long Beach is the second largest in the United States, North America, and the Western Hemisphere, and second only to the Port of Los Angeles, just seven miles north along the Pacific Coast. The Los Angeles Harbor "twin ports," together, receive more than 40 percent of all imported goods into the continental U.S. (Khouri, 2015, January). At the outset of the middle harbor expansion project the Port dedicated just two percent of its projected budget toward air pollution mitigation efforts designed to off-set negative health impacts on seniors, and children--namely to address childhood asthma.

The first round of community grant funding was announced in fall of 2009. Five million dollars of health care funding would go to local programs that focused on individual and community health impacts of those living closest to the Port, and in the geographic zones the Port had identified as the most at-risk (see Figure 2). The Port solicited grant applications from local organizations and public agencies through a series of public workshops. The Port explained that they were looking for high-impact projects that would serve as many people in the geographic areas most impacted by construction

pollution, as well as increased medium and long-term impact of increased volume of goods being moved in these communities (Port of Long Beach, 2010).

In the first round of the Port of Long Beach Community Grants Program, a total of \$5,221,160 was distributed to ten local agencies to provide direct health care and health education services to those in areas most affected by the Port's Middle Harbor Expansion Project. The goal of the funding was to "lessen the impact of cumulative air pollution from Port development projects." Health care organizations could reach this goal in a few ways, through: direct indoor pollution reduction; screening and diagnostics; outreach to sensitive populations; and "educational outreach programs that teach sensitive populations how to manage their symptoms" (Port of Long Beach, 2010).

Three funded programs were centered on a comprehensive *promotora* intervention that included case management and home visits to improve asthmamanagement. Two of these programs included specific focus on *promotora* intervention with families to manage *childhood* asthma. The "Bridge to Health" program, and the Long Beach Alliance for Children with Asthma (LBACA) program, were both implemented by promotoras de salud, lay community health educators from the communities they aimed to serve (Long Beach Alliance for Children with Asthma, 2016; Long Beach Health Department, 2016; Port of Long Beach, 2011; The Children's Clinic, 2014). Since the late-1990s both organizations have utilized the promotora de salud model to implement national standards of care for children and adults with asthma in the greater Long Beach community. Promotoras de salud are considered an "upstream" (preventative) intervention to address health disparities. Promotoras work closely with families to teach asthma management skills so as to prevent asthma attacks, missed

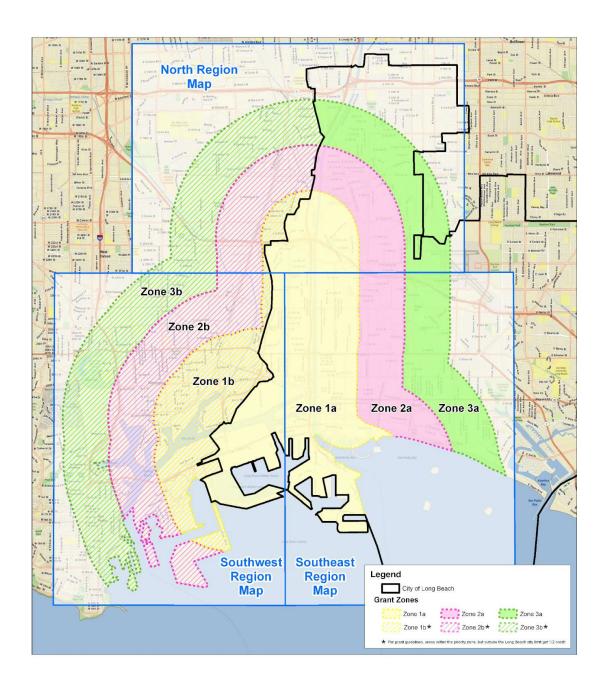


Figure 2. Geographic Preference Zones from Port of Long Beach Round 1 Health Care and Senior Facilities Request for Proposals, Mitigation Grant Program. Facilities or programs serving children or seniors within 1 mile of the Port are in Zone 1; 2 miles Zone 2; 3 miles Zone 3. Prevailing winds coming from the Port head north and east, therefore facilities in Zones 1a, 2a, and 3a were given priority over 1b, 2b, and 3b.

Health Care & Senior Facilities		
Total programs funded	10	
Total amount awarded	\$5,221,160	
Round 1 Funded Organization	Promotora de Salud Program	Funds
City of Long Beach Health and Human Services	Asthma Life Skills Academy for seniors and adults	\$798,622
Long Beach Alliance for Children with Asthma, a coalition organization housed within Miller Children's Hospital, a 501(c)3 nonprofit	Asthma education and outreach*	\$710,660
The Children's Clinic, a non-profit 510(c)3 and Federally Qualified Health Center	"Bridge to Health" chronic care and education*	\$825,727

Port of Long Beach Community Grant Programs, Round 1, 2011 Air Pollution Mitigation Funds for the Middle Harbor Expansion Project Health Care & Senior Facilities

Table 1. Three out of ten health care programs funded by the Port of Long Beach in 2011 based their air pollution mitigation activities on the public health promotora de salud model of health education and home environmental management. *Two of these promotora programs focused on children's asthma management efforts. \$1,536,387 of Port of Long Beach Air Pollution Mitigation Grants, Round 1 funding went toward children's asthma management hinging on the familial-scale intervention of promotoras de salud.

school days, emergency room visits and hospitalizations, and alleviate the burden of

asthma in the Los Angeles Harbor region for Latinx, Black, Asian, and other families

whose quality of life is impacted and diminished by this disease.

Childhood Asthma in the Los Angeles Harbor Region

The Federally Qualified Health Center (FQHC) where I managed the "Bridge to

Health" program from 2011-2013, is a non-profit community health center (CHC) that

provides primary health care services to communities in, and around Long Beach. The

FQHC status of a community health center is achieved through a series of stringent federal requirements of care achieved in clinical operations and standards of care, including being within and serving a geographically designated Medically Underserved Area or Population where affordable and accessible primary, preventative health care services are scarce, but the need is high.

Medically Underserved Areas and Populations (MUA/Ps) are disproportionately low-income communities of color. FQHCs were established as part of the Johnson Administration's "War on Poverty," and continue today, in our disjointed public health system, to serve as the U.S. health care "safety net" for Medicaid and Medicare recipients, and the working poor, many of whom in Southern California are Mexican and Latin American immigrants and first-generation Americans, with and without documentation. Health education and outreach services are an important dimension of FQHC preventative care, and something that community health centers must demonstrate in practice *before* achieving FQHC status (which guarantees access to increased federal funding). National guidelines include the recommended staffing of community health workers, or promotoras de salud if the FQHC serves a Latinx population (National Association of Community Health Centers, 2010). Public health studies have shown that promotoras are effective liaisons to help low-income, Latinx communities access services, increase health care coverage enrollment, and address chronic illness and health disparities through community-oriented health education and health care system navigation (Deitrick et al., 2010; Mojica et al., 2016; Parker et al., 2008; Reinschmidt et al., 2006; Sánchez et al., 2012; Stacciarini et al., 2012; Staten et al., 2004; among others).

Environmental justice activists and public health advocates were among the many public commenters on the Port of Long Beach's 2008 draft EIR/EIS that voiced concern about the impact of the Port's activities on children's health. While children are certainly not the only demographic affected by dense, toxic air pollution, concern for the health and safety of children is an understandable and persuasive argument for EJ activists to use in their advocacy efforts. As pointed out by local experts, the effects of toxic air pollution are particularly acute for small children for three significant reasons (KPCC, 2016). First, children's minute-ventilation is higher. That is, kids, particularly *young* kids breathe faster, therefore, they intake a higher dose of pollutants as compared to an adult breathing in the same air. Second, children are more likely to be exposed to toxic air emitted into the environment, as they are more likely to play outside and therefore, inhale unfiltered air, particularly in fence-line communities where schools and parks are located near freeways, railyards, and within close proximity of other hazardous sources of pollution. Third, children are growing. Their bodies, their lungs, and their brains are growing and developing and prolonged exposures to dense polluted air can prevent healthy growth, can prevent healthy lung function, and can affect one's health in myriad ways (Chen et al., 2015; Eenhuiszen et al., 2013; Goldizen et al., 2016; Selevan et al., 2000).

Fine particulate matter, PM 2.5, is monitored by the EPA. PM 2.5 is a category of all particulates less than 2.5 micrometers in diameter. In the LA Harbor region, particulates are produced as a byproduct of industrial manufacturing and the combustion of diesel fuel. While the U.S. and State of California Departments of Environmental



Figure 3. Federally Qualified Health Centers, Medically Under-Served Areas, and Zip Code boundaries overlaid on major roadways and freeways in the Los Angeles Harbor region, including Long Beach, California. Map from the United States Health Resources and Services Administration.

Protection Services have standards for PM 2.5 emissions, given the high concentration of polluting industry and activities in the LA Harbor, the region has historically been out of compliance (American Lung Association, 2021; EPA, 2004; 2021 Hasheminassab et al., 2014). The unregulated subcategory of ultrafine particulates, PM > 0.1 micrometers, are particularly dangerous to human health. Particulates less than 0.1 micrometers are less than one one-thousandth the diameter of a human hair and can penetrate the mitochondria (aka the powerhouse) of an individual cell, and prolonged exposure is linked to birth defects, childhood asthma, cardio-obstructive pulmonary disease, heart disease, stroke, and cancer (Ning et al., 2003; Ostro et al., 2015; Sioutas, Delfino, & Singh, 2005).

At the Board of Harbor Commissioners meeting on April 13, 2009, environmental justice advocates spoke out against the project on behalf of themselves and their neighbors, their local communities, and local and regional EJ-focused grassroots coalitions and organizations. They expressed sincere concern for the broad environmental impact of the Middle Harbor Expansion Project on the public's health. Speakers noted the high rates of asthma, cancer, and other chronic illnesses in local fenceline communities. Fenceline communities to the Port of Long Beach are the neighborhoods, schools, and parks that *border* the Harbor District in Long Beach, as well as the railyards, and the Port's main transportation routes, the SR-47 and the I-710 Freeways They are the communities *through* which Port trucks are routed. They are the schools, parks, and neighborhoods right next to rail yards. In Long Beach and the LA Harbor region these fence-line communities are majority low-income communities of color, majority Latinx (greenRELAY, 2009).

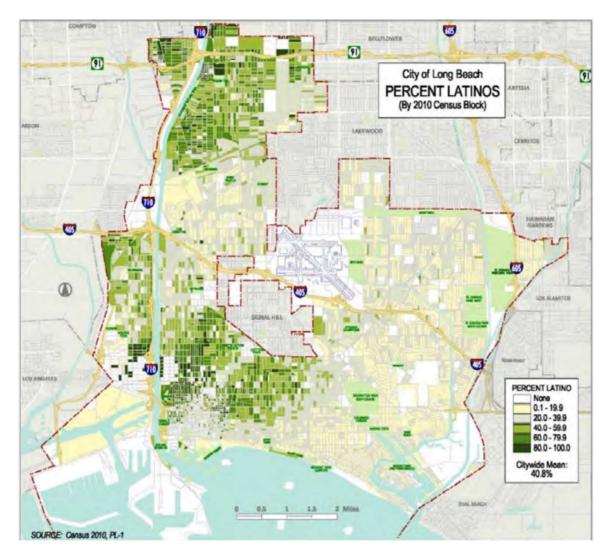


Figure 4. 2010 U.S. Census map of Latinx population in the city of Long Beach, California. The darker the green, the higher the concentration of Latinx population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area (See Figure 2).

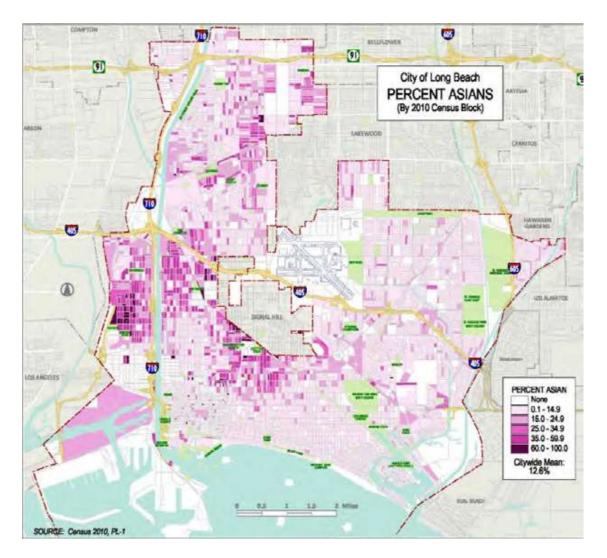


Figure 5. 2010 U.S. Census map of Asian population in the city of Long Beach, California. The darker the fuchsia, the higher the concentration of Asian population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area (See Figure 3). Long Beach has one of the largest Cambodian refugee communities in the United States.

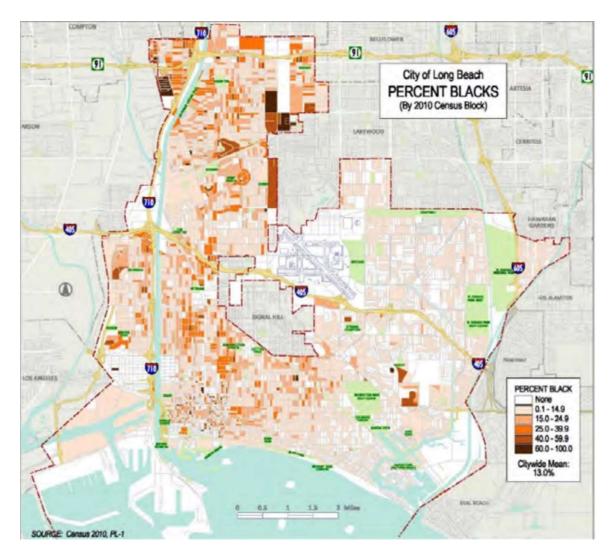


Figure 6. 2010 U.S. Census map of the Black population in the city of Long Beach, California. The darker the orange, the higher the concentration of the Black population according to census block. Highest concentrations are within Zones 1a, 1b, 1c of the Port of Long Beach 2010 mitigation area (See Figure 3).

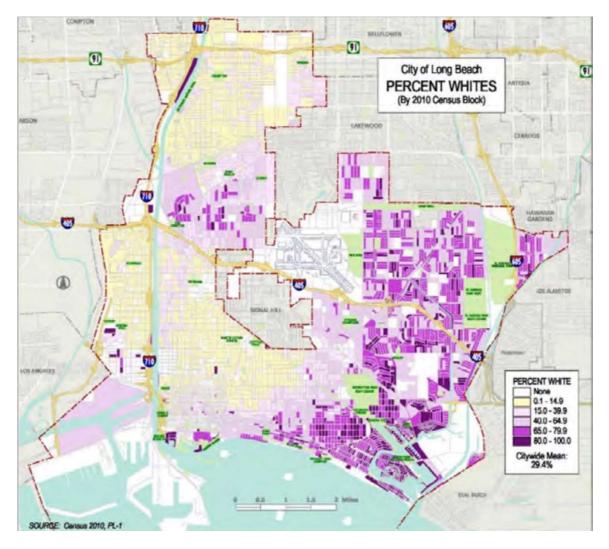


Figure 7. 2010 U.S. Census map of the white population in the city of Long Beach, California. The darker the purple, the higher the concentration of the white population according to census block. Highest concentrations are mostly outside the Port of Long Beach 2010 mitigation area (See Figure 3).

The grant mitigation funding zones (see: Figure 2) encompass areas of Long Beach as well as the neighboring community of Wilmington covered by the MUA (see Figure 3), and are majority communities of color, namely Latinx, Cambodian, and African American (see: Figures 4-7, City of Long Beach, 2013). In 2010 the city of Long Beach had a population of 462,257, with nearly a quarter of its population under 18 years

of age. Long Beach communities most impacted by the Port's activities are majority Latinx, Asian, and Black in 90802, 90805, 90806, 90813, and 90810 are within the high priority zones 1a, 2a, 3a (see: Figure 2). Not coincidentally, these five zip codes also have the lowest concentrated socioeconomic index, the highest concentration of uninsured residents, the least amount of green space, the largest numbers of hazardous waste generators, the highest number of days recorded by the South Coast Air Quality Management District as "unhealthy," and the lowest life expectancy rates in the city (City of Long Beach, 2013). While Los Angeles County has seen an overall decrease in childhood asthma mortality since the 1990s, childhood asthma incidence rates continued to be a serious environmental health issue for fenceline communities (Garcia et al., 2019; Pérez et al., 2009). In 2013 the City of Long Beach reported that these areas had childhood asthma rates between 13 and 15%, well above the documented nine percent average for Los Angeles County during this time period. These same areas of Long Beach also had the highest rates of hospitalization for childhood asthma in 2009 (see Figure 9).

Port mitigation zones 1b, 2b, and 3b extend into the Harbor region between the Ports of Los Angeles and Long Beach (see Figure 2). The community of Wilmington, nestled between the "twin ports" was more than 86% Latinx in 2010, with a median household income of just over \$40K. The community sits at the juncture of both the ports, freeways and rail yards, an oil field, and oil refineries. Wilmington is included in the federally designated MUA (see Figure 3), but health data is tracked locally by the Los Angeles County Department of Public Health (LACDPH) according to Service Planning Area (SPA) 8 (see Figure 8). While the LACDPH acknowledges the severity of

childhood asthma in this particular community (Asthma Coalition of Los Angeles County, 2017), SPA 8 data as reported by the LACDPH misrepresents the severity of childhood asthma in subregions of SPA 8, including Wilmington, because it includes the wealthier, whiter, coastal cities of the South Bay that have lower levels of pollution,

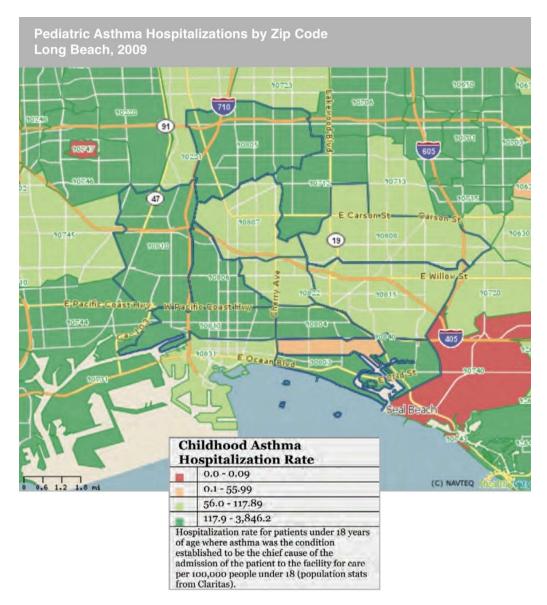


Figure 8. Pediatric asthma hospitalizations by Zip Code in 2009. Long Beach Community Health Assessment, 2013. Dark Green indicates the highest rates of hospitalization per Zip Code.

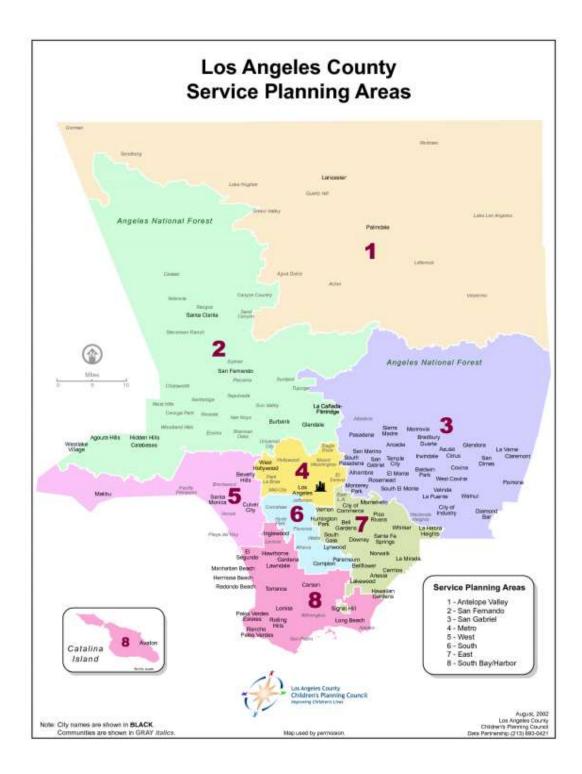


Figure 9. Los Angeles County Service Planning Areas monitored by the Los Angeles County Department of Public Health.

median household incomes over \$100K and more accessible green space with healthy air, affordable and fresh produce, and preventive health services (Los Angeles Times, 2009).

Struggling for Environmental Justice through a Public Health Paradigm

During the 2009 Port of Long Beach Board of Commissioners meeting many environmental justice activists appealed to the Board on behalf of the public's health, speaking in broad terms about the prevalence of asthma and cancer in communities closest to the Port's operations. The Port of Long Beach came prepared with an offer of \$5 million toward health care air pollution mitigation funds, both due to its in anticipation of the community pushback against the project, as well as the reason which I aim to highlight here, which is: public health services are understood as a valid strategy to address the inequitable distribution of environmental harms. More than one-third of Port mitigation funding went to infrastructure in schools and health care facilities, and health services specifically designed to address the disproportionate burden the Port expansion would have on children's health. Public health interventions to address childhood asthma management through the public health promotora de salud intervention comprised nearly a third of the health care mitigation funding alone.

Efforts to address the prevalence of childhood asthma are largely framed through a public health perspective, dependent upon community-based public health services. Living with and managing childhood asthma is complex enough, and in Southern California it is an increasingly politicized experience for young people of color and their families in making the connection between health and the struggle for environmental justice (EYCEJ, 2014, June; EYCEJ, 2014, August; EYCEJ, 2014, December; Voicewaves, 2012, November; Voicewaves, 2013, August). The issue of respiratory

health, and specifically childhood asthma, is also a much-studied issue in Southern California, and long has been, given the physical geography of the Los Angeles Basin, high population density and concentration of industry has made LA notorious for bad air (California Air Resources Board, 2021; Jacobs & Kelly, 2008; Littman & Magill, 1953). In the 2000s and 2010s research studies increasingly situated concerns of childhood asthma at the cross-hairs of health and the environment (Brandt et al., 2012; Gauderman et al., 2005; McConnell et al., 2006; Pérez et al., 2012). Yet, the disproportionate burden of complications like emergency room visits, hospitalizations, and the number of days low-income Latinx, Black, and Asian children struggle to breathe in the fenceline communities adjacent to the global goods movement in LA County is primarily addressed through public health services.

Asthma continues to be a highly medicalized problem addressed only after exposure, through diagnosis, treatment, and education. The highly racialized environmental-community burden is tracked and addressed by state public health agencies through an individual paradigm. That is, individual asthma that is "poorly controlled" requires one-on-one education, and accessible health care services with a "compliant" patient, in order to "control" it (Martin et al., 2006; Matiz et al., 2014). The reality is that childhood asthma in the LA Harbor region is not solely a public health issue. The geographically racialized scope and scale of children's respiratory health disparities in the Los Angeles Harbor region and the city of Long Beach is worth paying attention to, if not only as a single, yet complex indication of the entrenched severity of environmental racism in the region. Childhood asthma in LA County is a structural and

systemic geographic phenomenon of environmental racism, and stating it as such matters.

While the concept of environmental racism in Southern California is not new, it is useful to situate the burden of childhood asthma in the LA Harbor region within a traditional EJ studies framework. Not only because it is applicable, but because of the glaring lack of such a framework used by state public health agencies to assess or address such disparities. In the 1987 United Church of Christ "Toxic Wastes and Race in the United States" report Dr. Benjamin Chavis, Jr. characterized U.S. environmental policy, and the disproportionate siting of toxic waste disposal in African American and other communities of color as "environmental racism." This report and the framework it provided is credited with launching the U.S. environmental justice movement. In 1991 more than 1,000 delegates attended the First National People of Color Environmental Leadership Summit in Washington, D.C., and put forth a holistic, ecological framework of environmental justice in seventeen principles. The Principles of Environmental Justice affirm the rights of racialized and historically marginalized peoples to participate in the environmental decision-making process, to live and work in environments free of harmful toxic exposures, and to receive reparations and quality health care as part of a holistic view of justice, which includes righting the wrongs already done.

In Pulido's (2000) study of environmental racism (ER) in Southern California, she observes that ER is not just an issue of intent, and not just an issue of the siting of toxic polluting facilities in communities of color. Building on Bullard (1990) she makes a critical intervention in geographic studies of environmental racism, stating that ER is a socio-spatial process dependent upon differential, structural, and systemic forms of

racism at work in space, over time. In a 2004 United Nations report, Bullard defines ER as "any policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups or communities based on race or colour" (iii). Further, that ER stratifies and *reinforces* the stratification of people over time, by the work they perform, and where they live, by trading human health for profit, and placing the burden of proof on those who experience ER, rather than on requiring polluting industry to produce substantiating proof that their activities will not reproduce nor reinforce geographies of environmental racism.

The 1991 Principles of Environmental Justice and the political momentum of the environmental justice movement resulted in a major victory in 1994 when President Clinton signed Executive Order 12898, directing the Environmental Protection Agency to lead federal initiatives toward achieving environmental justice, directing all federal agencies to not only address EJ through their policy and practice, but also to set precedents for state and local agencies to follow suit. Yet, there is a disconnect between the aforementioned literature on environmental racism, and how the material consequences of ER, perhaps most acutely felt in the body, as health consequences, are addressed and attempted to be solved by public agencies charged with, and depended upon doing so.

I observe that despite the burden being proven over, and over again--that the phenomenon of environmental racism exists and detrimentally affects people's lives-and, that public health services are called upon as a dimension of achieving environmental justice in the 1991 Principles, there remains a gap in the EJ movement and EJ studies to critically assess the role that public health policy, practices, and services as

a help or hindrance toward achieving EJ. Drawing on my own experience working alongside EJ activists as a public health professional, and in my own immersion of EJ studies literature, I observe that this is because there is an assumption that public health services are helpful, and working toward similar, if not the same goals. I also observe that this is, perhaps, because as viewed through the holistic, ecological lens of EJ as put forth in the 1991 Principles, public health services are an essential ingredient, a necessary strategy, to achieve if not just one aspect of justice. But, despite appeals to public health professionals (see: Brulle and Pellow, 2006) and public health adoption of the EJ mantra "where we live, work, and play" (Cole and Foster 2001; see: City of Long Beach, 2013), there continues to be a disconnect between the provision of evidence-based public health services and environmental justice outcomes.

Pulido (2017) observes that despite the "many successes" of the EJ movement, it has largely failed to improve the conditions of people's lives, and pins "EJ failure" (Pulido, Kohl, and Cotton, 2016) on the EJ movement's reliance on the regulatory state. This is supported by substantial evidence that the EJ Executive Order 12898 has, in fact, made little large-scale impact (see: Konisky, 2015). In this critical turn in EJ studies, scholars have observed that environmental racism, as a dynamic socio-spatial process (Bullard 1990; Pulido 2000) should be recognized and understood as state-sanctioned violence (Pellow 2018; Pulido 2016, 2017), in reference to the lack of improved and enforced EPA regulations of large-scale industrial and corporate polluters (Konisky, 2015; Pellow 2018; Pulido, Kohl, and Cotton 2016; Pulido 2016, 2017). The close relationship between the state and racial capitalism, and capitalism as a direct cause of

environmental racism makes the state a contested site, and a purveyor of violence (Gilmore, 2002; Pellow 2018; Pulido 2016, 2017; Pulido and De Lara 2018).

In this study I recognize two direct ways in which the public health arm of the state is fueled by, and itself invests in, the system of racial capitalism. The first is what it means for public health state agencies and non-profit organizations to take money from the Port of Long Beach, and the second is the reinforcement of racialized, gendered, and classed labor through its low-wage classification of promotoras. The City of Long Beach Board of Harbor Commissioners is indeed a public agency, although perhaps in the gray area that much of the state exists in between public accountability and private interests. The Port was founded in 1911, and according to the 1931 Long Beach City Charter, the Commissioners are appointed by the Mayor and approved by the City Council. The land that the Port of Long Beach sits on is owned by the City of Long Beach "in trust for the people of the State of California." The 710 Long Beach freeway was built from the Port, inland, with public and private funds specifically to serve the POLB's needs to develop it as an economic hub that financially serves both the City of Long Beach, the greater Los Angeles Harbor Region, the State of California, and private economic interests in the U.S. and overseas.

As Parenti (2015) points out, historically capital does not capture non-human nature without the cooperation and participation of the state. Indeed, the founding and expansion of the U.S. settler-state is rooted in its investments and dependencies on the theft of land, capital accumulation through enslaved labor, and its on-going investment in and dependencies on the system racial capitalism. As delineated in the beginning of the Introduction it is within the City's, or broadly speaking, the state's paradigms of

scientific knowledge, property regimes through the law, and capacity for the building and maintenance of physical infrastructure that the utilities of non-human nature are rendered through the accumulation process. Specifically in this case, that the utility of space is made profitable through its development, despite any misgivings--toxic exposures over time, negative impacts on life and health, and potential premature death of the local population--otherwise. And, it is argued as such that the benefits *outweigh* the costs. It is through such a process, as is the case of the City and Port of Long Beach, that the location and routes of the goods movement, and the pollutant byproducts of the operation, produce uneven geographies of exposure, inequities, and environmental injustice in the locale, and region.

The public health arm of the state, in this case, public agencies and nonprofit health organizations, by taking POLB funding, reinforces the system by which people are made to become sick and die from pollution in the first place. In taking these funds, the state then hires, or informally brings on promotoras de salud (as volunteers) to carry out the interventions as promised to the funders, whether as full-time, part-time, or volunteer labor (HRSA 2007; The California Endowment, 2011). Promotoras themselves are characterized in public health literature as lay health educators and workers, who come from the communities they serve. They have less formal education, but become "highly trained" in their specific intervention. Promotoras often live in the communities they serve, and in Long Beach and the LA Harbor region this means that they also experience the conditions of environmental racism, and come from immigrant and poverty, or working-class backgrounds.

Promotoras as Latinas in the U.S. are racialized as non-white, perpetually "alien" others (Gonzalez, 2011[2000]). Their socioeconomic status, education status, and relegation to the physical margins of the region on the fenceline of the global goods movement produces them as necessary excess to the function of racial capitalism (Ferguson, 2003). Promotoras are produced in "excess" because their lived, material realities as low-wage racialized and gendered workers are a necessity of capitalist accumulation. Their material conditions are produced in excess of the wealth produced, but their conditions maintain their status as a disposable labor pool from which the racial capitalist state can draw from to implement its perpetual interventions. That is, to teach people to manage their asthma through a highly individualistic program, rather than working to prevent the disproportionate burden and trauma of asthma in their communities in the first place. I explore this in more detail in chapter three.

In this way, the Port of Long Beach community mitigation efforts between 2010 and 2014, provides a unique perspective (or, perhaps a not-so-unique on-the-ground reality) of the role that public health services play hindering progress toward achieving environmental justice. Where EJ activists appealed to the state/corporate polluter (i.e., the City of Long Beach appointed Board of Harbor Commissioners and the Port of Long Beach), they did so in the language of public health. Whether seeking prevention of further harm on human health, or "reparations and access to quality health care" (Principles, 1991) for the harms already caused--i.e. for the disproportionate poisoning of children of color--they were largely met with expanded public health services by another arm of the state. While their concerns and cries were not ignored, by situating this case study in a geographic understanding of environmental racism, and recognizing the

relationship between racial capitalism and the state, I aim to highlight three things about the mitigation services Harbor communities received as a consequence of EJ protest and advocacy, and outline the first of two interdisciplinary contributions I make with this study.

First, I want to bring attention to the fact that while public health may be a single strategy within an environmental justice paradigm, EJ frameworks are but a single dimension of public health policy, practices, and services. Environmental health is only one element of a public health perspective servicing the Harbor region and POLB fenceline communities, as evidenced by a lone paragraph on environmental health in the 2013 City of Long Beach Department of Health and Human Services Community Health Assessment. Second, while public health services may be needed to achieve aspects of environmental justice, when the majority of resources available to the community are poured into short-term, immediate needs of public health services for the long-term benefit of the polluter(s), I contend that EJ is not possible.

Justice is not feasible when survival is barely made viable. Third, I aim to expand the parameters of state-sanctioned violence definition put forth by Pulido (2017) and built upon by Pellow (2018) that recognizes the racialized environmental violence committed by the lack of strict and coordinated regulation of polluting industry by the EPA, and the state's investment in racial capitalism (Pulido 2016, 2017; Pulido and De Lara, 2018), to include the public health arm of the state. The public health arm of the state is charged with serving the interest of the public's health, and therefore responsible for mitigating the immediate environmental effects of the state's investment in polluting racial capitalist projects. It is precisely the public health arm of the state that enables the regulatory state

to continue to inflict policies and practices "*whether intentional or not*" (emphasis added, Bullard 2001) that contribute to geographies of environmental racism, and therefore is complicit in, and a purveyor of long-term state-sanctioned violence.

Promotora Praxis and Chicana and Latina Feminisms: Toward a Latinx

Geographies Paradigm

The role of promotoras de salud has been co-opted and configured within the U.S. public health system as an effective intervention to address a variety of health issues in both urban, suburban, and rural Latinx populations (Larkey, 2006; Lujan et al., 2007; Postma et al., 2011; Zuniga et al., 2012; among others). Promotoras de salud are central to the story of childhood asthma and environmental racism in Latinx fenceline communities in the Los Angeles Harbor region of Southern California. In my time working alongside promotoras de salud for a Federally Qualified Health Center serving the MUA in Long Beach and neighboring communities, including Wilmington, I witnessed the transformative power in the lives of the community members they worked with. Their education services are meaningful because the promotoras are patient, persistent, provide access to important resources, and hold space for the mothers whose children suffer from asthma as a consequence of the toxic pollution where they live, go to school, and play.

In this study one of my goals is to elevate the work of the promotora. Critical attention to their praxis and leadership in Latinx communities most affected the global goods movement and other polluting industries provides critical insight into my first contribution of this study, which is the role that public health services serve to perpetuate state-sanctioned violence. And, it also brings me to the second interdisciplinary

contribution I aim to make with this work. On the spectrum of public health state workers to volunteer, grassroots community leaders and activists, promotoras de salud are integral actors within and *against* geographies of environmental racism. Elevating and learning from their praxis lends insight into the ways that communities fight for survival amidst socio-spatial processes of racism, and how geographies of environmental racism are challenged and disrupted on the ground through practices of community care.

Chicanx, Latinx, and Latina American people have a rich history of struggling for environmental justice, as is well documented in farmworkers struggle for environmental and economic justice (Pulido 1996; Peña, 2005). Chicana, Latina, and Latin American women across las Américas have a rich history of being on the frontlines of environmental and social struggle (Maier and Lebon, 2010; Miller, 1991; Ulloa, 2017; Wald et al., 2019), particularly when it comes to fighting for justice for their children (Bayard de Volo, Lorraine, 2001; Bejarano and Fregoso, 2010; Gilmore, 2007). In Los Angeles, Mexican American women's frontline actions against environmental injustice have been studied and documented (Pardo, 1998), and Latinx communities across Southern California are leaders in the local, regional, and national EJ movement. However, less has been widely recognized about the work that promotoras de salud do at this juncture between social activism, environment, health, and community survival. Promotoras, as Latina and Latinx social, political, historical, and feminist actors are largely missing from Chicana/x and Latina/x studies, and their praxis is undertheorized in Chicana/x and Latina/x feminist theory, as well as feminist geography (see exceptions: Cahuas 2019, 2020).

Chicana/x and Latina/x feminist theory provides an expansive, yet grounded analytical and theoretical framework from which to draw in order to examine the spatial and temporal work that promotoras de salud perform toward the survival and care of their communities. My research methodology and overarching theoretical framework is grounded in four foundational dimensions of Chicana/x and Latina/x feminist theory (CLFT): Testimonio, Intersectionality, Interconnectedness, and Care. These CLFT themes coincide, intersect, and relate across critical environmental justice studies, feminist science and technology studies, and fields of geography. Such an interdisciplinary frame for researching and analyzing how promotoras are called upon by the state, and what roles promotoras perform in response to environmental racism in their own communities serves to recognize the ways in which Latinx peoples resist diverse forms of racism as socio-spatial phenomena (Pulido 2000) and engage in spatial practices that build community, and transform space and place over time (Cahuas 2019, 2020; Ramirez, 2020). Put another way, interdisciplinary geographic research grounded by meaningful engagement with Chicana and Latina feminist theory enables me to develop an explicitly Latinx geographies paradigm with this project.

The first foundational dimension of CLFT that I engage with, and is a building block of recognizing scalar environmental awareness in promotora praxis is testimonio. Testimonio is a traditional touchstone of Chicana and Latina feminist theory and practice. To share testimony of one's personal experiences and speak them into the public, political realm has deep roots across las Americas, and is a way to call for social change and speak truth to power across scales of injustice (Pérez-Huber, 2009). It is a grounded method to demand and fight for justice for one's family and community, for a cause

bigger than oneself, through one's activism (Delgado Bernal, Burciaga, Flores Carmona, 2012).

Testimonio is a methodology, it is theorization, it is knowledge production, and it is a practice that one engages in (The Latina Feminist Group, 2001; Cahuas and Levkoe, 2017). It is grounded in experiential and embodied knowledge, related to "theories of the flesh" that grounds knowledge-making in the realm of the everyday life and one's lived experiences (Blackwell, 2011; The Latina Feminist Group, 2001; Moraga and Anzaldúa, 1981). Testimonio has not only produced Chicana and Latina feminisms, but grounds CLFT in the spiritual, material, visceral, political, and creative. Anzaldúa builds on it through her autohistoria-teoría (1987, 2015), and Lara theorizes it through a holism she calls "bodymindspirit" (2003). The tenets and outcomes of testimonio intersect with a foundational principle of feminist science studies in that scientific knowledge is situational (Haraway, 1988), and that objective studies "are impossible for anyone" (Haraway, 1989). Testimonio in its own right, and in relation to other women of color feminist praxes also foregrounds the feminist geography cornerstone of situating one's own positionality in research methodologies, knowledge production, and scholarship (Eaves, 2019; Kohl and McCutcheon, 2015; Sultana, 2007; among others).

The second foundational dimension of CLFT I engage with is intersectionality. The development of Chicana and Latina feminist theory as an expansive field and ethos is rooted in the recognition and naming of oppressive white supremacist regimes of race, racialization, and racism, classism, sexism, and homophobia impact Latina and Chicana experience over time across las Americas. This has come to light through Chicana and Latina feminist projects that have sought to "write Chicanas into history" (Pérez, 1999)

and recover the seeds of Chicana and Latina feminisms through archival methods and oral history projects (see: Blackwell, 2011; Cotera, 2008; 1999; Ruiz and Sánchez, 2005; among others). Critique and theorization unique to the cultural experience of intersectional forms of oppression and grew on its own terms through diverse Chicana and Latina lived experience (Moraga, 1983; Anzaldua, 1987; Castillo, 1994), in relation to coalitional women of color feminisms (Moraga and Anzaldúa, 1981; Lugones and Spelman, 1983; Anzaldúa and Keating, 2002; Caballero et al., 2018), third-world feminisms (Sandoval, 2000), and coalitional Latina feminist theory (The Latina Feminist Group, 2001).

Intersectionality as a tenet of CLFT relates to the use of Black feminist thought and intersectionality in feminist science studies (Harding 1993) and feminist geography (Ducre, 2018; Eaves 2017; Hopkins, 2018; Kobayashi and Peak, 1994), and offers another dimension of intersectional feminist theorization along race, class, gender, and sexuality that is less considered in both fields (see exceptions). Intersectionality is also a pillar of critical environmental justice studies in both that understanding environmental injustice, and problem-solving to achieve justice requires an intersectional lens that looks at how environmental injustice affects and is entrenched through racism, classism, homophobia, transphobia, sexism, and ableism. An intersectional lens that includes the ways in which oppressive structures impact Chicana and Latina lives and relationships to the environment, to place, and to the Earth is reflected in CLFT, as well (see: Anzaldúa, 2015; Castillo, 2018; Moraga and Ybarra, 2019).

The third dimension of CLFT that I engage with in this project is the concept of interconnectedness. Much of Chicana and Latina feminist theory in the idea that we are

connected to our ancestors and can regain access to traditional forms of knowledges, even when the violence of colonialism has, over time, disrupted that cultural continuity (Anzaldúa, 1987; Castillo, 1994; Facio and Lara, 2015; Hurtado, 2020; Moraga, 2000[1983]). The theme of interconnectedness resonates between oneself and one's sexuality (Moraga, 1983), oneself and one's spirituality (Anzaldúa, 1987, 2015), between ourselves and our communities (Caballero et al., 2018), coalition-building across Latinidades (The Latina Feminist Group, 2001), and transnational interconnectedness between oneself, one's homeland, and the diaspora (see: Aldama and Quiñonez, 2002). CLFT scholars also lend this perspective to reproduction and motherhood (Castillo 1994; 2018; Caballero et al., 2018), and our sacred relation to Mother Earth (Castillo, 2018), and our place in our environment and world (Anzaldúa, 2015).

The idea of interconnectedness to each other, and space and place, is an underlying precedent for the field of political ecology, which from its emergence has examined the scientific knowledge of human and non-human relations in place, and in more critical work, has examined the way that dominant settler relationships with land are racialized and gendered (Kosek, 2006; Mollett, 2016; Mollett and Faria, 2013; Ybarra, 2017). The emergence of "abolition ecology" strives to grapple with the foundational violence of white supremacy that connects the racialized struggles against the carceral state and the struggles for environmental justice (Heynen and Ybarra, 2020). Abolition ecology draws explicitly on the fourth pillar of critical environmental justice (Pellow, 2018), indispensability, as an ethos counter to the concept of racialized expendability (Márquez, 2014). Drawing across women of color feminisms, Indigenous and decolonial theory, and political ecology, and building on the 1991 Principles of EJ, Pellow (2018) puts forth the idea that human and more-than-human actors, in place, in space, within our local and global ecologies are indispensable to one another, and calls upon the EJ movement to treat it as such and develop this paradigm in action. Toward indispensability is also the call for mutual liberation, which is an underlying call in Chicana, Latina, and Indigenous feminist theory, methodologies, and practice (Falcón, 2016; Sandoval 2000).

Building on the idea of interconnectedness, indispensability, and mutual liberation, the fourth dimension of Chicana/x and Latina/x feminist theory that I engage with is the idea of care. This aspect of CLFT can be understood through community and feminist activism, and the articulated struggles for gender equality (Blackwell, 2011), community health and safety (Pardo, 1998) and cultural and human dignity (Caballero et al., 2018). In CLFT the concept, ethos, and practice of care is explored through spiritual activism (Facio and Lara, 2015) and decolonization of the mind, body, spirit, and cultural practices (Pérez, 2015). Particularly through the frame of mothering one's community and one's biological children, care is the root of the Chicana M(other)work framework (Caballero, et al. 2018), as is explored in depth in chapter four of this dissertation. Care is common ground for coalition building in women of color feminist praxis (Moraga and Anzaldúa, 1987; Anzaldúa and Keating, 2002; Gumbs, Martens, and Williams, 2016). Care is also foundational to environmental and social justice struggles, as is the case when mothers of color are often at the forefront (Gilmore, 2007; Pardo, 1998). The concept, praxis, and economies of care are explored in geographies of health and health care, feminist, queer, and trans geographies of care, and the labor of care in labor geographies (see: Andrews and Evans, 2008; Connell and Walton-Roberts, 2016;

Hanrahan and Smith, 2020; Lawson, 2007; Vasudevan and Smith, 2020, among others). In relation to the theme of interconnectedness, we are compelled to act on the feeling of caring deeply, as is related in Pellow's CEJ pillar of indispensability.

Chicana and Latina feminist practice and theory is scalar. Chicana and Latina feminisms are delineated through a concept of the self as connected to family, community, and ecology. Local struggles for justice are viewed and understood as emblematic of historical, transnational, and wide-scale interconnected struggles for mutual liberation. So, my second interdisciplinary contribution is to build an explicitly Latinx geographies framework through a critical environmental justice, feminist science studies, and critical human geographies analysis of promotora care work grounded in deep engagement with Chicana and Latina feminist practice and theory. As such, in this study I delineate Latinx geographies of survival and care that promotoras de salud enact within and against geographies of environmental racism in the LA Harbor region.

The Stakes and Structure of the Study

In her posthumous work *Light in the Dark/Luz en lo Oscuro: Rewriting Identity, Spirituality, Reality* (2015), Gloria Anzaldúa presents a meditation, a theory, a guide within, and for Chicana feminist praxis. She guides the reader through her autohistoriateoría through a series of breaks of the internal self, and breaks between self and place, self and community, self and ecology, and the re-constitution of the self, community, and place with a social justice imperative. She names this paradigm the "Coyolxauhqui imperative," which is also rooted in Aztec mythic history. The moon goddess, Coyolxauhqui. made an attempt on her mother's life, Coatlicue, the Earth-Mother goddess. But, her brother, Huitzilopochtli, stopped her, cutting off her head. Her story is

represented by a huge stone monolith of her dismembered body, and serves as Anzaldúa's "light in the dark" and represents "a complex holism--both the acknowledgement of painful fragmentation and the promise of transformative healing" (Keating, 2015, xxi). According to Anzaldúa: "Coyolxauhqui represents the psychic and creative process of tearing apart and pulling together (deconstructing/constructing). She represents fragmentation, imperfection, incompleteness, and unfulfilled promises as well as integration, completeness, and wholeness. The light of the full moon encourages crossing over and entering the other world, what Don Juan calls the left side of awareness and what I call El Mundo Zurdo" (50).

In her text she describes the "cracks of the world" -- and refers to 9/11, U.S. imperialism, and the unjust U.S. war in Afghanistan as one such major crack, that splits apart reality. She invites her reader to consider what it means to reflect deeply inward, use one's imagination, driven by spirituality and other ways of knowing and being in order to delve into such cracks, into such harsh breaks with perceived realities, what might also be described as perceived norms, or perceived safety. "From infancy our cultures induct us into the semi-trance state of ordinary consciousness, into being in agreement with the people around us, into believing that this is the way things are. It is extremely difficult to shift out of this trance" (7). That is, she models for her reader, and invites her reader to co-create, what is possible within the breaks, beyond the breaks. She delves into those breaks of what we knew "before" in order to imagine what could otherwise be, and for the purposes of social justice in particular: What we can build beyond what was offered to us before?

I take very seriously the invitation Anzaldúa extends to her reader, that is to be a co-creator with her: "My job is not just to interpret or describe realities but to create them through language and action, symbols and images. My task is to guide readers and give them the space to co-create, often against the grain of culture, family, and ego injunctions, against external and internal censorship, against the dictates of genes" (7). It is in this spirit, coaxed by this invitation, and inspired by Anzaldúa's creativity, imagination, spirituality, and corporeal theory, her autohistoria-teória, and her invitation to create from the borderland space and time and being of *nepantla*...that I connect her goals in scholarship, to my own: "I hope to contribute to the debate among activist academics trying to intervene, disrupt, challenge, and transform the existing power structures that limit and constrain women...In questioning systems of knowledge, I attempt to add to or alter their norms and make changes in these fields by presenting new theoretical models" (7). In this project I present three pieces of my own testimonio, breaks in what I thought I once knew of my reality as a professional working in public health, and as someone invested in liberation and justice.

I present this knowledge production and theorization on its own terms in three stand-alone pieces that also inform the traditional scholarship presented here. La Rajadura / The Crack: Driving to Work opens up this study and speaks to the first of many realizations I had about the ways in which the state apparatus of public health actually worked against its stated purpose through the state's investment in and reliance on racial capitalism. Una Fisura / A Fissure: Defining Expertise at a Community Meeting presents one of many instances that I witnessed and was complicit in an us/them distinction between public health professionals and community members along racial and

class lines, and speaks to the challenges of fighting for equality even when you are invited to the table. Una Abertura / An Aperture: The Home Visit recalls one of my final collaborations with one of my co-workers and promotoras I was lucky enough to work with. The day of this home visit I shadowed the promotora and participated in the education session with the clinic patient and the promotora's "client." During the home visit I furiously took notes, and took in the space and place of the client's home and the promotora's education session with her. I knew what I was participating in that afternoon was important and mattered deeply, as did every home visit promotoras paid to their clients. I did not know how integral it was going to be as I left the clinic to pursue further graduate education, to my own story, my research, and the scholarship here. These cracks are put back together here, in conjunction with interdisciplinary scholarship, a reconfiguration of things anew, slightly different, to make some sense of injuries and injustices, and ways we can imagine beyond the prescription for survival, and work toward individual health as part of ecological health and community liberation.

Cracks in my own reality, or what I thought I understood about how justice can be achieved, are the impetus for this study, and the contributions I aim to make. The dismembering that occurred then, is remembered and reconstituted here, or rather, an understanding of the world put back together through an interdisciplinary study with a Chicana feminist social and environmental justice imperative. I hope lessons learned and insights made from this study can be of use in the struggle toward social and environmental justice.

In "Papelitos Guardados, Testimonio, y Intersticios: A Chicana Feminist Methodology for Critical Human Geography," I share the development of my

methodology for this study, and detail its dimensionality. My research and analytical method developed jointly from experiential theorization from my time working in Long Beach, as well as through my academic training in public health, ethnic studies, and geography. I begin with a piece of testimonio that details my struggle to pin down my research methods amidst the cognitive dissonance I have experienced the last two years-during pregnancy, my first year of motherhood, and during the COVID-19 pandemic. During this period, however, I have learned to trust and rely on my intuitive practices, and come to recognize my otherwise disjointed research, writing, and analytical process as many parts of a perfect whole. I delineate my use of experiential and embodied knowledge, my use of testimonio, as well as my vast research into the public record with a "papelitos guardados" framework, building on the collective testimonio method first put forth by The Latina Feminist Group (2001). I explain that in the process of collection and navigation of the public record, and coming to approach it as an archive, I draw from a Foucaultian archaeological method to read across categorization and siloization of knowledge in the disciplines and in state practices. I then build on a Foucaultian genealogical method to delineate a re-telling, re-composition, or "history" of how such knowledge, categories, and silos get enacted on the body, deployed against communities, and produce geographies of environmental racism that promotoras are called upon to serve.

In "Modeling Promotoras de Salud," I use the Latourian (1984) "black box" metaphor to examine how the public health promotora model has become a popularly used, and highly regarded intervention to address childhood asthma in Latinx communities struggling against environmental injustice. The idea of the black box is that

all of the attention in the implementation of a model or theory is focused on the correct inputs, so as to produce the desired outputs, or results, while ignoring the model's inner complexities altogether. In the chapter I put forth a genealogy of the model in relation to the institutionalization of environmental justice at the federal level, and then I open up the model, using the archaeological method to undefine, and redefine components of the model's inner workings. I contend that the inner complexities of the model are considered constants in public health implementation, routinely taken for granted without hardly ever being critically questioned in research or practice. I open up the model and delineate its inner complexities in relation to the four dimensions of Chicana and Latina feminist theory I laid out in the Introduction, in order to more fully understand the depth and complexity of the state's call upon promotora de salud labor.

In "The M(other)work of Survival: Laboring Against State-Sanctioned Violence," I build on the Chicana M(other)work framework (Caballero et al., 2018), which is an interdisciplinary framework that brings together Black feminist thought (Collins, 2000) and Chicana and Latina feminist theory, and theorizes specifically the transformative power of motherhood through a community-based paradigm of love and mutual liberation. I draw on the depths of my experience and critical reflections on my time spent working with promotoras de salud in Long Beach, and the richness of promotoras de salud practice and impact that registers in the public record. I examine the spatial and temporal practices of promotoras de salud, in the ways that they respond to environmental injustice and racism in their communities. I analyze the spatialities and temporalities of promotora m(other)work praxis toward a Latinx geographies paradigm. I argue that promotora geographies of care are produced from within, but enacted beyond

the public health paradigms that the state calls upon the promotora to execute. In this way, promotora m(other)work counters, works up against, and actively counters state-sanctioned violence encountered within geographies of environmental racism.

III. PAPELITOS GUARDADOS, TESTIMONIO, Y INTERSTICIOS: A CHICANA FEMINIST METHODOLOGY FOR CRITICAL HUMAN GEOGRAPHY

"Being a good geographer means going to look and see, and then to challenge oneself in one's description of what one is seeing. But politically it is giving all of the attention you have to the thing, in order to understand how it works."

-Ruth Wilson Gilmore *Geographies of Racial Capitalism*, Antipode Film (2020)

"From our different personal, political, ethnic, and academic trajectories, we arrived at the importance of testimonio as a crucial means of bearing witness and inscribing into history those lived realities that would otherwise succumb to the alchemy of erasure."

-The Latina Feminist Group, Telling to Live, Latina Feminist Testimonios (2001)

Testimonio: A Nepantlera Perspective on Methodological Development

The question is: How exactly have I conducted my research and analysis for this project? The answer is embedded within the circumstances of trying to complete my dissertation, while mothering my now almost two-year-old, during the pandemic and antiracist uprisings of this past year. The year before this I was mothering a newborn and learning to mother myself. I was developing a new embodied knowledge: learning a language of intuition, acquiring tools to slow down, and developing a daily practice of compartmentalization and skill of managing the feeling of being pulled in opposite directions (felt deeply in my bones). I was doing literature searches, and combing internet data sources on my phone while my baby napped on me after breastfeeding (and flaring up that lingering carpal tunnel from pregnancy). I was writing down lists, half-formed thoughts, ideas, sketches, diagrams, and notes in my phone and scribbled in notebooks here and there, whenever I had a chance to do so. The year before that I was pregnant, and as my journal entries remind me, too sick to do much of anything. I wrote to myself: "My not feeling well does make it more difficult, uncomfortable, to sit here and try and

concentrate on anything else--but, not impossible." Even in my journaling I was hard on myself, and expressed my own internalization of capitalism and neoliberalism in my private writings. Growing my baby wasn't "productive" enough, even for me, I guess. It has been a process of learning by doing, and unlearning guilt and shame over what I thought research and productivity, and being a "good" graduate student, researcher, and academic was *supposed* to look like. I continue to be on a journey of learning to be kinder and more generous with myself, and to give myself the space and time to follow the lead of my instincts and intuition in my life, and in my research.

It has been taught, and trained, and ingrained in me (throughout my academic career) that "the questions drive the method." For me, there was reciprocity between the development of my questions as my methodology unfolded, and the methodological path was clarified by the questions themselves. It has been a dialectic process between data collection, determining what exactly my questions were, and then how I am best able to answer them through this years-long process of collecting and analyzing my data. My journaling, writing through what I "know" over, and over, and over again has been foundational to my study. I have worked backwards through my experience, and then fast-forwarded in time and across space, incrementally fueled by disciplinary and interdisciplinary inquiry, perspectives, and knowledge that I have come to know through my graduate training. This study has emerged in the space between my academic study, and my collective experience as a first-generation Mexican American, Chicana public health professional, community health educator, and state worker in the "non-profit industrial complex" (INCITE! Women of Color Against Violence, 2007).

And so, the method has been, and has developed *through* my writing. Writing through difficult experiences I had working in community health for term papers and creative projects over the past seven years, as a means to try to pin down what exactly *was* so difficult about my experiences. What is it about the challenges I encountered during my time working in Long Beach, California (and even before that, at the Centers for Disease Control and Prevention), and the lingering unease, suspicion, and critiques that have remained with me (and grown) since? Writing through the fog I felt during and after pregnancy, knowing that I still had so much of this study to figure out. Or, so I thought. I did not realize that it was this "figuring out" process that was in fact integral to my research and data analysis process.

Writing through the pain and isolation and trauma of this past year during a pandemic, racial justice uprisings, and the ever-worsening climate crisis has also clarified the stakes of this project for me. I have sharpened my critique of the state's political, social, and financial investments in the system of racial capitalism. Instead of compartmentalizing and working on this project as something separate from the pandemic my goals were clarified in a broader understanding of where my analysis fits into the larger scheme of things. As I witnessed public health systems break down, government officials' incompetence, profit put before people on every scale, I observed local struggles that communities in Long Beach and the Los Angeles Harbor region of Southern California have long struggled against. The reality that #wearejusttryingtobreathe has been amplified on a national and global scale as part of the interconnected crises of Latin American and Indigenous refugee incarceration and family separation, anti-Black and anti-Brown police violence, anti-Asian violence, and pandemic of this past year (and so much more).

I always come to my research and writing as a whole human being, "bodymindspirit" (Lara, 2003), that is, my corporeal, spiritual, and intellectual forms interconnected and mutually influential, and "writing in crooked lines" (Pérez, 2015), within, and derived from the liminalities, is perhaps the only way I know how. My initial focus on the system of racial capitalism and the role of the global goods movement in producing conditions of racial capitalism, and the inherent contradictions of relying upon a deliberately disjointed public-private health system to achieve justice. But, this is only a part of a larger story that ultimately aims to center promotoras de salud. In the vein of Chicana and Latina history, and other historically marginalized scholars academic interventions in the Western disciplines, as a Chicana geographer I aim to center promotoras who have been marginalized in their own story. I am interested in the dynamic temporality, spatiality, and place-making power of promotora labor, care work, and m(other)work.

The state, like capitalism, like any system, is run by people. And, when those people uphold administrative investments in actions that will put our most marginalized communities (and ecologies) at even higher risk, people get sick, suffer, and die, and those communities (and all of us) are forced to carry ever-heavier burdens of trauma and grief. Speaking explicitly of Latinx communities in and around the twin port complexes in Southern California, such a statement could be applied in any number of instances given the U.S. government's performance during the pandemic this past year. And, what I have observed in life and in my research, what we are (always) left with is the comfort

and care of the frontline workers and community leaders whose love and care buoys us, and makes possible our individual and collective survival.

Overview

My research methodology is composed of diverse data sources, and interdisciplinary feminist and critical race analytical frameworks. At the core of my approach, however, is a Chicana feminist ethic, that horizontally runs through the methodological approach I have developed. In what follows I outline the different components of my methodology and framework, and underscore the centrality of Chicana and Latina feminist praxis to my work. Drawing on the idea of "papelitos guardados" put forth by The Latina Feminist Group (2001), I elaborate and build on the idea of saved, protected, guarded roles and papers, as a means of conducting research and a methodological framework.

Papelitos guardados, for my research, has two meanings. One, there are my own papelitos guardados that I have produced over the years, my own autoethnographic writing, and life stories that I have written, saved, poured over, and analyzed as foundational to the development of this study. It is from my papelitos guardados, my own memories and practical theorization written down, that I produce the testimonio I share as part of this study. My experiential theorization is grounded in the geographies of my body, the imprint that my interaction with place has had on my own physical and psychic self: "like a map...we weave (tejemos), and are woven into" (Anzaldúa 2015, 69). Two, there are the papeles guardados that I have collected from my public record research. My research in the registro público, or public record, consists of:

• Minutes and recordings of public meetings

- Peer-reviewed scientific research in public health, medical, and air quality monitoring disciplines
- State-funded research reports
- Policy documents and memoranda
- Conference programs
- Promotora testimonio
- News, media coverage
- Grassroots social media, and other public information sharing

Both my papelitos guardados, and the papeles guardados I have collected, saved, and organized are data sources that I have used to study, analyze, and theorize the ways in which the state calls upon promotora labor to resolve issues of environmental injustice in their own communities, and the roles that promotoras perform in response to the asthma epidemic in Southern California.

The analytical approach I use with both the papelitos and papeles guardados, both my auto-ethnographic writings and the public record, can be understood through a framework of intersticios (interstices) and intersections. Within this analytical approach I draw on diverse methods and theoretical paradigms to develop a way of working within my data, and reading for the silences and "cracks of the world," as well as the ways in which historical systems, structural oppression, and power dynamics forge, and deepen those cracks in local geographies, to and within which promotoras attend with such strength and love (Anzaldúa 2015, 16). My framework challenges Western disciplinary modes of knowledge production and organization, and rejects the siloization of knowledge and action in the public sphere. I recognize such as antithetical to an antiracist, feminist, decolonial approach to knowledge production, and detrimental to achieving social and environmental justice.

In my analysis I explore the Latourian "black box" metaphor (1984) through a Foucaultian archaeological and genealogical method (Foucault, 1982, 1994a, 1994b,

1995, 2007), operationalize the Chicana M(other)work Framework (Caballero et al., 2018), and engage Anzaldúan theory (1987, 2002, 2015). I also draw from and weave together dimensions of intersectionality, Marxist feminism, eco-feminism, feminist and deconstructivist critique of the production of scientific knowledge, and feminist frameworks for mapping geographies of care in relation to a critical environmental justice studies framework (Pellow, 2018; Pulido, 2016, 2017; Pulido and De Lara 2018). My analytical paradigms are rooted in women of color feminisms and critical race theory, and mobilize Chicana and Latina feminist frameworks for studying Latinx geographies and confronting the perpetuation of environmental racism and injustice in our communities.

Papelitos Guardados: Experiential and Embodied Knowledge

In their introduction to the ground-breaking anthology *Telling to Live: Latina Feminist Testimonios* (2001), The Latina Feminist Group (TLFG) detail the collaborative process by which they came together as Latina academics to share their *testimonios*. In their efforts they cultivated space for coalitional latinidades feministas (Latina feminisms) by unsettling established cultural terms and terrain, questioning the universal authority of Euro-centric feminist frameworks, and centering Latina feminist knowledge production as a means to better understand intersectional forms of oppression (1).

TLFG explains that the anthology retains the "raw edge" of their testimoniando (21), that is, the public telling of their life stories as a method to explore their complex identities as Latinas, and a means to theorize the joys, pains, and challenges they experience as Latinas in academia. The testimonios are presented in relation to one another, building a constellation of diverse and relational latinidades feministas, and operationalizing the cultural identifier "Latina" as a coalitional and political term (6).

TLFG profess their "papelitos guardados," a term used to describe the "writings tucked away, hidden from inquiring eyes" (1). For TLFG, papelitos guardados "evokes the process by which we contemplate thoughts and feelings, often in isolation and through difficult times. We keep them in our memory, write them down, and store them in safe places waiting for the appropriate moment when we can return to them for review and analysis, or speak out and share them with others" (1).

In Telling to Live, testimonio is used as a method for extracting and analyzing lived experience as a direct source of data, and reclaiming this process as a "complex genre" from which both knowledge and theory are produced (17). For TLFG papelitos guardados are the stories held from the public's view, and the translation of these personal stories into testimonio has a political, cultural, and social justice purpose. Testimonio serves as disclosures not of personal lives, but rather "of the political violence inflicted on whole communities" (13). In this way testimonio serves to center the diversity and relationality of Latina experiences as a source of knowledge for better understanding intersectional forms of oppression and marginalization.

My papelitos guardados, my saved papers, tucked away, are reflections and retellings of my personal and professional experiences, roles I have had and performed, memories I retain consciously and unconsciously, and the indelible imprint that certain people, places, and experiences have had on my body, being, identity, purpose, and goals. My notes, sketches, journaling, mapping, and long-form autoethnographic writings have taken place in myriad form, in some cases with, but mostly without an audience. It is through my papelitos guardados that I have critically reflected upon the complexities of my experience as a Chicana public health professional, state worker, within the nonprofit

industrial complex and the United States public health care safety net, in service of a majority Latinx community in Southern California.

I went into public health because I was interested in working toward social justice, but when I left the community health sector in 2013, I was so heartbroken and demoralized, that I turned to academic study, and the writing of an entire dissertation to explain why. Of course, I did not know this was how it would go, when in 2013 I quit my job and applied to graduate school (again). Writing became a large part of my process of disentangling my self-worth from the professional work I had done. Writing became a means to reorient my focus on understanding the ways that justice is achieved in our communities. Writing became a method for me to pick apart, and examine one, by one, the messy ways that public health work was embedded within larger systems and structures of violence and injustice.

Writing also became a method for processing my grief. It was the loss of work I cared deeply about, and the kind of grief associated with the process of unlearning the social and economic societal order as I once understood it. My view had split open, and as I peered through those cracks I attempted to make sense of this new perspective. Feeling first, writing second, and putting words on paper became a method for my analysis. And, it is such that issues of children, breath, life, and health are so precious, that analysis of environmental racism and air pollution must be grounded in the messy entanglement between the personal and the political. The accumulation of my papelitos guardados, over time, emerged as a method for documenting the systemic and structural intersectional forms of oppression that my public health work was deeply embedded in, and a path forward for self-reflexivity and self-recognition of the ways in which I was

and am complicit. What began as a deeply personal and intuitive process developed into a driving force of my research methodology: Through my papelitos guardados I work through the scale of my experience--from the deeply internal, to interpersonal, institutional, structural, systemic, geographic, political, and historical--as a means to clarify how the public health work I had been so invested in could not solve the problems it claimed to provide solutions for.

The types of writing I have done over the years, in response to, and as reflection of my time spent working in community health includes, but is not limited to:

- Long-form journaling
- Logic models and flowcharts
- Lists and keywords
- Poems
- Letters to coworkers and community members that I never sent
- Letters to myself
- Autoethnographic writing for term papers (and all the drafts of which I kept to myself)
- Loving texts, emails, and conversations with past and present co-workers, colleagues, teachers, and advisors who have fueled and imbued various academic and personal writings as part of this project

These are my papelitos guardados. They are my saved papers, my digital and paper memories, the roles I was trained to fill and perform, the roles I have occupied, abandoned, claimed, and aspired toward. My papelitos guardados are the very process by which I have traversed temporal, spatial, structural, and systemic scales, relating the embodied to the political, and studied the ways that the state-sanctioned violence marginalizes and oppresses Latinx communities in Southern California.

The translation of my papelitos guardados into the testimonio presented in this work is situated in the "complex genre" of Chicana and Latina feminist testimonio that serves to not only disclose "the political violence inflicted on whole communities" (13), but to illuminate the complexities, and even the subtleties, of state-sanctioned violence on Latinx and other historically marginalized communities. Further, my testimonio serves to expand the paradigm through which racialized oppression and violence can be analyzed and theorized through testimoniando. I provide three distinct testimonios that work in relation to the analysis and theorization throughout. "*La Rajadura*/The Crack" jumpstarts the study, provides impetus for critical analysis, and situates my work geographically in Southern Los Angeles County and greater Long Beach. In "*Una Fisura*/A Fissure" I aim to provide contextualization for the complicated and complex nature of disentangling critical analysis of the state's use of promotora labor, from uplifting and respecting the positionality and work of promotoras themselves. In Una *Abertura*/An Aperture I recount a home visit I was privileged to attend with one of my promotora co-workers in 2013. I provide an inventory of our labor and joint efforts one afternoon, and delve into the absences within the official curriculum that I investigate as part of this study.

Drawing from my papelitos guardados I translate my own experiences into testimonio, as a way to produce "autohistoria-teoría" (Anzaldúa, 2015), or theorization through my embodied knowledge, but also to speak truth to power with my recognition of self as part of a larger cultural and historically racialized and oppressed group of Mexicans and Latinx peoples in the United States. While mine is not a story of intense political repression (Pérez-Huber, 2009), it is neither divorced from the political repression, historical marginalization, and "slow violence" (Nixon, 2011) of the communities at the center of my larger narrative, and with those whose fates I am forever linked. My testimonio is mine to give, and exists in relation to and in solidarity with the promotoras and families whose struggles I have witnessed and tried to help, though my

testimonio was not produced in a coalitional, collective setting. In this regard, one central theme of my testimonio is the cognitive dissonance I experienced while working toward justice within the ideological and institutional constraints of the state.

While my testimonio has been produced on my own terms, it was never produced in isolation from the community with whom I worked with in Southern California community health. Many of my papelitos guardados are the conversations had, tears spilled, and hugs given from colegas and colleagues with whom I worked in solidarity with on the front lines of the asthma epidemic and environmental racism and injustice in Long Beach. It was truly through the condensed political education of learning to bear witness to the labor of promotoras de salud, during and far beyond my time working in community health, that fuels this study.

Through my papelitos guardados I arrived at my research questions, and my research questions in turn, revealed my years of writing, and my critical reflections on the role I served in, as a foundational and complex methodology. How are promotoras de salud called upon by the state to remediate and resolve environmental racism in their own communities? What roles do promotoras de salud perform in the regional response to environmental racism in Southern California? It is true though, that "the method follows the questions." In turn, these questions drove the development of a secondary, complementary dimension of research into the public record of promotoras de salud in the United States, and in Southern California. Public record research of promotoras de salud and their response to the asthma epidemic in Los Angeles County further established the spatial and temporal boundaries, and scales of my research, revealing the need for a critical geographic approach.

Papeles Guardados: The Register of Promotoras de Salud in the Public Record

My papelitos guardados revealed the centrality of the promotora's role to this study, and thus demanded another set of data. Yet, the concept of papelitos guardados, or saved papers, as an intuitive approach became a relational one and an applied framework to build upon with my research in the public record. I began to collect, save, organize, sort, and analyze state-produced documents and data:

- Environmental impact reports
- Environmental toxins peer-reviewed scientific research
- Promotora de salud program evaluation studies and reports
- Public health policy, commentary and white papers
- State and non-profit institutional and organizational documents
- Grassroots flyers and public documentation
- Videos, news coverage, and other media

I began saving this public record documentation, thinking of it, and approaching it as an

archive.

In using the public record/registro público, I am guided by a subset of

methodological questions:

- What registers in the public's frame? Register, as in sound, pitch, volume, and frequency.
- What is the public impact of promotoras de salud in their fight against asthma, and the environmental pollution that causes it?
- Where (and how) can we hear their sound the loudest?
- Where is their impact being made and why?
- Who hears the promotoras and listens to their work?
- What frequency do you need to be tuned into in order to register the meaning of their care work and labor, as well as the multidimensionality of the roles they perform in their communities?
- Where and how does the register of promotora labor and impact reverberate across the public sphere?

And so, my method shifts, but in relation to my papelitos guardados. I become collector,

archivist, of papeles guardados in the registro público, protected papers, guarded roles of

the promotora de salud in the purview of the state, the testimonio promotoras have given in various forms, and in what registers in the public record.

Through the process of collecting, organizing, and analyzing such an unwieldy and expansive data set I was guided by my academic and professional knowledge of public and community health, and the praxis of promotoras de salud. I collected data on three spatial and political scales: federal/national, regional/state, and regional/local. My research is primarily focused between 1994 and 2014. On the national scale my focus is on the federal initiatives and local efforts to address racial and ethnic environmental health disparities. I delineate a genealogy of public health research, policy and practice that arose in relation to Executive Order 12898 and the imperative to focus on environmental justice. I look at the rise of public health scientific study of promotoras, public health and community health focus on addressing social determinants of health, and the rise of understanding between the relationship between pollutants and asthma on all three scales. I gathered data on the policy, funding, and programs that federal agencies make available, deliver, and mandate to state public health agencies and federally funded community health programs that center on addressing Latinx health disparities and childhood asthma.

In relation to this, I focus on the ways that local community health organizations, particularly federally qualified health centers take up the national directives of using promotoras de salud to address racial health disparities and inequities in the majority Latinx communities they serve, particularly in response to the asthma epidemic in Long Beach and the Los Angeles Harbor region. On the local scale I gathered data on the roles that promotoras de salud have had in the fight against the asthma epidemic, and in

relation to the local environmental justice movement. I center the 2009 fight against the Port of Long Beach's Middle Harbor Expansion as a flashpoint in the fight for EJ, and the expansion of promotoras de salud in Long Beach and surrounding southern Los Angeles Harbor communities. I consider events and circumstances that led up to that fight, and what the mitigation funding won as a result of that fight meant for the community moving forward.

I also look closely at federal and national promotora models, health education policy, behavior change logic models and health education socio -technical tools to provide a detailed explanation of what constitutes local promotora-led interventions. In my research I have gathered data on the myriad ways in which promotoras de salud have amplified their message in local media coverage. I am keenly interested in the ways they have used the power of their own voices to amplify the struggles of their community. A methodological sub-question includes: What is the register of their testimonio of the right to breathe in the public sphere?

In relation to the community-centered asthma education promotoras provide, I consider their work in relation to the regional and state-wide impact of their work. I look at their involvement in state-funded research on ultrafine particulate pollution, and the impact their work has had on medical and scientific understandings of how diesel pollution impacts human health. I also assess the way their work has been taken up throughout the state of California and supported through private philanthropic funding, particularly through the California Endowment's place-based funding initiative, Building Healthy Communities, a ten-year funding initiative that took place in West and Central Long Beach between 2009 and 2019. Finally, I assess the ways in which the state-wide

promotora de salud grassroots network Vision y Compromiso (Vision and Commitment) has had on organizing promotoras, on generating standard messaging about promotoras, and on knowledge production of, for, and by promotoras de salud.

In collecting, and organizing data from the public record, I have organized according to scale and category, source and type of document or media. Much like working within an archive, I must assess the grain, the directional flows, and the scales of the information, and thus when to read with the grain of the data, and when to read against it. Discrete categories must be understood and respected for what they are and what they represent, but horizontal reading practices are developed through the archaeological method that "asks that disciplines, their categories, their grids and cells be exploded, opened up, confronted, inverted, and subverted" (Pérez, 1999). I crossreference documents and sources to reveal patterns and connections in the data across time and space. When such patterns are recognized and analyzed from the public record, detailed revelations about power dynamics and political ecologies of place unfold.

Guided by my working knowledge of public health and asthma education, I put to practice archaeological and genealogical methods that draw from diverse critical analytical paradigms. Developed through a commitment to Chicana feminist praxis I utilize silence of the promotora "herself" within public health literature as an analytic. I read for gaps in knowledge and history of promotora practices, in order to recenter the promotora in her own story. I contend that in order to better understand the burden of environmental racism in Latinx communities in Los Angeles County, with the intent of working toward justice, one must recognize how much the state relies on the labor of the

promotora to uphold systemic and structural oppression, as well as how hard promotoras de salud fight for the survival of their communities.

Intersticios and Intersections: Reading for and within the "cracks of the world"

In order to challenge myself to really think through, question, analyze, and explain the geographies of environmental racism I have witnessed, lived, and worked against in Southern California, I utilized and practiced reading and analytical methods that attend to the detail within space and across time that is demanded of it. Geographies of environmental racism contain painful and violent manifestations of intersectional modes of oppression that can define lives from beginning to end, and span generations. Geographies of environmental racism are also microcosms and indicators of the earth system destructionary shifts that are inducing planetary climate change and will have catastrophic impact across geologic timescales (Rockström et al., 2009). Environmental violence on historically oppressed and marginalized peoples has been called "slow violence" (Nixon, 2011), but I have witnessed the slowness of daily exposures to diesel particulates induce asthma, a chronic condition for which there is no cure, in babies and children. Daily exposures to ultrafine particulate matter are microscopically violent. They invade individual cells, and there is no mechanism for filtering them out of the air we breathe. The violence is slow until it presents itself in its entirety. There is a sharp division between the day a child can breathe normally, and the moment where a child gasps for breath, and the line between life and death thins. This is what I recognize Gloria Anzaldúa would call "un arrebatamiento con la fuerza de una hacha" (a break with the force of an ax), or a "crack" in the world (2015, 16).

It is this violence, and these cracks, that I also recognize and name as statesanctioned violence. That is, violence that the state sanctions through its passive environmental regulation and its aggressive investment in racial capitalist projects that produce toxic pollution (Pellow, 2018; Pulido, Kohl, Cotton, 2016). It is in response to its own violence that the state also calls upon promotoras de salud labor. Only, the state calls the phenomena "health disparities," and the legacies of pathologization of Latinx peoples by institutions of American medicine and public health persist (McKiernan-Gónzalez, 2012; Molina, 2006; Stern, 2005), even if hidden and forgotten in broader public memory (Benjamin, 2016b). In my experience working in community health, and then through my research, I have had the opportunity to go "look and see, and challenge myself in what I saw" many times over (antipodeonline, 2020). In turn, building on Foucaultian archaeological and genealogical methodology grounded in Chicana and Latina feminist theory, I developed an interdisciplinary reading and analytical practice. My work is inspired and informed by the interstices of space, time, and place where intersectional modes of oppression come to bear on the lives lived within geographies of environmental racism, and the interventions of promotoras de salud that are required for community survival.

Promotoras de salud enact a community health model of individually-focused education and behavior change interventions. The promotora model is an evidence-based intervention that has proven effective to address complications and management of chronic illness within Latinx communities and populations in the U.S. (Hilfinger Messias et al., 2013; Otiniano, et al., 2012; Reinschmidt et al., 2006). In order to better understand the popularity and circulation of this model within U.S. public health research, policy and

programs in the last 25 years I approach public health research as a primary source. Drawing from Chicana and Latina feminist theory and critical race theory, I use archaeology as first put forth by Foucault and developed as a recovery method through Chicana and Latina historiography and develop a genealogy of the promotora model in relation to environmental injustice in Latinx communities. Of archaeology, Pérez (1999) writes that it "can help us examine where in discourse the gaps, the interstitial moments of history, reappear to be seen or heard as that third space" (xvii). I consider the modes of production and stabilization of public health knowledge as deeply enmeshed in the narratives, politics, economics, and racial imaginations of Western disciplinary epistemologies. In using a Foucaultian genealogical method, I draw both from Pérez's use to "write Chicanas into history," and from Lisa Lowe's (2015) characterization of the method to "not accept given categories and concepts as fixed or constant" (3). The task within the method itself is to inquire into how categories, definitions, frameworks, and knowledge itself become "established as given and with what effects" (3), and to "recognize how history has been written upon the body" (Pérez, 1999, xvii).

The genealogical method produces what Lowe (2015) describes as "a historical ontology of ourselves, or a history of the present" (3). In Lowe's study of the spatial and temporal relationalities of European colonialism and the rise of modern liberalism, she describes her use of the genealogical method within the colonial archive as a necessary mode of reading across archival repositories separated and organized by office, function, task, and period. The organization of the state archive itself actively severs and discourages links between settler colonial projects in different parts of the world. Lowe uses the genealogical method to read across the siloization of such records to illuminate

the relational web of coloniality violently imprinted on diverse geographies across the world.

The organization of the colonial archives Lowe investigates mirrors the colonial state's organization of knowledge and the way it implements that knowledge through policy and practice, governing and rule of law. It is an organization of knowledge that parallels the Western disciplines (Foucault, 1994a) because both colonial powers and the rise of the Western disciplines have grown from the same seed, of the Enlightenment, and have the same root system, of patriarchal white supremacy. Using archaeology and genealogy as method and practice, I recognize the parallels between the Lowe's colonial state archive and my investigation of the modern U.S. settler-state bureaucratic organization of disciplinary knowledge, as well as Pérez's intent to "write Chicanas into history" paralleled with my goal of centering promotoras themselves in the "official" narratives about them and their work.

The problem of environmental racism in Southern California is intentionally and inadvertently addressed through various arms of the state. Governmental agencies, departments, and organizations address population management and the provision of public services through unique paradigms of disciplinary specialization that speak to different dimensions of related issues. Public health measures include the *promotora* asthma intervention that address racial and ethnic health disparities, environmental regulation administered by the federal and state environmental protection agencies monitor quantities of certain pollutants in designated areas. City appointed officials are charged with monitoring activities of local industry, among others. However, the problem of environmental racism is never addressed directly (let alone through the usage of a

critical geographical lens). "Environmental racism" is not the language that is used by the state, and therefore not the paradigm used to understand what the problem is, or how to solve it.

Each agency, department, at various levels of government is informed by the expertise of their workers, expertise which is gained most often through advanced formal education and training in the Western disciplines. Even interdisciplinary fields, such as public health studies and environmental studies, that sit at the crosshairs and are necessarily ordered by frameworks that have evolved out of the Western disciplines to address modern problems. The way in which academic knowledge is produced, even interdisciplinary and critical academic knowledge, necessarily builds upon that which comes before it, over time. However, as reiterated throughout my academic career by my mentors, the method follows the questions, and here the questions about the state's public health response to environmental racism in the Latinx population is uniquely situated at the crosshairs of interdisciplinary fields of study that one, are generally left out of the conversation in dominant frameworks, and two, have less often been put into conversation with one another.

While access to the modern public health system has always been a tenet of achieving environmental justice, the public health arm of the state has less often been interrogated as a mechanism of injustice. The rise of public health frameworks that address racial and ethnic health disparities in Latinx populations has also lacked critical attention within Chicanx and Latinx studies. And, the inherent spatial and temporal paradigms in Chicanx and Latinx studies, particularly within Chicana and Latina feminisms, have largely been ignored by the discipline of geography. In drawing on my

professional, experiential, and academic knowledge, I use the genealogical method to read across the siloization of state interventions and projects, the social construction of public health science and environmental regulatory policy, and disciplinary and interdisciplinary knowledge production. To do so is to read across the siloization of knowledge production in order to question the "apparent closures" (Lowe 2015, 3) of achieving environmental, racial, and gender justice and to develop a framework from the interstices of these fields where new critical questions about social and environmental justice can be posed.

In "Modeling Promotoras de Salud" I examine the rise and prominence of the public health promotora de salud model as a dominant intervention used in diverse Latinx communities to address various health disparities. The "evidence-based" model is applied in a wide-range of rural and urban settings with Latinx communities across the United States as a means of addressing a wide-range of health issues, including preventative care and chronic disease management, health screenings, health care access, and health education for both children and adults. In this chapter I engage with the "black box" metaphor as put forth by Bruno Latour (1984), which has had tremendous influence across the field of science and technology studies, and which critical race and feminist scholars in and beyond science studies have used to make critical interdisciplinary interventions (see: Mascarenhas, 2018, Miriti, 2020; Williams and Moore, 2019; among others). The metaphor is borrowed from the cyberneticians who coined it to describe a complex "piece of machinery or a set of commands...In its place they draw a little box about which they need to know nothing but its input and output...No matter how controversial their history, how complex their inner workings, how large the commercial

or academic networks that hold them in place, only their input and output count" (Latour, 1984, 3). I use the black box as a metaphor for examining the inputs and outputs of the public health promotora de salud model, as well as for opening up the model to examine the internal complexities of its inner workings.

Drawing on critical frameworks used in the social study of science and technology serves as an important, critical reminder that the field and profession of public health, especially in Los Angeles County, has long prided itself on its use of "scientific objectivity" (Molina 2006, 1). Public health philosophy and practices applied with the rigor of scientific objectivity, though, have historically relied on the pseudo-science of eugenics to deploy public health interventions in the Mexican population of Los Angeles at the turn of the 20th century (Molina 2006), and throughout the state of California well into the 20th century (Stern 2005). Further, eugenic racial logics have played a significant role in the modern geographies of environmental racism in Southern California (Pulido 2000). It is with a particular intentionality that I cite historical interventions examining the racial logics of public health services directed at the U.S. Latinx population, and particularly that in California. As Benjamin (2016b) observes: "Forgetting racial pasts becomes essential to projecting essentialist differences in to the future without the charge of racism. If one forgets the cruelty of the U.S. Public Health Service's forty-year nontherapeutic study of syphilis in black [sic] men, then marketing medicine 'for the treatment of heart failure in African Americans' looks and feels like pharmaceutical charity, not medical racial profiling (Kahn 2014)" (2229). Benjamin's work on postracialism as technological innovation is an important reminder that racism, especially in our institutions is not simply ignorance, but rather comes across as a "reasonableness,"

and we must look for it "in our textbooks, policy statements, court rulings, science journals, and cutting-edge technologies" (Benjamin 2016a).

To examine, situate, and analyze the inputs, outputs, and inner complexities of the model I draw on the genealogical method as a means to destabilize and unsettle established definitions and assumptions that the public health promotora model makes and deploys in the field. Through a thorough analysis of the literature, and a closer look at the state's relational attention to environmental justice and racial health disparities through federal initiatives, I unsettle the structurally defined roles that promotoras de salud have been called upon to perform in resolving and remediating issues of environmental injustice in their own communities as part of the U.S. public health and health care system(s). I examine what constitutes the elimination of health disparities, what the goals of promotora programs are, and by what means goals are achieved.

Upon "opening" the black box, and analyzing the inner workings, I read for the gaps, or the intersticios, where promotoras are silenced and sidelined in the very work they are called to do. I also read for the intersectionality of oppression that is and is not addressed by the model's intervention, and draw from critical race and Chicana and Latina feminist theory to delineate and deconstruct the ideological conditions within which the promotora "model" has been forged. I examine the ways in which the effectiveness of the promotora model as a "solution" to Latinx health disparities has been settled, with little attention within the field of public health or otherwise, for the internal complexities and multi-dimensionality of the definitions used to construct the model itself. In doing this, I aim to unsettle the role that public health is perceived to play in achieving environmental justice, and contribute to the burgeoning subfield of critical

environmental justice studies by arguing that the state inhibits and blocks the roads to achieving justice through neoliberal policy in response to structural racism and its investment in racial capitalism.

In "M(other)work of Survival: Laboring Against State-Sanctioned Violence" I use the Chicana M(other)work framework in conjunction with ecofeminism, Marxist feminism, and critical race theory to make visible the invisible. This works on two levels. First, I delineate the care work that promotoras do in their community, and highlight the political nature of their reproductive labor that otherwise goes unnoticed in both the realm of the public health promotora model, as well as the dominant public sphere. Second, I argue that their labor traces and imprints geographies of care over the routes and landscapes within which geographies of environmental racism must be survived. The care work they enact in space and over time not only makes legible the invisible and invisibilized violence of ultrafine diesel particulates that infiltrate and harm their community, but is a praxis that rebuffs the state's refusal to regulate ultrafine particulate matter and ruptures the cycle of marginalization within which the state calls upon them to respond to.

The Chicana M(other)work framework, put forth by the Chicana M(other)work Collective, a group of working-class Chicana mother-scholars, calls attention to the layered and intersecting care work of "Mothers of Color." The CM framework builds on the idea of motherwork as theorized by Patricia Hill Collins (2000). Hill Collins observed that for Native American, African American, Hispanic [sic], and Asian American mothers, raising their children cannot be disentangled from the intersectional and interlocking forms of oppression their families faced in a white supremacist and

patriarchal society. Further, that motherwork "goes beyond ensuring the survival of members of one's family. This type of motherwork recognizes that individual survival, empowerment, and identity require group survival, empowerment, and identity..." (372). Within the paradigm, each role: Chicana, Mother, Other, Work, and Motherwork, are delineated as a uniquely situated role which is invisibilized in dominant white patriarchal society. Each role highlights a particular political, cultural, social, and economic experience, positionality, and perspective. The five roles simultaneously exist within and together form the framework. They not only highlight the intersectionality of one's struggles, but the political power that resides within naming the five roles within one intersectional paradigm.

The Chicana M(other)work framework is derived from Women of Color Feminist Theory through the collective praxis of the Chicana M(other)work Collective (CMC) (Caballero et al., 2018). The CMC is a collective of first-generation, Chicana scholars from working-class, (im)migrant Mexican families who live, and articulate the framework for the purposes of "collective resistance that makes [their] various forms of feminized labor visible and promotes collective action, holistic healing, and social justice for Mother-Scholars and Activists of Color, [their] children, and [their] communities" (4). The Chicana M(other)work (CM) framework is built out from the Collective's shared experiences of motherhood, community-oriented labor, academic labor and service, and their shared cultural knowledge, as well as experience of racialization as Chicanas. The CM framework encompasses the distinctions and relationality of their layered care work in the home, in the university as scholars, teachers, and workers, in their communities with their comadres (fellow mothers in solidarity with) and neighbors, and within and for themselves.

I apply the CM framework as a means to delineate and separate out the intersectional work that promotoras do within the socially, politically, and physically liminal space they occupy when working with their clients. In both my professional experience working with *p*romotoras de salud, as well as promotora testimonio found in the public archive, promotoras working on the frontlines of environmental racism and health disparities in Southern California are frequently mothers of children with asthma. Their experience learning how to manage their own child's asthma is part of what draws them, and what gets them recruited to do this work. Building on foundational work of Mary Pardo (2000), I observe that their struggles and labor are also community mothering work in the tradition of Chicana and Mexican American mothers of East Los Angeles, in relation to the anti-racist, anti-state violence work of other mothers of color in Southern California (Gilmore 2007, others).

I build on the idea of racial otherization inherent in the CM framework by drawing from ecofeminism and disability studies, particularly through Ray's (2013) conceptualization of the "ecological other," which she uses to describe and theorize the physical and social otherization facilitated through environmental exposures, like racialization and disability, that deviate from the cis-white able-bodied societal norm. I also build out the "work" dimension of the CM framework by delving into the devaluation of reproduction and reproductive labor in a capitalist society, and particularly within a state invested in racial capitalism. Careful examination of promotora labor is of particular importance to my overall argument due to the fact that it is through their

racialized, classed, and gendered reproductive labor required by the state, that geographies of environmental racism are reinscribed and state-sanctioned violence persists.

I draw from a wide-range of the public record, including public and non-profit community health program and funding records, promotora interviews in print and video, local community actions, community participatory research, and materials produced by the California state-wide promotora network, Vision y Compromiso. I draw from and build on the CM framework to hone in on the role that social reproductive labor plays in the maintenance of systemic and structural racial, gender, and environmental oppression and violence. Simultaneously, the CM framework provides a pathway toward reading horizontally, for the intersticios of physical, social, and political space the promotora labors within, and how promotora labor is a locus of convergence for the sedimentation of environmental racism in place, as well as the promise of survival. The CM framework anchors my analysis and complements the horizontal reading method I engage with the registro público. Further, the framework builds off of the interstitial and genealogical method I use in "Modeling Promotoras de Salud" in opening the public health promotora model black box, and complements the multi-dimensionality of my testimonios.

This study contributes to this growing body of scholarship at the intersection of feminist, health, and labor geographies subfields, particularly in relation to the concept of precarity. The concept of "precarity" in labor geography has, in recent years, "emerged out of engagements with feminist theory and migrant labor" (Strauss, 2018, 623). Labor geographers' attention to the precarity of migrant labor is an important avenue for geographers of color, particularly Latinx geographers, to explore and make important

contributions given the colonial and imperialist legacies of migration, as well as the ways in which experiences and relationships to migration has shaped not only Latinx lived experiences and ways of knowing, Latinx transnational families and communities, but has also shaped the kinds of political investments Latinx workers have in various fields and professions, promotoras de salud included. The "precarity" of promotoras de salud labor works on at least three levels, first as immigrants themselves, or the children of immigrants from Latin America. Second, as low-wage laborers, earning stipends for their work or low-end wages in the health care industry. And third, the precarity of their work can be defined through their encounters with the precarity of life their work demands, that is, in working with children who suffer from the pollutant excesses of racial capitalism, living with asthma as a consequence of environmental racism.

In taking up questions about precarity in promotora labor through a racial capitalist and intersectional Latina and Chicana feminist framework, I respond to Strauss' (2020b) call for labor geographies scholarship to give greater attention not only to racial capitalism, but to feminist theoretical interventions in analyzing worker agency (2020a, 2020b), and this project makes a contribution to this burgeoning field of scholarship. Further, my attention to infrastructure of the state public health apparatus builds on the "distinct infrastructural turn" in that I recognize the state's dependency on promotora labor as a precarious infrastructure, in and of itself, similar to home care workers "a social infrastructure of care that is largely invisible in urban policy" (Strauss, 2020b, 1218). Strauss and Xu, 2018). Promotora labor, as I argue, is rooted in kin and community survival, and related, in a larger framework, to the survival of our communities and the Earth, as is theorized in Chicana and Latina feminisms.

Chicana and Latina feminist theory is produced on its own terms, not as complementary or additional to dominant white feminist theory, which is the historical framework of feminist geography. Feminist geographers of color have certainly shifted the directions of the subdiscipline and created important openings for new avenues of study in recent years (Cahuas 2019, 2020; Cahuas and Levkoe, 2017; Ducre, 2018; Eaves 2017, 2018; Kobayashi and Peak, 1994; Kohl and McCutcheon, 2016; Muñoz, 2010; Vasudevan and Smith, 2020; among others). While my work is situated to make a contribution to the field of feminist geography, I strive to do so first, through a critical and meaningful engagement with CLFT on its own terms. I make these distinctions because while my work is situated within, and relational to critical human geographical scholarship, particularly on "geographies of care," yet the discipline of geography has, only recently and thanks to the foundational work of Pulido (1996, 2000) begun to seriously engage with Chicanx and Latinx studies (see: De Lara, 2018b; Faiver-Serna, 2019; Gonzalez, 2019; Herrera, 2012; Ramírez, 2020; Sandoval, 2019; among others). Also, while environmental justice studies scholarship has long been produced by geographers, particularly in the realm of political ecology, urban political ecology, and the emerging "abolitionist ecologies" (see: Heynen and Ybarra, 2020), environmental justice studies largely lacks engagement with Chicana/x and Latina/x studies (see exceptions: Pulido and De Lara, 2018), particularly from the field of geography (see exceptions: Pulido 1996; De Lara, 2018a).

As I have detailed, my scholarship is produced on the one hand, through my own embodied and experiential knowledge and toward Gloria Anzaldúa's concept of autohistoria-teoría. Inextricable from my onto-epistemology is my life experience and the

lived, theorized, critically-reflected upon perspective of being Mexican American, culturally and politically identifying as Chicana, and professionally working in service of Latinx populations and communities. My scholarship is situated within an intersticio of deeply knowing about and having been witness to promotora labor, and at the intersection of insider/outsider, having never worked explicitly as a promotora myself. Thus, the geographies of promotora care that I analyze and theorize in my study are rooted in a particular way of knowing, being, and moving through the world that is distinct from the vast majority of health, labor, and feminist geography scholarship on care. My work is geographical and feminist, but as I have laid out here, the methodologies employed are built from a rigorous onto-epistemological commitment to Chicana and Latina feminist theory, intersectionality, and women of color feminisms which has largely been ignored within the discipline of geography. This research certainly has potential to contribute and expand the potential of critical human geographical scholarship, however, and I aim to demonstrate this in the subsequent chapters.

IV. UNA FISURA / A FISSURE: DEFINING EXPERTISE AT A COMMUNITY MEETING

fis·sure | \ 'fi-shər \

noun: a narrow opening or crack of considerable length and depth usually occurring from some breaking or parting

"Sometimes what accretes around an irritant or wound may produce a pearl of great insight, a theory."

-Gloria Evangelina Anzaldúa (2015) Light in the Dark/Luz en Lo Oscuro: Rewriting Identity, Spirituality, Reality pp. 2

By November 2011 First 5 Los Angeles (F5LA) had been working to create a new community coalition in Central Long Beach for the past six months. F5LA historically was funded through a state cigarette tax, and operating in the gray area of the state, was run as a private foundation with taxpayer funds and other corporate donations. They had entered into the community with the intention of building the Best Start coalition in order to funnel millions of dollars over five years to locally-run service programs for mothers and children. It was a late-evening meeting in the middle of the week, but I was there on behalf of the local non-profit community clinic, where I worked as the health education and outreach director. The reason for our gathering that night was to finalize the nomination requirements for the board of directors' elections taking place in a few weeks. There was significant attendance that night from both the community organizations and local residents. While the meeting was facilitated in English, Khmer and Spanish translators were there to translate the contributions in each language as needed for different individuals.

With the number of board positions divided between the organization and community members, 60% to 40%, the coalition also wanted to ensure there were "experts" among leadership, as well. The areas of "expertise" were defined as: pre- and peri-natal care, infant care, child abuse prevention, early childhood education, and special needs. As the discussion of "expert" prerequisites unfolded, a particularly loud and persistent contingent of public health nurses and early childhood education specialists stated that experts "obviously" needed to have a graduate degree in their field, with at least five years of experience working in that field. As a bilingual and bicultural professional who, at that point early in my career, was technically qualified to run as an "expert" in *something* according to their standards, my heart began to race and my face got hot. I was intellectually, emotionally, and physically uncomfortable with this definition, but no one said anything. I looked around the room: why were none of the community members – who were often outspoken about *many* other things – speaking up in protest of this definition?

In the moment when "expertise" was first defined as graduate degrees and years of professional experience anger arose within me and I literally felt my temperature rise. That fire, that my mom said I had in my belly, was crackling. This affective sensation overwhelmed me as if my body instinctively felt and made sense of the hatred and fear in that room before my mind had time to intellectualize and process how ignorance had been deployed. In that moment my internal reaction led me to "movement" as I struggled to get my thoughts in order and make a clear argument against the proposed definition, ultimately pushing the majority to grudgingly concede to a slightly more open definition of expertise.

As confusion led to anger led to frustration almost instantaneously, I had a vision of my *bis-abuela*, great-grandmother, Manuela. I saw her and felt her calming, powerful presence. Despite the fact that I attained a professional graduate degree, let alone a bachelor degree (the first on my mother's side of the family to do so), I had first-hand knowledge of the kind of expertise, wisdom, and know-how that existed outside of the American system of higher education. Manuela Garnica-Serna, who is now passed on to the spiritual realm, was a *curandera*. While she never stepped foot inside a classroom, she was trained from the time she was four years old to know healing herbs, treat various illnesses and conditions, deliver babies, and even perform minor surgery. She was a spiritual healer and guide, her knowledge and expertise was vast. And she shared her wisdom on her travels to see her family, five generations from her sprawled on both sides of the border, before she left this Earth.

In Long Beach, we were lucky. In Long Beach, we had active community participation with so many young mothers who were eager to make their communities the best they could be for their kids. We had active community participation from experienced promotoras and community health workers who served their community during the day, and in their "off" time. We were lucky. We had a diverse community of refugees and immigrants and with them a diversity of knowledge beyond the realm of our Western professional degrees. I wondered, how could these women possibly vote to exclude this kind of expertise in the Mexican, Central American, and Latinx community of Long Beach? How could they vote to exclude another kind of expertise in the Cambodian community, one I might not know, but could imagine? Could they not imagine such possibilities with me?

I was angry in that moment, and tremendously saddened. I was sad because I believed these women did actually care about helping people in the community, and sad because this act of aggression was being permitted to fly in the faces of so many immigrant women of color at that meeting. I was sad because I perceived them to be absorbing the aggression rather than fighting back. I was sad and angry because I perceived the close-mindedness of my colleagues to undermine the purpose of coalition building in its purest form – to build networks among otherwise disparate interests. I wondered, if this was the shaky foundation we were building our coalition upon, how would our house ever weather a storm? Reflecting back, my sadness persists because I perceive their deployment of ignorance as fear of the unknown. I perceive fear to manifest hate and build walls, rather than building strength through the exploration of difference and possibilities previously unknown.

At the urging of my CEO, in December 2011 I ran and was elected to the Best Start coalition board of directors on behalf of my organization as a "non-expert" member. At another late meeting in February 2012 one of the elected "experts" – a nursing director at a local hospital – responded to a concern about current breastfeeding program access for local residents raised by another board member, an undocumented Long Beach community member. The community member, a Mexican immigrant woman, constructively raised a complaint about accessibility and availability of a breastfeeding program for new mothers so as to raise awareness among the coalition of frustrations she had heard in the community.

The breastfeeding program ran out of the local hospital and was under the nursing directors' jurisdiction. As the "expert," she responded without specific feedback to her

fellow board member's concerns, but rather stated: "We are both women and we are both mothers. I understand your concerns and I understand you." Once again, I felt the heat rise from my belly to my face. I was stunned by this older professional white woman's disregard for the ways in which her middle-class professional positionality set her apart from the experiences, needs, and concerns of the young working-class Mexican undocumented immigrant mother. The young woman took the "expert's" comment in stride, and thanked the nursing director for her compassion. I was agitated and caught off guard in a moment where I felt like I could say nothing, because to do so would be to speak for this young woman, just as the nursing director had done.

After the meeting I approached the community member. I did not know her that well, but we both participated in many of the same community coalition building work and I saw her frequently. I did not know what to say about the exchange between her and the nursing director, so I offered her a ride home. On the way to her apartment we spoke about her kids and she asked if I had any kids of my own. No, I told her, but someday. We were about the same age, and she told me that she loved being a mother, but that it was a lot of work. When we entered her neighborhood, she had me drop her off at the corner of her block. As she got out of the car I told her, *nos vemos*, and she responded, *gracias*, see you next time.

V. MODELING PROMOTORAS DE SALUD

Literally, for two years now, I have dreamed of a bridge...In the dream, I am always met at the river."

-Cherrie Moraga, "Preface" to *This Bridge Called My Back: Writings by Radical Women* of Color, First Edition

In this chapter I use the metaphor of a "black box" to examine the application of the promotora de salud model as a means to address a wide-range of health disparities in the Latinx population by the U.S. public health arm of the state. The Latourian metaphor (1984) highlights how a scientific model is transferable in diverse circumstances, with concern only for inputting the correct data configurations to achieve desired and reliable results. And further, without inquiry or attention to the internal complexities of the model or theory. A black box gets drawn around these internal complexities, denoting the literal and figurative opacity of the model's inner workings.

In Long Beach, California the promotora de salud model has been a useful method of addressing the disproportionate burdens of childhood asthma in predominantly Latinx communities near the Port of Long Beach for over twenty years (KPCC, 2016). The model is applied by community health organizations in the region, using various federal and standard curricula, and socio-technical asthma education and management tools. Families learn to manage their child's asthma, and decrease the frequency of asthma attacks, missed school days, and hospitalizations, increasing their "control" over the incurable chronic condition.

My goal in this chapter is to unpack the prominence of the promotora model as an upstream, or preventative solution to Latinx asthma disparities in geographies of

environmental racism. This chapter argues two main points. First, that while the model serves a needed and important purpose in helping people who are already suffering from pollution-induced asthma and other chronic respiratory illnesses, the prominence of the model is not paired with systemic and structural changes that would *prevent* geographically specific pollution-induced asthma in the first place. The implementation of the promotora model as a community-based intervention serves as a wide-scale perpetual mitigation measure, instead of a temporary necessity while serious measures are taken to reduce concentrated air pollution in working-class, Latinx communities. Second, I contend that the model's reliance on a particular classed, racialized, and gendered characterization of promotoras de salud reinforces the social and economic subjugated position of Latinas in U.S. society. The state relies on a racially-othered, perpetually available labor pool from which to implement various interventions that "address" health disparities in Latinx communities. Simultaneously, the state does not address the structural and systemic underpinnings of those disparities in any meaningful way. The state's dependence on promotora low-wage labor reinforces its investment in the system of racial capitalism that produces the labor pool as racialized and gendered excess as a necessary condition of its operations.

In the first section of the chapter, I lay out the widespread use of the promotora model as an evidence-based intervention. I identify the key elements of the implementation of the model in the Los Angeles Harbor region, and delineate the inputs of the model, as well as the measurable outputs that determine its success. In the second section I read across scales and categories of public health knowledge through an environmental justice lens to put forth a genealogy of the model's prominence in

addressing Latinx childhood asthma disparities in Long Beach and the Los Angeles Harbor region in relation to the Port of Long Beach's first round of air pollution mitigation grants in 2011. I examine the model's inputs and outputs at national/federal, regional, and local levels, and hone in on the discontinuity between neoliberal public health approaches and failure to recognize the socio-spatial aspect of structural racism. This analysis works toward the goal of better understanding how the state calls upon promotoras de salud to remediate and resolve the environmental racism crisis in Latinx communities, as well as to put into context how promotoras respond to environmental racism in their own communities, which I will explore more in-depth in chapter four.

The first two sections of this chapter work to describe the architecture and opacity of the black box, in the third section I build on feminist interventions in science studies to deconstruct the box itself and subject assumptions of the model, otherwise considered as constants in its transferability, to critical analysis. In the third section I draw on Chicana/x and Latina/x feminist theory to critically examine the model's inner complexities by using an archaeological method to undefine, complicate, and reconfigure key concepts and components within the black box of the model. The goal of this analysis is not only to recenter the promotora in her own story, as is part of the recovery project of Chicana and Latina studies (Blackwell, 2011; Cotera, 2008; Pérez, 1999), but also move toward a distinctly Latinx geographies understanding of the misalignment between the public health arm of the state and the goal of environmental justice. Despite the current misalignment, by recentering the promotora within her own story, we can begin to imagine what economic, social, and political divestments are needed to restructure the state's relations with community-based struggles for justice. And, to imagine the kind of

Inputs

- High rates of chronic illness (i.e. childhood asthma) and/or bad health outcomes due to chronic illness (i.e. emergency room visits, hospitalizations, missed school & work days)
- Presence of social determinants of bad health:
 - Unhealthy built environment (i.e. polluted air, lack of access to green space, unsafe outdoor space, lack of access to healthy & affordable food)
 - Inaccessible health care services
 - High poverty rates
 - Low health literacy

Promotora de Salud Model

- Promotoras are natural helpers
- Promotoras are an upstream approach to addressing the social determinants of health
- Promotoras bridge the gaps in the health care system
- Promotoras help patients and families gain control over their chronic illness (i.e. childhood asthma)

Outputs

- Improved health education, behaviors, outcomes
 - Decreased hospitalizations for asthma attacks
 - Decreased missed school & work days
- Improved "self-efficacy," or self-confidence in one's ability to take care of and manage one's child's asthma
- Lower health care costs overall, less burden to the taxpayer

Figure 1. An overview of a promotora de salud "model" as related in public health literature and practiced in Long Beach, California.

empowerment and ethics of care needed to restructure state systems of population management into systems of health and care for people as part of a larger ecological whole (Castillo, 2018; Heynen and Ybarra 2020; Pellow, 2018).

An Evidence-Based Intervention

Public health scientific research examines the effectiveness of the promotora de salud model in reducing health disparities, measuring different outcomes associated with chronic disease management, and usually short-term reduction in disease complications. The model's effectiveness is assumed as inherent to its implementation, so long as the promotoras receive adequate training and supervision. Public health researchers and administrators focus on the prevalence, or pervasiveness, of health disparities within a local community, and aim to improve population health on a community-by-community basis. The promotora de salud model has been used to address diabetes management, adult and childhood obesity, cervical cancer screenings, adult asthma and cardioobstructive pulmonary disease, injury prevention, mental health, HIV/AIDS, cancer, adult and childhood asthma, and more, in urban, suburban, and rural diverse Latinx communities across the United States (Staten et al., 2004; Larkey, 2006; Reinschmidt, et al., 2006; Lujan et al., 2007; Deitrick et al., 2010; O'Brien et al., 2010; Sánchez et al., 2014; Stacciarini et al., 2012; Hilfinger Messias et al., 2013; St. John et al., 2015; Mojica et al., 2016; Falbe et al., 2017; among others).

The model is based entirely on the idea that the promotora, herself, is from the very community in which she comes to serve. In this way, the promotora is able to meet with her clients on a horizontal or "egalitarian" level (The California Endowment, 2011), sans hierarchy or professionalism. The promotora is trained in health education through a

holistic framework that takes into account the client's economic stability, formal education, health care access and quality, their neighborhood and built environment, and the social and community context of the client's life, otherwise known as social determinants of health (CDC 2021). The promotora is considered best equipped to take into consideration the social determinants of her client's health, because they are also her own. Promotoras learn and understand the conditions of their clients lives as the underlying method in order to help them learn the skills, acquire the tools, and develop the confidence to exert some level of control over the conditions of their life in order to prevent or manage a chronic illness, and improve their quality of life.



Social Determinants of Health

Figure 2. Social Determinants of Health, as modeled by the Centers for Disease Control and Prevention.

The promise of the model is that the promotora is able to address major problems before they start. The model is considered an epitome of the public health "upstream," or preventative approach in health education (Koh et al., 2010). Promotoras take the time to discuss medication plans as directed by the doctor, help clients navigate the health system, and support clients as they try to shift and change their health behaviors over time. The positionality of the promotora, as a lay health educator and community worker, enables her to spend a lot of time with each client—something that is rare in health care where standard thresholds for medical provider productivity are high to ensure profitability within a capitalist framework, regardless of a public, not-for-profit, or forprofit medical practice. Promotora productivity is measured according to the number of clients reached, which counts toward progress on private grants and is reported to funders, such as the Port of Long Beach (see: The Children's Clinic, 2014). However, the progress and productivity of the promotora is ultimately driven by the quality of the intervention, and in helping families achieve better disease management and sense of control in their lives.

The promotora de salud public health model gets applied to childhood asthma in a fairly specific way. While standards for promotora asthma intervention are not assessed by a specific regulatory body, standards of asthma diagnosis, treatment, education, home environmental intervention, health literacy measurements, and patient management are (see: NHLBI, 2012[2007]). Promotora asthma interventions across diverse Latinx populations, rural and urban, share commonalities in their use of such federal and national standards of care (see: Zuvekas et al., 1999; Martin et al., 2006; Parker et al., 2008; Bryant-Stephens, et al., 2009; Postma et al., 2011; Peretz et al., 2012; Zuniga et al.,

2012; Rashid et al., 2014; Carrillo et al., 2015; Lopez et al., 2017; Martin et al., 2019; among others).

The Bridge to Health program, funded by the Port of Long Beach air pollution mitigation grant 2011-2014, adhered to these nationally and federally held standards. Bridge to Health was housed at a Federally Qualified Health Center (FQHC) where medical providers and clinic operations are held to a high standard of medical care in accordance with the most up-to-date diagnosis and treatment guidelines (NHLBI, 2012[2007]), and providers at the FQHC in Long Beach, California also receive additional evidence-based education, Physician Asthma Care Education (PACE) training (Brown et al., 2004; Cabana et al., 2014; Patel et al., 2013). The promotoras de salud work closely with the medical providers as part of the medical team to understand the provider's concerns about the patient's asthma management from medical, behavioral, and environmental perspectives. Then, promotoras work closely with the caregiver of the child diagnosed with asthma, to educate about the disease, and help strategize how to better manage it through medication, behavior modification, and home environmental management.

Promotoras implemented the "Bridge to Health" program with an "Asthma 101," in-depth education session, which provides an overview of the illness, how it gets diagnosed, how best to treat it, and behavioral strategies for managing it. This education session is usually repeated at least one other time, and built upon with incrementally more detailed education throughout the six-to-twelve-month intervention. The promotora educates the family on using long-term controller medication, and quick relief medications, including when to use the different kinds of medication, and the best way to

administer them (NHLBI, 2012[2007]). The promotora visits the family home and does a home environmental assessment to teach the caregiver what environmental triggers to look out for, how to safely and effectively remove them (i.e., mold, mildew, dust mites, cockroaches, other pests, unsafe cleaning products, etc.) (Bryant-Stephens, 2009; Srinivasan et al., 2003; Turcotte et al., 2014). She then works as a liaison between the caregiver and doctor to ensure that the family is being compliant with medications, and adhering as best they can to all the behavioral recommendations, as guided by the Asthma Action Plan (see Figure 2). The program is a highly individualized approach to addressing a pollution-induced illness within geographies of environmental racism. It puts the onus on the family, namely the caregiver, and yes, usually the child's mother, to ensure careful home environmental management, precise adherence to medication instructions, and strict monitoring of their child's behaviors in the name of disease management and asthma "control."

Inputs and Outputs of a Promotora Asthma Intervention

Racial and ethnic health disparities are defined in a comparison model between non-white racial groups and the white population. The impetus for the use of the promotora de salud model as a locally-based, community health intervention is the presence of a Latinx community or population that experiences health outcomes disproportionately worse than their white counterparts, and/or health care is disproportionately more difficult for them to access. Health care access is defined according to five dimensions: economic affordability; availability, measured in time and technology; geographic accessibility, including location and transportation; accommodation for different abilities and needs; and cultural and social acceptability

ASTHMA ACTION PLAN





Asthma and Allergy Foundation of America aafa.org

The	colors of	a traffi	c light will h	elp
you	use your	asthma	medicines.	

GREE Use pr

GREEN means Go Zone! Use preventive medicine.

YELLOW means Caution Zone! Add quick-relief medicine.

RED means Danger Zone! Get help from a doctor.

Personal Best Peak Flow:

GO		Use these daily controller medicines:				
You have all of these: Breathing is good No cough or wheeze Sleep through the night Can work & play	Peak flow:	MEDICINE For asthma with exercise,	HOW MUCH	HOW OFTEN/WHEN		
CAUTION		Continue with green zone medicine and add:				
You have any of these: • First signs of a cold • Exposure to known trigger • Cough • Mild wheeze • Tight chest • Coughing at night	Peak flow: from to	MEDICINE	RE PROVIDER.	HOW OFTEN/ WHEN		
DANGER Take th		Take these medicines	these medicines and call your doctor now.			
	Peak flow: reading below	MEDICINE W! Your doctor will wan				

Figure 3. Asthma Action Plan (Asthma and Allergy Foundation of America) (Penchansky and Thomas, 1981; Wyszewianksi, 2002).

In the case of Wilmington, West, Central, and North Long Beach, the Latinx population, along with Black and Asian populations, bear a disproportionate burden of asthma, and asthma-related emergency room visits, hospitalizations, and missed school days as compared to the local white population in Long Beach and the Los Angeles Harbor region (City of Long Beach, 2013).

Health care gaps include gaps in access (see above), as well as gaps in culturally competent and appropriate communication and care practices. In Berg et al.'s (2007) East Los Angeles qualitative study of "Latino family experiences and needs in caring for a child with asthma" (363), a small group of parents of elementary school children in East Los Angeles were interviewed about their experiences in the health care system, and how they manage their child's symptoms. In majority Mexican and Latinx East LA, childhood asthma rates are higher than the rest of the county due to disproportionate industrial air pollution, in many ways similar to the fenceline Latinx communities in the LA Harbor region and Long Beach (City of Long Beach, 2013; KPCC, 2016). The researchers found that a recurring theme in all of the discussions and interviews "was a combination of not knowing what to do, a sensation of helplessness, and a lack of understanding about the disease process and treatment regimen" (365) in the parents' experiences of receiving care in the hospital. The parents expressed frustration at not being given clear instructions on how to prevent their child's symptoms from escalating, and from the lack of care and empathy they experienced in local emergency departments.

Collectively, the parents expressed the desire to have someone in the health care system available to teach them like "an organization, like people who had more power than us as mothers, not as Latinas, but as mothers. Is it possible to implement, like for example, more information at the hospitals?" so that they can be prepared and do their best for their kids: "The more information I have, the more I can fight with this illness and help my children" (368). Drawing on Clark's (2002) ethnographic study of immigrant Mexican mothers' desire to have health services that provided "intervention, explanation, and personalismo (a warm and personal approach)" (175), and Israel's (1985) examination of promotoras and community health workers as "natural helpers," Berg et al. (2007) conclude that the implementation of a promotora program in the East LA community would be beneficial to addressing gaps in the health care system and concerns of health literacy and confidence among Latinx parents of children with asthma.

Berg et al.'s (2007) local study of asthma management in a community where asthma is prevalent due to large-scale sources of toxic pollution is indicative of a public health approach to studying and addressing consequences of environmental injustice and racism. This particular study was small-scale, and discussed the challenges that immigrant Latinx parents face in managing all of the logistics and emotions that come with dealing with their child's illness. The recommendation of promotora programs in East Los Angeles is indicative of the desire to prevent kids from having asthma attacks, and to prevent parents from having to rush their children to the emergency department, fearing for their child's life. What is upstream about the promotora intervention is the transformative power of promotoras to help patients manage the impact toxic pollution has already made in their lives.

Asthma, as a chronic illness, gets taken up by the public health arm of the state for obvious reasons. But, the promise of its "upstream" or preventative intervention does not go so far as to prevent asthma in the first place—a promotora is not a magical solution,

and cannot educate her community out of breathing in toxic air when they live next door to freeways, rail yards, and two of the biggest ports in the world. The prominence of promotoras de salud as a public health intervention to address issues of environmental justice should arguably be part of a larger strategy for structural and systemic reform, upheaval, and reorganization. One which includes promotoras, but is not centered on them. Critical evaluation of the inputs and outputs, and opening up the black box of the promotora model requires looking at the conflation between public health services and environmental justice that gets made on the local level. Because the EJ movement, broadly, is comprised of local activism within a larger overarching, national (and global) movement, this requires consideration, again, of the 1991 Principles of Environmental Justice, and what ensued on the federal level in response to the political visibility of the EJ movement in the mid-1990s, to understand what kinds of programs and projects get funded and promoted by the state, and implemented at the local level.

Tracing the Genealogy of the Promotora Model as the Solution to Latinx Childhood Asthma in Southern California

This section traces the rise of promotoras as an evidence-based public health solution to pollution-induced childhood asthma in Latinx communities, particularly in the Los Angeles Harbor region of Southern California in the 2010s. Utilizing the genealogical method is useful for delineating the inputs and outputs of the promotora model, toward opening the black box to examine and reconfigure the model's inner complexities. Pérez (1999) describes the use of Foucault's genealogical method to better understand "how history gets written on the body" (xvii). In this case, the goal is to better understand how the public health arm of the state enacts racialized violence through its neoliberal policies and its political and programmatic investments in racial capitalist logics. Such, that the state inscribes *geographies* of environmental racism on the lungs of children, the hearts of mothers, and the bodies of families and communities, and then calls upon promotoras de salud to remediate state-sanctioned violence as a perpetual mitigation measure.

In my telling of this history, weaving public health history into the realm of the environmental justice movement, and this "ontology of ourselves" (Lowe, 2015, 3), I aim to highlight three main points in relation to opening the black box of the promotora model, and in recognizing how the state calls upon promotoras de salud. First, I want to point out the state's disregard, in all capacities, to recognize racism as a "dynamic sociospatial process" as Pulido (2000) defines:

Because racism is understood as a discrete act that *may* be spatially expressed, it is not seen as a sociospatial relation both constitutive of the city and produced by it. As a result, the spatiality of racism is not understood, particularly the relationship *between places*...A final problem with a narrow understanding of racism is that it limits claims, thereby reproducing a racist social order. By defining racism so narrowly, racial inequalities that cannot be attributed directly to a hostile, discriminatory act are not acknowledged as such, but perhaps as evidence of individual deficiencies or choices. Yet if we wish to create a more just society, we must acknowledge the breadth and depth of racism (1).

Secondly, the public health arm of the state comes to take up initiatives in accordance with the federal initiative to address environmental justice, investing in "place-based" and "community-based" initiatives to address the social determinants of health, but its frameworks for addressing racial and ethnic health disparities come to rely on an individualistic approach to structural and systemic problems. Third, the state's neoliberal policy and program approach reinforces, and is reinforced by its commitment to a reliance on racial capitalism and its logics through its funding frameworks and the labor it relies to carry out its programs, namely promotoras de salud.

In 1991 the Principles of Environmental Justice were ratified at the First National People of Color environmental justice conference, and the momentum that had been building on local levels for years, even before the 1987 United Church of Christ report came out, burst onto the national scene (Bullard, 1990). In 1994 President Clinton signed Executive Order (E.O.) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," incorporating Title VI of the Civil Rights Act of 1964, which prohibits intentional discrimination, and the National Environmental Policy Act of 1969, which set policy goals for the protection and maintenance of the environment (Bullard et al. 2014). E.O. 12898 directed the United States Environmental Protection Agency (E.P.A.) to lead efforts for all federal agencies to address environmental justice concerns through their policies and programs. The E.P.A. came to define environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies" (E.P.A., 2017). In mandating all federal agencies to respond there was recognition in E.O. 12898 that EJ cannot be achieved through environmental regulation alone, and identified "human health" as an indicator of progress toward achieving justice.

In 1998 the Clinton Administration revised the Centers for Disease Control and Prevention (C.D.C.) Healthy People initiative established in 1980, to *eliminate* health disparities, rather than to simply reduce them, with specific focus on racial and ethnic

health disparities of people of color as compared to the white population (H.H.S., 2020). Through Healthy People 2010, the C.D.C. provided broad scale public health goals to align public and private philanthropic funding streams toward academic research, statebased and community-based initiatives, and program evaluation toward understanding the social and cultural drivers of racial and ethnic health disparities, and to find solutions to reduce and eliminate them (Grantmakers in Health, 2002).

In 2000, then-C.D.C. Medical Officer and Research Director on Social Determinants of Health and Equity, Camara Phyllis Jones published a framework taken up within the C.D.C. and across the field of public health, for understanding how racism functions on three levels: Institutional racism; Personally mediated racism; and Internalized racism (Jones, 2000). The framework, and Jones' leadership at the C.D.C., served as a catalyst for the delineation of a social determinants of health framework used to help shape community-based interventions aimed to eliminate health disparities between non-white and white populations. The C.D.C. definition of social determinants of health as "conditions in the places where people live, learn, work, and play that affect a wide range of health and quality of life-risks and outcomes" adopts the environmental justice adage "where we live, work, and play" (Bullard, 1990) through a framework of health equity.

It is necessary to recognize that the adoption of language that originated within the environmental justice movement by the C.D.C, a globally recognized as a leader in public health policy and practice, through a framework of health equity is statecooptation of the EJ movement's radicalism, born and mobilized by Black, Latinx, Asian, and Indigenous peoples. Further, it is imperative to recognize the difference between

justice, as delineated in the 1991 Principles of Environmental Justice, and equity, as defined by the state. Within the Preamble, the stated goals of the 1991 Principles are to "re-establish our spiritual interdependence to the sacredness of our Mother Earth" and "secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples." Justice, according to the Principles, is a holistic, structural, systemic, and ecological project that affirms human rights, equal participation of historically marginalized groups in decision-making, the cessation of toxic pollution, reparations for past harms, and protection from future harm. On the other hand, the C.D.C. defines health equity as "the opportunity to 'attain his or her full health potential' and no one is 'disadvantaged from achieving this potential because of social position or other socially determined circumstances" (C.D.C., 2020).

The translation of the Principles of EJ, to E.O. 12898, to federal public health agencies are individually-oriented, with health defined through a social paradigm that is, I observe, surface level within the organizing systems and institutions that guide our social behaviors, relationships, and practices. The ideals of environmental justice are spatiallyoriented through an egalitarian, decolonial framework. In this way, justice is achieved through fundamental reconfiguration of the infrastructure that determines not only our social relations, but our ecological ones. Environmental justice, as defined by the 1991 Principles, connects human health to the health of our non-human and more-than-human relations, the local ecologies we are a part of, and the Earth system life itself depends on.

In 1999 a joint effort between the E.P.A., the C.D.C., and the Department of Housing and Urban Development (H.U.D.) launched the Healthy Homes initiative in

response to a Congressional Directive over concerns about child environmental health. Healthy Homes developed as an expansive program for home environmental health for myriad disease in relation to the environmental justice executive order, and as a program developed to work toward the elimination of racial and ethnic health disparities as part of Healthy People (H.U.D.; Smith et al., 2010). The Healthy Homes initiative includes a series of educational modules and tools developed by the different agencies, as well as funding opportunities for local health agencies and organizations to implement the intervention in their communities. As part of the three local promotora de salud asthma education programs funded by the Port of Long Beach in 2011, the Healthy Homes home environmental assessment, and several other educational materials, are included as a key part of these interventions (Long Beach Alliance for Children with Asthma, 2016; The Children's Clinic, 2014; The City of Long Beach, 2016).

The promotora de salud model was first implemented in Long Beach by the local Federally Qualified Health Center as an ad-hoc community health solution to the prevalence of uncontrolled asthma in Long Beach in the mid-1990s (KPCC, 2016). The issue of asthma grew to be a community concern, and in 1999 the Long Beach Alliance for Children with Asthma was formed and founded, and funded by the Robert Wood Johnson Foundation and the E.P.A. as part of the University of Michigan School of Public Health Allies Against Asthma study. The study focused on coalitional approaches to reducing and eliminating asthma disparities in communities of color through a holistic approach (Center for Managing Chronic Disease, 2007).

As national focus grew to incorporate asthma as a top priority through the Healthy Homes and Healthy People initiatives in the 2000s, with focus on eliminating asthma

disparities through a social determinants of health framework, the promotora programs in Long Beach incorporated the socio-technical tools and undertook more trainings and ongoing education in best practices for childhood asthma education. Further, the popularity of promotora programs as an evidence-based model across myriad health disparities rose in the 1990s and 2000s, particularly in California with one of the highest Mexican and Latinx populations in the United States. In 2000, a 501(c)3 nonprofit advocacy and training organization for promotoras de salud in the state of California was established. Visión y Compromiso (Vision and Commitment) is a statewide network that hosts a training institute, regional meetings, and an annual meeting for promotoras de salud. Upon founding, the mission of Visión y Compromiso (VyC) was: Survival First, Health Second (Lemus, 2016).

In Long Beach, local and regional support for the promotora model, and federal and national directives for a promotora-driven asthma interventions were also supported at various levels, by private funders, even before the Port of Long Beach in 2011. The public health "system" in the U.S. is an ad-hoc network composed of state agencies at the federal, state, county, and city level, nonprofit organizations, and private philanthropic funders. Public health services are provided in relation to our health care "system," which is a disjointed network of public and private medical providers that is designed for profit, and not based on an ideology that health care is a human right. Smith (2008) delineates a history of the nonprofit industrial complex in the United States based on a libertarian model of charity produced from racial capitalist profits in the late nineteenth century. The rise of philanthropic giving throughout the 20th century in all realms of American life heavily influenced not only public health, but social justice and grassroots movements. Smith, and the contributors to the anthology *The Revolution Will Not Be Funded* (2008) argue that foundation funding is a sort of "shadow state" (Rodriguez, 2008) which aim to control social movements through the bureaucracy of nonprofit status and strict funding requirements, and theoretically provide "a correction for the ills of capitalism" (9).

The state and philanthropic organizations both rely on the racial capitalist market for power, prestige, and profits, which fund and coordinate public health programs aimed at addressing the social determinants of health. These programs are then staffed by lowwage promotora labor, in ample supply due to both the pervasiveness of health disparities in Latinx communities, and Latinx women occupying one of the lowest paid groups in the U.S. While the state seemingly aims to lead the public health field toward the goal of "eliminating health disparities" it does so with limited purview of what the problems are, namely that they are social and not structural and geographic. Further, the state and its associated private networks and partners continue to invest in racial capitalist logics that produce the very conditions which it declares to try to solve.

Within the disjointed U.S. public health system, the C.D.C.'s Healthy People goals "to eliminate health disparities" get referred to and taken up by public and private programs and funders. Critical human geographers have observed that the rise of neoliberal governmentality in geographies of health and health promotion have given rise to a market-based rationality whereby citizen-subjects learn to govern themselves through small changes in their local environments (Carter, 2015; Jessop, 2002). Neoliberal governance in the state public health apparatus includes: the invention and promotion of the "public-private partnership," where public agencies are encouraged to work closely

with business interests to find healthy solutions for all parties, including corporate sponsorship of health promotion materials and campaigns; grant competition for 'public' funds; decentralized governance to the local level, absolving state and federal agencies of regulatory responsibility; and, the promotion of an apolitical discourse that emphasizes individual responsibility for good health (Carter 2015; Jessop 2002).

In the third and final section of this chapter, I open up the "black box" of the promotora model, and examine the complexities of its inner workings through a Chicana and Latina feminist and critical race lens. In doing so, I delve further into the entanglements between neoliberal governmentality and racial capitalism as a foundation of state-sanctioned violence, to delineate the public health arm as a site of contestation for the environmental justice movement. I critically examine the cultural and social roles assigned to the promotora by the state in response to the impacts of environmental racism in her own community, and reorient her subjugated position through a Chicana and Latina feminist theoretical lens toward recovery and re-centering of the promotora in her own story.

Opening the Black Box: Promotoras de Salud, and the Internal Complexities of the Model

In this section I examine the characterizations of promotoras within the model, and of the model itself, that have come to define its transferability across diverse Latinx communities and health disparities, particularly childhood asthma: promotoras are "natural helpers"; the promotora model is an "upstream" solution to teach disease "control"; and, promotoras are "bridges" between their communities and the health care system. Building on the genealogy of the previous section, I contend that the

transferability of the model is determined according to the norms, standards, and institutional authority that compose the structure, network, and hierarchies of the public health system. Public health research of promotora programs is modeled on a scientific method, and studies of health behavior change and health literacy using the model adhere to evidence-based standards of rigor determined and monitored by the field itself. Checks and balances are achieved along the way through the peer-review process, through critical review by private and federal funders, and credibility is attained and kept through academic institution accreditation.

However, as Stone (1988) observes: "facts do not exist independent of interpretive lenses and they come clothed in words and numbers" (314), and the integrity of scientific-based public health knowledge should depend on critical debate with a diverse community (Oresekes, 2019). Given the subject matter of the promotora model, and given the centrality of Latinx communities and Latina/x workers, I observe that public health research of promotoras de salud has so far failed to do this, particularly in its lack of dialogue with Chicanx and Latinx studies scholars, and particular to asthma, in public health researchers' lack of dialogue with the environmental justice movement and EJ studies scholars. In this section, I open the "black box" and examine four key elements that come to define its transferability in Latinx childhood asthma disparities: natural helper; upstream; control; and bridge. I analyze them in relation to one another, as they come to define the promotora model in its purported entirety: Promotoras are natural helpers who implement an upstream approach to asthma control, and are bridges between their communities and the health care system.

The Natural Helper

In her paradigm shifting article, Israel (1985) puts forth a community-based health education and behavioral intervention framework that is grounded in the social support of "natural helpers." In the article she lays out much of the groundwork which would later be taken up and incorporated in the Social Determinants of Health paradigm (see Figure 2), which is that to modify an individual's health behavior, one must address the individual in the context of their social environments. The article discusses two broad health education and behavioral intervention strategies.

First, Israel argues that health education programs are strengthened through the use of natural helpers who can implement the intervention (66). Second, behavior change is better addressed through a more holistic environmental approach that includes the networks and communities to whom one belongs, and "the informal leaders who are engaged in community wide problem-solving" (65). Israel defines natural helpers in the following way:

Such natural caregivers are lay people to whom others naturally turn for advice, emotional support, and tangible aid. They provide informal, spontaneous assistance, which is so much a part of everyday life that its value is often not recognized. These natural helpers provide daycare for young and old, advice and emotional support on health, personal, family, and financial matters, and referral information to formal agencies when necessary. Natural helpers are most often characterized as persons who are respected and trusted, and who listen well and are empathetic, sufficiently in control of their own life circumstances, and responsive to the needs of others. The identification of such natural helpers for an intervention may be, for example, from a neighborhood base or a church base with the emphasis on working with the natural caregiver to strengthen the entire entity of his or her network (66).

Israel's definition and what she proposed, at the time, shifted the field of health behavioral change and health education toward health interventions that conceptualized the individual as part of a community. The paper gave way to an entire subfield focused on constructing, studying, and reifying the community health worker and promotora as a natural helper (see: Andrews et al., 2004; Eng and Young, 1992; Eng, Parker, and Harlan, 1997; Reinschmidt et al., 2006; H.H.S., 2007; among others). And, particularly in defining the role of promotora as natural helper in Latinx childhood asthma interventions (see: Bryant-Stephens, 2009; Carillo et al., 2015; Krieger et al., 2009; Parker et al., 2008; Peretz et al., 2012; Postma et al., 2011; Martin et al., 2006; Martin et al., 2015; Matiz et al., 2014; Rashid et al., 2014; Zuniga et al., 2012; among others).

Throughout the 1990s and 2000s the fields of public health and health care came to increasingly rely on community health workers and promotoras de salud in their operations as "cost-effective strategies addressing the health care needs of underserved communities" (Health and Human Services, 2007, ii). In 2007 the U.S. Department of Health and Human Services (H.H.S.) Health Resources and Services Administration (H.R.S.A.) conducted, and put forth the *Community Health Worker National Workforce Study*. The report situates the need for the community health workers in the projections of "demographic diversity that will fuel population growth from 2000 to 2050," and that "the vitality of the minority population has added large cohorts in the youth side of the age spectrum" that will require greater community-oriented services and "cultural understanding" for families that are "often isolated and underserved" (1).

The study found that the state of California was home to the largest community health worker, or promotora, paid/unpaid workforce with more than 9,300 promotoras identified. Nationally, Hispanic, or Latina/x promotoras comprised about 35% of the workforce, the largest non-white group, and about 78% of employers responded that their community health workers served Hispanic populations. Nationally, about two-thirds of

community health workers were paid, and one-third were identified as volunteers. Of the 67% that were paid, pay scales depended on experience. For new hires, the majority started between seven dollars and \$13 per hour. For experienced community health workers, the survey found that the majority received at least \$13 per hour, and about half received \$15 or more per hour. For both paid and unpaid community health workers, nationally, 14% had less than a high school education, 35% had a high school degree, 20% had some college, and 31% had a four-year degree. "The majority of CHWs were female (82 percent) between the ages of 30 and 50 (55 percent). The predominance of women in this workforce was partly due to the focus of many programs on underserved children and their mothers as well as to clients' greater acceptance of female caregivers in their homes" (v).

The 2007 workforce study provides some key data that helps contextualize and open up a broader, critical analysis of how Latina promotoras get constructed as "natural" helpers in public health literature, and the field at large. Promotoras are subjugated in three ways, that cannot be understood without the others, and should only be understood through an intersectional lens: as women, as racialized Others, and as care workers. Critical analyses of Latina care labor, particularly in sociology and geography, have focused on Latina domestic labor, particularly that of transnational migrants. Their domestic care labor has been analyzed in relation to their identity as mothers and ideas about motherhood, as reproductive labor and social reproductive labor are often theorized relationally (Hondagneu-Sotelo and Avila, 1997), though, as Fortunati (1996) points out, "reproduction is separated off from production" and constructed as "non-value" (1), and

in this way social reproductive labor is devalued in relation to the nonvalue of reproductive labor.

As racialized Others, Latinas have historically been constructed as a subordinated racial group to whites and in relation to other non-white groups. Non-white groups, and constructed deviations from the white heteronormative man are not only socially constructed, but economically as human and labor excess in a racial capitalist economy (Ferguson, 2003; Villanueva, 2002). The promotora, as a gendered, racialized waged care laborer, is at least "given the impression of a fair deal" despite the fact that "under capitalism every worker is manipulated and exploited and his or her relation to capital is totally mystified" (Federici, 2012 [1975], 16). But, as Federici explains:

the wage at least recognizes that you are a worker, and you can bargain and struggle around and against the terms and the quantity of the wage, the terms and the quantity of work. To have a wage means to be part of a social contract, and there is no doubt concerning its meaning: you work, not because you like it, or because it comes naturally to you, but because it is the only condition under which you are allowed to live. Exploited as you might be, you are not that work (16).

In the case of promotoras, where many promotoras are unpaid, and the idea of the promotora is developed from an essentialist perspective of this intrinsic characteristic of being a *natural* helper, Federici's critiques of unwaged housework within a capitalist society applies:

The difference with housework lies in the fact that not only has it been imposed on women, but it has been transformed into a natural attribute of our female physique and personality, an internal need, an aspiration, supposedly coming from the depth of our female character. Housework was transformed into a natural attribute, rather than being recognized as work, because it was destined to be unwaged. Capital had to convince us that it is a natural, unavoidable, and even fulfilling activity to make us accept working without a wage. In turn, the unwaged condition of housework has been the most powerful weapon in reinforcing the common assumption that housework is not work, thus preventing women from struggling against it...(16). She goes on to explain that capitalism has been successful in "hiding" housework, domestic work, care work by "transforming it into an act of love" (17). The idea of promotoras constructed as natural helpers, paid and unpaid, not only serves to hide their labor, but to construct it as an act of love that serves a higher purpose, a mission beyond just a job. The catch is that constructing the promotora in this way ultimately serves the state's investment and dependence on racial capitalist logics, providing a perpetual labor force for its neoliberal "community" health interventions to address asthma and other chronic illnesses through education and behavior change within a social frame of health equity, and not justice. This ultimately denies promotoras and the communities they serve the basic material needs for good health in the first place, and calls upon promotoras to remediate and resolve environmental racism in their own communities.

Promotoras as Bridges: Teaching Asthma Control as an Upstream Intervention

Within the social determinants of health framework health equity, the promotora model is constructed as an "upstream" intervention. The "upstream" versus "downstream" metaphor has permeated public health knowledge, practices, and policies in nearly every realm, and is used especially within behavior-change interventions. The original story was told by Irving Zola, and used by McKinlay (1981) in the article "A Case for Refocusing Upstream: The Political Economy of Illness":

I am standing by the shore of a swiftly flowing river and hear the cry of a drowning man. I jump into the cold waters. I fight against the strong current and force my way to the struggling man. I hold on hard and gradually pull him to shore. I lay him out on the bank and revive him with artificial respiration. Just when he begins to breathe, I hear another cry for help. I jump into the cold waters. I fight against the strong current, and swim forcefully to the struggling woman. I grab hold and gradually pull her to shore. I lift her out on the bank beside the man and work to revive her with artificial respiration. Just when she begins to breathe, I hear another cry for help. I jump into the cold waters. Fighting again against the strong current, I force my way to the struggling man. I am getting tired, so with

great effort I eventually pull him to shore. I lay him out on the bank and try to revive him with artificial respiration. Just when he begins to breathe, I hear another cry for help. Near exhaustion, it occurs to me that I'm so busy jumping in, pulling them to shore and applying artificial respiration that I have no time to see who is upstream pushing them all in...

The metaphor is useful in thinking through how public health interventions must address health problems "upstream" rather than "downstream," that is, how can public health interventions be prevention-oriented, and prevent problems before they start, rather than pulling people out, barely alive, downstream, as mere survival, if at all.

The metaphor is a powerful one, and useful in regards to thinking through how the "natural helper" model came to be relied so heavily upon in addressing the social determinants of health. Promotoras, coming from the communities they serve, are able to navigate the community networks, develop rapport with families and individuals, and also serve as a "bridge" in helping those families and individuals navigate the health care system. In this way, promotoras are positioned to help identify problems before they start, or at least before they become deadly. With childhood asthma the first key is identifying the symptoms early on, and if the child is very young, to treat with breathing treatments and regular visits at the doctor's office. This can be a challenge if families live in a Medically Underserved Area, have difficulty accessing transportation, have limited time if working multiple jobs, are undocumented and/or uninsured, or experience other barriers to health care access. The role of promotoras de salud, particularly in Long Beach, California working for a Federally Qualified Health Center, as well as the independent coalition organization, the Long Beach Alliance for Children with Asthma, is to develop rapport with families, become a part of their support system, and build community at least to the extent that parents will bring their children in for routine

doctor's visits, and meet with the promotoras to ensure that asthmatic symptoms are kept under "control."

Promotoras, in this sense, implement an upstream intervention within a known toxic environment where children are likely to develop asthma, or chronic respiratory symptoms associated with air pollution. Promotoras are indeed a bridge between their communities and the health care system, because they serve an important purpose in maintaining the flow of patients into the health care system, and in this way implement an upstream intervention with the goal of preventing asthma attacks, preventing hospitalization, preventing children, parents, families, and communities from suffering unnecessarily because they weren't in control of their symptoms. Control, here, is key to the intervention being upstream.

The asthma education that the promotoras provide is comprehensive. Asthma education covers the biology of the illness, and explains how a child's lungs and airways are fundamentally altered by the disease, and that it is not something their child will grow out of. The promotoras provide thorough and detailed tutorials on how best to use inhalers and spacers, a tool that helps make the most of the inhaled medication, and when to use the different kinds of corticosteroid inhalers -- short-term relief versus long-term control. The promotora also visits the family home and does a comprehensive home environmental assessment to teach the mother how to manage her home environment to ensure asthma control for her child. The promotora will review the education as many times as they think is necessary with the children and their families, usually the child's mother as the primary caregiver, and as many times as the mother wants them to.

Teaching asthma control as an upstream intervention is situated within the paradigm of health equity. That is, that the social determinants of one's health, or their economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context, all play influential roles in one's health status, in this case, in one's asthma control. And, that in using the promotora model, the promotora herself, as a bridge between the families she works with, and the health care system, has greater access, understanding, and influence over helping families improve each of these social determinants in order to achieve better health. The model, however, is limited within its own neoliberal framework of equity, lacking a definition, foundation, or stated purpose for justice.

Equity, in the case of childhood asthma in geographies of environmental racism, is conceived within an understanding that illness is inevitable, and the only preventable things are things within the individual's control. And further, that the public health arm of the state has no stake in helping to prevent health effects from toxic pollution, in the first place. The directive from E.O. 12898 co-opted the language of environmental justice, where people "live, work, and play," to fit neatly within a health equity framework that fails to see the historical, geographic, decolonial, and ecological vision for environmental justice put forth in the 1991 Principles of Environmental Justice.

Despite the stated vision of "eliminating racial and health disparities" in the Healthy People initiative, the limits of public health upstream thinking, particularly within the context of childhood asthma in the Los Angeles Harbor region, are confined to an individual-based program within a neoliberal context. Melamed (2011) defines neoliberal multiculturalism as an "official" antiracism discourse structured, in part, by

U.S. governmentality that portrays "an ethic of multiculturalism to be the spirit of neoliberalism" (42). Neoliberal multiculturalism has ensured "a move away from using antiracist discourse" (43) and toward an abstraction of race, where representation alone represents progress, where the language of equity and "equal opportunity" is supposed to be empowering (CDC, 2020). Within the Healthy People initiative, the stated focus on eliminating health disparities is situated within the CDC, and broadly speaking, the public health system's approach to achieving these goals through a health equity framework. Representation here, comes to be not only in the representation of the racial and ethnic disparities described by the CDC, but by the racial diversity of workers that the public health system employs to achieve their goals -- workers who are culturally competent with the populations they are working with.

Promotoras as natural helpers, in this way, come to be the epitome of the upstream approach to health because they are *from* the communities they work with. They are competent because they receive training in the interventions, they are responsible, and their access to their communities is unmatched by other public health professionals. Entire subfields of public health research and study, and public health infrastructure itself, have been built based on this idea of the promotora model as an upstream approach to community-based health. But, is addressing health through the "social" not mere representation if the state arm of public health is not invested in fundamentally changing the material conditions of racially and otherwise historically oppressed peoples it claims to want to "reach"? Is it not mere representation when "valued" community health workers and promotoras are unpaid and underpaid for their

work? The value is in name only and the state's neoliberal multiculturalism policies rely on racialized labor pools of capitalist excess to implement its programs.

Toward a Chicana and Latina Feminist Perspective on the Promotora Model

In 2010 The California Endowment (T.C.E.), a health philanthropic organization based in Los Angeles, California, embarked on an ambitious ten-year, multi-billion-dollar investment project in Central Long Beach, and 13 other sites across the state of California "to create places where children are healthy, safe, and ready to learn" (T.C.E., 2011). The Central Long Beach site overlapped with the Port of Long Beach highest priority mitigation zone (see Figure 2 in Introduction). In 2011, T.C.E. surveyed 259 promotoras across the 14 sites, and convened promotoras from across the state, including promotoras working to improve asthma conditions in Long Beach, to engage in charlas, or discussions, about the leadership roles promotoras play in "engaging families, particularly low-income and immigrant families, to improve the built environment, increase awareness about factors that affect health, and transform their communities so that all persons can thrive" (6). In a report prepared by the state-wide promotora network Vision y Compromiso (VyC), and two other promotora-focused community health organizations in Southern California, Latino Health Access and Esperanza Community Housing Corporation, T.C.E. published a framing paper: "The Promotor Model: A Model for Building Healthy Communities" (2011).

The framing paper is useful and interesting for many reasons. First, it puts forth a model of promotores de salud that reinforces much of what has been discussed in this chapter so far, particularly what makes promotores useful and effective at reaching Latinx communities, with the goal of intervention and decrease in health disparities.

While the report uses the gender-neutral promotor/promotores, I use the feminine promotora to center the often invisibilized gendered labor promotoras perform. While the framing paper was prepared by three promotora-centric non-profit organizations, using survey and focus-group data, the paper was initiated by a powerful, private foundation that funds all three organizations that wrote it, and is stated upfront that the process was facilitated by a consultant hired by TCE.

I highlight this because it echoes the power dynamic through which one learns of promotora work through public health literature. That is, through the voice of a researcher, in this case a consultant, who the reader is to assume is invested in the work of the promotora, but who never actually fully discloses their positionality, if at all. In this case, as is with so much of public health research on promotoras, researchers inherently have particular biases (Haraway, 1988) and research investments which they do not disclose in relation to the scientific paradigm they utilize, nor is there explicit are they engaging in any kind of decolonial, feminist, anti-imperialist model of knowledge production (Falcón, 2016). And so, in both the PH research PR lit, and in this framing paper, there's reason to question the paradigm put forth, at least to a degree.

In describing the impetus for the framing paper, which is in part to encourage TCE funded organizations in the 14 BHC sites to better understand and utilize promotoras de salud in their work, it is stated: "Promotores de Salud (Promotores, Promotora or Promotor) are highly trained community leaders. Characterized by servicio de corazón (service from the heart), Promotores share a desire to serve their community and improve conditions so that their children, and all children, may know a better way of life. Living in the communities where they work, Promotores are powerful advocates for

individual and community transformation..." (6). This characterization of who promotoras are, and why they do what they do certainly echoes some of the public health literature, and is certainly brought to light within a power dynamic that calls into question how comprehensive it can be when the process for developing and writing this paper is brought together by a large, powerful funding agency also funding work that promotoras do in these communities.

Promotoras are anonymously quoted throughout the framing paper, and much of it is in their own words, their own testimonio, their own declarations of theorizing their roles, positionalities, and work as promotoras. Similar to the "Latina anónima" in Telling to Live (The Latina Feminist Group, 2001), in the framing paper, promotoras are quoted anonymously, sharing pieces of their own testimonio and their own theorization about their roles and positionalities as promotoras. In *Telling to Live*, The Latina Feminist Group theorizes "Latina" as a coalitional term. They discuss the hours and hours of conversation, or charlas, they had in small groups, that it took for them not only to become comfortable to share their papelitos guardados, and share their testimonio, but that that process of discussion and sharing ultimately revealed themes in their shared experiences, that led to understanding themselves as part of a diverse, dynamic cohesive whole. They took the all-encompassing term "Latina" to mean something more than a homogenizing all-encompassing umbrella term, but a coalitional term with the capacity to hold all of their difference, divergence, and historical, social, political, and racial positionalities.

Parallel to the descriptive explanation of collaboration and conversation within The Latina Feminist Group, the method and process for information gathering is discussed and explained in the T.C.E. promotora framing paper:

During September 30 through October 15, 2010, the Leadership Team convened 125 Promotores from San Diego, Riverside, Orange, Los Angeles, Stanislaus, Alameda, San Francisco, San Mateo and Contra Costa Counties in facilitated conversations (charlas) conducted in Spanish. The size of the charlas varied from 7 Promotores in Coachella Valley to over 40 Promotores in Los Angeles. To ensure consistency, the team of expert Promotores from the retreat facilitated all charlas. All conversations were recorded, transcribed and reviewed in Spanish by team members. Transcriptions were translated from Spanish to English. In November, the Leadership Team met once again with the consultant and expert Promotores to discuss the results of these statewide conversations and to deepen the understanding of how Promotores build healthy communities.

The discussion that came out of the charlas was organized in ten "primary characteristics and values of promotores" (see Figure 4). The theorization of the role of the promotora is grounded in "a passion for justice and equality" (10) that encompasses the diseasespecific education and behavioral interventions they implement.

The ten "primary characteristics and values of promotores" put forth in the framing paper are described according to promotora anónima statements about their praxes, and align with ideals associated with the concepts of natural helper and bridge, as the paper states that being a promotora is less about the disease-specific intervention promotoras implement, and more about the leadership she provides in her community. One promotora anónima shares that "the problem of clean water isn't just my neighbor's problem, it is mine also. What happens to her, matters to me. What I want for my family is the same things she wants for hers - we are equal" (10). In this way, promotoras create egalitarian relationships, share information and resources, and approach their community with empathy and love, because "we know how to put ourselves in the shoes of others"

(12).

The principles illustrate the idea that promotoras see their work as an extension of something bigger than what gets defined as a job. One promotora anónima stated:



10 Dremeteres are effective rele models for community change

Figure 4. Primary Characteristics and Values of Promotores, The California Endowment, 2011.

"People have to be able to reach us when they need to. Our job is not just 9-5. It takes

whatever it takes" (13). Another observed,

I cannot be concerned only with the number of people who attend my class. When someone says, 'my husband beat me up last night' or 'my son is in a gang,' I cannot say 'Well, that is not on my agenda for today.' As Promotores, we carry our agenda of what we want to teach that day, but it may not be the agenda of the community. Therefore, we have to change it based on the needs of the families we meet each day and all of their pain, needs, hopes, and talents (13).

The paper puts forth a principle of service as a "profound desire" of promotora work because they share similar life experiences and cultural traditions with their clients: "We are examples of change and can show people what we have done, the paths that we took, and the mistakes we made. When people identify with us they say, 'If you can do it, I can do it too'" (14).

The principles emphasize the naturalness of promotora work, as well as the bridge work that promotoras do toward working towards community change and transformation. These aspects of promotora work, however, are grounded in a commitment to justice, and arguably one of liberation: "What happens to her, matters to me." One promotora anónima describes the role of promotoras this way: "We are a bridge to services, but we have a role to play in making sure that the right services get to our community" (15). Another promotora anónima declares that "We are from the community - we are the voice for so many people who dare not come out and speak" (16). Given these theorizations on the role of promotoras, the paper puts forth a theory of change in three stages: 1. Relationship building 2. Information sharing 3. Community participation through individual and collective action. The paper argues that this is the model in California, and it can be implemented with any issue. And, if the promotora is allowed to function in accordance with this model, community transformation can happen. One promotora anónima stated: "Institutions need to consider how they will provide the scope of work, training, support, and supervision that Promotores need to be able to do this kind of community change work" (19).

Advocacy for promotoras de salud to work toward community transformation within a health equity model is a challenge when the power dynamic between promotoras and the state is uneven, and promotoras are called upon to work within a paradigm of equity as opposed to justice. To say that "Promotores must be guaranteed a seat at the decision-making table so that they can participate equally in every activity associated with the process of creating a healthier community including planning, implementation, data analysis, policy creation, and evaluation" (19) is easier said than done by organizations working in community health. Meritocratic hierarchies are entrenched in the medical profession and public health training, reinforced through organization hierarchies and pay scales. During my time working in community health, I used to tell the promotoras that we were on the same team, and that we all had our roles to play.

While I truly believed this, and tried to adhere to the egalitarian ideals of my public health training, at the end of the day I had my professional degree. I was ultimately a state worker, director of my department, responsible for maintaining the organizational hierarchy. I earned almost double what the highest-paid promotora was earning *after* we fought tooth and nail for a two-dollar pay raise in lieu of the added responsibilities she was charged with when we were awarded a Port of Long Beach air pollution mitigation grant in 2011. At the end of my time working in community health, I believed what I had said, but I had come to the conclusion that it was disingenuous to pretend that rank didn't influence decisions made. The framing paper goes on to state:

For the majority of service delivery agencies, this shift in how Promotores are viewed within organizations requires systematic and institutional change. In short, it represents a paradigm shift away from a disease management framework and 'top-down services for specific diseases' towards a 'community engagement framework for health equity and health communities' that invests in Promotores and develops inclusive programs with and for community residents. This community engagement framework for health equity is philosophically aligned with and can be advanced by the Promotor model (19).

This call is truly a radical shift away from the historical development of promotoras de salud within the field of public health and as state workers called to remediate and resolve state-sanctioned violence within their own communities.

The promotora testimonio shared as part of the T.C.E. Framing Paper (2011) speaks truth to power about promotora work that is for community uplift and toward justice. Promotoras address intersectional problems of their neighbors through intersectional approaches that encompass the whole person, not just the deliverables of their grant funded program. They approach issues of health from a perspective of community interconnectedness and care, in that they must meet the needs of the community, as complicated and messy as they are, because those needs are also the same for the promotora herself. Promotoras enact an ethics of care as a foundational drive of their labor, despite the subjugation of their care work within a racial capitalist system. Promotoras occupy low economic, social, and political positions, and because of this positionality the work that they do as state workers should be understood as 'survival first, health second.' That is, laboring toward survival and mutual liberation is distinctly different from the state's multicultural neoliberalism, where the state lacks the framework and the political will to address material conditions of historically oppressed groups, and replaces it with a hollow politics of representation.

In this way, we also see (once again) the ways that neoliberal policy works with racial capitalist logics to produce in excess of itself. Promotora labor is an abundant labor pool--necessitated for capitalist profit accumulation that the state depends on--but promotoras themselves, activated by their own conditions, having experienced and

knowing first-hand intersectional oppression, and engaging in testimonio, and other cultural traditions rooted in struggles for justice. Promotoras enact practices of liberation beyond the confines of what the state offers them. That is, they theorize and fulfill community leadership roles beyond the state's essentialization of natural helpers, and fulfill the needs of their community exceeding the state's dependency on their labor to serve as bridges. Further, they support the whole person's needs despite the states' directives to address chronic disease in an upstream way through disease control as a neoliberal paradigm of education and behavior change masked as empowerment. As I explore in the next chapter, promotora praxis builds geographies of struggle, care, and resistance. That is, promotoras produce in excess of neoliberal capitalist frameworks, and push back against the genocidal agenda of the foundational white supremacist-patriarchy of racial capitalism. Promotoras create and enact praxes of care as a horizontal praxis that enables survival and provides a blueprint toward mutual liberation, and the restructuring of public services that work toward justice, not just equity.

VI. UNA ABERTURA / AN APERTURE: THE HOME VISIT

ap·er·ture | \ 'a-pər- chur

noun : 1. an opening or open space 2a. the opening in a photographic lens that admits the light

"To bridge the fissures among us, to connect with each other, to move beyond us/them binaries...We must try to contemplate others' sufferings from 'safe' places without engaging them with deep feeling. However, to really listen, we must put our corazones y razones (feeling and intellect) in our manos and extend them to others in empathetic efforts to understand."

-Gloria Evangelina Anzaldúa (2015) *Light in the Dark/Luz en Lo Oscuro: Rewriting Identity, Spirituality, Reality* pp. 77-9

In April 2013 I visited the home of "Juana," the mother of a young asthmatic child, with my coworker, "Antonia," a promotora de salud, or community health worker, at the community health clinic in South Los Angeles County where I worked. Antonia had been a promotora for nearly ten years. She had come to the work through her own intimately painful experience of learning to manage her own child's asthma. She was passionate about serving her community, and described the work she performed: educating mothers, caregivers, and patients about how to manage asthma, providing referrals to social services and resources, and being a supportive, compassionate, loving presence in her clients' lives, as "her calling." That afternoon, Antonia and I arrived at Juana's house, which was a small rental unit down a skinny driveway, behind a larger house in a neighborhood near the 710 freeway in Paramount, California. Antonia had confirmed the home visit with Juana that morning, though we knew the risk that Juana might not be home and we might have to try again another day.

"Clients," that is, clinic patients and their families, lead complicated, difficult lives, and things come up, or they forget about the appointment, Antonia had explained to me. We knocked on the door and Juana answered. She was home in the middle of the day while her child was at school. Antonia and I entered the house through the living room, exchanged pleasantries with Juana, and were offered something to drink. We sat in the living room, each opposite the other on the couch, and two chairs.

Antonia and Juana had met a few times before at the clinic. Juana's young child had been diagnosed with asthma and was referred to Antonia by the pediatrician. Antonia had met with Juana twice after her child's appointments, had conducted some preliminary education, and scheduled today's home visit. This was my first-time meeting Juana, though Antonia had told her I would be coming. My presence there with Antonia that day was explained to Juana that I was there to assist in the education, though truly, I was there to observe and learn from Antonia's expertise so that I could better manage the grants that funded Antonia's work. We quickly got into the curriculum of the home visit. Antonia had brought with us a bucket of "eco-friendly" cleaning supplies, and a hypoallergenic mattress and pillow cover. She gave them to Juana and explained that these were for her to help reduce asthma triggers in her home, and that she would explain in detail how and why to use these in her home from now on. Then, Antonia pulled out a flip chart. This was a flip chart that had been developed over time by Antonia and one of the doctors at the clinic, in collaboration with other promotoras and health educators in the community. The flip chart provided key illustrations and basic information as a guide for Antonia to educate Juana on the biology of her child's asthma, the sensations her

child feels during an asthma attack, what environmental factors trigger asthma, and how to properly administer asthma medication.

Antonia brought out an inhaler and spacer and explained the differences in longterm and short-term medication, tricks to using the inhaler, and how to use the spacer so that her child would get the full effects of the medication (video, etc.) Antonia explained to Juana that asthma was a chronic condition, a life-long illness, and not something that her child would "grow out of." She explained that it was possible though, to get her child's asthma under control, so that her child would experience fewer to no asthma attacks, where her child's breathing was severely impaired and life was threatened, meaning less visits to the hospital, a more active lifestyle, fewer missed school days, and fewer missed working days, like today, where Juana had to get off of work and lost pay.

After going through the flipchart, Antonia invited questions from Juana. They discussed how asthma alters the functioning of the lungs, and we all took some deep breaths through skinny coffee straws that Antonia had brought to demonstrate what it's like to breathe when having an asthma attack and your airways are severely restricted. Juana became emotional when discussing how she feared for her child's life when her child struggled to breathe, and the daily struggle she had dropping her child off at school, worrying that she would have to meet them at the hospital due to having an asthma attack, or not having access to their medication during the day, or being asked to do too much by their teacher. Antonia and I listened intently, shared in Juana's concerns, and collectively felt her fears deeply. Antonia then shared a bit of her own journey to control her child's asthma, that she knew first-hand the fears Juana had, and how it can feel overwhelmingly out of your control. Then she explained that the information she shared

with her today is a step toward empowerment, and that Juana began a journey toward being empowered and more in control of her child's asthma the day she agreed to work with Antonia based on the pediatrician's referral. Then she explained to Juana that this next part of the home visit is where we get to put the education to work in the home. We were going to walk through how to use the cleaning supplies we brought for her, and give her some practical advice on how to manage her home environment for asthma triggers to lessen her child's risk at home.

The three of us got up to walk around the house together, and used a standardized home environmental assessment as our guide. Antonia began to explain about dust mites in the carpet, pillows, mattresses, and stuffed animals, mold and mildew in the bathroom, cockroaches in the kitchen, and cleaning product chemicals that trigger asthma attacks due to their toxic nature. We explained that the hypoallergenic mattress and pillow covers for her child's bed and pillow would ease the persistence of dust mites that trigger her child's shallow breathing at night, and that cleaning and getting rid of most or all of her child's beloved stuffed animal collection would also help clear the air for her child to breathe easier. The mold and mildew in the bathroom was not too bad, and with some thorough deep cleaning with some of the products we brought her, like simple white distilled vinegar, Juana would likely be able to maintain a cleaner, healthier bathroom environment for her and her family. Antonia explained how to use boric acid to deter cockroaches, and the many uses of murphy oil soap for keeping clean and fresh floors. We discussed the need to rid her living room floor of carpeting, but Juana would need her landlord's permission and cooperation to do that. We gave Juana the information for our volunteer attorney who could advocate on Juana's behalf.

At the end of our visit Juana signed an "Asthma Action Plan." This socioscientific contract was co-developed by the Centers for Disease Control and the Department of Housing and Urban Development, alongside the Home Environmental Assessment. Antonia explained the usage of these documents to Juana's benefit, that the copies provided to Juana were a good reference to practice and develop her knowledge and healthy behaviors based on the education she received today, that the home environmental assessment provided a checklist of everything we went over on our home environmental assessment so she could re-trace our steps in her own cleaning routine, and that since the Asthma Action Plan was signed by both Juana and Antonia that day, they could be held accountable to each other in the months ahead as they worked together with the pediatrician, to get Juana's child's asthma under control. Juana's signature increased her accountability to us, her health educators, the clinic where her child received care, and in turn the federal government and private grants that funded the asthma education program and Antonia's work. Juana's signature indicated that she had received asthma education, completed a home environmental assessment, and understood her role and responsibility in managing her child's asthma -- even though some of the triggers we had discussed were out of her control.

We left Juana's home and followed the signs to the 710 freeway. During our home visit with Juana, Antonia and I focused our education efforts exclusively on the home environment—that is, knowledge and tools Juana can use, and actions that she can take to control, or at least manage, components of her home's ecology that can trigger asthma attacks. That day we made no mention of the outside air. We made no mention of the trucks on the freeway, or the fact that our work was funded by the Port of Los

Angeles. We had conveyed a lot of information in several hours of intense conversation. However, the connection between these conditions of environmental injustice in majority Latinx communities in South Los Angeles County, and the rates of asthma, particularly childhood asthma, that we routinely saw at the clinic, particularly amidst young Latinx children were never lost on Antonia. Nor were these connections lost on the other promotoras at the clinic or in the community. In fact, it is this connection, between systems, environment, asthma, mothering, and community that drives much of the promotora's care-work that is done beyond the realm and call of her clinic duties.

VII. THE M(OTHER)WORK OF SURVIVAL: LABORING AGAINST STATE-SANCTIONED VIOLENCE

In this chapter I examine the multidimensionality of promotora care work on the frontlines of environmental racism in Southern California. In the previous chapter I argued that the state calls upon promotoras de salud to directly respond to, and remediate the effects of toxic pollution in their own communities. The uneven power dynamic between the state and promotoras perpetuates a harmful, cyclical relationship. The state perpetually depends on the availability of promotora labor to implement highly individualized interventions that to address health consequences of environmental racism, making the state a site of contestation for environmental injustice. In what follows, I contend that the transformative power of promotora praxis is a complex geography that is entangled with, but cannot be encapsulated by the public health promotora de salud model, nor the state's call upon her labor. I use the Chicana M(other)work framework (Caballero et al., 2018) to analyze the spatial and temporal dimensions of promotora care work. I use it in relation to Chicana and Latina feminist theory and critical environmental justice studies, to add specificity to the struggle of promotoras as mothers, and as workers who engage in community mothering work as a geographical praxis, moving toward the study of Latinx geographies.

The Chicana M(other)work (CM) framework is organized according to five dimensions interrelated within the overarching concept: Chicana, Other, Mother, Work, and Motherwork. I situate the spatial and temporal scales of promotora de salud community mothering work within Chicana, Latina, and women of color mothering praxis in feminist and environmental justice literatures. I define and assess temporal and

spatial scales of racial capitalism and geographies of environmental racism, and use the CM framework to identify and examine promotora praxes of resistance and antagonism to state-sanctioned violence. The CM framework is a lens and a tool to examine temporal and spatial "cracks in the world" (Anzaldúa, 2015) within which promotoras attend, the temporalities and spatial routes of promotora work, and the limitations and possibilities of promotora topographies through the "bridging" they do in their jobs. In this chapter, I ask: What are the spatial and temporal scales of promotora labor? I argue that promotoras de salud in Long Beach, California respond to state-sanctioned violence of environmental racism in their communities through a multi-scalar spatial and temporal praxis of resistance and care that enables community survival.

Promotora M(other)work: Temporalities and Spatialities of Community Mothering

The Chicana M(other)work (CM) framework is grounded in the struggle for collective resistance, and aims to make various forms of feminized labor visible. As the Chicana M(other)work Collective (CMC) observes: "Activist movements tend to have mothers and caregivers of color at the forefront, and yet their stories are often overlooked" (Caballero et al., 2018, 16). At the core of the CM framework is the centering of historically marginalized and invisibilized identities, positionalities, experiences, and ways of being and knowing in struggles for social justice. The framework is derived from the lived experience of Chicana-identifying mother scholars, and builds from Chicana and Latina feminist theory. The identifier "Chicana" is distinct, but is not meant to be exclusive. Similar to the ways that The Latina Feminist Group theorized "Latina" as a coalitional term across Latinidades, the CMC views their framework as expansive to include cultures, identities, lives, experiences, caregiving, and

work of Chicanas and all Mothers of Color (Caballero et al., 2018). "Mothers of Color" is capitalized because as a distinct group, their stories, ancestral knowledge systems, and praxes of care contribute to the survival of our communities, but go unseen, unappreciated, and under-acknowledged in the Western disciplines, and in the wider public realm.

Ana Castillo underscores that the marginalization of Chicana and Latina perspectives in the academy is a tremendous loss for theorizing and understanding societal transformation. In the Foreword to the Chicana M(other)work Anthology: Porque Sin Madres No Hay Revolución, she writes: "Most often, instead of seen as worthwhile reading for anyone interested in social change, our writings are reduced in importance with regard to the status quo" (x). The CM framework makes visible the social justice imperative of recognizing and theorizing feminized gendered labor, reproductive and social reproductive labor, and underscores transformative change Mothers of Color enact in the communities they work with.

The Chicana M(other)work framework encompasses five intersectional and relational identities and positionalities: Chicana, Mother, Other, Work, Motherwork. The Chicana M(other)work framework uses "Chicana" as a relational identifier for trans and cis women of color, and for the recognition of Chicana Feminist Theory as the foundation of the framework. "Mother" is a relational identifier for caregivers, mothers of biological and chosen kin. "Other" builds on the relational processes of racialization and racism as put forth in Critical Race Theory. Specifically, "Other" refers to the sedimentation of social, political, historical processes that occur relationally to one another, that is, Chicana is not constructed as Other without the inherited, colonial white supremacist

racial hierarchy. Racial otherization is a relational process in space and place, over time (see: Lipsitz, 2011; Molina, 2006). "Work" refers to reproductive and social reproductive labor, to the contingent and exploited status of workers specifically within the neoliberal university, and to workers, broadly, within a racial capitalist regime. "Motherwork" builds on Patricia Hill Collins' (2000) concept of "motherwork," which is the community mothering laboring practices and experiential theorization that Black, Indigenous, Latinx, and Asian American mothers do as inherent to building a more livable world for their children and future generations. The Chicana M(other)work (CM) framework is grounded in the struggle for collective resistance, with a vision that the impact of mothers and caregivers in the here, and now, reverberates across time and space, for the survival of their children, communities, and future generations.

In this project I build from the Chicana M(other)work framework in relation to a broader Chicana and Latina feminist theoretical paradigm. I use Chicana and Latina feminist theory in relation to critical environmental justice studies toward a Latinx geographies intervention in critical human geography. I use the CM framework to develop a scalar, spatial, and temporal analysis that situates the work of promotoras de salud in academic literatures that have historically ignored their work and therefore, their power as social, political, and environmental change agents on the ground. The CM framework is grounding and expansive for a geographical analysis of promotora de salud work in Long Beach and the Los Angeles Harbor region of California. The promotoras I discuss and refer to in this chapter are engaged in work that is centered on addressing childhood asthma as a result of toxic air pollution in Latinx communities. Promotoras are engaged in a form of community mothering through the education of other people's

children, and other mothers and caregivers. Further, most promotoras engaged in this work are mothers of children with asthma, themselves. They have spent years navigating the health system, learning to care for their child's asthma, and have come to the work in order to make it easier for other families now going through a similar experience.

The promotoras I refer to include those who are employed by community health organizations in the Los Angeles Harbor region most affected by and concerned with the air pollution of the Port of Long Beach, not excluding air pollution from manufacturing industry, oil extraction and oil refineries, and other sources of urban pollution in the area. Those who are employed by community health organizations implement the promotora de salud childhood asthma intervention as I describe in chapter three and in the preface testimonio to this chapter. In my analysis, I also include analysis of the work of promotoras who are volunteers and engaged in community-organizing work around issues of air quality and childhood asthma in Long Beach and the LA Harbor region, specifically the work of promotoras engaged with the Long Beach Alliance for Children with Asthma. These two "camps" of promotoras-paid and unpaid--collaborate in myriad ways through the coalition-based organization, the Long Beach Alliance for Children with Asthma, as well as other grassroots efforts in Central, West, and North Long Beach, and the Wilmington community in California.

Promotora m(other)work in Southern California is enacted in relation to the histories and geographies of Chicana, Latina, and Mothers of Color social movement organizing, and laboring against state-sanctioned violence in so many forms, that works for the liberation of all children and peoples. In Latin American studies the political and social struggles of mothers is well documented across las Americas, particularly in

relation to the political violence, disappearances, femicides, and displacement of subjugated, Indigenous, and otherwise marginalized peoples (see: Alvarez, 1990; Bayard de Volo, 2001; Fregoso and Bejarano, 2010; Franceschet, Piscopo, and Thomas, 2017; among others). In Chicana and Latina feminisms the role of mothers and motherhood, and the iconography, embodiment, and deviations from ideals and norms of motherhood all play a central role in theory, literature, and critical studies that examines the juxtaposition of mothers as marginalized and powerful (Cisneros, 1991; Castillo, 1993, 1994; Gaspar de Alba and Lopez, 2011; Moraga, 1997; among others).

Collins' (2000) concept of motherwork delineates "the meaning attached to Black women's labor" in both private and public settings, not as separate but as a convergence "to produce a distinct sensibility concerning political activism" (209). She says this is often misunderstood as "maternal politics," and argues that "Black women as activists in both struggles for group survival and for institutional transformations not only challenges gender-specific assumptions of Black political theory and practice, it simultaneously questions basic assumptions of public, private, and political." Her concept of motherwork encompasses the spectrum of socio-spatial relations whereby Black women must struggle for group survival as strategies of everyday resistance, that have also often left Black women with "little formal authority or real power" (209). Her theorization on motherwork is paradigm shifting for many reasons, not least of all re-configuring the ways in which women exert political power through "everyday resistance" as opposed to institutional power and visibility in dominant culture.

In coalitional women of color feminisms, motherhood is theorized through embodiment and the transformational change of becoming a mother, as well as the

caregiving and community-building roles that cis and trans women, non-binary, queers, and femmes take on in the struggle toward liberation and justice. In the Revolutionary Mothering: Love on the Front Lines (2016) Gumbs, Martens, and Williams curate an anthology "about revolutionary mothering inspired by This Bridge Called My Back" (Williams, 1). The editors aim is "to point to the conversation that we believe mothers are already having with each other" (5) in that "poverty is violence and children are hope, [and] mothering work, children, and poverty are intertwined with each other in our lived experiences" (6). Gumbs, in her Introduction, states that "revolutionary mothering" is a bridging act, because the practice of motherhood is "older than feminism...more futuristic than the category of woman" (9). In claiming motherhood as a revolutionary act, and in bridging the work of caregivers to the work of dismantling white supremacy and fighting for a livable world for all, the editors claim: "In order to collectively figure out how to sustain and support our evolving species, in order to participate in and demand a society where people help to create each other instead of too often destroying each other, we need to look at the practice of creating, nurturing, affirming, and supporting life that we call mothering" (9).

Mothers of Color have historically been at the forefront of social justice struggles on the ground, and this history is particularly rich in Los Angeles County. In Gilmore's (2007) study of the rise of the prison industrial complex in California, she examines the multi-racial coalitional movement of Mothers Reclaiming Our Children (ROC), who "established a presence at many locations throughout the political geography of the penal system" in the 1990s (182). Mothers ROC were invested in helping one another learn how the prison system worked so that they could better advocate for their incarcerated

loved ones. Mothers ROC were concerned not only for their children and loved ones behind bars, but in coming together, forming alliances, and helping educate one another, Gilmore argues that "they engaged in the unwaged reproductive labor of reclaiming the future by saving their children" (215). The support networks and activism of Mothers ROC built a broader movement whereby the "sociospatial constraints of everyday life" (22) were transformed through coalitional power of mothers who "transformed their caregiving or reproductive labor into activism" (183).

Pardo (1998) considers how the individual experiences of gender, ethnic, class, and community identities led Mexican American women to community, social, and political action in the formation of the group, Mothers of East Los Angeles (MELA), in the 1980s and 1990s. Through this intersectional feminist lens, she describes how the move from personal problems to community-consciousness led to collective action across a range of social, political, and environmental injustice. Pardo documents that "Mothers of East Los Angeles" coalesced as a church-based community group, first with the leadership of a local priest, who "wanted the mothers to get involved" against the siting of a prison in East Los Angeles. Pardo argues "the women also manipulated the boundaries of the role of mother to include social and political community activism, and they redefined the word to include women who are not biological mothers" (115). At one community meeting where a young Latina expressed her solidarity with the group, but "almost apologetically, she qualified herself as a 'resident' but not a 'mother'," one of the group's leaders replied, "When you are fighting for a better life for children and 'doing' for them, isn't that what mothers do? So you don't have to have children to be a mother" (115).

Women of color have historically been at the forefront of struggles for environmental justice on the ground, and have led in far greater numbers, in all capacities, than in any other segment of the environmental movement in the United States (Taylor, 1997, 39). As Taylor observes: "People of color want to stop the destruction of the earth, not dominate it. This position was clearly articulated in discussions and in the principles of environmental justice adopted at the First National People of Color Environmental Leadership Summit" (54). This is no truer than in Southern California, where women of color have been at the forefront of environmental justice struggles for decades. Kim (2021) writes of the presence and relentless force of Latina and Asian immigrant women exert their efforts, at great personal risk, to fight against corporate polluters and the state in the industrial "port-belt" of Los Angeles. Kim writes that immigrant mother activists in Long Beach in the early 2000s "were well aware that the regulators would dismiss residents by dismissing their knowledge ('You smell something? I don't smell anything'; 'Thanks for your bucket brigade information')" (75). She argues that despite the demoralization from the state, immigrant women environmental justice activists in Los Angeles persist because "one thing all movement actors know is that victories are few and far between" (87) and that keeping up the fight means they must be active in the public sphere, because exerting one's political agency is in and of itself, a powerful act.

Slow, State-Sanctioned Violence

In the early 2000s promotoras with the Long Beach Alliance for Children with Asthma (LBACA) participated as "citizen scientists" with University of Southern California researchers measuring the concentrated particulate matter in fenceline communities adjacent to the Port of Long Beach, their railyards, and their truck routes (Gauderman et al., 2005; Hricko, 2008). Local environmental justice activists and public health advocates had been voicing their concerns about port pollution to local government officials since the 1990s (KPCC 2016). In 2000 the State of California Environmental Protection Agency (Cal EPA) Air Resources Board funded research on the environmental health effects of a subcategory of particulate matter pollution, PM < 0.1. These particulates are measured on a nanoscale, and encompass all particulates that measure less than one one-thousandth the diameter of a strand of hair.

In 2003, researchers at UCLA published a groundbreaking paper that delineated the detrimental health effects of diesel fuel exhaust PM < 0.1 prolonged exposure, due to the fact that it is so microscopic it can penetrate the mitochondria of individual cells, altering cellular function, and inducing disease, particularly in children and even in utero (Ning, et al., 2003). The USC Traffic and Exposure study recruited LBACA members to measure ultrafine particulates at key sites along Port of Long Beach routes (Kim 2021; KPCC, 2016; Hricko, 2008), in an effort to better understand their presence in the community, since even after Cal EPA funded research on PM < 0.1, they continued to be an unregulated category of pollution (Sioutas et al., 2005).

The state-sanctioned violence of ultrafine particulate pollution can be characterized as "slow violence," in Nixon's generative term, particularly because the affective influence of such pollution accrues over time and due to "prolonged exposures" alters the body's functions, particularly the lung function and breathing capacities of young children (Chen et al., 2015; Eenhuiszen et al., 2013; Goldizen et al., 2016; Selevan et al., 2000). The concentration of these pollutant exposures are produced by the global

goods movement, and occur in majority Latinx, Asian, and Black communities in the Los Angeles Harbor and Long Beach. The slow bodily effects of pollution should be understood as the byproduct, excess, consequence, and violence of global capitalism, which is locally and globally, racial capitalism (Christian 2019).

This slow, state-sanctioned violence is met at the cellular scale of the body. It induces chronic conditions that do not fit within an easy diagnosis, such as affecting one's ability to think, headaches, body aches, and more, as well as asthma, chronic respiratory conditions, and cancer (Ning, et al. 2003; Sioutas, Delfino, and Singh, 2015). Due to the geologic articulation of the Los Angeles Basin and the climatology of Southern California's industrialized "Mediterranean climate," pollution has little incentive to travel very far, hangs in the air and is embedded within local geographies. Produced at the port, in the railyards and long train tracks, on the freeways and local access routes of ground transport big rig container trucks, particulates traverse the concrete landscape. Pollution creeps over sound walls, into neighborhoods, parks, schools, and homes. They are the norm, part of the air, part of bodies, part of communities.

The cargo from the ports is transported to inland distribution centers, producing a network of environmental racism and injustice in majority Latinx communities of San Bernardino County (De Lara, 2018a). From there goods travel as far as Chicago Illinois. The plumes, trails, and pockets of pollution are racialized and violent at the scale of the body and community. They can be traced over the global logistics and shipping industries (Cowen, 2014) whereby ultrafine particulates, and other distinct forms of pollution inflict their slow violence at a global scale.

Morton (2013) describes "hyperobjects" as that which you cannot see, but which are also in plain sight as massive, yet invisible objects. They are "viscous" to the human condition, and occupy an elevated and extraordinary dimensional space that results in their invisibility to humanity for extended periods of time. Hyperobjects, according to Morton, massively out-scale our spatio-temporal realities: we cannot point to them, we periodically forget about them, and their influence becomes something we unknowingly absorb in our daily lives. According to Morton, hyperobjects are responsible for "the end of the world" and ultrafine particulates, incalculable and without measurable thresholds in our Earth system, cannot be counted out, on the global scale, of having serious influence in our current climate crisis (Rockström et al., 2009).

Local, slow, state-sanctioned violence is a global crisis, but on the local scale, and in Long Beach communities, it is met person-to-person. Promotoras confront the violent, harmful presence of toxic pollution in the soft, affirming, supportive, and reliable ways they meet the community most affected by them. Promotoras de salud engage in community-uplift through the daily practices of teaching, one-on-one with caregivers, as well in classes and at outreach events and health fairs in the community. They meet community members in parks, at schools, at church events, in the doctor's office. They also meet community members wherever they are in their asthma "control" journey. Whether the child is just beginning to show symptoms and the doctor catches the potential prognosis early on, or if the child has had several asthma attacks and hospitalizations, the role of the promotora is to help guide the mother, parent, or caregiver in learning about the illness, learning how to manage it, and to help empower them to prevent further trauma and help the child lead a healthy life.

Promotoras are also there to encourage and uplift fellow mothers, parents, and caregivers through community-building practices, like getting involved with the Long Beach Alliance for Children with Asthma (LBACA). Since 1999, bi-monthly LBACA meetings have provided a space for Latinx, Cambodian, and diverse mothers, caregivers, educators, and health professionals to convene and discuss city-wide and regional issues about air pollution and asthma (with on-site English and Khmer translation) (). One promotora, Erika explains why the coalition work is so important in the long-run, and why more and more people need to get involved: "Some of the barriers that we face in creating change are...many times just starting the conversation and having our voice heard. They do not listen to us. Those are the main barriers. They don't listen to us. They don't pay attention to what we're saying. Many other times the barrier is the lack of information among our community. We need to inform our fellow community members so that they can understand what the problem is, and so that they can understand that we have to continue to fight" (sepehrsh, 2011).

LBACA invites elected officials from the City, County, and State, as well as representatives from the Ports, and other industry representatives to the coalition meetings to listen and respond to the mothers' concerns. The power in numbers of undocumented, immigrant, refugee, working-class, poor, and other racialized and marginalized community members that form the coalition has, over time, generated local political power that industry and the state has been forced to contend with, and answer to, to a degree. The slow violence of ultrafine particulate matter at the scale of the body is met with promotora m(other)work at every local scale, from the body, to community

outreach: from teaching a caregiver how to administer asthma medication, to giving one's testimonio at a LBACA meeting to a Port of Long Beach executive (sepehrsh, 2011).

Cracks in the World

Anzaldúa (2015) writes about the events and experiences that split one's perception and experience of the world. These events can be violent, traumatic, unnerving, make one question their perception of the world, split the self, shatter reality, and break the heart. They can be psychic, emotional, interpersonal, cultural, political, physical, geological, and planetary events. Anzaldúa describes such cracks as endings and beginnings:

Every arrebato--a violent attack, rift with a loved one, illness, death in the family, betrayal, systematic racism, and marginalization--rips you from your familiar 'home,' casting you out of your personal Eden, showing that something is lacking in your queendom. Cada arrebatada (snatching) turns your world upside down and cracks the walls of your reality, resulting in a great sense of loss, grief, and emptiness, leaving behind dreams, hopes, and goals. You are no longer who you used to be. As you move from past presuppositions and frames of reference, letting go of former positions, you feel like an orphan, abandoned by all that's familiar. Exposed, naked, disoriented, wounded, uncertain, confused, and conflicted, you're forced to live en la orilla--a razor sharp edge that fragments you.

Anzaldúa's theorization of literal breaks across the scales of time, space, and embodiment, or what I think of as that which cannot be uttered, but is deeply felt and moves us to action and practice, is useful for thinking through the temporal and spatial praxis of promotora m(other)work. That is, the ever-present urgency of the geographies of their work.

The crack is a gaping hole in time, in place, in all of space when a young child is gasping for breath, a parent fumbles to dispense the inhaler, rushes the child to the emergency room, is waiting to hear from the doctor as to the diagnosis if the child hasn't been diagnosed with asthma. The crack is the lag time when the parent must rush from work to the school after receiving a call, or stays awake, worried, listening to their child wheeze all night long as they struggle to sleep, to rest. The crack is the split second when a child breathes normally and an asthma attack is induced. The crack is the eternity of seconds in trying to dispense emergency asthma medication. The crack is the heartbreak of a worried parent, mother, caregiver. Eva, a promotora with LBACA, describes such a crack in her own testimonio: "I have a daughter that is fourteen years old. She started to have problems with asthma when she was six months. One day, there was an emergency. When we arrived at the emergency room, I was there with her, and she almost couldn't breathe. Thank God a doctor entered at that moment, and saved her. That's when I realized it was a serious problem" (sepehrsh, 2011).

Air pollution in Southern California, in Los Angeles County, and in Long Beach and the LA Harbor region is well documented by local corporate, public, and grassroots media. Promotoras play a significant role in communicating the story of air pollution and asthma to the public. In an Univisión interview from 2016 in Wilmington, West of Long Beach and in the Port of Long Beach air pollution mitigation zone (POLB, 2010), Roxana Lopez, a mother to a young daughter with asthma, and promotora, Jessica Figueroa are interviewed in Roxana's living room. The opening scene of the interview is a familiar one: the promotora visits the mother in her home, and they sit in the living room. Plastic covers the arm chairs next to each other, and a silhouette of la Virgen de Guadalupe and other Mexican iconography are on the wall in the background. Speaking to Jessica, Roxana recalls a frightening and painful moment: "Mi nina me decia, 'No puedo mami, no puedo respirar." (My daughter told me, 'I can't mommy, I can't breathe.') Roxana

describes having to "act fast" in that moment, a split second, because "no los pone la medicina, se puede estar morir" (if you don't administer the medicine, they can die). She says that the doctor yelled at her: "You should have called the paramedics so they could have taken her to the hospital." But she says she didn't know, "Pero yo no sabia."

In the interview, the scene shifts. Roxana's daughter comes and sits on her lap, gives her mami kisses on the check and Roxana gives her a big hug. Soft, familiar Norteño chords play in the background, and Jessica, the promotora, or "Asthma prevention adviser," says: "Estamos respirando todo eso todos los dias, y no estamos matando cada día despacito." (We are breathing it every day, and it is killing us slowly every day). Jessica emotionally describes her own struggles and familiarity with the disease: "I have family with asthma. My mom, my sister...and cousins...And, I think that my boy is going to have asthma, too. Living in San Pedro, working in Wilmington...sometimes I feel like I have a whistle in my chest. It really affects me." Comforting Jessica, Roxana describes the home environmental changes Jessica has instructed her to make: diligently cleaning mold, aggressively getting rid of cockroaches, using different, more environmentally friendly cleaning supplies. She says: "If you can't change the outside, you gotta do the best inside your house. You have to do it for the kids."

Everyday Acts: Intersectional Praxis within the Interstices of Time and Space

The Chicana M(other)work framework is powerfully useful for appreciating, understanding, and teasing out the spatiality and temporality of promotora "everyday acts or tactics" (Certeau, 1984) of resistance against environmental racism. In each moment that a promotora is working with another mother, a caregiver, and their child, the

promotora must contend with the whole of what the family is dealing with. That is, not only the asthma diagnosis and/or the trauma of asthma attacks, but asthma in the context of poverty, racism, language barriers, immigration status, and other structural and systematic barriers and forms of oppression. The CM framework names the elements of what promotoras must contend with in their work, as well as the power of their praxis: Chicana identity, or cultural specificities within Latinidades; the spectrum and scales of mothering and caregiving; racial otherization on various scales, including environmental racism, which Ray (2013) names as "ecological" otherization; paid and unpaid work and labor for the state and within a racial capitalist economy; and, motherwork, all the ways that promotoras mother their communities, caring for their own children and other people's children as a way of ensuring community survival.

The work of promotoras is place-based, it is temporal and future-oriented, it is geographic, and it is scalar. Promotoras go out to meet their community where they are. They do health fairs at parks, in parking lots, at community centers and schools, farmers markets and even local grocery stores. They meet with patients at clinics, at hospitals, at schools, and in families' homes. They meet with the community in the places where they live, work, and play, amidst the daily exposures of pollution in their community. Promotora praxis is geographic, it is enacted amidst, and I argue against, the presence of pollution, toxic particulates, and the illness they induce. Therefore, promotora praxis pushes back against the toxicity of these spaces. It pushes back against fear of getting sick, it meets people where they are being exposed in their daily life, and harnesses power in the community through education. The praxis of promotoras is a culturally and

historically grounded tradition of community education and uplift (Ramírez-Valles, 1998,1999).

Promotoras who do this community uplift and education work are often moved to do so for a variety of reasons, very often including the experience of mothering their own child with asthma, and not precluding the need to work to feed and care for their own families. They've spent years stumbling their way through a disjointed healthcare system, through interpreters, and having survived through it all, come to the work in order to help other mothers navigate the system much easier, and prevent the perpetuation of trauma in their community. That is, the trauma of seeing your child struggle to breathe, rushing to the emergency department, not really understanding what is going on, thinking maybe you're doing something wrong, and wondering, worrying how you prevent it from happening again.

In the time it takes to work with mothers and caregivers of children with asthma, at minimum six months, but always much longer than that because the promotoras form close bonds with their clients, she eases into health education about the environmental injustices faced in the community beyond the mandated curriculum and education materials produced by the Centers for Disease Control and Prevention, the Environmental Protection Agency, and even the approved materials by her own organization. She educates her client, oftentimes a fellow mother, on the science and dangers of pollution. She educates her client on the unregulated diesel ultrafine particulates that pollute their community. Promotora clients who become educated and interested in this advocacy and activist work become something closer than just a client or a neighbor--they become comadres.

In this context, comadres are fellow mothers who are there to fight alongside in the struggles for what's best for the community, for the children, and for building a better environment. In Long Beach, comadres become involved in grassroots efforts to attend city council meetings and speak about their experiences. They provide their testimonio about their experiences as the mothers of children with asthma, and speak truth to power whenever they are given the chance. They work to get better infrastructure built, like higher sound walls and more trees planted on school grounds. And, promotoras support their comadres in myriad ways, from helping to arrange childcare so a comadre can attend a community meeting at night, providing encouragement and impromptu counseling, and literally building a support network from the ground up for some of the young mothers in particular. Promotoras support their comadres in the fight for social and environmental justice, a fight that comes with being Latinx and raising a child who struggles to breathe in Southern California.

The community mothering, or m(other)work that promotoras do in response to the state-sanctioned environmental violence in their communities is instrumental to the survival of their communities. Their work is facilitated by a love for their own children that is so abundant it overflows to serve the needs of other mothers and caregivers, other people's children, the next generation and future generations who in the process of the promotora's labor and praxis become her chosen kin. She builds an extended network, bridges the gaps sanctioned by state oversight, and bridges interstices only she can perceive and attend to on the ground.

The promotora builds and practices geographies of survival beyond the epistemological route of the state and its investments in racial capitalism. These spatial

and temporal praxes rupture the very way the promotora is called into being by the state. It is in making these connections, between the personal, environmental, and political, and doing so behind closed clinic doors after the doctor has left the room, walking the patient out to the bus stop, and on the phone after they've completed their weekly and monthly check-ins on medications. It is in the knowing way the promotora reads a comadre's openness to hearing and comprehending the ways in which a child's health and suffering is connected to the joint axes of power of the state and capital, and that by getting involved in local efforts, they have the collective power to stand up against violence inflicted on their children and in their community.

The promotora's m(other)work of survival shifts the temporality of people's lives. She prevents asthma attacks before they happen, she provides people with the tools and knowledge to create a more survivable, breathable, livable, dream-able life, even along "asthma alley," and amidst the geographies of environmental racism in Southern California. The community mothering work, the m(other)work as defined by the Chicana M(other)work Collective is inclusive to diverse mothers, parents, care-givers, trans and cis, Chicanx and other racial, ethnic, and cultural identities of those who care for their communities and kin, related or not. It is a coalitional-based praxis that defines how one moves through the world, and challenges the social and cultural structures that would otherwise isolate us from engaging in one another's mutual liberation for the sake of the collective just as much as the sake of ourselves.

Taking seriously, allowing for the time and space required to appreciate and understand nuance, and making visible the everyday practices or tactics (Certeau, 1984) of lives and struggles made marginal and otherwise invisible by dominant knowledge

systems and paradigms is a necessary step toward achieving justice of any kind. Related to making visible the otherwise invisible, is the imperative of protecting future generations. "Astute and strategic mothers who aim in community to protect and to provide for the next generation have been around since the big bang. It remains, however, a subject vital and urgent to our progress as human beings, and to the continuance of a healthy planet" (Castillo, 2018, xiii). Inherent within Chicana and Latina feminisms is the scalar understanding that care and community work contributes to the caring of our planet, toward a wider vision of justice, because the future is worth fighting for, even if we are just trying to survive in the here and now.

During my time working with promotoras de salud in Long Beach, one of my roles was intermediary between the highest tier of the organizations and the promotoras themselves, occupying a low-paid, but highly visible position within the organization. Much of the public persona around the organization itself was, in fact, built around the asthma intervention that the promotoras implemented. One of the questions that I was plagued with from the moment I became involved with the organization (first as a volunteer), was: What do they (the promotoras) do all day?

For many reasons, this question was degrading to the intensive labor that the promotoras did, and that I witnessed for three years, day in and day out working with clinic patients and community members. However, it was, in a way, understandable (with a caveat) for two reasons. First, it was an understandable question only because so much of the promotora's work is done without an audience. This is because of the private and confidential nature of working with clinic patients, and the necessary rapport that must be developed between promotora and patient, in order for the promotora to be successful in

educating the mother or caregiver, and having influence over behavior change. In order for the client (how promotoras refer to the clinic patient and caregivers they work with) to be vulnerable with the promotora, the promotora also, to an extent, has to be vulnerable with the client. This is also very emotionally draining on the part of the promotora.

The second reason that the question: "what do they do all day?" was understandable, is because the promotora spends a lot of time with her clients. And, in between meeting with clients, she is on the phone calling and checking in on other ones. In recalling the Promotor Framing Paper (The California Endowment, 2011), a promotora anónima stated: "As Promotores, we carry our agenda of what we want to teach that day, but it may not be the agenda of the community. Therefore, we have to change it based on the needs of the families we meet each day and all of their pain, needs, hopes, and talents" (13). This echoes my experience in working with, supervising, observing, and apprenticing promotoras de salud. Promotoras meet clients where they are in life, in that day, in that moment, and as professional and experienced as they are, sometimes conversations take longer than expected, one must address issues that were not on the agenda for the day, because the client's needs demand it.

Finally, while the question "what do they do all day?" is understandable given these dimensions of promotora labor, the caveat of it is that this question should not be asked by organizational leadership who puts so much vested interest in the outcomes of their promotora program. As put in the T.C.E. Framing Paper: "Institutions need to recognize their own interests and motivation before deciding to work with Promotores. Those institutions that have a genuine interest in creating healthy communities must be

committed to an institutionalized vision for social justice and social change within their own organizational environment" (24). Addressing what is best for the community starts with how you treat your staff, especially the promotoras.

Promotoras de salud in Long Beach enact their intervention in the whole of their work with the community and with their clients, not just within the framework they are trained in for asthma education and behavior change. The everyday actions that they take in the exam room, in the hallways, in their offices, on the phones, and out in the community, away from the prying eyes of supervisors and administrators, is done within the interstices of official time frames, official space and places of the state, of the organization, and of their grant duties. At the microscale of the local, promotoras lend a shoulder to cry on in the exam room after the doctor has left. They discern a client's need for extra support and call more frequently than the intervention plan made with the doctor, client, and promotora demands, because the promotora wants to make sure the client is doing ok, surviving—with their child's asthma, and everything else that is going on in their life.

One afternoon, in between meetings, I ran into one of the promotoras in the hallway. She asked me if I wanted to buy a pinata from one of her clients. He was starting a new business making and selling pinatas locally, and she said she was just so proud of him, and really wanted to support his business. Having no need for a pinata that day, or anytime in the near future, I told her, yes. She told me I could pay her for the pinata at the end of the day, and pick it up from her office. I went to pick it up before she left, and she still had several other pinatas in there, from other clinic staff she had solicited sales from. Promotoras bend time and space of the work day to fit the needs of the community

because it is the right thing to do, because their clients' lives and survival demands it. Promotoras are not innately extraordinary in some essentialist paradigm, but they are extraordinary in the sense that they expertly navigate the time, space, and places of the state health care system when it was not created for them. Promotoras are the bridge, they are the infrastructure for their communities. Promotoras enact geographies of care on top of, in spite of, and against what would otherwise reject their praxis, what they embody, where they come from, and who they are.

Promotora Topographies

Promotora m(other)work in so many ways, works as a continuous process of picking up the broken pieces of people's lives that are harmed and affected by environmental racism, and guides, supports, and empowers them to put themselves back together in some way. Promotora m(other)work is, in this way, similar to the "path of conocimiento," or the path of putting oneself back together (Anzaldúa, 118). While Anzaldúa describes conocimiento as an artistic, deeply spiritual, and individual path one walks, it is also a multi-scalar inhabitance that is a useful frame for recognizing spatial and temporal scales of promotora m(other)work. Promotoras practice a form of community mothering as a method to save themselves, to save others, and to save the world.

The method and mode of survival requires a constant putting together what has been broken, to create something new, to create something beautiful and meaningful from what would otherwise kill us. Promotoras walk the same routes every day, working with clients, working with their fellow community members, educating and speaking their truths and what they know about the on-going harm that air pollution has on their

community. The topographies they build, over time become more ingrained in the local geography. More people see them, recognize them, and walk with them: LBACA coalition meetings receive greater attendance, more state and corporate officials respond to LBACA requests to meet with community members. The persistence and presence of promotoras rebuffs environmental racism to the point of survival and even hope.

Some of the promotoras I used to work with, have since left the work. The truth of it is, when I use the word "labor" in my analysis, I do not use it lightly. Promotoras are tasked with emotionally taxing and sometimes physically exhausting work. They are often employed in non-profit organizations where your plate is always too full, and while these big grants are based entirely on the work of the promotora, they are always the lowest paid person on the grant. This was indeed the case with the grant that I oversaw during my time working for a publicly and privately funded non-profit clinic. Promotoras are the lowest paid staff on the grant because they are cheap labor. Very often promotoras have received their high school diploma. The promotora is celebrated as an "expert" in her community, but this celebration is in words only. Her expertise, which is vast, is not paid accordingly because it does not fit into the capitalist myth of meritocracy, and because her expertise is not measurable with an academic degree.

Promotoras build strong, beautiful bridges, and while they are doing this work, it is transformative and meaningful. But, bridges are only engineered to carry so much weight. The bridge itself can only endure, and become a more permanent feature of a physical landscape if the earth, on both sides, is strong and stable. For promotoras, they require strong support both in the community, as well as within the healthcare system. In "This Bridge Called My Back" Cherrie Moraga asks: "How can we--this time--not use

our bodies to be thrown over a river of tormented history to bridge the gap?" (emphasis in original) (xv). The burdens promotoras carry from the communities they work with are emotionally complex because they are faced, day in and day out with the material and emotional consequences of multigenerational and intergenerational, systemic and structural intersectional forms of oppression in real people's lives. And unfortunately, often lacking meaningful institutional support for the heavy load they carry, bridges can break.

If, as Gloria Anzaldúa states: "Bridges are thresholds to other realities, archetypal, primal symbols of shifting consciousness. They are passageways, conduits, and connectors that connote transitioning, crossing borders and changing perspectives. Bridges span liminal (threshold) spaces between worlds, spaces I call nepantla, a Nahuatl word meaning tierra entre medio" (or land in between) (Anzaldúa, 2002, 1). Then, I posit that promotoras build and embody bridges between their communities and public health services as topographical remedies in the landscapes of environmental racism. Through the bridging community mothering work they do, they are portals, and they build portals for community survival, for future generations. They literally are building the infrastructure for what it takes to survive environmental racism, and planting and harvesting the seeds for greater collective resistance against future environmental injustice, and against further destruction of our planet. Inherent in the Chicana M(other)work framework is the relationality and poetry between Black feminist and Chicana feminist theory, that is a scalar understanding that community mothering contributes to the caring of our planet, Mother Earth, and toward a wider vision of justice

because the future is worth fighting for, even if we are just trying to survive in the here and now.

The motherwork that promotoras do, in all capacities, and for whatever length of time they respond to the call to do the work, is powerful. They reach backwards in time and draw wisdom from their own struggles, they reach forward in time and empower parents to save their own children from potentially deadly asthma attacks. Their labor is strenuous, but for however long they do the work, they plant seeds for the survival of their communities and future generations.

VIII. CONCLUSION

In this study I argue that the public health arm of the state relies on and reproduces the subjugation of promotora labor within a classed, feminized, and racialized framework, where promotoras are produced as necessary excess to racial capitalism. The state's reliance on promotora labor to implement a neoliberal health intervention, that is, a highly individualized approach to managing asthma that occurs on a racialized geographic mass scale, only reinforces the state's reliance on private capital for its operations, and its overall investment in a racial capitalist system. And, in so doing, I make an intervention in critical environmental justice studies to expand the parameters of the state, as Laura Pulido observes, a "site of contestation, rather than an ally or neutral force" (Pulido, 2017, 1) for achieving environmental justice. I argue that the public health arm of the state is also an arbiter of environmental racism, a purveyor of state-sanctioned violence, and needs to be treated as a site of contestation for achieving environmental justice.

Promotoras, as public health workers and members of their communities also enact geographies of care that exceed the state's logics. That is, the spaces they occupy, the space they hold for families, the time they take to perform acts of love, and be of service for families within and beyond the parameters of the state's prescribed intervention, not only enables community survival, but serves to expand the boundaries of the margins where their communities are otherwise relegated. Thus, their spatial and temporal praxes serve as a critical resistance to the state-sanctioned (slow) violence of environmental racism. Promotoras de salud as Latina and Latinx social, political, historical, and feminist actors are largely missing from Chicanx and Latinx

studies, and their praxis is under-theorized in Chicana and Latina feminist theory, and engagement with their work is largely missing from feminist geography, health, and labor geography. In this project I strive to elevate the leadership of promotoras as critical actors in geographies of survival and care, and in drawing on a Chicana and Latina feminist paradigms, aim to contribute to Latinx geographies scholarship.

This project was initiated by my professional experience working alongside and supervising promotoras de salud who endlessly worked to alleviate the daily harms, pains, and trauma of toxic air pollution in their own communities. I worked with promotoras who themselves were mothers of children with asthma and lived in the communities most impacted by the pollution produced by the Port of Long Beach. These promotoras had come to this work because of their life experience, and their desire to make a difference for other families. So, in this project I draw on my experiential knowledge as a guide and a framework for research into the public record.

For this project I have sourced and followed myriad digital trails of promotora labor in Southern California, in the state of California, in the United States, and in the field of public health. I draw from digital recordings of promotora testimonio given at public meetings; local media covering childhood asthma in the Los Angeles Harbor region and Long Beach; public health state and nonprofit white papers, interviews, studies, and reports; public health policy; scientific studies on air pollution in Long Beach and the Los Angeles Harbor, and public health studies in Southern California and nationally on the promotora de salud model for addressing asthma management in Latinx populations.

In the research process I became collector and archivist of the ways that promotora testimonios, public testimony, promotora presence, and promotora impact registers in the public frame. And, in doing so I have to read across otherwise separate categories of knowledge and knowledge production. I have researched in the state archives at the local and federal level, I read air pollution scientific papers, medical journals, public health studies, YouTube videos, short and long-form journalism, city council minutes, blog posts, even some social media. Further, in order to construct my analytical framework, I read across not only multiple disciplines—Chicanx and Latinx studies, environmental justice studies, public health, multiple subfields within critical human geography, science and technology studies, and the environmental humanities.

And, in all that I read, as I look for promotoras de salud, I am guided by a few things that I know both from lived experience and from academic study. The first thing I know is that promotoras an Latinas, as immigrant women, racialized Others, the working poor, as mothers are marginalized. This means that when I go looking for promotoras in the public record, and when I read across the vast archive I have collected on them, I must read for the ways in which they get silenced, ignored, and their agency constricted. This means their stories, their agency, their power, and their unique knowledge systems are largely hidden in the public frame, in academic literature, and in state produced and recognized knowledge systems. In this way, I read for the interstices and intersections within "official" knowledge produced on or about promotoras by academia or the state, as well as the interstices and intersections on the ground, in the realm of promotora praxis.

The second thing I know is that the state, broadly speaking, relegates knowledge within a particular organization that maintains hierarchies of knowledge, of people, of systems. Similar and much related to the western disciplines, there is an order of things. The public health arm of the state recognizes the unique roles that promotoras perform in being the bridge between public health systems and the communities they serve. However, the state designates promotora knowledge systems and practices to "lay" knowledge, a lower position in the meritocratic knowledge hierarchies it subscribes to, and accordingly pays promotoras much lower wages (if any) for their expertise.

In 2009 the City of Long Beach Harbor Commissioners—a publicly appointed Board—approved an estimated \$750 million middle harbor expansion project for the Port of Long Beach, and as a concession to community pressure from environmental justice activists, the Port was directed to funnel \$15 million to air pollution mitigation funds. Environmental activists appealed to the state in the language of public health: "We are asked to take on faith, the Port's promises that these mitigation measures…will somehow result in the criteria pollutant reductions needed to significantly reduce health impacts" (Dr. Gisele Fong, Harbor Board of Commissioners meeting April 2009). On the ground there is an assumption that public health services are helpful, and working toward similar, if not the same goals, as EJ activism. However, there is a disjuncture between the goals of public health and the goals of environmental justice.

For the environmental justice movement, public health services are an essential ingredient, a necessary strategy for achieving a dimension of justice. This is clearly delineated in the 1991 Principles of Environmental Justice. And for public health, environmental considerations are just a singular dimension of a social determinants of

health framework, that works to achieve health equity. Health equity, as defined by the CDC is "the opportunity to 'attain his or her full health potential' and no one is 'disadvantaged from achieving this potential because of social position or other socially determined circumstances." However, equity does not equate justice, and justice is not in the state's vocabulary for public health. The Port of Long Beach community mitigation grants in 2011 provide a unique perspective (not-so-unique on-the-ground reality) of the role that public health services play in hindering progress toward achieving environmental justice. In using public health as the "burden of proof" EJ activists were met with expanded community health services. But much of these air pollution mitigation funds were poured into short-term, immediate solutions to the problem at hand.

The public health promotora model serves a needed and important purpose in helping people who are already suffering from pollution-induced asthma and other chronic respiratory illnesses, but I contend the prominence of the model is not paired with systemic and structural changes that would *prevent* geographically racialized pollutioninduced asthma in the first place. The goal of the promotora asthma intervention is to teach families how to exert control over asthma symptoms. Controlling one's asthma looks like very few, if any asthma attacks. This means no emergency room visits, and no major issues.

The promotora model is considered an "upstream" or preventative intervention within the paradigm of health equity. That is, that the social determinants of one's health: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context, all play influential roles in one's health status, in this case, in one's asthma control. When a

public health organization implements the promotora model, they recruit paid or sometimes unpaid, promotoras to do the labor, that is to translate communities' needs for the organization, and to translate the public health system to the community. The success of the model's implementation depends on the promotora herself, as a bridge between her community and the state. The promotora, indeed, has greater access, understanding, and influence in the lives of the families she works with to help them achieve greater asthma control.

The model as implemented by public health agencies and organizations, however, is limited within its own neoliberal framework of equity, lacking a definition, foundation, or stated purpose for justice. Equity, in the case of childhood asthma in geographies of environmental racism, is conceived within an understanding that illness is inevitable, and the only preventable things are things within the individual's control.

The implementation of the promotora model as a community-based intervention serves as a wide-scale perpetual mitigation measure, instead of a temporary necessity while serious measures are taken to reduce concentrated air pollution in working-class, Latinx communities. The model's reliance on a particular classed, racialized, and feminized characterization of promotoras de salud also reinforces the social and economic subjugated position of Latinas in U.S. society. The state does not address the structural and systemic underpinnings of those disparities in any meaningful way, except to rely on feminized and racialized promotora labor as the ad-hoc infrastructure that bridges Latinx communities and the health care system. Thus, the needs of the community are far outmatched by the long-term benefit of the state and polluter, in this case the City of Long Beach, who not only profits off of Port of Long Beach expansion

because the Port operates on City-owned lands, but in the larger realm of the state, ends up funding federal and city public health programs.

Justice is not feasible when survival is barely made viable. The public health arm of the state has no stake in helping to prevent health effects from toxic pollution for two overarching reasons. First, the state fails to acknowledge the historical, geographic, decolonial, and ecological vision for environmental justice, and second, public health functions depend on racial capitalism. The public health system relies on a widely available low-wage labor pool of racialized, feminized promotora workers. These workers are produced as necessary excess to the function of racial capitalism, which is the function of profit, which then, the state relies on to fund promotora interventions. This creates a dysfunctional cycle in public health practice and is antithetical to the fight for environmental justice. So, if justice is not feasible within the paradigm offered by the public health arm of the state, what then to make of the ways the state calls upon the labor of promotoras de salud? And, what to make of the life-changing interventions that promotoras implement?

My inquiry began back in 2011, as I recount through the three stand-alone testimonios I present in this project. In the language of Gloria Anzaldua, these testimonios represent an arrebatamiento con una hacha, or a break with the force of an axe, or cracks in my worldview, in my perception. These re-tellings of particular moments of realization and shifts in my perception demonstrate some ways in which the state apparatus of public health actually worked against its stated purpose through the state's investment in and reliance on racial capitalism. These realizations were cracks in my perception of how I thought justice was achieved. So in this study I reconstitute the

fragmentation of my old worldview, putting it back together with a Chicana feminist environmental justice imperative.

Ultimately these cracks in my perception and understanding, also serve as the impetus for studying what I already knew to be true, which is that promotoras de salud, change people's lives for the better. The transformative power of promotora praxis is a complex geography that is entangled with, but cannot be encapsulated by the public health promotora de salud model, nor the state's call upon her labor. I use the Chicana M(other)work framework (Caballero, et al., 2018) to analyze the spatial and temporal dimensions of promotora care work, to situate the struggle of promotoras as mothers and as workers who engage in community mothering work as a geographical praxis.

The Chicana M(other)work framework is a lens and a tool to examine the spatial and temporal "cracks of the world" (Anzaldúa, 2015) within which promotoras attend, the temporalities and spatial routes of promotora work, and the limitations and possibilities of promotora topographies they build as "bridges" between their communities and the public health system. The framework is grounded in the struggle for collective resistance, and aims to make various forms of feminized labor visible. As the Chicana M(other)work Collective observes: "Activist movements tend to have mothers and caregivers at the forefront, and yet their stories are often overlooked (Caballero, et al., 2018, 16).

At the core of the framework is the centering of historically marginalized and invisibilized positionalities and identities, and it encompasses five in one: Chicana, Other, Mother, Work, and Motherwork. Here, I relate and extend the framework specific to promotoras de salud: "Chicana" as a relational identifier for trans and cis women of

color, and for the recognition of Chicana Feminist Theory as the foundation of the framework. Promotoras de salud in Long Beach are often Mexican and Central American immigrants or first-generation residents. "Mother" is a relational identifier for caregivers, mothers of biological and chosen kin. Most promotoras in Long Beach are mothers of children with asthma. "Other" builds on the relational processes of racialization and racism as delineated in Critical Race Theory, and the specificity of racial otherization as a socio-spatial process of environmental racism. "Work" refers to reproductive labor of mothers, and the social reproductive labor of promotora care work, as well as to the exploitation of the working class within racial capitalism.

And finally, "Motherwork" builds on Patricia Hill Collins' (1994, 2000) concept of "motherwork," which is the community mothering laboring practices and experiential theorization that Black, Indigenous, Latinx, and Asian American mothers do as inherent to building a more livable world for their children and future generations. The Chicana M(other)work (CM) framework is grounded in the struggle for collective resistance, with a vision that the impact of mothers and caregivers in the here, and now, reverberates across time and space, for the survival of their children, communities, and future generations.

Promotoras are not innately extraordinary in some essentialist paradigm, but they are extraordinary in the sense that they expertly navigate the time, space, and places of the state health care system when it was not created for them. Promotoras are the bridge, they are the infrastructure for their communities. Promotoras enact geographies of care on top of, in spite of, and against what would otherwise reject their praxis, what they embody, where they come from, and who they are. Promotoras build and embody bridges

between their communities and public health services as topographical remedies in the landscapes of environmental racism. Through the bridging community mothering work they do, they are portals, and they build portals for community survival and future generations. They literally build the infrastructure for what it takes to survive environmental racism. They plant and harvest the seeds for greater collective resistance against future environmental injustice, and against further destruction of our planet.

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