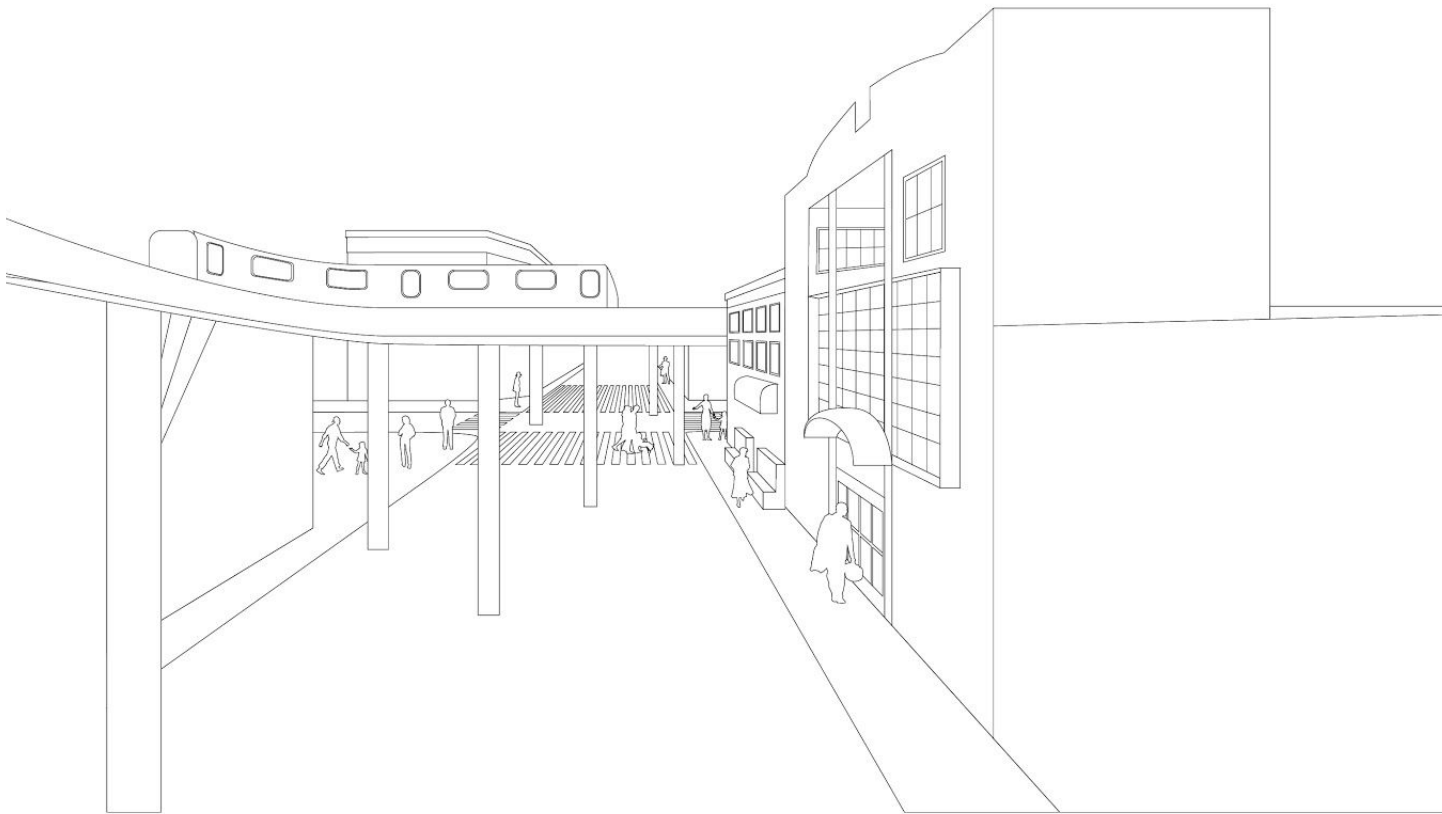


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Equity from Within

Bridging the health gap through place-based
redirective design practice



Health is closely tied to our daily environment.
Understanding how neighborhoods affect our
physical and mental health is the first step toward
building healthier and more equitable communities.

Table of Contents

Table of Contents	3
Abstract	4
Defining the Health Gap	5
Systems Thinking through Design and Public Health	9
Previous Work - Supplying Fresh Food to the Places that Need it Most	11
Research Context - The Roots of Resiliency	13
Health in the South Bronx	15
Bronx Community Board 2, Hunts Point and Longwood - Community Health Profile 2018	17
Hunts Point zoning, local organizations and food landscape	18
Research Overview	19
Place-Based Design Research - Research Of, For & By Place	21
Research Question	21
Outline of the Thesis	22
Outline of the Chapters	22
Chapter II: Theoretical Framework	25
Introduction	25
Public Health is about Satisfying Neighborhood Needs	25
Manfred Max-Neef's - Needs and Satisfiers (from Human Scale Development)	29
Tactics, Strategies and Power Dynamics	30
Subverting Affordances	31
Affordance Lens	34
The Political Patterns of Everyday Practices	35
Redirecting the Trajectory of a Practice	37
The Domains of Everyday Life	38
Communities of Practice	41
Designing for CoP	43
Communities of Redirective Practice	44
Spectrum of Redirection - Theoretical Design Framework	45
Summary	46
Chapter III: Methodology	47
Introduction	47
Whose Behavior is it Anyway?	47
Public Health & Design are about Context	48
Community Based Participatory Research	52
Designing the Design Process	54

Reflection on Methodology	55
Mixed Methods	56
Evaluation and Analysis	56
Criteria	57
Co-Design	58
Expert Interviews	59
Documentation	60
Summary	61
Chapter IV: Fieldwork	62
Introduction	62
Communities of Redirective Practice	62
Urbee: a Place-Based Healthy Lifestyle Campaign	64
Healthy Recipes - From Our Kitchen to Your Table Cookbook	66
Wayfinding Signs for Navigating Civic Pride	69
Play Streets as the Front Yards of the Community	72
Active Design and the Community Action Group	76
Scaling Out and Scaling Up Equity	78
Place-Based Expert Interviews	80
Book Synthesis	82
Equity from Within - The Playbook	83
Chapter V: Discussion and Conclusion	89
The Design Framework: Human Needs and Redirective Practice	89
The Equity from Within Playbook: Translating Theory into Practice	91
Conclusion	96
Contributions	99
Future Work	101
Works Cited	104
Appendix	109

Abstract

This practice-based research explores the relationship of the built environment to the health of community residents through applying design as a tool for inquiry and synthesis. Our socioeconomic position in society is linked to our health; on average, the better off a person is socially and economically, the more wealth and social capital a person has, the fewer adverse health outcomes they experience. As a result, there is a social gradient in health: those living in the most deprived neighborhoods die earlier and generally suffer from higher rates of diabetes, high blood pressure, and heart disease than those living in the least deprived neighborhoods; in many neighborhoods, your zip code is a better predictor of health than your genetic code. Just as there is an increasing wealth gap in the United States, so too is there a health gap which stems from the social, economic, environmental and structural inequalities which shape health outcomes. By critically engaging with these social determinants of health, we can further recognize that health is shaped by the design of places where we live, learn, work and play. In looking at the causes of health disparities, health equity seeks to increase the opportunities for everyone to live their healthiest life possible by addressing these social determinants.

Taking a place-based approach and working at the intersection of design for social innovation and public health, this work seeks to demonstrate that intentional design at the neighborhood level will create greater opportunities for individuals to lead healthy lives. Throughout the course of this research, a series of interventions have grown out of place and include the 'recoding' of the built environment through active design, the expansion of a food literacy program and a series of community engagement events centered around promoting healthy lifestyles and extending access to local social services. A guidebook of tactics is presented, developed through insights from community-based designers, regional planners and public health experts, which offers practical steps for inclusive and equitable community organizing and development. By shifting the narrative around health from one focused downstream of individual medical treatment to one looking upstream at prevention and the socio-economic conditions which shape health, we can build healthy communities which allow residents to achieve greater health equity, thus beginning to close the health gap.

Informed by social practice theory, environmental psychology and redirective design practice, this research demonstrates the possibilities for design as a means of encouraging civic action towards local change, for redirecting unhealthy and unsustainable patterns of everyday behavior and proposes actions for furthering equity with and in a community.

Chapter I: Introduction

We Cannot be Healthy Alone

“Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl...

Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile.”

Robert F. Kennedy, University of Kansas, March 18, 1968

Defining the Health Gap

Just as there is a significant wealth gap in the United States, so too is there a health gap existing between individuals and across communities. A relationship exists between where you live, learn and work, between the physical structures and the social infrastructure of a place, and the health and quality-of-life outcomes you experience.

This work seeks to explore how individual health outcomes, existing at the intersection of the natural and built environments and how those influences, when combined with social forces - economic, political and cultural - contribute to the health landscape of a place-based community over the course of people's lives. It examines how healthcare is integrated into the everyday lifestyles of community residents and how health outcomes are co-shaped by the confluence of geographic place, social structuring and individual agency. The social determinants of health are described as “the conditions in which people are born, grow, live, work and age; and inequities in power, money and resources that give rise to inequities in the conditions of daily life” (Marmot, 2017) and serve as a useful means for beginning to analyze health as being shaped both socially and geographically.

The social determinants of health focus on factors outside of traditional healthcare systems as a means of better understanding the conditions which structure health outcomes. Taking a broader definition of health, and building off the United Nations' definition of inclusive health (Baciu, Negussie, Geller, 2017), we can look at the distribution of health as a measure which includes the sum of natural, human and physical assets which contribute to intra and interpersonal health equity as distributed throughout a community. Taking an "assets-based approach" toward health equity, an approach to sustainable community development based on their strengths (Kretzmann, McKnight, 1993), this work seeks to compare the health of an individual by looking at the extents of health inequalities of a place and population (the structural determinants of health), the allocation of health resources (an example such as the 'inverse care law' is explained later) and the social determinants which can be used for interpreting and measuring health and the distribution of it throughout a community (Penman-Aguilar, 2016).

Offering a framework for analyzing health beyond the policies of a place including access to healthcare available in a geographic location, the social determinants of health, are a 'social model' approach toward analyzing health on a neighborhood level looking at the conditions which condition health outcomes.

Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups (Penman-Aguilar, 2016), illustrating how different population health outcomes are shaped by factors beyond traditional health clinics, such as policies which determine and define the physical and social landscape of a place. This can include environmental policies that address land, water and air quality, land-use and zoning laws which shape spatial boundaries and physical constraints, and economic and social policies which regulate market and social behaviors. This level of analysis includes national policies and local initiatives which historically structure a place, or as Dr. Michael Marmot (2017) describes them, the "causes of the causes" for shaping health outcomes.

Health equity, or equity in health as the World Health Organization defines, "implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential" (Baciu, Negussie, Geller, 2017). Equity is the absence of avoidable and unfair differences among groups of people and those differences play out socially, economically and geographically. To better understand health equity, it is easier to describe the term by looking at the health disparities between groups of people and across populations. Factors like demographics, financial and social capital, education, and environment contribute to the

mental and physical wellbeing of individuals. Looking at the differences in these determinants to health reveal the wealth, power and social status of an individual and a group of people.

The allocation of health resources is another factor to consider when looking at how health is distributed throughout a geographically defined location. The 'inverse care law' was proposed by Julian Tudor Hart in 1971 and is the principle that "the availability of good medical or social care tends to vary inversely with the need of the population served" meaning that the better off you are, the better access to healthcare you receive. And the worse off you are, the less access to healthcare you receive. This law treats healthcare as a commodity with a market that is more accessible the better financially off you are (Tudor Hart, 1971). Your allocation of health resources describes the level of healthcare accessible to you including the quality of expert care you receive and the accessibility and relevance of that care to your daily life.

The social, environmental and structural determinants of health combined with the allocation of health resources provide a more complete and holistic picture for interpreting how health plays out at the local level—how multiple and compounding factors can lead to health inequity and how they can be highlighted as a means of addressing health disparities including issues related to health equity and equity more broadly. Looking at health through the various scales which contribute to an individual's health range, from the intra and interpersonal to the organizational, communal and policy levels, allows for a bounding of domains for addressing health inequities while shifting up and down scales of varying incidence, recognizing that health is a confluence of many factors structural, social, environmental, economic and individual.

How the social determinants of health lead to inequalities in health within and between groups of people is known as the health gap. This expression comes from public health, a scientific field concerned with protecting and improving the health of people and their communities. The work focuses on promoting healthy lifestyles, researching population disease and prevention and responding to infectious diseases. The health of a population is the primary concern for public health practitioners and they have developed tools, methods and theories for advancing research efforts. The health gap is an important contribution from public health for understanding the disparities existing between different groups of people and for identifying what we can do to bridge those differences by reducing inequality, improving health outcomes, and living more sustainably.

This work takes a place-based approach to doing design research and is motivated by Dr. Anthony Iton's idea that, "your zip code is a better predictor of your health than your genetic code" (Alameda, 2008). Dr. Iton served for seven years as the Alameda County Public Health Department and his work focuses on developing regional solutions for tackling the root causes of health inequity. He suggests that inventions in health need to take place upstream on the social factors, the social-ecological determinants of health which are the conditions shaping health outcomes. The social factors are where health inequities begin and addressing those upstream factors are how we can begin to bridge the health gap.

The United States spent nearly \$3.5 trillion on health expenditures in 2017, that is more spending on healthcare than any other country in the world. And yet, ranks in the bottom half of industrialized countries in outcomes, life expectancy and infant mortality. (Bradley et al, 2011) Elizabeth Bradley and Lauren Taylor, researchers at the Global Health Leadership Institute, found the more money you spend on social services compared to medical healthcare the better your health was. By looking at how money was spent across The Organization for Economic Co-operation and Development countries, their work argues that for every dollar spent on healthcare, about two dollars are spent on social services. Contributing to higher life expectancy and health outcomes in those countries. In the US, for every dollar spent on healthcare, about fifty five cents is spent on social services (Bradley et al, 2011). In order to reduce the health gap, financial investment and social capital have to be applied upstream to the socio-ecological determinants of health inequities.

The practice-based work outlined in this thesis exists at the intersection of public health and designing for social innovation for addressing health inequities at the community scale. Taking a place-based approach and working with experts from public health, this work focuses on reducing the health gap by directing attention to the social factors which contribute to it. Public health applies the scientific process for exploring community health and requires working with large data sets for understanding population health trends. Taking a macro view to health, one that is population centered and focused on the general conditions which influence health outcomes, offers many advantages when designing for social innovation. Population and health census data informs decision making for targeting program development and implementation, an informed approach to action and health promotion beyond the clinic walls. This way of working is effective when the data is correct and the conditions around decision making are controlled.

However, this is not always the case. Data can reveal and it can conceal. Models may reflect reality in an attempt to make sense of complexity but data can never fully capture the details and the nuances which shape everyday life. Data can improve lives and inform more effective programs, but it cannot express empathy. This is the value of applying design thinking to public health for dealing with broad scale and complex issues such as obesity. Obesity is a wicked problem, "a problem whose social complexity means that it has no determinable stopping point" (Tonkinwise, 2015) and a problem that is difficult to fully capture through datasets alone. Obesity is an issue where there is no single solution to the problem. The complex nature of the problem requires a great number of interventions for addressing the challenge. The human-centered approaches from the field of design are focused on human factors and understanding the behaviors that shape our decisions. The creative problem solving process of design offers a means of capturing the details of everyday life that are difficult to capture through data alone.

Design and design thinking complement approaches from public health. Both fields are concerned with improving lives and are focused on understanding the context of everyday life and how our decisions shape outcomes and impact society. Design uses observation and empathy for informing understanding around an issue at the micro level. Public health uses population data and policy analysis for understanding an issue at the macro level. Together, these two fields meet at the community scale and drive change by devising "courses of action aimed at changing existing situations into preferred ones" (Simon, 1969).

Systems Thinking through Design and Public Health

An ability to think systematically is increasingly becoming necessary when considering the challenges of the 21st century. As the issues society faces grow more complex and complicated, such as the increasing forces of globalization and rising inequality, diet related diseases associated with obesity and hypertension and the challenges of increasingly harmful climate change, they create a necessary call to action which systems thinking is poised to address. Systems thinking interprets the issues highlighted above as interconnected and co-determining, demonstrating the depth and severity of contemporary challenges design, public health and many other fields are facing (Meadows, 2009).

Taking a holistic approach to analysis, systems thinking focuses on how individual parts interrelate and how systems work over time and within larger contexts. Systems thinking offers a collection of tools which allow interdisciplinary teams to work strategically to tackle problems that are large-scale and wicked in nature. Looking at patterns of behavior over time, systems thinking recognizes that changing one part of a system may affect other parts or the entire system itself. The goals of systems thinking are modeling the dynamic conditions which structure and constrain different types of interactions across scales for interpreting nonlinear behavior. The tools, methods and models developed from this way of thinking offer new ways of working to a wide range of practices.

When dealing with complex issues, such as wicked problems (Rittel, Webber, 1973), it is useful to begin by drawing boundaries around the topic of interest. The marking of boundaries defines a system while distinguishing it from other systems within an environment. Boundaries are defined by the researchers and take many many different natural, artificial and hybrid forms such as organizations, communities and bio-regions. Bounding is crucial and where you draw those demarcations influences how you frame your topic or problem area for deeper investigation. Systems mechanisms, inputs, stocks, feedback loops and delays, offer a variety of ways for approaching and modeling the behavior of a bounded issue over time. Grappling with complexity by bounding and modeling systems dynamics creates a shared paradigm for further interpretation and facilitating interdisciplinary collaboration.

Public health and design are both concerned with the analysis of social systems (Jones, 2013). Systems thinking offers tools to bridge the disciplines and a shared language through systems mechanics terminology. Applying the tools of systems thinking to the challenges public health and design practitioners work on provides a common way of working across scales and between disciplines. Articulating a shared process for mapping issues aligns disciplinary perspectives while providing a common platform for inquiry. As discussed previously, design's focus on micro human-centered behaviors and public health's focus on macro population trends converge at the community scale. Systems thinking, applied to a population and a place, affords a common set of tools for collaboration and capturing the practices of everyday life.

What emerges from the combination of design, public health and systems thinking is a holistic means for investigating a community and the domains of everyday life nested within its confines. And a shared perspective aligned to prevention and intervention into the practices which shape life domains. A community is where people come together, where social interactions shape culture and develop relationships. Community offers a

sense of belonging and compassion through codependency. The domains of everyday life are a collection of different types of community and a collection of different types of practices which demonstrate our relationality to one another and express our shared interests. Systems thinking is the study of relationships, interconnections and interdependencies, it is used for explaining the configuration of the parts to the whole and webs of relationships. As a mode of inquiry, it is suited to the study of community.

To deal with the large-scale and complex challenges of the 21st century, which we hold in common, requires generating a collective political will through community power, agency through interdisciplinary collaboration and a general understanding of systems theory. As John Donne famously wrote as he was recovering from typhus, “no man is an island,” human beings do not thrive on their own, they need community to overcome adversity. Just as we cannot thrive on our own, we cannot be healthy on our own. Systems thinking is a shared paradigm and a collaborative way for working, it offers a way for interpreting lifestyles, life courses, daily practices and places.

The following section situates the thesis by explaining the trajectory of research and practice that led to this body of work. What is discussed are the practical applications of systems thinking in a collaborative environment while working in a community setting. My motivations for doing this type of research are reviewed as the elements of new ways of working with and in a community begin to emerge through a reflection on practice.

Previous Work - Supplying Fresh Food to the Places that Need it Most

This work began almost a decade ago, in 2011, I was introduced to the community of Hunts Point in the South Bronx through a newly established master’s program at Parsons School of Design where I was exposed to the value of systems thinking. Transdisciplinary Design, “was created for designers interested in imagining alternative futures through design-led research tools and methods for addressing pressing social, economic, political, and environmental issues and challenges of local and global dimensions,” (Messerli, 2019) and takes a highly collaborative approach toward applying design research toward addressing large-scale, complex social challenges. As a cohort, we were tasked with exploring how food shapes and impacts the community of Hunts Point.

Reimagining the Hunts Point food system required a closer look at the networks of health and the totality of how the healthcare system acted and functioned within the community. The rates of obesity, diabetes, and asthma for residents living in the South Bronx's, Hunts Point are alarmingly high and will be discussed in the following section. Looking at the urban ecosystem of health, our team looked broadly across systems of policy, education, behavior, environment and issues of healthcare accessibility. While complex and interrelated, we began to identify factors that might support, mitigate, or inadvertently create barriers to health. Identifying local organizations that were supporting the community's health, we also identified system inefficiencies and mechanisms or 'positive reinforcing feedback loops' that seemed to lock individuals into a tireless cycle of hardship and poor health. Many of these reinforcing factors can be attributed to the prioritizing of industry needs, ineffective policies and hostile infrastructure. One example is the Spofford Juvenile Detention Center, a notorious jail for teens in Hunts Point which housed nearly 300 juvenile offenders right down the street from Public School 48 along Spofford Avenue (McLaughlin, 2019).

After completing my degree and looking to expand on the research, I began working with a team of active residents focused on food justice in Harlem and the South Bronx who were beginning to develop an alternative model of food distribution based around community needs and collective economic participation. The Corbin Hill Food Project focused on building a flexible farm share model which met the needs of the residents they served. Produce was locally grown in upstate New York by small family growers - fresh, seasonal and tailored to the cultural tastes of the communities it was being distributed in. Farm shares were priced to be accessible and the flexible payment structure allowed residents to use Supplemental Nutritional Benefits Program (SNAP) to subscribe to bi-weekly ordering cycles. Additionally, we sought to evolve the traditional community supported agriculture model by extending our offerings beyond the normal 26 weeks of growing in the northeast region by offering a diversity of local, value-added items as well as winter storage crops. This allowed us to serve our shareholders for almost 40 weeks out of the calendar year.

This novel approach to local food economies was shaped through systems theory combined with alternative ways of thinking about everyday practices, how those practices are shaped and how they then go on to reshape places and lifestyles. Working with Corbin Hill for over five years, our efforts challenged mainstream notions of food production and distribution, providing communities with different ways for satisfying their needs regionally. We saw success in connecting underserved residents with resources, through healthy food and nutritional literacy, which allowed our subscription members to develop skills for leading healthier lifestyles. The work we

were developing and the Hunts Point community left an impression on me. As I saw our business model evolve, new questions emerged around food as a form of medicine and community development through regional planning efforts which motivated me to want to continue the work in an academic setting.

Recognizing the role design could play in shaping new practices and developing alternative and regenerative systems that build equity for the people who take part in them, I sought to pursue this research to further investigate how the combination of public health and designing for social innovation could provide a way of working for addressing issues around socio-economic inequality, disproportionate power dynamics and environmental sustainability. Having developed a relationship with the community of Hunts Point and looking to grow the work, I sought to explore new ways of practicing community based design that developed a community's capacity while contributing to shaping sustainable patterns of behavior expressed through everyday practices.

In starting to articulate a practice-based research process, the next section takes a historical and deeper look into the community of Hunts Point. To work with a community you first have to define and know that community, that starts by looking into the past at the social circumstances, significant events and political forces which contributed to the contemporary challenges the community is currently faced with. We begin by looking backward for understanding how we might move forward.

Research Context - The Roots of Resiliency

"At times Hunts Point is the fattest and poorest congressional district in the United States."

Pathways to a Resilient South Bronx

In the 1970's the South Bronx was literally burning. Over the course of 10 years, the community saw a record setting 30,000 buildings set ablaze and abandoned. Through a legacy of disinvestment by federal housing agencies, insurance companies, banks and landlords, the once thriving working class community, a melting pot of mixed race and cultures, later became a case study for institutionalized racism as the demographics of the area shifted with the arrival of Puerto Rican immigrants to the area following World War Two.

The South Bronx was shaped by strategies of marginalization, like selective lending and redlining, which left residents, both old and new, behind as the city of New York was on the brink of declaring bankruptcy and needed to restructure. 'Planned shrinkage' was seen as a way to move the city forward as poorer areas, like Hunts Point, saw the

withdrawal of city services which led to the closure of fire houses, police stations and public schools. Low-skilled industrial jobs, a driver of the New York economy and an attraction for immigrant labor, closed doors and moved to the southern United States thanks, in part, to relaxed union and labor regulations. The jobs left and city services were reduced, the G.I. Bill made homes more affordable, leading to the suburbanization of America and white flight from the area. Robert Moses' top-down planning policies, like the Cross Bronx Expressway, carved up traditional neighborhoods and paved over community resources (McLaughlin, 2019).

The combination of restricted investment, reduced city support and a diminishing economy, created a storm of factors which led to the 'decade of fire'. A period of urban decay, displacement and declining quality of life, resulted in poverty and suffering for the residents that stayed. As the decade ended, the South Bronx saw widespread illegal drug usage, increased crime and the enforcement of the Rockefeller Drug Laws, which the New York Civil Liberties Union referred to as "New York's Jim Crow Laws" and led to mass incarceration with severe prison sentences. Their report "states that 90 percent of the people confined are black or Hispanic" and the passage of the Anti-Drug Act of 1986, "doubled the number of Americans involved in the criminal justice system" (McLaughlin, 2019). Urban decay, drugs, crime and poverty left the South Bronx stigmatized and isolated.

Abandoned and disinvested, residents began to look inward to each other and to the remaining community assets to overcome hardship. Demonstrating a determination through social cohesion, strong social networks formed as residents that stayed fought back to rebuild their community. The concept of "sweat equity" emerged as people took over abandoned buildings investing their own labor into rebuilding apartment units and reclaiming their community (McLaughlin, 2019). Neighbors began to organize, forming grassroots organizations to secure remaining housing stock and lobby the city for funds for improvement. And nonprofits sprang up to provide social services and fill the void planned shrinkage left behind. Looking inward, the South Bronx built social cohesion to solve common problems.

Reinvesting in themselves and in the community, residents began to turn the South Bronx around. The city restructured finances becoming financially stable and wisely taking the position they would let local nonprofits continue to lead the way in the community. City government developed partnerships and provided funding to the community groups and nonprofits that played a role in rehabbing the South Bronx. Today, "a surprising 45 percent of the people who work in the Bronx work for non-profits, including hospitals and other health-related facilities," these groups hire

locally from the community and develop the capacities of local residents for obtaining meaningful careers (McLaughlin, 2019).

Health in the South Bronx

Focusing on health and wellbeing, community health centers played a major role in turning the South Bronx around. The Economic Opportunity Act of 1964, provided funding to establish community health centers in underserved and poor areas, “the Bronx now has thirty-seven primary care sites and a total of 117 sites (including school-based, mental health, and other specialized services).” As a result of this network of care and concern for the community, “nearly half of the Bronx’s low-income residents are patients of a community health center.” The demonstrated impact these community health centers have had is shown in the 7 year increase in life expectancy for residents, from 1988 through 2010, compared to the 4 year national average increase over that time. The high life expectancy of 78.9 years is unusual for a low-income area and highlights the social-ecological network of social services, nonprofits and community health centers local residents are supported by (McLaughlin, 2019).

On average, South Bronx residents have a high life expectancy however it is worth taking into consideration the quality of life. Though Hunts Point life expectancy is 2.3 years shorter than New York City’s overall, 42% of adults and 26% of children are considered obese, as of 2019, they rank number one in the city for heart disease being the top causes of premature death (Hinterland et al., 2018). Bronx county is labeled the least healthy County in New York State (Robert Wood Johnson Foundation). Factors include child poverty, poor air quality, lack of access to healthy food and obesity. An elementary school absenteeism rate of 35% leads to low high school graduation rates and furthers income inequality. Residents may be living longer but overall they’re not in good health (McLaughlin, 2019).

Health is related to wealth, economic stress limits your quality of life and 29% of Hunts Point residents are considered to live in poverty. The major economic force in the community is the Hunts Point Food Distribution Center consisting of produce, meat and fish markets, the food distribution center is one of the largest centers in the world employing roughly 8,500 workers. The low-wage jobs do not provide enough money for rent burdened residents (58%) and ironically, with 4.5 billion pounds of food being trucked through the community, Hunts Point is considered a food desert, an urban area

that has limited access to affordable and nutritious foods. With a ratio of twenty corner store bodegas to one grocery store, available food options are pre-packaged, high in calories and lacking nutritional density (Hinterland et al., 2018). It is easier to make healthy choices when healthy food is easily available, unfortunately that is not the case in Hunts Point.

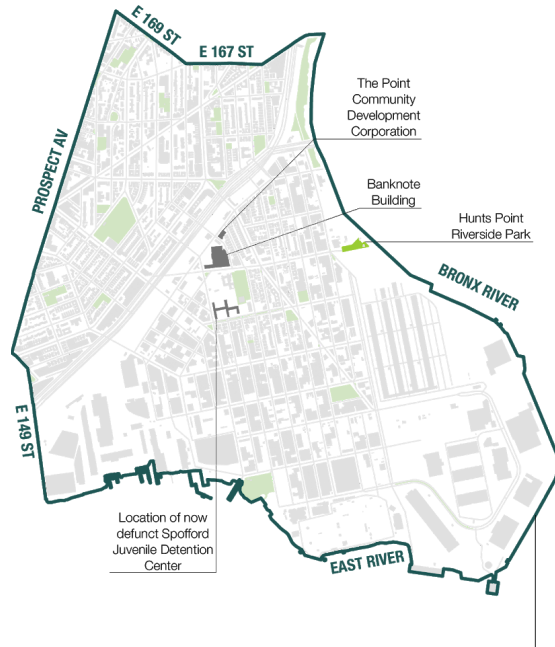
People who are poor are more often exposed to pollution and hazardous environments. The food distribution center and its surrounding ancillary services bring 20,000 trucks into the Hunts Point peninsula daily. The industries produce trash and emit carbon dioxide which is breathed in by residents contributing to extremely high rates of asthma. Additionally, the South Bronx is home to nine waste transfer stations and six thousand tons of trash are hauled into the South Bronx each day, roughly a third of the city's entire daily trash (McLaughlin, 2019).

The environmental and industrial hardships Hunts Point residents face again became a rallying point for community members to organize around. Led by The POINT Community Development Corporation, an environmental justice movement gained momentum, as residents engaged their local community boards, attended public hearings and planning meetings. They rallied around the notion that the Hunts Point waterfront "was for the people of Hunts Point" (McLaughlin, 2019). Working with US Representative Jose Serrano of New York's 15 Congressional District, the group of engaged citizens successfully lobbied for the clean-up and restoration of the Bronx River Watershed and the development of the first new riverside park in the area in over sixty years (McLaughlin, 2019).

Over the past thirty years, residents of Hunts Point and the South Bronx have demonstrated resilience in the face of extreme adversity. Their story of struggle and renewal was best highlighted in 1997 by being awarded the designation of All-American City by the National Civic League. The award demonstrates the power of grassroots community problem solving and their mantra, "don't move, improve." The South Bronx offers a case study in how to turn a place around through the power of community. Through the resiliency of individuals organized to fight for their needs, communities have power. Collective voices working together can affect positive change.

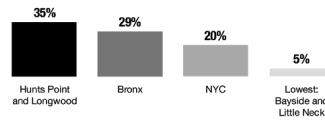
HUNTS POINT AND LONGWOOD

Bronx Community District 2



ELEMENTARY SCHOOL ABSENTEEISM

(percent of public school students in grades K through 5 missing 19 or more school days)



Source: NYC Department of Education, 2016-2017

SUPERMARKET TO BODEGA RATIO

For every one supermarket in Hunts Point and Longwood, there are 20 bodegas.



Source: Farmers Markets: NYC DOHMH Bureau of Chronic Disease Prevention and Tobacco Control, 2017; Supermarket to Bodega Ratio: New York State Department of Agriculture and Markets, October 2016

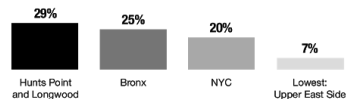
AVERAGE LIFE EXPECTANCY: 78.9 YEARS

Hunts Point and Longwood's average life expectancy is 2.3 years shorter than NYC overall.

Source: NYC DOHMH Bureau of Vital Statistics, 2006-2015

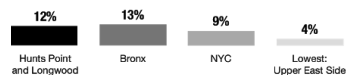
ECONOMIC STRESS POVERTY

(percent of residents)



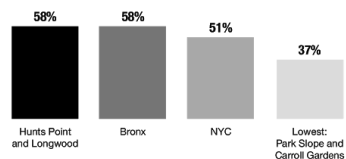
UNEMPLOYMENT

(percent of people ages 16 and older)



RENT BURDEN

(percent of renter-occupied homes)

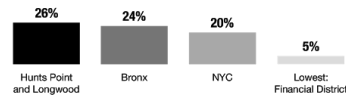


Note: Unemployment data may differ from rates presented in other published sources.

Sources: Poverty: American Community Survey as augmented by NYC Opportunity, 2012-2016 (community district and NYC), 2016 (borough); Unemployment and Rent Burden: U.S. Census Bureau, American Community Survey, 2012-2016; Avertible Deaths: NYC DOHMH, Bureau of Vital Statistics, 2011-2015

CHILDHOOD OBESITY

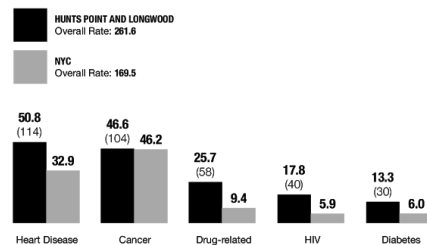
(percent of public school children in grades K through 8)



Source: NYC Department of Education, 2016-2017

TOP CAUSES OF PREMATURE DEATH

rate of death before age 65 per 100,000 people (number of deaths)

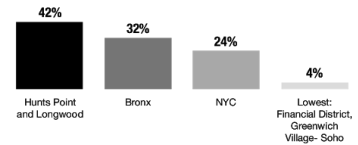


Note: Top causes of premature cancer deaths are based on a small number of events and may fluctuate from year to year. NYC rate includes premature deaths among NYC residents only and will differ from other published sources.

Source: NYC DOHMH, Bureau of Vital Statistics, 2011-2015

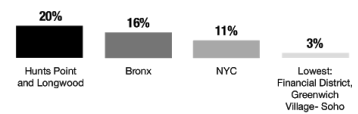
OBESITY

(percent of adults)



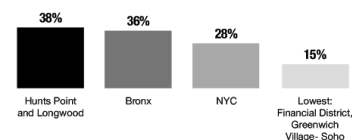
DIABETES

(percent of adults)



HYPERTENSION

(percent of adults)



Source: NYC DOHMH, Community Health Survey, 2015-2016

HUNTS POINT AND LONGWOOD

Bronx Community District 2



District 8 school data taken from taken from schools.nyc.gov

Fast food location data taken from
www1.nyc.gov/site/doh/services/restaurant-grades.page

Supermarket and bodega/grocery store data taken from
data.ny.gov/Economic-Development/Retail-Food-Stores-Map/p2dn-xhaw



Hunts Point zoning, local organizations and food landscape

Research Overview

The previous overview of the South Bronx demonstrates the strength of community for overcoming systemic racism, political neglect and economic adversity. The policies put in place were by design, yet through civic activism and community cohesion, residents were able to redesign their community to meet their needs. Hunts Point and the South Bronx are not perfect places, health outcomes illustrate there is plenty more work to be done, however we can learn from studying their approaches and the approaches of other communities of active citizens who developed methods for successfully overcoming community challenges. There are valuable lessons in how the South Bronx went from a 'decade of fire' to becoming an All-American City - lessons in community organizing, lessons in health and sweat equity and lessons in the power of place and everyday practices.

Hunts Point is a peninsula sticking out into the East River of New York. Geographically, it is contained by the Bruckner Expressway and, as we have seen, has a storied past and a promising future. These factors offer a focus for studying the intersection of public health and designing for social innovation within a confined location. This research seeks to explore how conditions in our everyday environments shape our everyday practices. And how we can redirect those practices toward more equitable and sustainable outcomes. Through focusing on the practices which shape everyday life, I plan to research the role design can play in building community power, promoting health equity and for closing the health gap.

This work seeks to demonstrate that in shaping more equitable health outcomes through the combination of design and public health, practitioners working in collaboration must be driven both bottom-up and top-down in their approaches toward addressing health disparities. Networked efforts must extend from citizens, communities, businesses and organizations toward co-shaping the future locally while developing the collective political will for influencing system-changing policies while recognizing leverage points where collective action can influence change across all levels.

To do this, I will take a place-based design research approach. I have structured this based on reframing Christopher Frayling's articulation of three possible relationships between research and design practice (1993). In my reframing, I concentrate specifically on investigating a *place*:

- research **of** place - in producing a theoretical design framework for redirective practice that could suggest new applications for design.
- research **for** place - in producing a theoretical design framework from which designers can derive practical techniques relevant for their own practice.
- research **by** place - in using the theoretical design framework in design projects to develop redirective design.

The research to be reported here includes all three in some respect. The findings from my practice will provide tactics for doing community centered design, which will enhance the field of design-led research and designing for redirective practice. The intention in producing a model for doing place-based design research and producing a collection of methods for working with and in a community is to understand how to turn a place around and to share my findings with other design practitioners looking to do the same.

An overview to the place-based design research approach:

Research OF Place	Research FOR Place	Research BY Place
What was?	What is?	What could be?
Contextualizing	Specifying	Generalizing
Understanding a population within a specific place	Research to enable and advance a place	Action and reflection through place-based participation
Ecological, economic and cultural history	Identifying local organizations and decision makers	Community based participatory research & action research
Social and political policies	Networking & coalition building	Collaborating and co-designing
Prior research and data collected	Investigating best practices beyond place	Reflection-in-action, reflection-on-action
Inquiry focused on place and local practices	Inquiry to inform or produce material for place	Inquiry achieved through situated practice

Place-Based Design Research - Research Of, For & By Place

My research is located within the fields of design, public health and community organizing and the research is underpinned by theoretical orientations from environmental psychology, social practice theory and learning theory. My main methodology is practice based research and three projects were produced and implemented in the community of Hunts Point. In addition to this thesis, I produced the Equity from Within playbook, a book aimed at community practitioners, developed based on my findings, which serves as a complement to this document. The playbook's collection of methods serves as a synthesis of the research done throughout the course of this thesis.

Research Question

Two key research questions are drawn out from my research overview and sustain the practice based research inquiry throughout:

1. How can everyday community practices be reimaged to support and extend health equity within a place?
2. In the context of place-based health equity, how can ways of designing that don't simply perpetuate the status quo but work toward shifting power dynamics be collected and shared?

Outline of the Thesis

My thesis follows a practice based research structure, in which the designs developed are placed at the core of the research. The aim of this research is to develop a theoretical design framework and the thesis will describe the development of the framework and its application through practical work.

Chapter I: Introduction - I describe the research proposition, my interests and establish my research questions.

Chapter II: Theoretical Framework - Examines current theory and knowledge relevant to redirective design practice. This takes the form of a literature review.

Chapter III: Methodology - Defines my system of methods used within the context of my research and discusses my practice as research.

Chapter IV: Field Work - Having established my research questions, the background to my research and my strategies for design, I explain the designs produced. I reflect on the projects and observations from the field. I present the findings accumulated through the practice in a secondary playbook. I analyze the findings accumulated through the practice and present my theoretical and practical positions arising from research.

Chapter V: Discussion and Conclusion - I summarize the analysis and draw together the wider implications of my research findings.

Appendix: Provides a collection of supporting materials from expert interviews done through the field work component of this dissertation.

Outline of the Chapters

The thesis begins by establishing the area within designing for social innovation and public health which forms the platform for establishing the methodologies selected. I begin by explaining the health gap and the confluence of factors which contribute to health outcomes. I highlight the socio-ecological causes that influence health disparities and make the case for the collaboration of the fields of design and public health for advancing health equity as one way to bridge the health gap for reducing health inequalities. Systems thinking is discussed for offering useful tools, methods and as a means of fostering interdisciplinary collaboration. Design and public health are both concerned with social systems and systems thinking affords a way for interpreting everyday lifestyles and the daily practices which shape them. I then turn the discussion to previous work done by me for situating the inquiry in real world practice based research and express the motivations for continuing the work in an academic setting. Building off previous work done, I offer a historical overview of the community which acts as the location for the field work section of this thesis. After describing the research context, I provide a research overview and offer a structure for doing place-based design research and for the development of a theoretical design framework for reflecting on my practice. Lastly, I frame the research questions that sustain the practice based inquiry.

In the theoretical framework chapter, I develop a design framework for analyzing everyday practices as situated within a place. Redirective practice is discussed for

critical reflection on current design practices and serves as the starting point for construction of my design framework. Economic theory for how human basic needs is discussed as being foundational to the development and sustainment of individuals and communities. A literature review from the fields of environmental psychology and design is presented for connecting human action to natural and artificial environments. Social practice theory is discussed in relation to redirecive design practice for interpreting the political nature of everyday practices. The domains of everyday life are offered for holistically redirecting lifestyles as demonstrated through ideas of cosmopolitan localism. Communities of practice are situated at the end of the design framework and the learning theory is used to explain the structuring of practices and the communities that emerge from this activity. The end of the chapter presents my theoretical design framework, or spectrum of redirection, for redesigning everyday practices and their structural and cultural conditions.

In the methodology chapter, I outline my practice based research approach and the underlying methods for design research. I begin by describing different approaches to research that exist at the intersection of design and public health. After reflecting on various approaches for collaborating with the community at this intersection, a review of methods from public health is offered for interpreting local context through the structural and social determinants which shape health outcomes. I then discuss the ontological role of design and it's potential for collective behavior change. From there, I highlight the methods used to advance my inquiry and their significance for informing my practice and how the design framework is used for analyzing and evaluating place-based everyday practices.

In the fieldwork chapter, I apply the theoretical design framework in practice through the methods of co-design, expert interviews and documentation. Taking a place-based design research approach, I orient this research by reviewing the funding structure of the three year grant I worked on and the scope and aims of the project brief. This chapter reports on three projects which emerged from the co-design process and I use the design framework for situating the projects along the spectrum of redirection. The projects, and the collaborative environment which they emerged from, illustrate the design framework through co-designed artifacts produced out of a place-based design research practice. The different designed artifacts are reflected upon in terms of their relevance to the design framework. The chapter concludes with a synthesization of takeaways from projects produced and expert interviews conducted in the form of a complementary playbook document.

In discussion and conclusion, I summarize the theoretical design framework, discussing the scope of research reviewed for scaffolding the framework while also reflecting on implications for different audiences. The place-based design research approach to practice is reflected upon as a means for structuring inquiry. And the connection of the design framework to the place-based research approach is reviewed. The playbook is then presented as outlined by the novel approach to inquiry developed in this thesis and chapters from the book are characterized through the place-based design research process. I then connect the design framework, research process and playbook to one another for grounding theory in practice. And offers research findings originating from my research. Conclusions from the thesis reflect on the main elements of this work and contributions arising from my PhD are presented. I end with possibilities for future research.

The appendices provide a collection of supporting materials and primary evidence collected throughout the duration of this inquiry.

Chapter II: Theoretical Framework

Developing a Design Framework for Place-Based Redirective Practice

Introduction

This chapter develops a theoretical framework for interpreting everyday practices as the byproduct of social-material conditions which then reproduce similar conditions. First I examine needs satisfaction as a way of approaching public health; then I introduce a distinction between strategies and tactics as ways of making change. Next I investigate environmental affordances as a way of scripting human behavior through design; then I introduce social practice theory as a way to examine the political structuring of practices. I then present life domains as a way to study how patterns of practices reproduce conditions they emerge from. Finally, I introduce communities of practice as a model for interrogating redirective practice. These concepts are introduced to develop a design framework for analyzing the constitution of everyday practices by reducing them to their social, material and political elements. Following on this, I conclude discussing the framework and the concept of communities of redirective practice.

Public Health is about Satisfying Neighborhood Needs

Human needs are basic, essential and universal. Biologically we are all the same system requiring the same inputs (food, water and protection) which lead to similar outputs. Reducing our needs to their essence is a useful way to begin thinking about what we share, our common and basic human needs, for beginning to analyze how needs are met and how they contribute to shaping health outcomes. A systems thinking approach for representing the myriad ways human needs are satisfied provides a starting point for interpreting public health's relationship to place.

While our needs may all be the same, how we satisfy those needs are multiple and varied. Chilean developmental economist, Manfred Max-Neef's Human Scale Development "calls for a restructuring of the way we pursue knowledge in order to create critical awareness throughout society" (MaxNeef et al., 1991), to develop a reflexivity for how we negotiate our basic needs, brings attention to the human scale of society for interpreting inequity. Through Max-Neef's framing of needs, "the number of design targets can be reduced to a manageable handful from an essentially endless set of needs" (Ehrenfeld, 2008) offering those concerned with the intersection of design and public health to sharpen their focus to how, when, where and why those needs are fulfilled for a better understanding of how an individual's contextual conditions shape health outcomes.

Satisfiers, Max-Neef says, are the ways we meet our needs and they vary "according to social, cultural and ecological context" (Kossoff, 2011). Satisfiers are designed for meeting our needs, highlighting their satisfaction opens up a discussion around the variety of factors which contribute to the needs satisfaction. Public health is concerned with the health of a population across different scales, ranging from local neighborhoods and communities to states and geographic regions, and analyzes how populations promote health through collectively organized efforts. Just as public health looks at the scales of health promotion, Max-Neef looked at similar concerns, through an economic lens, observing how groups of people meet their needs for extending their livelihood and shaping local culture through their everyday practices.

Max-Neef, building off his theory of needs and satisfiers, developed language around two types of means for satisfying basic human needs, "exogenous" and "endogenous" satisfiers (MaxNeef et al., 1991). The approaches to needs satisfaction address both existential needs and human values as situated along a spectrum of needs fulfillment, based on agency and provenance, through performative enactment. The nine articulated needs, material and immaterial, structure this matrix, as satisfiers emerge at the intersection of the material (horizontal axis) and immaterial (vertical axis) needs (see the end of this section).

Endogenous satisfiers are those embedded within and controlled by local communities (Kossoff, 2011), 'bottom-up' and 'anti-authoritarian', they originate from a position of self-management and local stewardship. Max-Neef deemed these types of practices as synergistic in that they combine fulfillment of many needs at the same time. Take growing your own food as an example, this practice fulfills the fundamental need of subsistence while also contributing to the needs of creation, having and interacting. The endogenous satisfaction of needs allows a community to manage their needs

based on their local context. This type of needs fulfillment was at the community scale and contributed to weaving the social fabric of a place-based group of people.

On the other hand, exogenous satisfiers are those which are imposed or institutionalized. They typically fail to comply with other types of needs fulfillment, existing to isolate, inhibit or 'pseudo-satisfy.' These types of satisfiers can be construed as coercive or short-term in their fulfillment. Taking food again as an example, if the food consumed regularly were to be imported into a community, the need of subsistence would have been met singularly. Skills around planting and growing will be forgotten or never learned. Imported food might also inhibit the satisfaction of complementary needs such as having the ability to grow your own sustenance and the freedom of self-reliance. Because the nutritional density of the food is unknown or unclear and most likely was sold to us through advertising, this raises issues around coercion, deskilling and authenticity.

Needs and their fulfillment are foundational to individual and public health. What Max-Neef's theory of needs and satisfiers brings to light is how our everyday actions are political in nature, and how, through their enactment, they contribute to different types of community and different types of power relationships. On one hand, needs met locally respond to demonstrated community wants. A culture of endogenous need fulfillment strengthens community bonds, enables collective-determination, encourages local stewardship and place-based equity. On the other hand, when needs satisfaction is imported or imposed onto a community, the group loses their ability and capabilities to control such activity. Needs satisfaction then becomes top-down and imposed. This manner of exogenous needs fulfillment encourages people to look beyond their own capacities, and those of their neighbors, to satisfy needs not tailored to the culture they originated from. The exogenous approach abdicates control, weakens social bonds and strips a place of controlling how their needs are satisfied or even for developing the capacity to build equity as value is extracted beyond the community.

The health of a population is based upon their ability to make informed choices, through organized efforts, across the different domains of life. How these choices are navigated, how those needs are satisfied and by whom, shapes the culture of a locality as the satisfaction of needs are culturally determined. How needs are satisfied shapes a community's health and cohesiveness. A deeper understanding of the ways in which needs are not being satisfied locally, enables designers of social innovation and public health practitioners to develop more specific interventions for building community capacity and enabling more localized self-reliance (MaxNeef et al., 1991).

Narrowing our focus to the finite number of needs humans hold in common, based on Max-Neef's work, lays the foundation for a framework for interpreting the myriad of ways humans have historically evolved for culturally satisfying them, constructing entire societies shaped around those decisions. By articulating a distinction between bottom-up, endogenous satisfiers and top-down, exogenous satisfiers, Max-Neef's taxonomy begins to reveal the power dynamics inherent in the expression of everyday practices and their relationship to community identity. As a model for explaining power dynamics and cultural transformation, Max-Neef's needs and satisfiers, highlight the 'consequence of dropping traditional satisfiers for the purpose of adopting new or different ones' (Holden et al., 2017). Adopting new collective practices, and the political trade-offs of those adoptions, is compelling for shifting power dynamics through behavior change at the community scale.

Max-Neef's developmental economic theory starts to explain how the cultural conditions of a community are structured through the politics of everyday practices. In the next section, I discuss distinctions between strategies and tactics, exposing the hidden power tensions of places.

Needs according to existential categories Needs according to axiological categories	Being	Having	Doing	Interacting
Subsistence	1/ Physical health, mental health, equilibrium, sense of humour, adaptability	2/ Food, shelter, work	3/ Feed, procreate, rest, work	4/ Living environment, social setting
Protection	5/ Care, adaptability, autonomy, equilibrium, solidarity	6/ Insurance systems, savings, social security, health systems, rights, family, work	7/ Cooperate, prevent, plan, take care of, cure, help	8/ Living space, social environment, dwelling
Affection	9/ Self-esteem, solidarity, respect, tolerance, generosity, receptiveness, passion, determination, sensuality, sense of humour	10/ Friendships, family, partnerships, relationships with nature	11/ Make love, caress, express emotions, share, take care of, cultivate, appreciate	12/ Privacy, intimacy, home, spaces of togetherness
Understanding	13/ Critical conscience, receptiveness, curiosity, astonishment, discipline, intuition, rationality	14/ Literature, teachers, method, educational policies, communication policies	15/ Investigate, study, experiment, educate, analyse, meditate	16/ Settings of formative interaction, schools, universities, academies, groups, communities, family
Participation	17/ Adaptability, receptiveness, solidarity, willingness, determination, respect, passion, sense of humour	18/ Rights, responsibilities, duties, privileges, work	19/ Become affiliated, cooperate, propose, share, dissent, obey, interact, agree on, express opinions	20/ Settings of participative interaction, parties, associations, churches, communities, neighbourhoods, family
Idleness	21/ Curiosity, receptiveness, imagination, recklessness, sense of humour, tranquility, sensuality	22/ Games, spectacles, clubs, parties, peace of mind	23/ Day-dream, brood, dream, recall old times, give way to fantasies, remember, relax, have fun, play	24/ Privacy, intimacy, spaces of closeness, free time, surroundings, landscapes
Creation	25/ Passion, determination, intuition, imagination, boldness, rationality, autonomy, inventiveness, curiosity	26/ Abilities, skills, method, work	27/ Work, invent, build, design, compose, interpret	28/ Productive and feedback settings, workshops, cultural groups, audiences, spaces for expression, temporal freedom
Identity	29/ Sense of belonging, consistency, differentiation, self-esteem, assertiveness	30/ Symbols, language, religion, habits, customs, reference groups, sexuality, values, norms, historical memory, work	31/ Commit oneself, integrate oneself, confront, decide on, get to know oneself, recognize oneself, actualize oneself, grow	32/ Social rhythms, everyday settings, settings which one belongs to, maturation stages
Freedom	33/ Autonomy, self-esteem, determination, passion, assertiveness, open-mindedness, boldness, rebelliousness, tolerance	34/ Equal rights	35/ Dissent, choose, be different from, run risks, develop awareness, commit oneself, disobey	36/ Temporal/spatial plasticity

Manfred Max-Neef's - Needs and Satisfiers (from Human Scale Development)

Tactics, Strategies and Power Dynamics

“Power reminds, but everyday practices undermine” - Jamer Hunt

An active dialog takes place between the strategies of authority that articulate a place and the tactical responses of the people living there. Everyday practices negotiate this tension and emerge from this dialog.

Strategies and tactics shape context. They provide social structure to the interrelated conditions through which action occurs. “Strategies are the techniques of the empowered” (Hunt, 2003); they are top-down processes from established powers that seek to reinforce their hierarchical position. Tactics, on the other hand, are “clever tricks of the ‘weak’ within the order established by the ‘strong’” (de Certeau, 1984) and emerge out of the friction existing within response to the strategies of the status quo. Strategies constrain possibilities, while tactics afford them. Both strategies and tactics, co-define the temporal-spatial dynamics of a place, imbuing it with a perception of top-down authority and bottom-up response.

Strategies seek to script places in order to maintain authority and remind subjects of their presence. Language and behavior are produced to reinforce top-down pressure, demonstrate ownership, and maintain hierarchy, or the status quo. They are the result of “force-relationships,” which contribute to maintaining the foundations of power. Strategies come about “when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an ‘environment’” (Hunt, 2003). Isolation is a strategy of subjugation that divides and promotes marginalization. They are the efforts of the imposing order to weaken potential threats to authority; assert their will over the isolated, disassociated entities; and assume ownership over the resources and spaces enclosed through these acts.

Tactics seek to subvert the script of a place. Tactics “take advantage of ‘opportunities’ and depend on them” (de Certeau, 1984). They are bottom-up responses to the language and behavior of an authority or place. Tactics are the “art of the weak” (de Certeau, 1984), relying on chance moments and encounters toward “putting one over on the adversary on his own turf,” and are evidenced “only through the objects that they move about and erode” (de Certeau, 1984). Implicit in the response of everyday push back against authority is the desire to express personal agency, to assert independence in opposition to the law that typically constrains behavior. Expressive acts of freedom,

“must play on and with a terrain imposed on it and organized by the law of a foreign power” (de Certeau, 1984).

Traditionally, design seeks to materialize a governmental or corporate strategy “imposing places, objects, visual messages, and ideas into our lives” (Hunt, 2003). While tactics are a user’s everyday response, it is the user’s desire to “adopt those objects, translate those ideas, and inhabit those spaces in an unpredictable, improvisatory way” (Hunt, 2003). It is the subjugated who “rewrite the script” (Hunt, 2003) through clever tricks within the established order, who second-guess the authority of an imposing order. Strategies and tactics “can be distinguished according to whether they bet on place or on time” (de Certeau, 1984). Strategies seek to maintain authority through constraining behavior, whereas tactics afford self-expressive behavior, asserting “play that it introduces into the foundations of power” (de Certeau, 1984). Designing for social innovation should consider the strategies of those imposing authority and the tactics of those responding to it.

The practices of everyday life are tactical responses to the structures of the status quo. Improvisational by design, they rewrite the script by offering alternative narratives. How can we begin to identify these narrative elements, the positive deviants to the status quo, to begin shaping new stories? Responses which challenge the unsustainable assumptions of society and offer alternative ways for being-in-the-world.

Subverting Affordances

“Affordances do not cause behavior but constrain or control it” - J.J.Gibson

In the previous section, it was my intention to extend Max-Neef’s economic theory from the cultural conditions embedded in our everyday practices to the structural conditions they respond to. The design of physical environments, social, economic and political policies, script behaviors that partially determine health outcomes. But a script is only a story for a performance, learning to read the script empowers a response.

Scripting has the ability to “prescribe its users how to act when they use it; a script is a material structure that, by its specific layout, exerts a force on the actions of its users. That is, the script of an artifact invites certain user behavior while counteracting other behavior” (Latour 1992, Akrich 1987). Just as scripts can invite certain kinds of behavior than can exclude others. Affordances offer a way for peeling back the layers of perception and action.

An affordance is “the possibility of an action on an artifact or environment” (Gibson, 1991). The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill” (Gibson, 1991). Situating the concept in relation to an individual's ability to perceive opportunity for action, based on their mechanical abilities, intent, and interpretation of the environmental affordances, calls for examining practices within the context they are produced.

The word niche comes from Old French and means nest. A niche can be considered as “a set of affordances,” expanding on that understanding, “a species of animal is said to utilize or occupy a certain niche in the environment...a niche refers more to how an animal lives than to where it lives” (Gibson, 1991). Environmental niche, as a composition of “sequential” and “nested” affordances, explains dynamic behavior emerging through interaction with the physical and natural elements around it. Sequential affordances are action on a perceptible affordance leading to information indicating a new affordance and nested affordance as one affordance serving as context for another one (Gaver, 1991).

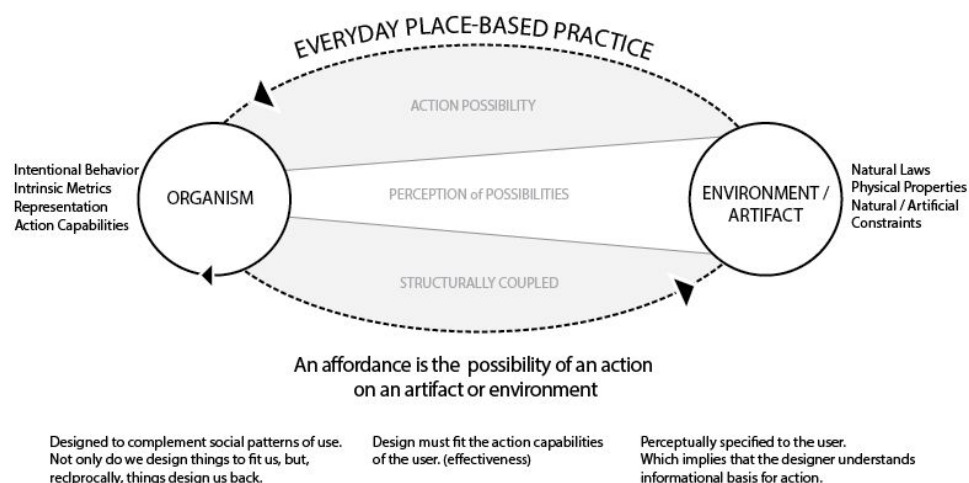
The verbal and physical affordances of the designed world sequence conditions throughout our environmental niche for informing how we should live. They afford certain behaviors while constraining others. Affordances are both subjective and objective, they cut across the Cartesian subject-object line, “they are objective in their existence” and do “not depend on value, meaning, or interpretation. Yet they are subjective in that an actor is needed as a frame of reference” (Gibson, 1982). Affordances are “neither an objective property nor a subjective property; or it is both if you like” (Gibson, 2015). This “introduces the idea of the actor-environment mutuality; the actor and the environment make an inseparable pair” (McGrenere and Ho, 2000). In regards to the intersection of design and public health, this hybrid relationship, through our interaction with objects contextually situated within the environment is a mix of social, material and natural elements blended in everyday practices (Latour, 1992).

A brief conversation around affordances is useful for thinking through two fundamental aspects of effective design interventions in an environment: usefulness and usability. Usefulness, as it relates to design, is the possibility for action while interacting with the design, the ability of the artifact and environment to meet the intention or goals of the user. Usability, as it relates to design, is the perceptual information communicated to the user through the artifact positioned within an environment, scripted to provide feedback through the combination of mapping use, to context, for desired change of state.

Scripting, communicates both the usefulness and usability of designed artifacts through physical and visual cues.

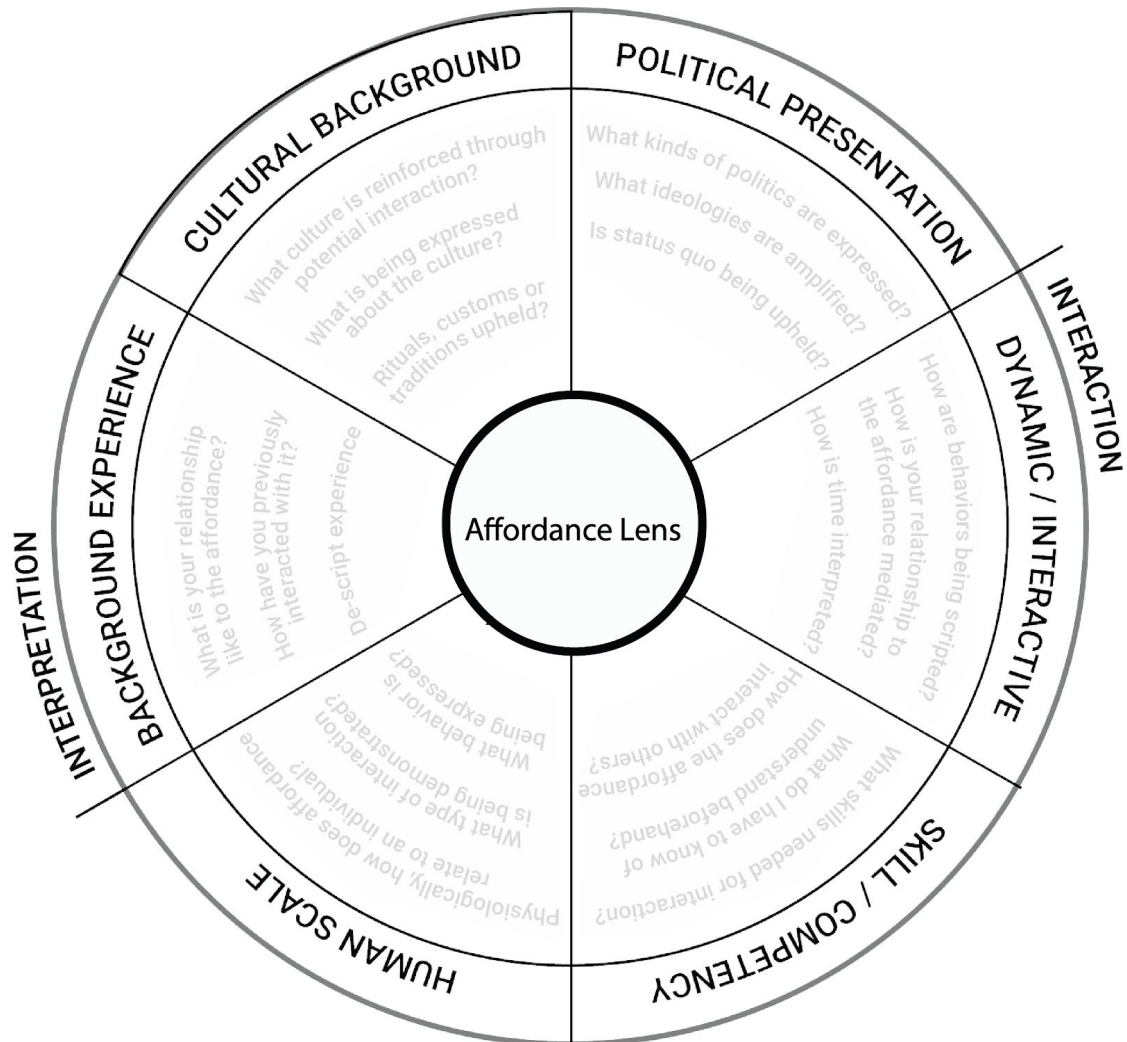
There are many layers to perceiving, understanding, and acting upon affordances. Culture rises out of our interpretation of and interaction with them. Culture both shapes and is shaped by our ability to perceive and react to sets of affordances as situated within an environmental niche toward a desired state or goal. It is through our relationship and interaction with affordances where culture is shaped. “Culture systems may, on the one hand, be considered as products of action, on the other as conditioning elements of further action” (Kroeber & Kluckhohn, 1963). Illustrating the dynamic and compounded relationships of actor and affordance, intention and environment, suggests the development of cultural norms rising out of repeated and embodied interaction with sets of affordances and suggests cultural norms emerge out of the “conditioning elements of further action.”

Scripts in our environment are culturally constructed, and can take many forms, an affordance literacy pushes perception beyond the limits of the cultural systems that shaped it, offering new action possibilities for creating new meanings. We can subvert the structures of poor health by developing new cultural norms and attuning to new ways of perceiving the world. Perception precedes performance. For public health practitioners motivated by shaping a culture around health within a community, scripts offer the potential to tell new stories, through material and messaging, shaping new action possibilities and new everyday practices.



Affordance diagram to illustrate the relationship of organism to environment

Affordance Lens



New ways of seeing the world afford new ways of acting in it. The Affordance Lens was developed over the course of three years (2016-2019) with design students ranging from freshman to masters level at Carnegie Mellon University. The layering of multiple lenses for interpreting and analyzing affordances creates a more detailed understanding for how organisms, affordances, and environments constitute one another. The Affordance Lens was created in response to calls for “a dynamic, agent-centered, cultural-, experience- and skill-relative, but perception independent, ontology” (Bonderup Dohn, 2009).

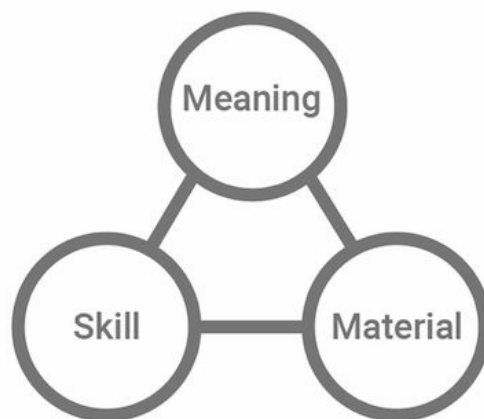
The Political Patterns of Everyday Practices

"Culture grows in the body, giving rise to a particular responsiveness to certain affordances in the environment" – Tim Ingold

The affordance section highlighted how environments can be manipulated to encourage new ways of responding to physical landscapes for seeding a culture of health. This section seeks to explain how new behaviors, over time, can shape new practices. And how new practices can express alternative politics to the status quo.

Practices are the nexus of material and immaterial flows, the site of production and consumption, practices establish and reaffirm our being-in-the-world (Warde, 2005).

A practice is defined as being constituted by a number of different elements, including material infrastructures (e.g. buildings, parks, technologies), common cultural understandings about how and why to do things, and practical knowledge (both tacit and explicit) and skills (Reckwitz 2002; Strengers & Maller 2011).



Social Practice Theory triad of skill, meaning and material

Practices, as a unit of study describe how the world is made and remade. Design study scholar Tony Fry argues that, “practices are the basic ontological units for analysis” (Fry, 2009). The ontological nature of practices situates our bodies as the carriers of them. “Individuals are determining as well as determined, the producers as well as the products of history” (Pred, 1981). As the culmination of the lifestyle choices we make, practices are expressions of health and have implications for health outcomes. Practice “incorporates the past and the future into the experience of the present” (Wenger, 1999). Practices have a profound role in the reproduction of society as an ontological unit of world making. We are constituted by our practices; our actions in the world shape us, our identity and our agency. As practices go on to (re)produce themselves they are (re)producing society. The “social order, structures, and institutions come into being through practices” (Røpke, 2009). As a point of intervention, everyday practices offer the potential for bringing new ways for being-in-the-world.

Humans cannot create society; we can only recreate it “for it always pre-exists them” (Bhaskar, 1979). Social structure is an “ensemble of ['space-time' variant] structures, [everyday material] practices and conventions that individuals reproduce or transform, but would not exist unless they did so” (Bhaskar, 1979). The pre-existent nature of society points to ideas found in the social and structural determinants of health and the history of place for shaping contemporary practices and contributing to health outcomes. From this understanding we can begin to imagine the transformative leverage points everyday practices offer for shaping healthier and more sustainable futures.

Practices “as the application of knowledge and skill to realize some kind of end” (Fry, 2009) express a politics through their enactment. For it is “at the scale of actual human practices that a society is reproduced and that its individuals are socialized” (Thrift, 1981). Socialization is the reproduction of the society through practices as the instantiations of the social system, recreating or disturbing the status quo. “Practices do not float free of technological, institutional and infrastructural contexts” (Randles & Warde, 2006) they are always situated within the political structures of these institutions.

The structure of practices offer opportunities for shifting health outcomes, the practices which reinforce this structure can be redirected for behavior change to take root. As Fry argues, it is “not about 'saving the planet' but rather, initiating those ontological changes that establish the self as a change agent” (Fry, 2009). A change agent has the ability, perspective and agency for enacting change through everyday practices, reconstituting self and society, toward more equitable health outcomes. Social structuration and the

idea that “design designs” (Fry, 2014) then becomes a form of world creation in giving shape to new social norms and empowering individuals as change agents within their own communities.

Redirecting the Trajectory of a Practice

If practices have a trajectory then they can be redirected. Redirective practice is a critique of contemporary design, positioned “post the disciplinary divisions of design knowledge.” Redirective practice challenges designers to reflect upon the agency of design and its capacity for shaping society. Highlighting the political nature of design, “that it always serves a particular ideological master (be it serving the political economy that underpins the status quo)” and its role in materializing everyday practices, redirective practice doesn’t call for “total rupture from the status quo” rather, it challenges designers to reflect on “how a practice is being determined” by analyzing the structures which structure contemporary design practice (Fry, 2009).

We can advance redirective practice by taking a “prefigurative, rather than reactive, position to the political” (Fry, 2009). Designers demonstrate agency through professional practice and the artifacts they put into the world, extending agency to the users of these artifacts. Designed artifacts shape the capacity for individuals to act in the world. Artifacts have a capacity for “steering” (Shove et al., 2012) agency and shaping lifestyles. In a sense “design, designs” (Willis, 2006) having ontological implications through the practices it enables.

An awareness of the ontological nature of design is a move towards redirective practice. In attempting to redesign design, “the agency and agent of design” need to transform. A shift in the mindset of practice “constitutes itself as a politics of designing” and places the “agency of design centrally within the political.” Expressing a politics through design practice calls for “modifying, remaking or reframing” of one’s own practice. Because design shapes everyday practices, it is going to need a diversity of methods for advancing redirective practice and “the structural and cultural condition that designs our mode of being-in-the-world” (Fry, 2009).

One specific method suggested for applying redirective practice to design is ‘recoding.’ ‘Recoding’ “centers on the transformation of the sign value of objects, images, structures, spaces, services and organizations” by altering the values inscribed into the

symbols design practitioners are acting from a posture of redirection. Which has great potential for the field of graphic and industrial design as both deal with symbolic form, either explicitly through type or implicitly, through designed artifacts. An important step in reimagining a practice, but if redirective design which “aims to redirect ‘our’ mode of acting in and on the world in which we find ourselves” is going to have a larger influence on design, an expansion of methods and definition for design addressing the “redirection of all those practices that act to maintain the unsustainable qualities and trajectory of the status quo.” (Fry, 2009)

Redirective practice offers a vision for reimagining disciplines, especially design, and is concerned with upstream practices related to production. What does it look like to focus attention on downstream modes of redirective practice related to consumption? Applying redirective practice to our everyday practices produce our “mode of being-in-the-world” (Fry, 2009) The situated nature of everyday practices and relational aspects of consumption offer opportunity for extending redirective practice beyond disciplinary boundaries.

Artifacts are the nouns, the material things which facilitate the verbs or everyday activities which facilitate and sustain community. Focusing design intent on practices allows for “shifting the focus from products to practices: not cars, but commuting; not microwaves, but cooking; not beds, but sleeping; not showerheads, but bathing” (Leber, 2014), while highlighting practices and not just design or designed artifacts as points of intervention for redirection. Practices relate directly to sustainability, both personally and environmentally because “it is through such practices, day after day — bathing, eating, driving, dressing, shopping and so forth — that people sustain themselves, but also contribute towards environmental degradation” (Edemekong et al., 2019).

Redirective design takes a prefigurative position to the politics of design discipline. Just as public health works toward addressing upstream ‘causes of the causes’, redirective design practice works toward redesigning the cultural and structural conditions that design our mode of existence. Looking ahead, the next section takes a holistic look at practices through life domains. The domains of everyday life apply systems thinking and scalar shifts to examine how entire lifestyles might be redirected.

The Domains of Everyday Life

The domains of everyday life are about the “coexistence in the context of the present” (Kossoff, 2011) and are a means of bounding practices within a specific environment for deeper examination. And recognizing practices their interconnected and nested nature. Everyday practices relate individuals to other individuals, individuals to artifacts and to natural and built environments, they are the enactment of designed artifacts and take place both horizontally and vertically for structuring everyday life. As discussed earlier, needs can be satisfied endogenously or exogenously, as a way for interpreting the power dynamics inherent in everyday practices.

The domains of everyday life are a framework for understanding how emergent practices serve as an organizing structure for shaping communities, “as communities strove to satisfy their needs in place-specific ways at different levels of scale” (Kossoff, 2011). These scalar shifts are what the domains of everyday life enact for bounding practices while framing them within a context of use. The domains ripple upward from the household, to the neighborhood and on to the city and larger bio-region of an environment. Each scalar shift level contains, within its own bounding, a community of practice which will be discussed at length later on.



The Domains of Everyday Life - Nested levels of community as webs of relationship

The domains of everyday life offer a framework for extending public health, specifically the social determinants of health as they frame activities within a life domain, demonstrate how needs are met within place and the political expression of their fulfillment. The domains are useful for describing issues concerning health inequity as

they situate themselves within the notion of social structuration, or the interplay of human agency and social systems for structuring society (Giddens, 1981). Structural properties of social systems as “being both the medium as well as the outcome of recursively organized social practices” (Kossoff, 2011) and the domains of everyday life, through the lens of public health, allow for a more informed understanding of the recursive nature of social practices for structuring communities of practice.

The domains of everyday life expand upon practice theory. They describe the nested and emergent properties inherent in the enactment of practices (Kossoff, 2011) while pointing to their interconnected and interdependent nature. Social practice theory articulated the triad of elements (material, skill & culture) for describing practices, the domains situate practices across scales and power dimensions. The domains “have a distinct human scale dimension” (Kossoff, 2011) when combined with endogenous needs satisfaction, they offer a rationale for how “the individual may empower the social.” (Kossoff, 2011). The domains represent the supra-individual nature of everyday practices.

The edge conditions of practices and the foundational aspects of Max-Neef needs and satisfiers are what the domains contribute to social practice theory, the bounding of practices allow for designers and public health researchers to study practices as situated within a use context and environment of enactment. The domains express the boundaries of practices as “the shift between different ways of satisfying needs within them” involving different communities which give “rise to different and distinct forms of everyday life at each of its levels of scale” (Kossoff, 2011).

While practice theory situated within the domains of everyday life does much toward understanding the relationship between behaviors and health outcomes, both theories could benefit from a more integrated understanding of affordance theory. As discussed previously, affordance theory “studies the relations between abilities to perceive and act and environmental features” (Kaaronen, 2017) offering a bridge between cognition and action. Affordances are a heuristic which seeks to articulate the attitude-action gap between an organism and an environment. Affordances “emphasizes the dynamical and systemic coupled relations between animals and their physical environment” (Gibson, 2014) for explaining how practices lead to health outcomes.

Thanks, in part, to their systemic nature, affordances are helpful for expanding the scalar nature of the domains and the adaptability of humans to different contexts as they are “applicable to whatever system we are interested in observing” (Kaaronen, 2017). Environmental affordances serve as the means for satisfying human needs

bridging across the scales established through the domains of everyday life. Affordances offer a versatile tool for studying designed artifacts, practices and relationships through the domains of household, neighborhood, city and region as they are concerned with the fit of the individual to their expanding ecological niche.

An ecological niche is a network of interrelated affordances available in a particular form of life on the basis of the abilities manifested in its practices – its stable ways of doing things. Individual affordance is an aspect of such a niche” (Rietveld & Kiverstein, 2014). A fundamental understanding of human action possibilities in a niche unties practice theory and the domains. Combined with Giddens’ theory of structuration we continue to develop a theoretical design framework for describing health outcomes as co-determined by the affordances of an individual's environment, enacted through the social practice theory triad, nested and scaled through the domains of everyday life as shaped through human agency, the physical environment they’re situated within, and the social structures which order human behavior.

This section focused on expanding social practice theory by scaling situated practices across the domains of everyday life for recognizing patterns in their reproduction. The domains of everyday examine how practices, across scales, shape different types of community. Continuing to develop the design framework, communities of practice are presented in the next section to examine the communities of practitioners that structure everyday practices and how we might reconceive them through redirective practice.

Communities of Practice

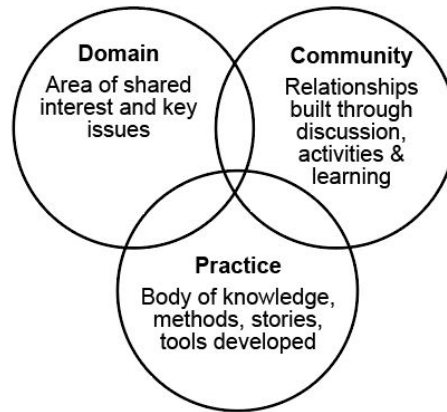
As previously noted, practices do not take place in isolation, they are relational and complemented by other practices, “for instance, when some practices can be considered sub-practices in relation to a more general heading: washing the car can be considered an element of car driving” (Røpke, 2009) the nested and connected nature of practices support and sustain one another. It is through their relationally that patterns emerge. These patterns are what structure daily activities and ultimately shape identity for an individual and a collective as ‘both social order and individuality result from practices’ (Schatzki, 1991).

Public health is concerned with place and the practices which emerge from the enactment of place. Their enactment over time shapes our health as does our social relationships to one another. Health is a byproduct of the relationship we have toward ourselves, our community and our physical environment. The interconnected and

interdependent nature of practices are an ideal place for public health practitioners to focus as “practices do not exist in isolation from each other, but are inextricably linked so that networks of practices can be identified at the level of ‘lifestyles’” (Spaargaren, Martens, & Beckers, 2006).

Practices overtime and their reproduction “generate patterns of social relations, characterized as social systems” (Røpke, 2009) and are representations of the entanglements of objects, meanings, actors and the networks which facilitate activity. These performances unfold over place and time and through repetition become entangled with other actors in the formation of systems or communities of practices. The resulting social systems “are thus relations between actors, organized as repeated social practices and reproduced and transformed by the actors” (Giddens, 1981). Social systems form out of repeated interactions and strengthen with time. Relationships form and are expressed through these encounters. The developing patterns of practices and their social assemblages can be described as ‘communities of practice,’ “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.” (Wenger, 1999)

The formation of a community of practice unfolds over time and through shared concern expressed through the development of “a body of common knowledge, practices and approaches” resulting in a collective identity. Just as practices consist of a structure and an agency, these established ways of interacting lead to a structuring for the community of participants taking place in shared practice. The structure of a community of practice (CoP) consists of “a unique combination of three fundamental elements: a domain of knowledge, which defines a set of issues; a community of people who care about this domain; and the shared practice that they are developing to be effective in their domain” (Wenger, 1999).



Community of Practice framework - Domain, Community and Practice

Originating from organizational learning theory, the scope of CoP can be expanded beyond the business sector to analyze communities of practice which form for a variety of reasons as practices can be shared around many topics and personal motivations. A key insight from the concept is that it “defines itself in the doing” (Wenger, 1999), and in that doing, members of a community share common concerns and recognize a shared and collective interest in addressing those concerns.

A critique of communities of practice is their apolitical framing. Communities of practice are what Ray Oldenburg calls “neutral places,” sites that while not explicitly political in their space of congregation, may allow for a politics to be expressed. Because of the nature of work that communities of practice emerged from, business relationships transcending organizational boundaries, they are seen merely as a space of learning about one’s own practice and do not venture in the realm of political expression through performance. Participation in communities of practice may be understood as the “complex process that combines doing, talking, thinking, feeling, and belonging” but not acting politically or sustainably in the involvement of our whole person “including our bodies, minds, emotions, and social relations” (Wenger, 1999).

Communities of practice share a consensual domain that is mutually concerned and beyond the thinking and abilities of an individual. The shared problems are larger in nature and require multiple perspectives and a collective effort for addressing. A community of practice is bigger than the individual, “the interaction among groups is intended to create consensual domains and to generate commitments generated in such domains” (Wenger, 1999). This collective commitment is foundational for a community as community “is “about” something; it is not just a set of relationships.” (Wenger, 1999).

Designing for CoP

Connecting CoP's back to design and the creation of sustainable everyday practices, we can describe designing for communities of practice as “enabling a form of social innovation to occur, where communities of practitioners challenge existing norms to create new ways of living and doing” (Scott, 2011).

The co-design process “can be seen as the scaffolding for the temporary community of practice in the making” (Robertson & Simonsen, 2013) as the tools and methods used are meant to address shared issues around a domain that involves the community of practitioners most concerned with that specific domain or issue. Understanding the value of a particular community of practice for participants and the structure of their formation is useful for co-design because “meaningful learning in social contexts requires both participation and reification to be in interplay” (Wenger, 2010) and reification is the concern of design. Reification embraces “making into an object” and objects aid in learning and are the materials which result from and facilitate communities of practice. “Many practices are impossible without shared technologies, documents, images and objects” (Wenger, 1999).

Designing for communities of practice and the learning and meaning motivating their formation is “heavily dependent upon the inscriptions, objects and technologies shared by the community of practice” (Fox, 2010), pointing to the pre-figurative nature of redirective design practice described earlier. CoP can be intentionally designed for through understating the interplay of meaning making in social contexts as facilitated by both artifact and participation. “Artifacts without participation do not carry their own meaning; and participation without artifacts is fleeting, unanchored, and uncoordinated” (Wenger, 2010), describing the role of design and collaboration in the creation of meaning making practices.

Communities of practice are “considered to be a type of learning community” and their framing as a community is pretty close to the traditional definition of community as being connected by a “common interest, having roles and responsibilities and existing overtime despite a change of participants” (Wenger, 2010). For designers looking to explore what it means to design with and for CoPs, understanding the ingredients, focusing “on core practices or methodologies is one of the easiest ways to build connections” within a community of practice. And is “an intention to create, cultivate, or

capitalize on the process—almost as a technique” (McDonald, 2015) for their development in addressing shared concerns.

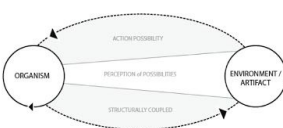
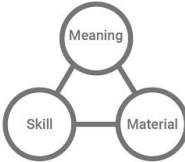


Communities of Redirective Practice

What does it mean to design for communities of redirective practice? As has been explored previously, communities of practice are a type of learning community that contributes to meaning making for its participants. Having an understanding of the basic elements which comprise an everyday practice (skill, material and image) and the basic elements of a community of practice (a domain or shared issue, a group of concerned people and an intent for collectively addressing the issue) and an orientation to what it means to design for redirective practice, provides a perspective for identifying characteristics of communities of redirective practice.

Structuration is “neither the experience of the individual actor, nor the existence of any form of social totality, but social practices ordered across time and place” (Dickie-Clark, 1986). Structuration points to the notion of a community of actors, bounded by both a locality and temporality and engaged in a social activity produced in cooperation with others.

The value of redirective design practice is in recognition that design, and resulting enactment through designed artifact (practices), have a politics and can reinforce or undermine social structure. Layering redirection and the “rematerialization of culture” (Fry, 2009) on structuration, scaffolds a framework for ordering practice across time and place as a means of co-designing for agency or “creative enticement via practice as political expression” (Fry, 2009).

Spectrum of Redirection - Theoretical Design Framework

Spectrum of Redirection			
The ambition of redirective practice is to...gather a multiplicity of practices, to redesign/redirect the structural and cultural condition that designs our mode of being-in-the-world			
AFFORDANCES-IN-PRACTICE PRACTICES-IN-PLACE		PRACTICES-AT-SCALE COMMUNITIES-OF-PRACTITIONERS	
Affordances	Social Practice Theory	Domains of Everyday Life	Communities of Practice
Invariant variants, subjective & objective - the possibility of an action on an artifact or environment	Practices have a history, a structure, they advance (in)equity and shape agency They're performative and can be regenerative	Trans-local networks, Communities within community, The Domians shape lifestyles and life courses	Can be viewed as a simple social system A complex social system can be viewed as constructed by interrelated communities of practice
			
SELF	MICRO	MESO	MACRO
SATISFIERS - The quality of these networks of everyday life is a reflection of the quality of satifiers from which they are derived; unique to the time, place-based (geography) and cultural context			
NEEDS - understood as a system, interrelated and interactive Subsistence, Protection, Affection, Understanding, Participation, Leisure, Creation, Identity, Freedom			

Summary

This chapter reviewed multiple theories spanning developmental economics, environmental psychology, practice theory and organizational learning theory. Beginning with Max-Neef's needs and satisfiers, he introduced concepts concerning the cultural conditions of how humans fulfill nine basic needs. Needs, understood as a system and interrelated and interactive, are satisfied in ways unique to the time, place and cultural context. Demonstrating how societies were transformed through how those needs were satisfied. Next I reviewed the power dynamics of a place through the strategies and tactics which negotiate the tensions of authority found in maintaining order by scripting society. Next I presented environmental affordances for attuning to scripts for realizing new action possibilities. Following that, social practice theory described the social and material components behind everyday practices. Redirective practice was introduced for critiquing social practice theory through politicizing practices and their cultural and structural impact. The Domains of Everyday Life introduced horizontal and vertical scales to social practice theory for describing entire life domains and bounding practices to them. Communities of Practice was examined as a learning theory having its own internal logic of community, domain and practice. These elements shape new practices, new tools and new methods, and were presented for design consideration. Because of their apolitical nature, redirective practice offered a reimagination of communities of practice and their potential to shift entire ways of constituting practices. Communities of redirective practice were presented for conceiving new ways of learning under the remit of redirective practice. This chapter concludes with the ordering of a theoretical design framework scaffolding the theories reviewed throughout this chapter. What is represented is a spectrum of redirection for redesigning the cultural and structural conditions that design our mode of being-in-the-world (Fry, 2009). The design framework scales from environmental affordances at the individual level outward to Communities of Practice at the macro scale. The design framework is founded upon Max-Neef's needs and intends to reduce everyday practices to their social, material and political elements to be reconceived of on the basis of health equity.

Chapter III: Methodology

Local Accountability through Place-Based Research

“Trust is not something you hand to people. You have to earn it” - Karen Hacker

Introduction

My research employs a hybrid practice based methodology derived from design research and public health. These methods and frameworks can be divided into two main approaches, the making of design artifacts through a co-design methodology and the frameworks of public health for analysis and evaluation. In this chapter I start by introducing the relationship of behavioral outcomes shaped by actors and environment; next I examine public health frameworks for representing complexity and situating research. Then I consider the disposition of the researcher through community based participatory research as a way of inquiry; next I consider the disposition of the designer through ontological design as a way of practice. The chapter concludes by describing my methods and criteria for evaluation.

Whose Behavior is it Anyway?

What is compelling about the intersection of design and public health is the possibility not only for individual behavior transformation but collective transformation. There has been plenty of work around individual change, “but our understanding about the transformation of human systems, such as our workplaces, neighborhoods, and towns, is primitive at best” (Block, 2008). All too often interventions follow the logic that if we shift the mindset of an individual “the shift in community will follow” (Block, 2008). Frameworks from public health offer a means for analyzing a context from an individual, social and environmental perspective, synthesizing multiple forms of data and sharing out to local stakeholders and decision making for informing action. And the development of metrics for monitoring and evaluating projects, assessing impact and tracking collective transformation.

As mentioned previously, design is concerned with the individual whereas public health is concerned with the community. The space between the two disciplines presents the potential to expand upon individual behavior change and begin, 'weaving and strengthening the fabric of community' as a collective effort which 'starts from a shift in our mindset about our connectedness' (Block, 2008). It is not about individual behavior change, it is about organizing and mobilizing a community of change agents around a common cause or concern and leveraging collective action towards larger scale transformative change.

The frameworks from public health, combined with the design process, presents the possibility that using 'a range of interventions will often be more effective in changing behavior at a population level than using a single intervention in isolation' (Michie et al., 2009). The combination of these methods for change has the potential for shifting the 'the structural properties of social systems' (Bates, 1972) as our combined actions are both the medium and outcome of those structuring processes, reinforcing or undermining those structures. Through collaborative effort, an attunement to the local context and a focus on health equity we can develop local capacities for collective transformation.

Public Health & Design are about Context

The 'subject and object constitute each other' in co-determining health outcomes (Verbeek, 2005), highlighting the role of context as it relates to shaping agency. Agency is what it means to be present and acting in the world, focusing on an individual's context, allows for a better understanding of their capacities for determining their own health outcomes as 'being can never be separated off from its context' (Fry, 2009). Investigating a context through a situated design research process demonstrates the significance of place in understanding human behavior as "human beings live embedded in landscape and they perceive it through their whole body; it affects their well-being' (Menatti & Casado da Rocha, 2016)

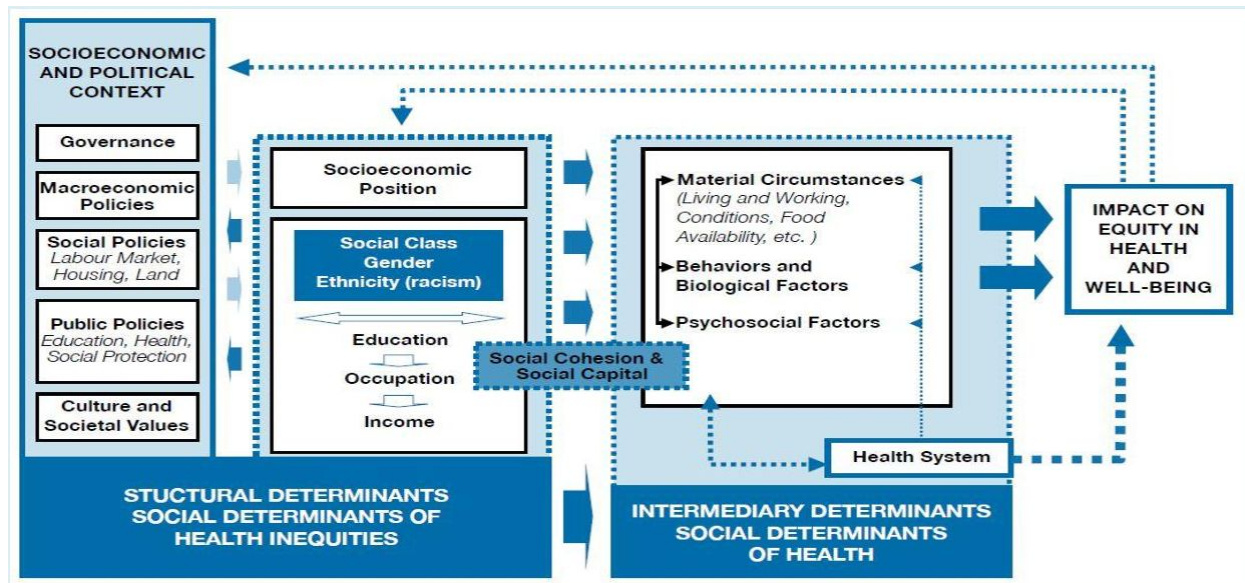
Our everyday context is "broadly defined to include all social and political mechanisms that generate, configure and maintain social hierarchies, including: the labour market; the educational system, political institutions and other cultural and societal values" (Fry, 2009), context is what it means to be present and expands what it means to be situated in a specific place and time. Context is hard to frame and evaluate, as noted above, because of its expansive and complex nature. However, focusing specifically on

an individual in context, explores what it truly means to be present in a specific place and time. As, “context isn’t just ‘there,’ but is actively produced, maintained and enacted in the course of the activity at hand” (Dourish, 2004), practices situate experience and express what it means to be and the agency necessary for being.

Focusing on the individual and their everyday context is what designers do everyday through contemporary notions of human-centered design. As contexts will depend on time, place and circumstances, the human-centered design process situates the user at the start of the investigation and seeks to understand how individuals navigate their everyday lives and how the built environment and designed artifacts assist in facilitating daily experiences. By focusing on the needs of the user, it is thought that more effective design solutions will emerge. Various methods and tools have been developed for contextually empathizing with users.

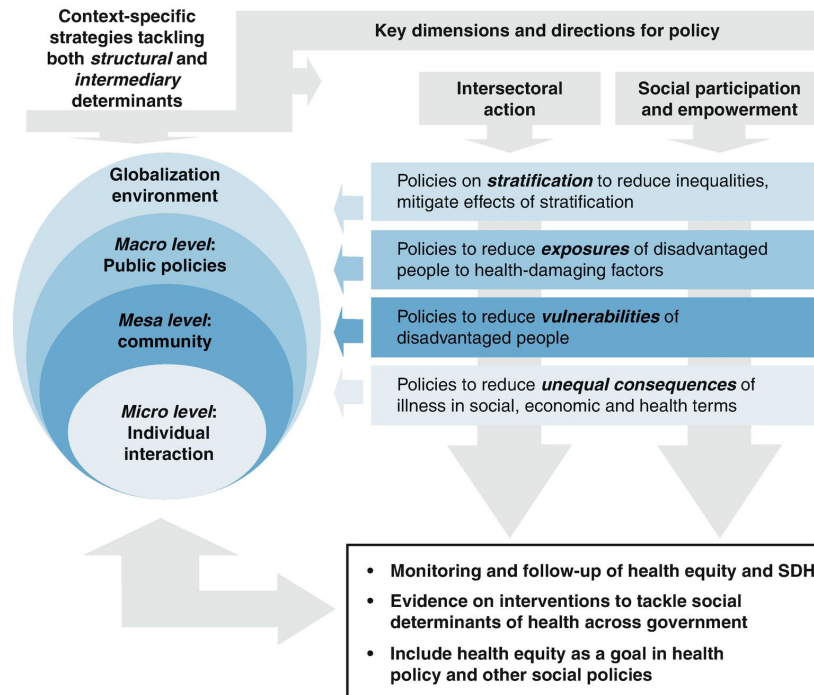
Just as design research has developed their own approaches for sense making and understanding context at the individual and human scale, public health researchers have also developed their own tools for doing the same at the community and population scale. Contemporary definitions of health are focused on both the notion of agency (e.g., skills and adaptive capacities), and on social-environmental determinants (Blacksher & Lovasi, 2012). The Social Determinants of Health are a framework used by public health practitioners for analyzing health and are divided into three categories: (1) individual, (2) social, (3) environmental and recognize that individual factors are not solely responsible when analyzing one’s health.

A better understanding of the social determinants of health allows public health practitioners to make more informed decisions when it comes to analyzing, implementing and evaluating interventions designed to address health outcomes. A recent framework, The World Health Organization’s Commission On Social Determinants Of Health — Conceptual Framework of 2007 is, what I feel in relation to the discussion around community and design, the most comprehensive articulation of the social determinants of health for understanding the lived conditions of an individual, the value of social cohesion and community to health and empowerment and the importance of cooperation between citizens and organizations. The model builds off of previous frameworks while emphasizing an approach that looks upstream to the ‘causes of the causes’ (Marmot, 2015) and at the ‘root causes and pathways of health differences among social groups’ (Canadian Council, 2015).



World Health Organization - Conceptual Framework for the Social Determinants of Health

The WHO Conceptual Framework is a unique evolution in systematically modeling health outcomes by differentiating between upstream structural determinants, those in the realm of socio-economic position and policy, from downstream intermediary determinants, those in the realm of psychosocial and behavioral factors and material conditions. Creating this distinction, describes an individual's context as shaped by both structural and social determinants, social cohesion and social capital, acting as bridges between the two frameworks. The framework clearly lays out a conceptual model for understanding one's health as being influenced by many factors, shaped by many pathways, and the highly contextual nature of health. While also illustrating a clear interaction between determinants. This WHO Framework takes into consideration, from a socio-ecological perspective, the material and immaterial conditions which shape health at both the individual, community and society levels.



World Health Organization - Framework for Action

An additional advantage of the WHO Framework is the secondary Framework for Action, which recognizes the need to 'engage and empower citizenry to achieve long-term sustainability' (Canadian Council, 2015). The complementary model is actionable, building on the conceptual framing of the first model, the Framework for Action shows where and how to intervene and serves as a useful tool for navigating systems level interventions. The Framework was modeled off another common tool public health practitioners use for making sense of scales of impact and influence. The social ecological framework is used to understand the personal and environmental factors that determine healthy behaviors and scales outward from the intra-personal level (personal history and genetics) to the interpersonal and communal levels (physical and social environment) out to the political and economic conditions as situated within the general beliefs and attitudes held in common by members of a society (Bukatko & Daehler, 1998).

Taking a 'holistic and inter-sectoral approach' (Canadian Council, 2015) the Conceptual Framework and additional Framework for Action provides a valuable tool for understanding health from an ecological perspective. Together the frameworks are able to explain the systems of influence which contribute to health and have an interactive and multi-layered approach that is both informative and actionable. The tool is useful when working at the intersection of public health, design and participatory

research as it is a transdisciplinary tool that is approachable by a larger audience beyond the health sector. The Conceptual Framework serves as a blueprint for working with a group of researchers and organizing Community Based Action Research while the Framework for Action acts as a guide for design interventions. In combination, the frameworks highlight the importance of social capital, community organizing and taking upstream action toward addressing health inequities (Canadian Council, 2015).

Because of the systemic nature of the tool for investigating and making sense of complexity as well as the scalar shifts necessary for orienting networked and inter-sector interventions, the WHO's Commission on the Social Determinants of Health Conceptual Framework is a tool for addressing wicked problems and mapping complexity or as Donella Meadows would say 'dancing with the system' (Meadows, 2008).

The Dance - Donella Meadows

1. *Get the beat.*
2. *Listen to the wisdom of the system.*
3. *Expose your mental models to the open air.*
4. *Stay humble. Stay a learner.*
5. *Honor and protect information.*
6. *Locate responsibility in the system.*
7. *Make feedback policies for feedback systems.*
8. *Pay attention to what is important, not just what is quantifiable.*
9. *Go for the good of the whole.*
10. *Expand time horizons.*
11. *Expand thought horizons.*
12. *Expand the boundary of caring.*
13. *Celebrate complexity.*
14. *Hold fast to the goal of goodness.*

Community Based Participatory Research

“The development of social capital... is based on citizen participation. True participation implies a (re)distribution of empowerment, that is to say, a redistribution of the power that allows the community to possess a high level of influence in decision-making and the development of policies affecting its well being and quality of life.” — WHO, 2007“

By analyzing the inputs, throughputs and outputs of a community we can begin to understand how they form and maintain their social structure while interpreting the underlying values which influence the identity of a place.

An embeddedness in a place provides a deeper understanding of the local context. Steve Grabow of Wisconsin Cooperative Extension program described the tension between interpreting a place and acting on a place, “community development specialists would do well to spend more time learning how the community is organized, and less time trying to organize it” (Grabow, 2014). This approach takes time, acting as a precursor to doing any sort of meaningful community-based work. Mr. Grabow describes the importance of understanding a place and the people who live and work there so we “can continue to bring people together to make decisions about their communities” (Grabow, 2014).

Trust is foundational to community-based work as communities are based on mutuality, interdependence and support, essential elements to the stability of a place and a population. Looking to the Public Health field, Community Based Participatory Research highlights an open-ended research approach which “changes the power dynamics inherent in traditional research” (Hacker, 2013). Community Based Participatory Research (CBPR) is a non-traditional approach to framing inquiry, it is “not a specific qualitative or quantitative research method but rather an orientation to research” with the perspective focused on nurturing relationships with local residents as “essential partners who can energize their communities to develop and implement effective, sustainable interventions to improve health and eliminate health disparities” (Hacker, 2013).

Having been refined over the last two decades, CBPR “addresses health disparities and inequalities in diverse communities including groups that are socially disadvantaged, marginalized, stigmatized, or that have suffered historical injustice” (Hacker, 2013). The process for inquiry is a paradigm shift in how research is done from a public health perspective because it “highlights community resilience, resources, and opportunities for positive growth” within a place (Hacker, 2013). Co-design, in the service of public health and Community Based Participatory Research compliment one another as they are concerned with working with “communities to develop and implement effective, sustainable interventions to improve health and eliminate health disparities.” (Hacker, 2013).

The embedded role of the designer as researcher must practice “local accountability” and “recognize that their work must be geared to local needs, and not simply to the

production of knowledge for their research” (Hacker, 2013). CPBR is an effective approach for achieving this as it “fosters co-learning and capacity building among all partners” (Hacker, 2013) as principles in approaching and working with a community. Another aspect from CBPR deepening co-design is the idea of ‘cultural humility’ (Tervalon & Murray-Garcia, 1998), “a process that requires humility as individuals continually engage in self-reflection and self-critique as lifelong learners” (Tervalon & Murray-Garcia, 1998). Criticality and reflection are foundational to the field of design and CBPR offers an orientation for enhancing design research.

A similarity between design and CBPR is the iterative approach to working, similar to Kurt Lewin’s idea of Action Research, described as ‘a comparative research on the conditions and effects of various forms of social action and research leading to social action’ (Lewin, 1946) while involving the social as change agents of action in the process. ‘The social’ is increasingly acknowledged as an important part of the design materials available to the designer for experimentation while CBPR understands that “the community is generally interested in using the results to make change” (Hacker, 2013).

The situated nature of practice-based design and CBPR inherently make them place-based and involved with the lived realities of people living and working in these places. For making sense of place, researchers “need to understand the values and mores of the community at large,” developing cultural humility through “learning about cultural perspectives, history, governance, and so forth of a community will help the researcher develop this understanding” (Hacker, 2013)

The orientation to doing place-based design research through Community Based Participatory Research contributes to informing research of place, through learning the local history and culture, and research for place, through the involvement of community members as active members in the process. For the researcher, involving the community in the process contributes to building trust and develops cultural humility for designing your way into a community.

Designing the Design Process

Our lifestyles, how we negotiate our lives and navigate the planet, are both the medium and outcome of our existence. Our ontology, “our understanding of what it means for

something or someone to exist” (Winograd & Flores, 1986) does not take place independently from our everyday practices. Next, I will examine deeper how needs are satisfied and the personal and environmental impacts of needs satisfaction.

Ontologies ‘do not precede or exist independently of our everyday practices’ (Escobar, 2018), social practice theory demonstrated our practices are a triad of cultural production, performative skill and material engagement. Our actions, as human beings, shape the ways in which we realize our existence, while how we form that existence, in turn, shapes our human actions. We create cultural meanings and practices through particular ways of living, through the expression of our agency. Design also influences agency by shaping culture and experiences through the tools and technology it brings into the world and the rituals, ways of doing, and modes of being (Escobar, 1995). A more comprehensive interpretation of design takes into consideration it’s ‘ontological character’ or the idea that ‘design, designs.’

Ontological design, ‘is both a way of understanding and practicing design’ (Fry, 2009) From this shift in mindset, the primary concern for design is no longer the object but the practices (material and immaterial) brought into the world and the consequences for those actions (Fry, 2009). An ontological posture, from a design practitioner’s perspective, is both critical and reflective. Critical of what is brought into the world and how it transforms our lives while reflective and looking back to the traditions that have formed us (Fry, 2009).

From the position that our daily practices impact both our health and our planet, ontological design shifts the mindset for the designer by ‘initiating those ontological changes that establish the individual as a change agent’ (Fry, 2009), empowered to extend sustainability into the practices which shape lives and impact the planet. By understanding that design designs, the design process can be reimagined for advancing health equity and distributing creative agency throughout our lives.

Reflection on Methodology

In articulating a place-based design research practice committed to redirective practice, the ability to situate a methodology bridging design and public health, offered a diversity of methods for inquiry. But the scalar and complex nature of the theoretical design framework, developed in Chapter Two, made it challenging to target the right set of methods. The WHO Conceptual Framework for the Social Determinants of Health,

reviewed in the Public Health & Design are about Context section, offered guidance for analyzing and compartmentalizing socio-ecological complexity but didn't offer much on materiality. The complimentary Framework for Action helped position work across scale for situating inter-sector work.

Through the lens of Public Health, I targeted Community Based Participatory Research, as a way to engage a community for advancing research. The collaborative and community focused orientation to doing research aligned with my ambitions of empowerment through participant engagement. The reflexivity of practice, the disposition to doing research, offered advice around 'local accountability' and being comfortable in the 'non-traditional' approach to inquiry reassured me in structuring my own system of research methods.

Because redirective design comes from the field of design studies I found it challenging to identify methods to assist me in my practice-based research. Looking deeper into the ontological underpinnings redirective practice is structured upon, I became more comfortable with the idea that it was a mindset for understanding and practicing design. The critical and reflexive posture of this way of working appealed to me as it was concerned with the political nature of the outputs from practice. The value from this way of working was the promotion of critical creative agency through the design process.

Mixed Methods

This section now explains the methods used for inquiry, evaluation and analysis, namely: co-design, expert interviews and documentation

Evaluation and Analysis

Evaluation is judging the value of something, in my case, testing designs and evaluating the outcomes they have for the community they emerged out of. An analysis is a detailed examination of something in order to arrive at meaning, in my case, the analysis is of the research findings through place, as well as, research for place. Both analysis and evaluation exist at different times throughout the research process toward advancing systematic inquiry. My methodology is iterative and therefore the evaluation is found throughout the research project. My process is not a linear approach, rather it

is framed through learning action cycles found in Action Research facilitated by the design process in a plan, act, observe, reflect series of cycles or as a spiral (Lewin, 1946). The findings and methods are emergent and my approach responds to artifacts produced through the creative process and the learning generated from the application of selected methods.

Criteria

The theoretical design framework developed in Chapter 2 provides an outline for analyzing everyday practices and evaluating their social-material assemblages. As a design framework, it is meant to be applied for interpreting and understanding the enactment of everyday practices. Affordance theory situates a designed artifact into an environment, when acted upon, 'structurally couples' actant and artifact. The hybridity of the relationship can be analyzed for how the actant first notices the artifact through physical affordances (color, composition, form) and secondly how those affordances are mapped through scripting and situated environmental factors are interpreted preceding an encounter with an artifact. The performance can be analyzed as the artifact is interacted upon through behavior expressed and skills demonstrated. Evaluation focuses on goal fulfillment or realization of the task through the artifact.

Social practice theory offers a triad of material, meaning and competence for analyzing the enactment of a practice. The three elements of a practice offer a unique perspective for interpreting and understanding practices and serves as an aid for contextualizing environmental affordances and the performative elements of an engagement. Evaluation is done by reassembling the social practice theory triad for interpreting the cultural production of a practice and skill refinement. The scalar nature of the domains of everyday life provides a means for analyzing practices in a larger context while bounding practices to specific life domains. Practices can be analyzed for their complementary nature to one another, their sequencing and the summary of performance bracketed within a life domain scale. The domains of everyday life set the stage for evaluating the cultural, material and physical outputs of practices bound to a life domain. Evaluation can also look across domains for scalar impact.

Communities of practices shape practices, the theory offers bounding of distinct elements for the construction and analysis of a practice. Community, domain and practice are lenses through which to interpret everyday practices. What can be studied by interpreting everyday practices through the communities of practice spheres; why communities form, how they sustain themselves and their social-material outputs.

Evaluation focuses on learning outcomes, methods for collaborating and social networks.

Lastly, the foundational elements of the design framework are Max-Neef's needs and their localized satisfaction. Having a finite set of nine basic human needs, practices can be analyzed based on these elements. Endogenous and exogenous needs satisfaction considers the methods of practices enacted for meeting needs through the proximity for fulfillment. This way of perceiving practices looks at the amount of capacity an actant has for meeting those needs. Evaluation is derived from the time, place and cultural context of an enacted practice and the impact it reflects back on those contextualizing elements.

Co-Design

Collaboration drives the co-design process, the skills, the facilitation and the designed outputs produce new knowledge and culturally specific social-material assemblages. As discussed earlier in this chapter, the co-design process is essential for working with a community. As a method for advancing my research, co-design can be looked at through the theoretical design framework for situating the byproducts of collaboration. While also applying the design framework to the co-design process itself as a means for advancing my inquiry.

The benefits of the co-design process are the diversity of people that come together for creative problem solving. Situating the co-design process within a place-based practice provides for a focusing of attention to the specific needs of the community. The different community organizations within Hunts Point specialize in providing services to the neighborhood. The relationships developed through this research have allowed me to collaborate across organizations and within them. An example, facilitating a co-design session to develop wayfinding signs throughout the community, representatives from a healthcare clinic, a community organization, a resident and an artist came together to provide input into the co-design process and lend their expertise to the creation of signage. The signs, discussed in more depth in the Fieldwork Chapter, were culturally relevant and extended the efforts of the organizations that came together to design them, making for a more authentic and relevant design solution.

There are also downsides to the co-design process, trust takes time to develop between designer and collaborators. People coming together in the co-design process need to

see the value of design and how it relates to their own motivations for collaboration. Co-design also takes commitment, collaboration takes time. The facilitation I described earlier was done over a two hour lunch session and attendees were not compensated. Social capital was leveraged for getting people to commit to the afternoon session. Co-design can also be a slow moving process as there are many moving pieces and players who need to be involved as the community scales.

As a method for advancing my inquiry, co-design offers a way of working that brings multiple stakeholders together and applies the creative solving process toward addressing local challenges. Applying the co-design process, through redirective practice, focuses the research process on the production of practices and artifacts with the aim for redirection.

Expert Interviews

To step outside my own co-design process, expert interviews provide a way of connecting with other practitioners working at the scale of community. Experts can provide key insights from their own work and inform new ways of thinking about my own practice. As a method, expert interviews offer a way of doing qualitative research that is less time consuming than something like a survey. Through conversation, you have the flexibility to probe certain responses, ask follow-up questions and engage in deep discussions with someone who has specialized knowledge willing to walk me through their own process. Expert interviews, as a method, were selected because they allowed me a distance from my own practice and an engaging format for insights to be revealed on a process participants are directly familiar with.

The selected experts I interviewed are from fields in regional planning, community-based design, education and public health. Interviewees were chosen for their availability to sit for an hour long session and for their disciplinary knowledge on the subject matter. It is important to keep in mind that expert knowledge is not neutral, it comes from a biased position, and there are counter experts with different perspectives and ways of working. To address that, I identified experts from a diversity of fields, and framed my search through the hybrid space of asset-based community development. I felt this framing allowed me flexibility to survey different fields for practitioners that identified asset-based community development, or expressed elements from this way of working, as being part of their professional practice. The experts selected are from across a range of fields focused on community development, apply the co-design process toward collaboration and are situated within the United States. The United

States was selected as a filter for bounding and identifying candidates because the country is big enough to offer a variety of approaches while constraining my research efforts to practitioners who have to negotiate similar constraints.

Interviews were recorded for later analysis and the semi-structured nature of engagement allowed for a sense of informality and for exploring tangents in more depth. I used the same set of questions for all experts interviewed as a standard to guide discussion, for keeping the conversation on track and for later analysis to the similarities and differences in approaches.

Documentation

An underlying basis to the place-based research process is the methodology of a reflective practitioner and documentation of that practice (Schön, 1991). Documentation allows for capturing knowledge at the point of production and offers essential ways for adding rigor to research. Documentation provides evidence of experience and communicates that what cannot be known in the movement. It offers a way for capturing both the process and the outcome of practice-based inquiry, archiving it for future analysis, furthering Donald Schön's idea of 'reflective practice.'

The 'reflective practitioner' is enabled through documentation allowing the designer to step outside their process in order to glimpse the bigger picture. And provides the space to reflect on and report back fieldwork undertaken. Documentation affords material evidence for feedback and critique by the design practitioner and participants. As a mode of analysis, it permits stepping outside of engagement with the work and affords a space for better understanding actions taken in the research process. The Action Research approach of practice-led research benefits from documentation by preserving action and observing reaction. Different modes of documentation inform the reflection stage of the action learning loop while the selection of media type demonstrates a pre-planning to documentation and an attunement to what it means to be a reflective practitioner. Documentation of my design inquiry consists of sketchbooks for quickly recording 'reflection-in-action' in the field as projects unfolded and photo, audio and video for 'reflection-on-action' (Schön, 1991) as a multimodal and multimedia approach to documentation.

Summary

Throughout this chapter, various ways for practicing public health through design have been reviewed including the designing of the design process itself. Moving forward, professing the ontological nature design has on society, or that design designs, is a takeaway for approaching community-based initiatives related to public health. By exploring design through Community Based Participatory Research I acknowledge the political nature of research practice as well as the 'local accountability' required when pursuing this methodological approach to research. Combining systems thinking and design thinking establishes an informed and holistic approach to examining a problem area while applying an iterative and creative solving approach towards the development of potential solutions.

Moving forward, through the combination of research methods and approaches to design discussed throughout this chapter, I plan on using co-design as a collaborative method to examine how everyday practices can be reimagined to extend health equity in practice.

I will be using the Expert Interview method to look beyond my own practice to practitioners across the United States who engage in asset-based community development. By reaching out to a diverse group of public health experts, community-based researchers, regional planners, educators and other designers, I plan to survey a range of processes for shifting power dynamics.

Lastly, I plan to apply Documentation as a method for capturing design process and outcomes from my own practice to support reflective practice, to extend learning and to support the development of an archive of methods for doing place-based work for future analysis.

Chapter IV: Fieldwork

Applying Place-Based Design Research

Introduction

This chapter describes the fieldwork component of the practice-based research. First I set the context for practice as a way of representing concepts from the design framework; next I define the campaign the fieldwork is established in. Three projects are chronicled illustrating the design framework in practice. Then I discuss the projects in the context of collaboration; next I review takeaways from the different projects. Next I explain the structure of collaboration in terms of the broader aims of the organizations. Then I review findings from expert interviews, from there I discuss the process of synthesizing the data and structuring findings in a legible playbook format. The chapter concludes by defining the gaps in disciplinary expertise the playbook addresses.

Communities of Redirective Practice

The Learning Collaborative, The Healthy and Livable South Bronx Initiative and Healthy Hunts Point Action Group

In 2015, the New York Community Trust (NYCT) in partnership with The Neighborhood Trust invested in three south Bronx neighborhoods to help them become healthier places to live. The Healthy and Livable South Bronx Initiatives, as it came to be called consisted, of BronxWorks, Claremont Neighborhood Centers and Urban Health Plan. The strategic healthcare consultancy Healthy Places by Design was brought in to provide coaching and technical assistance for the collective of non-profit organizations. This type of formal initiative became known as the Healthy Neighborhoods peer learning collaborative tasked with developing a range of strategies to increase access to nutritious foods and improving the built environment for better health outcomes.

The combination of place-based funding, strategically positioned nonprofits across the South Bronx and the support of almost twenty years of technical assistance created a dynamic community of practitioners committed to redirective practice, both institutionally and through strategic interventions within the selected neighborhoods. The Healthy and Livable South Bronx community action group highlights a specific collaborative effort focused on promoting healthier neighborhoods in the South Bronx and encouraging members of the initiative to share best practices through regular meetings.

BronxWorks is a service organization in the Morris Heights section of the Bronx which helps individuals and families improve their economic and social wellbeing. Expanding on food access in the neighborhood, BronxWorks spent their time throughout the grant period improving healthy food access in bodegas and grocery stores while developing a farm stand and complimentary youth culinary program to connect closer with the community.

The Claremont Neighborhood Centers is an anchor organization in the Claremont / Morrisania section of the South Bronx providing daycare, afterschool and weekend programming in their recreation and educational centers within the community. The organization extended their youth programming over the course of the grant period developing an Urban Ambassadors program which engaged area youth in creative placemaking initiatives toward improving the neighborhood.

Urban Health Plan (UHP) is a federally qualified nonprofit community health center network serving residents in the South Bronx, Central Harlem and Corona, Queens. The system comprises ten clinics, eleven school-based health centers and three administration and program locations. Throughout the three year grant period, UHP was the lead agency behind actions addressing healthy food access and providing safer physical activity choices.

As a researcher, what stands out to me about UHP is their connectedness to the community through different programs. These programs extend the definition of health, and are targeted at specific communities within the community. Programs like Club Teens in Action, Project H.O.P.E Workforce Development and The Center for Aging were developed because of the demonstrated needs of residents and are a great example of UHP curating services to the different stages of a persons 'life course' (Marmot, 2015).

The Healthy Hunts Point Action Group was an initiative organized to directly engage local residents in co-creating community events which distributed health throughout the

Hunts Point peninsula. Comprised of UHP, Hunts Point Alliance for Children, The POINT Community Development Corporation, Family Enrichment Center and many other local organizations, The Healthy Hunts Point Action Group (community action group) developed programming together and built a collective political will for advancing their agenda of improving health outcomes and building community capacity. The local coalition worked with a group of twenty five mothers from Hunts Point to identify problems which they could collectively address. They also involved local city government and council members in their efforts as a way of demonstrating a united community front for the work they were doing.

Throughout the three year grant, UHP, working with members from the action group, led multiple community change initiatives including a food box program, healthy food marketing in bodegas, and self-defense and fitness classes. Together the team of change makers worked on issues regarding neighborhood safety, sanitation and healthy food access. The community action group is a crucial element to doing community based work around advancing health equity.

Working collaboratively for advancing health equity, the action committee provided me an opportunity to work on projects at the intersection of design and public health while offering a structure to watch the exchanging of best practices between group members. A rootedness in place aligned values and interests in the collective work of the action group, the alliance was a networked group focused on the domain of holistic health and developed tools and techniques for creating and sustaining impact.

Next I will discuss projects developed over the last three years produced out of the community action group as driven by UHP. It is important to note that the action group, working along with community members, were able to develop a shared narrative around health that focused on the social determinants of health and the collective power of organizing as a community. Below I will highlight three projects which ground that narrative in place and demonstrate the diversity of approaches that emerged out of the intersection of active design and public health.

Urbee: a Place-Based Healthy Lifestyle Campaign

The work that follows in the practice-based section of this report builds off of and extends Urban Health Plan's, Urbee healthy lifestyle campaign. Urbee is Urban Health

Plan's mascot, and serves as the face of the 'Shop Healthy, Eat Healthy, Be Healthy' campaign to promote health and wellness throughout the peninsula of Hunts Point while extending the healthcare services UHP offers beyond clinic walls. Urbee is depicted as a cartoon bee-like character who lives and promotes a healthy lifestyle through healthy consumption habits and an active and mindful lifestyle. The Urbee character is appealing to all ages because of the smiling and uplifting depictions while being inclusive to neighborhood residents as messaging accompanying the character is presented both in English and Spanish as well as accompanied by icons which reinforce specific messaging for those residents who are unable to read. The character can be found on posters, flyers, stickers, digitally and through other forms of local media throughout Urban Health Plan clinics, neighborhood shops and bodegas and community centers as these neighborhood amenities promote and extend the healthy living campaign. The Urbee campaign successfully demonstrates what it means to socially model a healthy and active lifestyle in a positive and approachable manner.



The Urbee logo for Urban Health Plan's 'Shop Healthy, Eat Health, Be Healthy' campaign

It is relevant that Urbee is depicted as a hardworking and active character as a healthy lifestyle takes commitment and perseverance to staying both active and mindful while remaining vigilant to the lifetime of dedication a healthy lifestyle takes. The various activities Urbee can be seen promoting include; exercising, shopping healthy, supporting local merchants, dancing and doing yoga, accompanying smoking cessation materials, staying hydrated and eating healthy, and staying active by opting to take the stairs in office buildings. The activities Urbee participates in take a holistic and active design approach toward promoting a healthy lifestyle through the various facets of our lives health touches upon. Lastly, with the decline of pollinators worldwide, Urbee is a reminder of our connectedness to nature while serving as a symbol for stewarding our environment and protecting the organisms which support our everyday lives.

The following projects are part of Urban Health Plan's effort to extend the 'Shop Healthy, Eat Healthy, Be Healthy' campaign out into the community of Hunts Point, by integrating healthy lifestyle practices into the everyday lives and daily practices of residents.

Healthy Recipes - From Our Kitchen to Your Table Cookbook

This cookbook is part of Urban Health Plan's 'Shop Healthy, Eat Healthy, Be Healthy' nutrition campaign and was not supported by the three year grant, rather it was supported internally by Urban Health Plan's Communication and Nutrition Departments.

The goal of the campaign is to educate the communities Urban Health Plan serves on ways to achieve a healthy lifestyle while promoting existing nutrition and prevention programs. Developed in collaboration with UHP's chef and registered dietician Karla M. Giboyeaux, we collaborated over multiple years to develop a nutritional cookbook that was inclusive in language, relevant to cultural tastes and visually appealing to local residents. Building off of a career devoted to nutrition and natural foods, Karla serves as the demonstration chef and kitchen coordinator at La Cocinita de Simpson ("Simpson's little kitchen"), a newly built, state-of-the-art teaching kitchen in the nutrition department of Urban Health Plan.

Working together in an interdisciplinary team comprising a chef, a communication designer, the head of nutrition at UHP, the head of communications at UHP, a food stylist and photographer we spent multiple months planning, tasting and tailoring recipes, developing the cookbook's concept and collaboratively executing the project. The cookbook serves as an extension of UHP's commitment to promoting holistic health and wellness and accompanied a six week cooking and nutrition training program attended by residents who were prescribed the course by UHP doctors as a means of understating and controlling their diet while managing diet-related illnesses.

The cookbook also serves as a resource manual, visually demonstrating how to breakdown and prepare various fruits and vegetables for meal preparation while also providing meal planning tips such as eating in season to save money and how best to utilize leftover items. Storage tips and essential pantry items are also suggested as a means of extending food dollars while increasing food literacy. Because a majority of participants in the nutrition program are immigrants to the US, at times they were unfamiliar with the local food landscape and struggled with aligning diet and tastes from the offerings of their new community. This was a barrier for leading a healthy lifestyle

and something the cookbook sought to address by increasing nutritional awareness through more traditionally culturally relevant recipes that would be more familiar with participants in the class.



Healthy recipes cookbook sample spread

Karla grew up in Puerto Rico where her grandmother, or abuela, taught her how to cook and inspired her to receive her BS in Nutrition and Dietetics. When she came to the United States, Karla attended New York University where she received her masters in Nutrition, Food Studies and Public Health with a concentration in food culture. The recipes featured in the cookbook represent nutritionally balanced and culturally relevant meals which participants felt inspired to prepare. While learning new culinary skills, class participants were also introduced to healthy eating habits. The recipes ranged from breakfast smoothies, to vegetarian options, balanced family meals and healthy desserts. There was even a section devoted to Karla's abuela and the traditional meals they used to prepare together.

The 23 recipes played up the visual and tactile nature of cooking, and each meal was organized by the number of servings, preparation and cooking times involved as well as the nutritional diversity of the dishes. Each recipe layout was highly visual in nature, depicting the various ingredients and steps in the recipe with large and colorful images while being accompanied by both English and Spanish how-to descriptive text. The cookbook serves as a cooking aid throughout the six week course, laying flat thanks to the spiral binding including blank pages for taking notes in each section. The cookbook accompanied meal prep in La Cocinita where participants were encouraged to take meals home and share with their families.

As a result of the six week course, participants collaboratively learned culinary skills and the nutritional value of produce and the connection it has toward the health of the body. The course taught skills in self-sufficiency and encouraged participants to share food with family members while passing along culinary skills to them. At the end of the six week course, participants were then taken to a local bodega store where they were instructed on how to shop for healthy items which accompanied the culturally-relevant recipes. The field trip reinforced practices learned in the kitchen and extended them into their everyday lives. The trip to the bodega was meant to serve as a guide for sourcing healthy items while saving money on family food budgets. At the completion of the class, participants were given a reusable shopping tote along with the healthy recipes cookbook and other kitchen preparation items to extend and continue the newly acquired practices at home.



Chef Karla, cookbook and complementary items for extending learning and healthy lifestyles at home

Wayfinding Signs for Navigating Civic Pride

Another project designed to extend the Urbee campaign into the community was a series of wayfinding signs which featured the Urbee mascot while depicting the character engaging in community building initiatives throughout the peninsula of Hunts Point. Working with Urban Health Plan's Institute for Learning and Development, I collaborated with Ruth Santana, Wellness Coordinator and Jamine Williams Healthy Livable Communities Coordinator to realize a series of wayfinding signage which was strategically installed throughout the neighborhood. The signs were intended to 'recode' (Fry, 2009) the environment and demonstrate the commitment Urban Health Plan, as a community health center, has to providing health and wellness beyond clinic walls and throughout the community.

The initial signs were inspired to engage community residents and promote walkability as a form of healthy expression and physical activity. Signs were co-developed with Urban Health Plan members and after several rounds of iteration and development the signs were installed by a group of active community members. We provided our 'street team' with all the tools necessary for installing the signs including markers, tote bags, industrial zip ties for securing the signs to poles and a map for directing intervention points. The signs were meant to embrace the unique character of Hunts Point and were inspired by other examples both within the community and beyond. This act of creative placemaking was employed to create an active community and the messaging was intended to be appealing across a broad mix of ages and cultures. Signs were bilingual in their messaging while being reinforced through relatable iconography with the Urbee character demonstrating the physical activity as a means of social modeling healthy behaviors.

Our first signs were branded Urban Health Plan blue to connect the intervention back to the mission of the healthcare network while promoting their services throughout the neighborhood. The signs were meant to do three things 1) promote walkability of the neighborhood as a means of exercise and fun physical expression 2) promote an upcoming community event co-sponsored by UHP and 3) to rebrand the place as encouraging healthy, safe and active lifestyles for all in an accessible manner. The signs added a game element as they were framed with the message "Live a Healthier Way with 10,000 Steps a day" as a milestone for walkers and to connect back to the Center for Disease Control's recommendation of at least 150 minutes of moderate

exercise per week. Complementary signs were developed with the message “It is ____ Steps or a ____ Minute Walk to Riverside Park” with the blank spaces incrementally counting down the number of steps and time to arrive at the park which was hosting the co-sponsored event.



Urban Health Plan's Action Group 'street team'

The ‘street team’ used the maps provided as a means of counting down the distance to the park and marked the appropriate amount of steps and duration using the markers provided. Arrows were also added by community members to direct walkers to the park. The pathway led participants from UHP’s Bella Vista II location along Southern Boulevard to Lafayette Avenue, a newly redesigned streetscape acting as “a critical linchpin in the South Bronx Greenway” (Mathews Nielsen Landscape Architects) to Hunts Points Alliance for Children’s annual Back-to-School Fair in 2018 at Riverside Park. The signs were created in a manner that allowed them to be standalone and still promote their message after the day of the event had concluded. The wayfinding intervention was so successful that years after the event, the signs are still present on street poles along the pathway directing people to the South Bronx Greenway, a multi-use bicycle and pedestrian pathway providing the neighborhood waterfront access while connecting to recreational facilities on Randall’s Island.

Building off of the momentum from the first round, the second round of signs were branded red to stand out against the initial UHP blue signs and for promoting UHP community partners, The POINT Community Development Corporation which houses

“O.U.R. Place”, a Family Enrichment Center recently opened by NYC’s Administration for Children’s Services (ASC). The Family Enrichment Center is an innovative new approach to providing community-driven, comprehensive services to support families’. Urban Health Plan in collaboration with FEC were hosting a “Shop Healthy Hunts Point Expo ” event on March 19, 2019 which provided information to local families for cost effective shopping tips for healthy eating in the peninsula while encouraging families to support local businesses. The red signage was again installed by a group of active community members leading attendees from UHP’s Bella Vista II clinic to The POINT community center while also promoting the benefits of walking. The signs were intended to show the collaborative nature of UHP and other local community organizations which make up the community action group.

The last round of signage was branded green to promote environmental stewardship and a cleaner and greener Hunts Point. This time around, signs were not installed as a means of wayfinding, but were meant to demonstrate civic pride as they represented locations where local residents volunteered to clean up a city block. In collaboration with Wildcat NYC, an organization who ‘provides comprehensive cleaning services to ensure cleaner, safer neighborhoods’, residents spent multiple afternoons picking up litter along Southern Blvd. and beautifying their neighborhood. After a location was cleaned, a sign depicting the Urbee character picking up trash was left behind on a sign pole, using a marker the date of the cleanup was added to the sign to demonstrate to residents when the location was cleaned and who took part. Additional cleanup dates will employ the same kind of signage as momentum builds for the initiative.



Urban Health Plan associates, the Action Group and volunteers with Wildcat NYC

These three examples of signs installed around the main corridor through the peninsula demonstrated the commitment of both local residents and local institutions to improve the quality of life for the community. Signs were intended to cultivate a vision of health and wellness through frequent messaging which demonstrated activities that addressed local issues in an inclusive and meaningful manner. Signage expressed a healthier vision for the neighborhood while activating public spaces through social activity and public participation. Mixing it up, embracing the unique character of the community and activating the neighborhood are combined attempts for promoting and reinforcing a healthier and cleaner vision for the future of Hunts Point.

Play Streets as the Front Yards of the Community

Working again with the Healthy Livable Communities initiative I got to engage with the Urbee 'Shop Healthy, Eat Healthy, Be Healthy' campaign, a dynamic and engaging way for promoting public health while extending the work of the Urban Health Plan. Beyond the previous marketing examples promoting the campaign throughout Hunts Point is UHP's annual Play Streets event. Play Streets offer a low-cost way for neighborhoods to convert busy city streets into temporary recreation spaces for children and families and are normally sponsored through New York City's Department of Health & Mental Hygiene and Department of Transportation. Play Streets are immersive experiences which pop-up for a day during the summer, allowing programming by local organizations and businesses. The goal of these events is the promotion of physical activity while building a sense of community.

Every year since 2017, Urban Health Plan has sponsored their own version of NYC's Play Streets and centered programming around play, healthy lifestyles and health screenings. These annual events allow local residents to really experience the diversity of approaches Urban Health Plan brings toward public health and influencing the social determinants of health. Activities range from traditional games like jump rope and basketball, to salsa and Zumba dance classes and raising awareness around the benefits of recycling and composting. Taking a holistic approach to individual and community health, UHP curates a culture of health and wellbeing for participants in a fun and engaging manner.

Throughout the course of my fieldwork with the community of Hunts Point, I have had the opportunity to participate in three consecutive UHP Play Street events. These events are much more than a traditional Bronx block party. These events engage the

community in meaningful play, connect residents with valuable community organizations and social services while extending the healthcare services Urban Health Plan offers in an open and accessible manner to residents. Each year UHP secures a city permit for hosting the Play Streets event and the street of Gilbert Place, right off of Southern Blvd. is blocked off on either end. No cars are allowed to park on the street for the day and residents begin to pull out lawn chairs, aligning them along the sidewalks for a glimpse of the action. From there, UHP staff, volunteers and other groups affiliated with the community action group begin to set up.



Hunts Point residents taking part in Urban Health Plan's Summer Play Streets

Each year the plan for the layout of the street changes as different community organizations are added to the list of participants. In any given year you will have groups like Grow NYC providing locally-sourced fresh fruits and vegetables, Bronx Children's Museum demonstrating the value of local biodiversity and promoting arts and crafts and New York's Botanical Gardens educating residents about the value of recycling and composting. These various groups come together annually to connect

with the community and demonstrate their commitment to Hunts Point residents. Fun and physical activity are the themes of the day as residents take over a city block to celebrate the start of the summer and promote healthy lifestyles. Opening up the streets to local community activities is a shift in mindset as they become thriving front yards for residents. Our streets are by far the largest segment of public space in New York City and this activation of the streets turns what is normally seen as a space for commuting to a place for community expression and building social cohesion.

Urban Health Plan is an anchor institution in this community and the Play Streets event is a truly unique way this organization celebrates and gives back to Hunts Point. The day begins with families signing up to participate and learn about UHP healthcare services. After enrolling, children are given a playful bingo card which encourages them to connect with all the various community groups at different tables set-up throughout the street and engage with the diversity of activities that have been curated for them. Each table hosts something different for families to experience, some tables you might learn about healthy eating while sampling freshly made salsa made by Chef Karla, at another table you might learn about the amount of sugars which go into beverages such as sodas and fruit juices and at another table you are encouraged to spin a big wheel and wherever the marker lands attendees are challenged to perform a specific physical exercise as demonstrated by a physical fitness expert. After each experience, children receive a stamp on their bingo card and move on to another station which might have to do with reading, creative expression or financial literacy. There are also activities for adults in the form of voter registration, connecting with local law enforcement or health screenings and sexual health information. No matter young or old, Play Streets has something to offer every resident of Hunts Point.

After children fill their bingo cards with stamps from each station, they can redeem the cards at El Mercado, a central tent in the middle of the street where volunteers from Grow NYC distribute bags of fresh produce to families in reusable tote bags along with recipes and nutritional information to connect the content in the bag with the recipes they might have sampled throughout the day. Play Streets provides a rewarding and enlightening experience for families while extending and reinforcing the essential services UHP provides to the peninsula. Each year these events demonstrate the innovative approaches and passion UHP brings toward public health.

As a designer, I served multiple roles related to the day's activities. During the very first Play Streets event, I engaged residents by setting up my own table, encouraging children to draw their favorite outdoor activity on a template I provided them. I received a lot of feedback and responses included playing soccer, going to the park, dribbling a

basketball and dancing. In my second year, I took the feedback recorded and created aluminum road signs which were based on the popularity of the activities received the previous year. These signs were branded with the Urbee campaign logo and children were excited their drawings had become signs which demarcated specific zones for physical activities. Because of the high quality nature of the sign and the bilingual messaging, they could be used to promote other UHP activities throughout the year. They could even be left outside and overnight for extended periods of time.

Beyond creating signs (designer as communicator) and recording observations (designer as researcher), a more important role I played as a designer was that of a documenter. Working with a videographer, we collaborated with event organizers to document and record the activities of the day, engage with families, hear about their experience and interview representatives from the various organizations. Designer as documenter is an extremely important role as we were tasked with telling the story of the Play Streets in a compelling way as a means of extending the work of UHP and reporting back to funders. The videos we developed over the three years of the Play Streets events allowed UHP to talk about and celebrate the work they do, use the material for promoting future events and to demonstrate to grantmakers how they were using funding and as a means of applying for additional support. In fact, UHP was so impressed with the work they decided to hire a full-time media person from the community to carry on the work and tell the story from the organization's perspective.

The Play Streets events are part of additional summer programming UHP participates in with other members of the community action group. For the last 13 years the Hunts Point Alliance for Children (HPAC) has been organizing a Back to School fair for community residents. Similar to how UHP's Play Streets are organized, HPAC centers their activities around literacy, educational empowerment and children and family services for residents. These events are also in partnership with local organizations, but because they take part in Riverside Park, there is much more green space for activities and programming. Tabling events are similar to those of the Play Streets while also including boat tours from Rocking the Boat, which offers youth development through wooden boatbuilding, environmental science, and sailing along the Bronx River and haircuts for community residents from local barbershop apprentice programs. Similarly to the Play Streets, there is a gaming element where children heading back to school are encouraged to fill their bingo cards and return them for a brand new backpack full of back to school supplies to start the school year off on the right foot. The complementary programs, co-sponsored by UHP & HPAC, are intended to bookend the summer for residents with Play Streets kicking off the summer and the Back to School Fair closing out the summer. These events are meant to demonstrate

the diversity of services local organizations, community groups and non-profits offer to residents while extending the important work they do in a fun and inclusive manner.

Active Design and the Community Action Group

The Healthy Hunts Point Action Group seeks to nurture healthy lifestyles through engaging programming that regularly promotes physical activity, healthy consumption habits and empowerment through education. Working collaboratively, these organizations are able to do much more together than they would be doing if they were working independently. Together these groups are working to reimagine the community while working toward addressing health disparities and promoting active design as a means of addressing the social determinants of health. Active design is intended to use design as a means of fostering healthy and engaged communities.

The community action group embraces the design process for empowering organizations to respond to the local priorities of the community. Through recognizing how the built environment shapes health, community and quality of life, these groups work independently to promote their own institutional agendas while also working interdependently to support health, and ensure equitable access to vibrant public and private spaces that support optimal quality of life. This is achieved through a diversity of methodologies combining active design, creative placemaking and public health for building health equity and strengthening communal bonds.

Takeaways from my collaboration with the community action group for advancing health equity in Hunts Point include developing inclusive and culturally sensitive messaging with multiple organizations as a means of engaging a diversity of residents while connecting with them through language that builds trust. Not only does messaging need to be inclusive, it needs to be promoted through multiple channels and different modes of media for reinforcing content. Beyond developing the media channels and messaging, documentation is essential for archiving and extending the work and for educating groups within and between organizations, funders promoting place-based work and residents who stand to grow from such information.

Tony Fry's notion of 'recoding' the built environment was something that came up multiple times as intentional interventions were developed with and for the community.

'Recoding' is rewriting the narrative or changing what something means to user's (Fry, 2009). Residents responded that it felt like someone cared when they saw the signage and they were seen as attempting to shift the conversation and the stigma residents historically have felt about their neighborhood. This could be seen as a form of positive social modeling as residents reflected upon the posture of the community and what it means to be an active and engaged resident of Hunts Point.

Tools and services for promoting and extending redirective practices are necessary for reinforcing behavior change through design. The co-designed cookbook was a tool for developing best culinary practices in the kitchen and increasing food literacy. The cookbook was part of a six week culinary program based around nutrition and maintaining a healthy diet for addressing food-related illnesses. And was designed to support a culinary curriculum, while being accompanied with other kitchen utensils which supported cooking practices at home. Participants in the program also took part in a healthy shopping field trip which took them outside the classroom and into familiar contexts for simulating best practices around food selection in local shops. The field trip reinforces the healthy practices while connecting them to actual products found on shelves at their favorite stores. This approach addressed behavior change by redirective practices such as eating together as a family and supporting sub-practices like developing culinary skills in the kitchen, healthy shopping and food budgeting skills for sourcing items, including information and tools to support and extend these best practices at home.

The large-scale community events kicked off and concluded the summer demonstrated healthy best practices at the neighborhood level. Connecting neighbors and modeling active lifestyle practices while simulating sustainable habits, both individually and environmentally, they were developed to demonstrate that behavior change doesn't have to take place in isolation and is best addressed at the community level for larger impact. This was done by connecting public health to families, local organizations, public and private spaces and the natural environment all in the name of community transformation. The community events demonstrate taking a holistic approach to shaping the domains of everyday life through public health and social services.

Designing for the social determinants of health is about designing for individual and collective behavior change and seeks to empower community members by meeting them where they're at and engaging them in the places they most frequent through inclusive messaging and services that build trust. Active design encourages residents to become active themselves, to reach out and connect with community groups who want the best for them and to become active in the determination of their own health

outcomes. Building health equity is not only about addressing health disparities at the social and structural levels, it is about addressing challenges around the physical, mental, and social well-being communities share in common. The Urbee campaign was created to take a holistic approach towards addressing the social determinants of health recognizing that health is tied to wealth through the “Shop Health, Eat Healthy, Be Healthy” campaign while serving as an effective means for advancing the distribution of health and closing the health gap

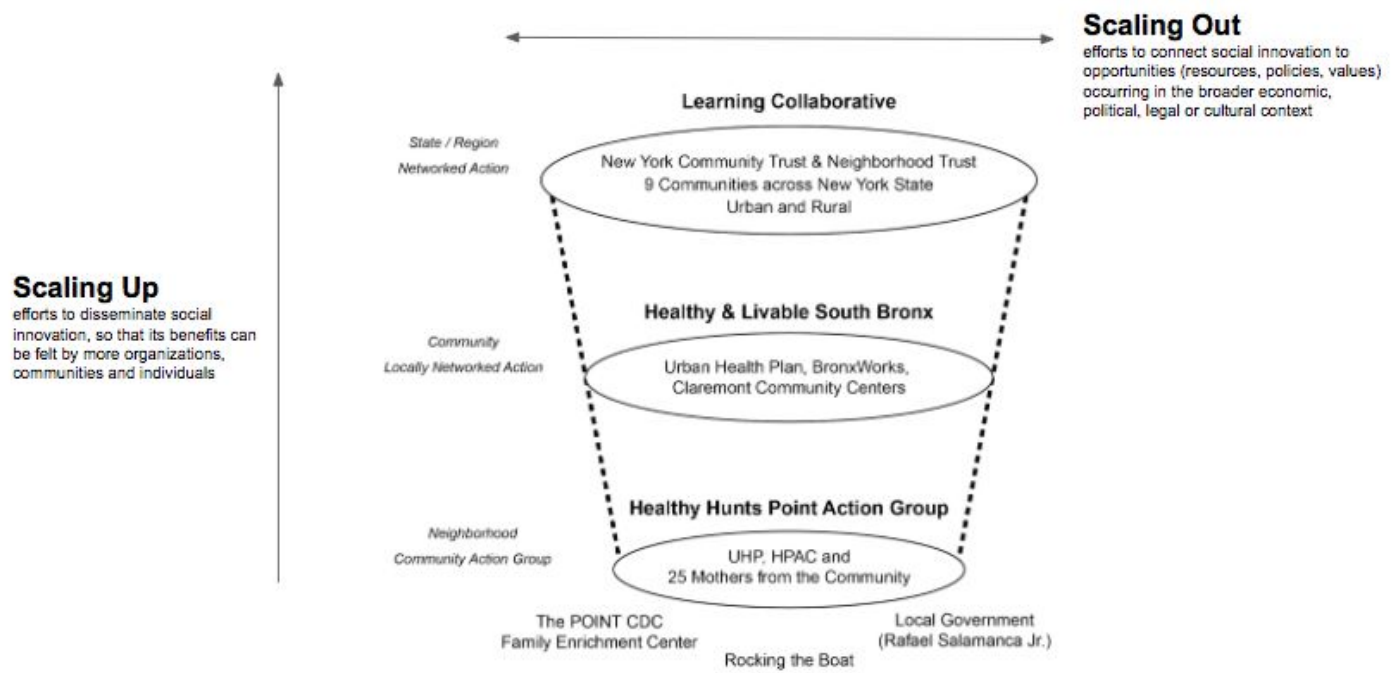
Scaling Out and Scaling Up Equity

As a community of practice working in the domain of health, the Healthy Hunts Point Action Group was able to successfully demonstrate how to work as a collective organized around a specific place and topic for developing innovative solutions and distributing healthy programming throughout the Hunts Point peninsula. Their work illustrates the collaborative effort public health takes at the community level with networked interventions supporting a new narrative around creative agency and social innovation. As a community of practice at the local level, the action group gave me a unique perspective as to how these entities were established and organized, how they operate on the ground and in practice and how they networked action for greater impact. As a unit of study, I was able to observe the inner-workings of a dynamic group of organizations, practitioners and community members for a more complete understanding of designing for advancing health equity in a community.

Looking outward and beyond the action group it was encouraging to see the structure of the Healthy and Livable South Bronx community of practice. At the next scale of social innovation, these groups were able to play to their strengths and focus on the different neighborhoods they were deeply embedded in while cross pollinating with other like-minded organizations committed to social innovation distributed throughout the South Bronx. These groups brought their own unique approaches toward creating healthier places to live and were organized in a manner that allowed them to deepen their own work while learning from peers in similar spaces, working across similar scales and engaging similar tactics for change. Those tactics are valuable insights that will resonate with other healthy community practitioners.

Stepping out from the South Bronx, it was interesting to reflect on how the initial funders, committing to a mission and a place, were able to develop networks of influence and impact. The strategy taken for systems level change began to become

more noticeable as major takeaways from the last meeting became the expressed desire to develop political momentum for engaging citizens and encouraging them to participate in the 2020 elections where US Rep. Jose Serrano of New York's 15 congressional district (home to Hunts Point), who after 30 years in Congress, announced he would not be running for re-election. The group saw this as an opportunity to support a younger, more progressive candidate to build off the legacy of the nation's longest-tenured Hispanic congressman. And to advance their social innovation work around health equity in the South Bronx.



Scaling communities of redirective practice

The scalar approach for addressing health equity is best illustrated by a tool mentioned earlier in the methods section, the WHO's Framework for Action. You can point to the work done across the different communities as existing at different scales along the social ecological model of health. The model helps to visually understand where interventions are being situated and their potential for 'scaling out' through disseminating social innovation efforts to other communities and residents (Antadze & Westley, 2013). As the learning collaborative sought to look upward to the policy level, they sought to 'scale up' by connecting their social innovation efforts to a broader, in this case, political and cultural context (Antadze & Westley, 2013) Scaling up this kind of work seeks to impact the broader system of health and in turn shift the larger context.

Place-Based Expert Interviews

The previous work discussed took place specifically across the South Bronx. Interventions were targeted to satisfy the needs of the local population in an inclusive and culturally relevant manner. What is encouraging about the co-design process, it can be facilitated anywhere, and have entirely different outcomes based on the local context you're working within.

Reflecting on the fieldwork with UHP, the action group and the learning collaborative, I noticed similarities to the approaches these different communities of practice applied for advancing health equity in the communities they served. The tactics for advancing equity developed in the South Bronx started to reveal a pathway for doing this kind of work. Collaborating with a diverse group of public health practitioners, community organizers and local institutions, demonstrated that this work, while place-specific, might be more common and generalizable. This insight encouraged me to look outward to other examples of projects and practitioners doing this kind of work across the United States.

Looking to examples around the country, which advanced health equity through social innovation and community engagement, I was encouraged by the amount of compelling work at this intersection. Throughout my research, I connected with 22 experts, from a diversity of disciplines, including community and regional planners, civic designers, educators and placemakers, representing the plurality of ways public health can be practiced. The expert interviews shared insights from their process for creatively addressing the social determinants of health.

The process for engaging these practitioners emerged from investigating the intersection of community, design and public health. Motivated by the work I had collaborated on and similarities in the tactics observed in the South Bronx, I was eager to connect with like-minded practitioners to discuss their work and process for working with communities. To begin my investigation, I read through countless manuals and process books for community engagement and creative placemaking, including resources from the fields of community development and public health. The secondary research familiarized me to the work of leading experts across those fields while disclosing tools and techniques used in practice. I was exposed to the broader community through conferences focusing on placemaking, equity and public health.

From these interactions, I was able to interface with organizations, consultancies and practitioners, specializing in asset-based community development, directly engaging them for learning more about their process and the tactics they applied in practice.

The groups surveyed can be found in the appendix along with key insights which emerged out of the expert interviews. Advice included designing for social capital, creating opportunities to flow through social networks, helping to broker and bridge relationships. Approaching this type of work by not just doing good in a place, but doing right and delivering justice and equity. And contrasting work versus a job, that this work is fundamentally about people, including the practitioners, and to tell those stories and remember the human angle to the work for not getting caught up in the trappings of a job.

These insights allowed me to focus on best practices vetted through the expert's own projects for developing a list of place-based tactics. While these tactics might have advanced health equity in their specific context, my focus was on commonalities in methodologies. What were the essential elements for doing this kind of work? What methods were shared in common and extractable? And how might this work be documented, disseminated and discussed in a manner that expands the methods while still remaining context specific?

Examples from expert interviews reinforced my place-based design research approach. Insights like, 'meeting people where they are at' was expressed multiple times. When I would follow up with, where is that? I would get answers that brought to mind sociologist Ray Oldenburg's term Third Place, the places where people spend time between home and work. Social places like parks, barber shops and public libraries, where communities form around. Other insights included, lifting up the community's shared values through 'listening sessions.' And constructing or collaborating with existing steering committees, groups similar to the Hunts Point action group, for building trust and momentum around projects. Another comment, 'slow motion is better than no motion,' reinforced my observation in Hunts Point around longer time horizons of engagement. I was reminded that, 'the community is the expert,' and as a researcher, 'this work moves at the speed of trust.' Reviewing interview transcripts, patterns began to emerge through the responses.

Takeaways from expert interviews included getting to know the community before they get to know you, intentionally design your way in through authentic engagement. From an asset-based perspective, all members of a community have certain strengths to be nurtured and leveraged through capacity building. That community cultural capital and

social networks are resources for furthering research process and design outcomes. And finally, while commonalities existed in process, outcomes needed to be authentically adapted to the needs of the local community.

In the next section, I discuss the takeaways in more depth, reflecting on my inquiry in relation to expert interview responses. And explain the process for selecting tactics and the rationale behind the structure of the playbook.

Book Synthesis

Taking data gathered from expert interviews, along with takeaways from the manuals and process books reviewed, I collected a number of successfully vetted tactics from the field. With an expansive list of moves made and lessons learned, I began analyzing patterns in approaches. Looking across the various ways of working, I recognized they facilitated, either implicitly or explicitly, the same iterative design process through Action Research, research informed action and action informed research. Taking a place-based and human-centered approach, local community members were involved throughout the process as ‘the community is the one with the problem.’ And being involved in that process benefitted both resident and researcher.

Recognizing the cohesiveness to approaches, repeatedly coming across a shared expression or phrase for articulating a move in the process, the application of like tools for advancement at similar points in the process and references to the same case studies as inspiration or illustration, I saw these practitioners, in a more general sense, as a larger community of practice. A group of people building relationships through feedback and peer learning, a sharing of practices and development of a collective body of knowledge, and the generation of methods and tools within a shared domain. This realization revealed the shared terminology, methodologies and tools this community of practice held in common. This insight led me to better understand what I was looking for through the synthesis and how best to structure the collection.

As a means of organizing and curating the collection of tactics, I ordered them along the place-based design research structure - research of, for and by place. By laying out the playbook in this manner, I was able to sequence individual tactics based on their application along the design thinking process, reducing the final amount because they either lacked relevance when ordered in this fashion or they were too similar and redundant. This refinement and ordering exercise, conversant with my own observations in Hunts Point, literature analyzed and extracted insights from expert

interviews, synthesized the tools and tactics into a coherent collection for articulating an 'equity from within' process.

Equity from Within - The Playbook

Acknowledging the role of equity in both process and outcome, the playbook came out of a desire to address the primary research question of the thesis. In my ambition to explore new ways of designing for shifting power dynamics, as discussed earlier in this research, I explored different ways of designing that have the potential to contribute to this aim.

Redirective design practice is highlighted as an alternative way for thinking about design practice. Declaring the ontological nature of design, redirective practice and design studies, offer a way for reflecting on the impacts of disciplinary practice. However, redirective practice as a 'change strategy' (Fry, 2010), is just that, a strategy short on specifics. The playbook offers both tools and tactics from real world projects for enacting the change strategy of redirective design practice. As a collection, they are assembled from a diversity of fields for engaging in transdisciplinary collaboration. Informed by community development, creative placemaking, public health and civic design, the playbook offers bottom-up, generalized advice for dealing with localized issues.

Community development offers a process where community members come together to take collective action to common problems. Engaging in this field, I reviewed resources used by practitioners for facilitating community change. These works were clinical and inaccessible to community groups looking to apply lessons on their own and the structured process needed to be managed by a trained facilitator paid to participate. Recognizing the paternalistic aspects inherent in this way of working, I sought to produce a work that was accessible, visually engaging and provided a roadmap for a community to engage in for exploring solutions to common problems on their own. Facilitation guidelines and resources support this effort.

Creative placemaking is a process in which public, private and non-profit sectors strategically shape a physical environment. The field is young and offers new techniques and potential for change. In its infancy, it lacks reflexivity and a criticality on its outcomes. Whose strategy is being implemented and to whose benefit? Often targeting low-income 'places that need to be changed,' beautification of these places can lead to gentrification. Recognizing the estranging aspects of creative placemaking,

the playbook looks inward on a community and takes an asset-based approach for amplifying cultural capital and internal capacity building. A theory of change and action planning provide mechanisms for residents to dictate the direction they want their community to go.

Recognizing the link between place and health, public health is concerned with the health of people within a community. Terminology from this field shapes everything from policy to packaging. With a focus on population wide conditions associated with health, the expansive nature of a term like 'public health' reveals scoping issues and highlights framing challenges. As a transdisciplinary field, it has the potential to conceive of itself too expansively and beyond the scope of health and science. Recognizing the possibility for overreach, systems thinking is imbued throughout all six chapters of the playbook. Borrowing language and concepts found in public health, the simple visuals complement the text, offering different approaches for illustrating the collection of tactics through different systems mapping techniques. And reinforcing the interrelationship of physical and social infrastructure that shape place.

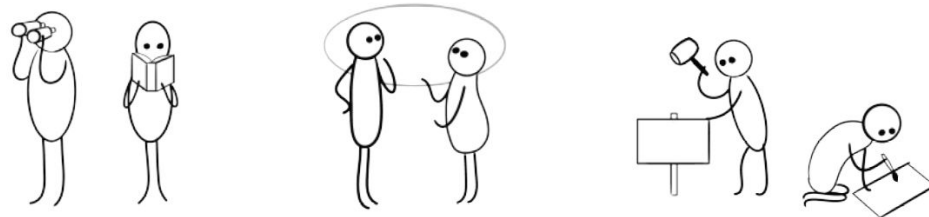
Democracy is a design problem, citizen design is a practice that focuses on the common good across scales and sectors. Beyond a focus on government alone, this way of working brings together institutions such as business, nonprofits and public institutions to address complex issues that are not exclusive to one sector. Similar to public health, the aspirations of citizen design face scoping challenges. What are the elements of the democratic process found through a citizen design approach? How and when is the public voice expressed? Recognizing the need to develop a collective voice, the playbook offers different ways of making the invisible, visible. Offering alternatives to the hierarchical nature of representative politics, the political nature of everyday life is enlivened through tactics of decentralization and empowerment for inspiring grassroots political action.

The Equity From Within playbook, is established in principles of redirective practice for revealing the political nature of design practice and exposing the structural and cultural conditions that design, designs. A focus on place-based everyday practices locates the work in a prefigurative position for 'modifying, remaking or reframing' everyday practices through design (Fry, 2009). Tactics, not traditional design methods, as they are defined, were selected for their ability and replicability, for supporting and extending a longer strategy for shifting power dynamics. As Foucault reminds us, 'power is everywhere' and all around us,' however there is power in a community coming together and focusing on place as 'everywhere is always local' (Foucault, 1998). The playbook was intended to extend the project of redirective design practice and the format was

selected to support this effort by disseminating praxis in an accessible and shareable guidebook layout. Beyond the scope of this thesis, the larger aim is to distribute the collection of tools and tactics to communities, researchers and design practitioners looking to advance equity in their own settings.

Equity from Within

Design Tools and Tactics for Place-Based Practice

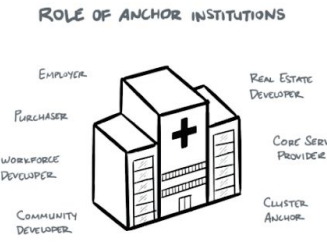


Francis Carter + Ray Owen

Equity from Within - Design Tools and Tactics for Place-Based Practice (playbook cover)

Learning & Interpreting	Organizing & Convening	Aligning & Visioning	Designing & Co-Creating	Operating & Sustaining	Reflecting & Evaluating
<ul style="list-style-type: none"> Leveraging Anchor Institutions Community Asset Mapping Stakeholder Mapping Behavior Mapping Listening Sessions Genus Loci Communities within Communities Tacit Knowledge Interpreting Local Metaphor Meaningful Data 	<ul style="list-style-type: none"> Community Visioning Context & Content Knowledge Social Network Analysis Partnerships (and Sponsors) Facilitation Do's & Don'ts Community Action Committee Meaningful Storytelling Authentic Community Engagement Practice Cultural Humility Symmetries that Exist 	<ul style="list-style-type: none"> Theory of Change Positive Deviance Space vs. Place Centralized, De-Centralized Practices are Political Build Capacity Third Place Making the Invisible, Visible Social Modeling Action Planning 	<ul style="list-style-type: none"> Cultural Capital Authentic Adaptations Small Wins (Start with the Petunias) Adaptive Reuse The Power of Ritual Adjacent Activities & Mixed Uses (Re)Commoning Designing at the Human Scale Amplifying Emerging Trends Community Champion 	<ul style="list-style-type: none"> Multiplier Effect Inter-Sectoral Collaboration Import Replacement Participatory Budgeting Alternative Forms of Capital Collective Impact / Critical Mass Ecologies of Interventions Sponsorship & Technical Assistance Local Media Alternative Financing 	<ul style="list-style-type: none"> Learning Network Small is Beautiful Networked Cooperation Training the Trainer Documentation Formative & Processes Evaluation Impact Evaluation (Analysis) Summative & Outcome Evaluation Criteria for Evaluating Alternatives Empowerment Evaluation

Equity from Within - Table of Contents

 <p>community-wealth.org</p>	<h3>Anchor Institutions</h3> <p><i>Leveraging organizations rooted in their community</i></p> <p>Institutions such as hospitals, universities, and churches anchor a community. To gain a better sense of how a community functions, and how it might function more effectively, you can look to local anchor institutions. Anchor institutions teach us more about a community, and also provide a powerful avenue for creating change.</p> <p>Within these various organizations or agencies, consider who makes the decisions. Who do they employ? Which members of the community benefit from their services? How do their goals align with those of the community? Anchor institutions play a major role in the social and economic health of a community, but they are not always attentive to the full scope of their impact. Through greater involvement in the decision-making processes of such institutions, community members may direct resources and propose actions that benefit the community.</p> <p>Financial support may be one of the greatest assets an anchor institution can offer. Anchor institutions can assist in fundraising, but even more significantly, they can provide fiscal sponsorship. Partnership between anchor institutions and other community organizations allows for an intersectional collaboration, where the voices of many are heard and combine to create a unified effort.</p> <p>Meeting the needs of a community requires deliberate, strategic action on behalf of anchor institutions. This action can only occur when community members have the voice and the power to direct policies.</p>
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Equity from Within playbook - sample spread

<h3>Tips for Advancing Equity</h3> <p><i>Subheading goes here</i></p> <p>Define and know the community - Generally speaking, the community is the one with the problem. It is important to do the background research and learn about the community, local culture, social networks, economic conditions, history and situated experiences.</p> <p>Equity throughout the process - A process focused on equity at all stages ensures fairness and inclusivity. Engage in an approach which produces policies, programs and practices that advance equitable outcomes through framing and interpreting, implementing and evaluating change.</p> <p>Embrace different modes of participation - Getting buy-in is a crucial part of the process. Expand your definition of participation and allow for formal and informal ways of involvement. Build community trust by allowing members to engage on their terms.</p> <p>Networked action and intervention - Complicated challenges require complex solutions. Efforts should support one another and enable collaboration that empowers the community. Build momentum through a diversity of activities which strengthen and extend your strategy.</p> <p>Focus both downstream and upstream - Advance strategies focused on daily actions while working toward addressing the causes of the causes behind inequities. Policies, practices and places offer different opportunities for enacting, advancing and scaling change.</p> <p>source citation</p>	<p>Develop collective political will - Change comes through shared self-determination. Community leadership, development and organizing is about enabling people power through participation. Support structures should activate residents and amplify their collective voices.</p> <p>Leverage partnerships and resources - Build community development skills and foster new relationships by mobilizing different forms of capital. Strategic partnerships and a focus on assets over deficits can lead to transformation and the potential for longer-term change.</p> <p>Enhance collaboration for social innovation - Equitable community partnerships require a transdisciplinary approach. Collaboration should add to the quality and quantity of interactions between stakeholders while working across issues and sectors to advance equity.</p> <p>Engage in longer time horizons - Long-term partnerships have the greatest potential for successful outcomes. Investing in a place for meaningful change takes time and commitment. Develop strategies to maintain collaboration and build capacity for sustaining progress.</p> <p>Change the narrative - New narratives about a community can shift paradigms and reframe possibilities. Contextualizing community problems and inequities can shed new light on current conditions. A compelling story has transformative potential for driving community change.</p>
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Equity from Within playbook - Tips for Advancing Equity

Summary

Wrapping up the fieldwork component of this research was both rewarding and reflective. The groups of practitioners and approaches I was exposed to, allowed me to better understand the dynamic nature of the collaborative work and the collective effort it takes for addressing the social determinants of health. Revealing to me was the scalar nature of the communities of practice networked together for knowledge sharing and greater place-based impact. The communities of practice were led by well-intentioned and capable practitioners and compassionate community members, expanding upon the definition of communities of redirecive practice, by encouraging all members, both in Hunts Point and in the South Bronx, to come together and share their passion and expertise. Community resilience comes through healthy interdependence. The different organizations, with very different objectives, came together to benefit the community, lend their disciplinary expertise and achieve something larger than could have worked independently.

Looking inward on my own practice, the reward was the diversity of projects I had the opportunity to collaborate on and realize through place-based design research. Interventions into the community ranged from providing healthy food access to improving the built environment for better health outcomes. The work was done with members of the community and their 'buy-in' and involvement, in both process and outcomes, contributed to sustained impact and active citizenry.

The complementary nature of the organizations, their approaches for working together and the services they provide the community, stands out as a coordinated approach for improving the overall health of a population. Another rewarding aspect to the range of projects was how they networked together under the umbrella of a healthy lifestyle campaign for approaching health holistically. The Urbee campaign provided a structure, much like a community of practice, malleable enough to allow for different types of initiatives to be developed, yet unified in the same domain of public health, while allowing for different modes of involvement and types of participation. The projects could be tailored to specific segments of the population or presented more broadly to the general public. Shifting the culture by changing the narrative, from the individual to the community level, successfully demonstrated how to begin seeding and nurturing healthy lifestyles.

Looking outward and having the opportunity to reflect upon the work, allowed space in my practice to step back and learn from the collaborative efforts throughout the three year process. The place-based approach by funders encouraged recipient

organizations to tailor programming to meet the needs of the communities they serve. The networked approach, also initiated by funders, provided for the creation of 'alliances with other actors beside direct partners' who were able to support different types of communities of practice, an 'important part of creating and sustaining impact'.

The momentum developed from this strategy encouraged change makers, across the different neighborhoods of the learning collaborative, to act as facilitative leaders in their respective locations as they connected groups throughout their local context for networked impact. While leveraging the coalitions for extending their efforts by connecting and extending services to residents. Additional takeaways included the prioritization of authentic community engagement as a way of building trust and advancing co-creation. This was an important takeaway as the process for nurturing community involvement takes time and a commitment to a particular group of people embedded in a place. Lastly, the culture of support, collaboration and sharing of best practices created an atmosphere of peer learning and allowed for an exchange of successful tactics that can be shared and tailored to a specific community context.

The playbook development offered another opportunity to reflect on the takeaways from the work in the South Bronx. Conducting expert interviews as the grant was concluding, the details of the collaboration were still fresh in my mind, while at the same time, I was able to distance myself to begin reflecting on the process. Through the interviews, I was able to compare and contrast my recent work with similar practitioners across the country. This facilitated deeper dialog with participants as I could speak directly to the process from my perspective, as they offered their own. A shared language through different viewpoints focused on process, unveiled interviewees and exhibited the elements of a community of practice around a shared domain in the formation of new knowledge.

Chapter V: Discussion and Conclusion

Discussion and Reflection

The Equity from Within playbook emerged from the theoretical design framework developed in Chapter Two and was structured through the reinterpretation of Frayling's research practice process focusing on place for situating my inquiry. As a collection of tools and tactics for place-based investigation through co-design, the playbook grounds the design framework while allowing for its application to a local context and for understanding and catalyzing community change through everyday practices. What will be discussed below is how the practical playbook connects back to the theoretical framework.

The Design Framework: Human Needs and Redirective Practice

The design framework developed throughout this thesis is founded on the idea that humans share the same collective needs, those needs are satisfied in a myriad of ways emerging out of the negotiation of social structure, local landscape and individual agency. Understood as a system, human needs are interrelated and interactive, uniquely satisfied within the time, place and cultural context of everyday life. How those needs are satisfied shapes health and quality-of-life outcomes.

How we attain levels of health are through what our environments afford or make possible, for good or for ill. Environmental affordances constraints action possibilities through the coupling of subject and object toward goal fulfillment. Affordances shape daily practices as situated within the local landscape and express our performative relationship to our environment. The health of that environment has a direct effect on the health of its inhabitants. The confluence of natural and artificial circumstances codetermine the conditions of everyday life. The affordances of an environment are the assets which allow for physical expression, meaning making and value creation.

Situating everyday practices within a time, place and environmental affordance reinterprets practices as a unit of study. As redirective practice argues, practices are inherently political, signifying the political conditions and outcomes associated when analyzing our everyday practices must be taken into consideration. How we commute, what we eat and how we shop all express a politics. Acknowledging the historical and

structural circumstances practices emerge out of opens up the possibility for redesigning and redirecting their politics.

As practices scale to shape the domains of everyday life, so too, are the politics associated with them. The nesting and sequencing of practices produces political inertia. The domains provide a systematic interpretation to the structuring potentiality of everyday practices and highlight their interdependent nature. Short and long networks shape trans-local relationships, converging on everyday life, sets the stage for design interventions. Domains shape lifestyles across scales giving rise to communities of practices. Communities within a community emerge out of these relationships as practices bundle, individuals collaborate and synergies materialize. The domains of everyday life, framed through redirective practice, provide a networked, interconnected and holistic framework for interpreting lifestyles and for making sense of the politics of everyday life.

Endogenous and exogenous satisfiers shape daily experience. They can empower an individual through up-skilling and creative agency or disempower through outsourcing and eschewing responsibility. How we meet our needs is how we relate to our landscape, how we express our inherent values and how we demonstrate our relation to other members of society. The distinction of needs fulfillment is the distinction between building capacity or creating dependence. Everyday experiences arise from how, when, why and with whom we satisfy shared basic needs.

Fry's redirective practice seeks to redirect the structural and cultural conditions that design our mode of being-in-the-world. This requires looking beyond the field of design and to the multiplicity of fields which contribute to social and ecological ways of being and sustaining. Wenger's communities of practice focuses on how communities of practitioners shape culture through learning and activities focused on an area of shared concern while producing a body of knowledge consisting of stories, methods and tools. Combining redirective practice, an eco-political theory with communities of practice, a learning and organizational theory, defines a space for exploring how practitioners develop practices and the political nature of these efforts. Communities of redirective practice considers the complexity of social-material systems, provides a reflexivity upon practice and works through transdisciplinary collaboration to address issues related to sustainability.

The value of the design framework developed through this thesis is that it takes a socio-material and place-based approach toward doing redirective design practice. Everyday lifestyles and daily practices, imbued with a politics, which (re)produce society are the focus for intervention, for collaborative focus and shifting power dynamics. The

design framework links disparate theories across social and material areas of study, to provide a comprehensive means for situating a design practice within a specific place and for investigating a localized context. The design framework is dynamic enough to shift scales from the micro to the macro while discerning how human needs are uniquely satisfied to a time, place and cultural context.

The Equity from Within Playbook: Translating Theory into Practice

The Equity From Within playbook actualizes the theoretical design framework, Spectrum for Redirection, by laying out and diagramming, in straightforward terms, the socio-material assemblages which give shape to a place. Through the curated collection of tools and tactics which emerged out of research exploring a collection of practices directed at the scale of community, a transdisciplinary work was produced for advancing redirective design practice. Design tools and tactics from the playbook can be plotted along the design framework for a deeper understanding of their structuring elements. The playbook offers a means of advancing the theoretical design framework through practice-based research.

The playbook grounds the design framework in a designerly practice and is meant to define, distill and distribute best practices concerned with advancing health equity and equity more broadly within a place. While the design framework is an abstraction providing a high level overview for redirecting practices across scales, the playbook serves as a means for drilling down and defining, learning, co-designing and evaluating redirective efforts. The simple visual representation and structure of the design framework organizes information, tying together existing theory and scaffolding it along a spectrum that increases in socio-material complexity, rippling outward from situated environmental affordances shaping bottom-up practices to the communities of practitioners shaping top-down practices. The design framework is intended to be a system for highlighting relationships between individuals and environment, identifying how practices co-shape context, illustrates interconnected life domains resulting from networked practices and represents interrelated communities of practitioners which structure them. As a framework, it is meant to reveal the nature of everyday practices, reducing them to their essential elements and identifying leverage points for redirection and place-based intervention.

Approaching equity as both a noun and a verb, the playbook serves as an actionable guide for redirecting the 'structural and cultural conditions that design our mode of being-in-the-world' (Fry, 2009). The goal of the collection of tools and tactics is to turn a place around, to work inside out, to advance equity by assessing the local assets and making sense of a community context and the people in it. Before you can begin to

learn and work with a community, you must define it. The design framework reduces a community to its socio-material assemblages. With the strength of the playbook arising out of, and expanding upon the idea of communities of practice, illustrating different types of communities within a community, such as communities of place, resistance and culture. The playbook provides a means for collective self-determination and is intended to be accessible to practitioners working at the scale of community.

For place-based design researchers, research of place is concerned with asking the question, what was? Taking into account the ecological, economic, political and cultural history of a specific landscape for bounding and contextualizing a place and time. This phase of the research process focuses on surveying and accessing prior research and preexisting data already collected. Getting to know a place by looking at published and unpublished reports, identifying neighborhood census and health data and reviewing historical journals, newspapers and books related to that community.

Inquiry begins by orienting to the local setting, focusing on the community assets, talents and strengths, cataloging preexisting secondary research while beginning to get the pulse of place. Starting with the learning and interpreting chapter of the playbook by looking at how needs are satisfied locally, identifying unique social practices to the community and the affordances of the local landscape. From an outsider's perspective, what are the observable local customs? Who are the local anchor institutions and organizations? What is the *genus loci*, or the spirit of the place? And how do those factors shape everyday practices within that community?

The type of work discussed in this thesis moves at the speed of trust, advancing inward toward the center of a community, from an outsider's perspective, requires a design posture of humility. Orienting to a place takes time, research of place focuses on what was, research for place takes background information gathered and connects it to the present day. Research for place asks, what is? And provides material to inform place-based practice. Inquiry focuses on specifying, identifying local organizations and decision makers in the community, current events and efforts underway while looking outward and beyond the community you're working in for relevant best practices that might inform and inspire new ways of working.

Design your way into a community by identifying the social networks and partnerships, engaging in local meetings and acting authentically in engagement efforts, cultivating trust and weaving the design researcher into the social fabric of the community. An example from the playbook related to this is **Practicing Cultural Humility**, transcending cultural competency through introspection on practice and a journey of lifelong learning. Showing up and meeting people where they're at takes commitment and longer time

horizons of engagement. The playbook discusses co-designing as the combination of **Content Knowledge & Context Knowledge**, for striking a balance in expertise and united for exploring what already exists and imagining what might. The interaction takes place when communities are organized, motivated and informed. Design research plays a valuable role in bringing these factors to bear. Getting the entire system in the room, through **Inter-Sectoral Collaboration**, is the goal when researching to enable and advance a place.

Community organization comes about when a group of people are aligned around a shared common interest or challenge. Tactics offered for doing secondary research, **Community Asset Mapping** and **Behavior Mapping**, informs the reader on contemporary concerns. Bringing issues to light takes an attunement to a group of people and their shared struggles, the Domains of Everyday Life provide a means for bounding lifestyles at certain scales while identifying overlaps in daily experiences. Overlaps demonstrate shared concerns for satisfying needs with the playbook offering various tools for aligning perspectives while facilitating shared visions for the potential future of the community. A tactic for bounding and visioning, **Positive Deviance**, recognizes the shared challenges a community faces and looks to those members who are able to excel, exemplifying a way for moving forward. For the design researcher, a robust understanding of the issues affecting a community demonstrates a sensitivity to practice and a pledge to the people in the room. Looking to the design process, how can the tools from the creative problem solving be leveraged to nurture trust with community members? How can engaging with a group of people through the design process be mutually beneficial for all members? And, what does a shared vision for the future look like when taking into consideration the domains of everyday life?

Realizing a co-shaped vision for the future takes both strategy and stakeholders while change at the community scale takes commitment and creativity. To advance what is, to what might be, requires building momentum and cultural capital around a project, getting 'buy-in' from necessary and relevant leaders and organizations and a coordinated action plan. **Anchor Institutions** offer structure and leadership in the community for creating momentum. Research by place seeks to ask, what could be? Inter-sectoral collaboration is essential to communities of practice who produce new knowledge, new tools and new stories. A shared concern aligned around relationships developed over time, produces new knowledge and new practices that are focused on addressing the key issues a community forms around. **Meaningful Storytelling** encourages expressing community issues and concerns in a compelling manner. As a learning theory, communities of practice provide a place for inquiry achieved through

practice. Research by place, through the lens of communities of practice, focuses that inquiry on a specific place.

Communities of practice offer a creative space for coordinated action and a forum for contemplative reflection and discussion. The material and immaterial knowledge produced in these settings are interdisciplinary in their nature, offering a diversity of perspectives to be expressed and debated. Their alignment around a shared domain gives unique disciplinary perspectives a point of convergence. What emerges out of these collaborative efforts can be intentionally steered through co-creation and redirective practice. **Adaptive Reuse** inspires communities to think about assets over deficits for reimagining old or underappreciated infrastructure. Co-creation shapes new narratives by allowing different voices to contribute to what could be. Redirective practice instills a reflective element to the creative process, a consideration to the consequences of creative action and their byproducts. **Impact Evaluation** assesses the changes to the community that can be attributed to a particular intervention. The resulting communities of redirective practice produce both action and reflection through participation in co-creation with new stories emerging from the transdisciplinary and place-based collaborative efforts.

As a means for facilitating the co-design process, the playbook applies the concept of communities of practice for bringing together organizations and groups of people with very different objectives to benefit the community they are all a part of while reimagining the community they want to be part of. The shared domain is the place they collectively determine through their situated everyday practices and the lifestyles they lead. The new knowledge, new tools and new stories produced are byproducts of group facilitation and the co-design process. To consider what could be, values need to align around a shared place and new stories need to emerge which express and enact those values. Who are the groups and organizations necessary for defining and articulating shared values in a community? What is the pathway for progress and implementation? And, how do the outcomes represent and effect both community and collaborators?

New narratives have the potential to turn a place around. The co-design process allows for many voices to contribute to the development of those stories. Demonstrating a commitment to a group of people, coordinating and implementing action and enacting sustainable change takes longer time horizons and an embedded practice based on trust and mutual understanding for the stories to emerge. Informed implementation must be developed around measurable outcomes for identifying change over longer periods of time and for new narratives to be taken up and familiarized within a local culture. Communities of practice are spaces for reflecting and evaluating on community efforts and establishing learning networks, the sharing of new knowledge between

different communities of practices extends learning and best practices beyond the scope of the community. Stories of resistance, resilience and renewal fuel redirective practice.

Connecting lessons from environmental psychology, social practice and learning theories founded in principles from local economics and public health structures a theoretical framework dynamic enough to frame large-scale social and environmental challenges within a localized context. The design framework bounds wicked problems to the daily practices of everyday life and creates a spectrum for focusing on socio-material assemblages, their historical development over time and the structural components which produce them. Scaling practices through their material and immaterial elements provides a framework for reducing and managing complexity. For designers working on large-scale issues around social innovation, the design framework provides a scheme for doing place-based redirective practice at the scale of community.

Structuring research of, for and by place locates the design framework to a bounded area for practice-based inquiry. A design research process asking what was, what is and what could be scaffolds the investigation and structures a comprehensive study concentrating on time, place and culture. As a means of directing research efforts, the reinterpretation of Frayling's research practice process focused on a specific place advances what it means to do Action Research within a localized setting. A practice-based investigation focused on research of, for and by place benefits design researchers providing a roadmap for structuring their own investigation. And the theoretical design framework developed through this thesis provides a higher level schema for analyzing the structural and cultural conditions that designs our mode of being-in-the-world.

Research of, for and by place organizes the playbook as a means of inquiry. The first chapter in the playbook, learning and interpreting, asks the question what was and begins the design research process by familiarizing the researcher to a population and place. The curated resources at this stage are intended to situate the research by contextualizing the investigation through secondary data. The next two chapters, organizing and convening and aligning and visioning, forward the investigation by asking what is. The two chapters provide resources for enabling and advancing research efforts intending to inform or produce material for the place-based practice. The following two chapters, designing and co-creating and operating and sustaining, engage the co-design process and advance the research through situated practice. Tools and tactics at this stage encourage performance, creative agency and implementation through place-based participation. The final chapter, reflecting and evaluating, looks back on the process and asks what worked and what didn't. This

stage is meant to instill a sense of reflexivity into doing design research, offering resources for assessing the design research process and the outcomes from practice.

The spectrum for redirection design framework provides a theoretical architecture for informing a mindset which recognizes the structuring processes behind the daily practices which shape everyday life. The design framework was structured to reveal complex design elements behind seemingly mundane daily practices, to reduce them to their essence and lay them bare for redirection. From this reality, an approach to doing place-based design research asking what was, what is, and what could be, scaffolds the investigation, contextualizes everyday practices to a time, place and culture and informs redirecive design outcomes. The playbook developed out of the design framework and place-based research process is intended to ground the thesis by aggregating ways of working which enact redirecive practice. The resources outlined in the playbook are meant to inform a new way of designing that shifts power dynamics and shapes new narratives.

Equity from Within is a call for collective self-determination through creative agency. Recognizing the political nature of our everyday practices reveals new possibilities for reshaping our communities. For transformative change to take place it needs to be transdisciplinary in nature, build community capacity for shaping their own futures and advance equitable outcomes which redirect the structural and cultural conditions that design our mode of being-in-the-world.

Conclusion

Connecting back to my initial research question, this thesis looked at the role of everyday practices for shaping outcomes and how design can be leveraged for disrupting the status quo in the context of community health equity. Health and other quality-of-life outcomes result from the structuring elements of society and the actions of individuals; these two forces meet at the intersection of community and co-determine these outcomes. To shift power dynamics and shape more equitable health outcomes, the community scale serves as a fitting space for design intervention. Co-design, as a process for collaborative creative problem solving, catalyzes community through creative agency and promises more sustainable change by involving the stakeholders in the community to help ensure the results from the process meet their needs.

To deepen my understanding around the role of everyday practices, in **Chapter Two** a design framework concerned with socio-material assemblages, scaling from daily practices to disciplinary practitioners, was developed for explaining how everyday practices are constituted and how they go on to construct society. Daily practices are

by design and are often done in a top-down manner leaving the voices of the people who will be enacting them out of the discussion. The design framework's intention is to redirect this power dynamic through better understanding the processes which structure daily life. As a design framework, it is meant to support a design practice focused on redirecting everyday patterns of behavior toward more healthy and sustainable outcomes. Because of its abstracted nature, the design framework serves as a blueprint for extending this thesis to other communities.

Looking to the Hunts Point community of the South Bronx, where this work emerged out of, we see that community activism matters and that collective voices working through organizations and with community residents can affect positive change. The residents there showed that communities, if organized, have power. In the **Scaling Out and Scaling Up section of Chapter Four**, I showed how networked communities of redirective practice successfully coordinated on a series of projects focused on improving the built environment and improving healthy food access. Public health is a transdisciplinary field focused on improving health outcomes and advancing health equity. Because of the nature of work within this field, it allows for organizations with different objectives to work together to benefit the community. Working in the space between design and public health, in the **Play Streets as the Front Yards of the Community section of Chapter Four**, I was able to look at the role a designer can play working with healthcare practitioners from a community health center in the South Bronx to assist in extending a public health campaign focused on everyday practices throughout the Hunts Point peninsula. The work improved health literacy and health outcomes for residents while promoting a culture around health equity.

Taking part in the work on the ground and in the community, I was able to step back from day-to-day activities and probe how the work materialized and how community change happens through internal stakeholders. From the position of designer as researcher, in the **Urbee a Place-Based Healthy Lifestyle Campaign section in Chapter Four**, I emphasized the networked efforts of different organizations in the South Bronx and the complimentary programming developed which took a holistic and lifestyle approach to medicine. Health was the lens used to coordinate action across sectors and empower community members through a diversity of neighborhood social services focused on many aspects of the social determinants of health. Urban Health Plan, as a community health center and anchor institution, "have developed a model of upward career mobility for staff from the community" (McLaughlin, 2019) by focusing on the 'causes of the causes' of inequitable health outcomes. UHP serves as a key community asset developing targeted programs with other local organizations for

reimagining the Hunts Point community around the shared values of family, community, health, perseverance and social activism.

“The South Bronx has presented a model for the rest of the world of an amazing comeback from terrible devastation” (McLaughlin, 2019). By positioning myself alongside an organization which played a major role in turning around the South Bronx, I was able to learn how this transformation happened while identifying different principles utilized by various groups in the community to improve living conditions. Principles like ‘sweat equity’ as capital, ‘cradle to career’ programming and ‘building capacity, not creating dependence’ served as key takeaways from my time working in Hunts Point.

Structuring the research of, for and by a place allowed me to historically contextualize the conditions of the Hunts Point community, provided me with data to enable my own research and practice while also informing collaborative action with community members in shaping design outcomes. Looking beyond the Hunts Point peninsula as it approaches other groups working at the intersection of community-based design and public health, I saw similarities both in process and outcome across the groups which aligned with the work I was doing in Hunts Point. Aggregating these different methods from across the country, they were organized into a collection of tools and tactics designers and other redirecive practitioners working at the scale of community can apply to their own practices. Just as the South Bronx presented a model for the world, the resulting playbook is intended to bring this work to communities that aspire to do the same.

New stories, new narratives about a community can shift paradigms and reframe possibilities. Effectively contextualizing community problems and shared inequities through place-based design research can shed new light on current conditions and empower through creative agency while offering new possibilities for what could be. A compelling story has transformative potential for driving community change. This work is not done nor will it ever be done - that is why it perhaps makes sense to consider equity as both a noun—and a verb.

Contributions

As described in the introduction to this chapter, and in the introduction to the thesis, the main contributions to knowledge include **a theoretical design framework which advances redirective design practice** focusing on everyday practices and communities of practice as areas for concentrating redirective action and for redesigning the structural and cultural conditions that design our mode of being-in-the-world. An approach to doing place-based design research has also been articulated for situating the design framework in practice and structuring inquiry through action research. **A series of projects** developed as part of the fieldwork chapter express the unique approach to doing place-based design research and provide examples of outcomes through this mode of inquiry. Lastly, **a playbook** complements this thesis as a resource for advancing place-based design research at the community scale.

The *Spectrum of Redirection* design framework deepens the work of redirective practice from the field of sustainable design studies. Linking together theoretical concepts from environmental psychology, social practice and educational theory and cognitive anthropology, the design framework combines work done beyond the field of design research. And makes the case for a model focused on redirective practice, constructed through disparate theoretical models, to shape a new perspective for reimagining design practice. The design framework introduces new concepts to design researchers, such as the domains of everyday life and communities of practice, while reinterpreting other concepts more familiar to designers, affordances and social practices, for a more critical interpretation of the systematic construction of everyday practices in a place. Implications for the design framework are to design researchers interested in pursuing redirective practice, for design studies scholars interested in issues related to sustainability and practice theory and researchers and philosophers interested in theories engaging materialism.

The scalar nature of the framework shifts from practices taking place at the individual and everyday scale, outward to social enactment and the shaping of life domains through dynamic and interdependent combination of practices and on to communities of practitioners who shape and design social systems through the creation of new knowledge, new methods and new tools. The value in this way of seeing the world, through the design framework, is the ability to decontextualize daily practices and their socio-material assemblages. And for a deeper understanding of how basic human needs are satisfied locally as derived from temporal, geographic and cultural conditions. In uniting dissimilar theories beyond the scope of design, I have created a novel design

framework to extend redirective practice beyond the field of design studies and into design-led practice-based research.

To illustrate the design framework in practice, a place-based way of working was developed. Similar to Action Research and expanding upon Christopher Frayling's model for systematic inquiry through the combination of research and practice, an approach to doing design research was developed and defined as place-based practice. Similar to ideas from philosophical materialism, place-based practice and the theory it seeks to ground in a local landscape, holds that all things, including mind and consciousness, result from material interactions situated in place. Research of place contextualizes place for inquiry focused in a local landscape and is concerned with understanding a population and their relationship to a location. Research for place specifies the inquiry through research to enable and advance place-based practice. The investigation at this stage focuses on informing or producing material for design outcomes. Research by place achieves inquiry through situated practice in an iterative action reflection learning spiral. Most similar to Action Research, research by place, refines and expands design outputs while fostering further action. At this stage through reflection-on-action, outcomes can be generalized and their properties abstracted. In reframing the relationship between research and practice, I have developed a unique process for inquiry situated through practice.

The collaborative projects presented in the fieldwork chapter of the thesis result from applied place-based design research practice. Emerging from the intersection of co-design and public health, projects from this chapter highlight the collaborative and place-based nature of this work while demonstrating implementable outcomes to advance research. In seeking to shorten the health gap, interventions targeted the social determinants of health and focused on advancing health equity. A place-based design process informed through community trust and longer timelines of engagement surfaced for grounding Frayling's research practice process while projects developed through this approach serve to illustrate the potential outcomes for working in this type of manner. Implications for this approach to doing design research serve practitioners working in public health interested in applying the design process and design research to engagement efforts with residents, investigators involved in community-based participatory research seeking to expand a community's involvement for co-developing creative solutions and experts working in creative placemaking and design research for structuring their own place-based inquiries.

Combined insights from expert interviews, along with reflections from my own practice, including best practices from the fields of public health, regional planners and community-based designers were synthesized into a playbook structured by the

iterative design process. The resulting playbook expands upon both the theoretical design framework, spectrum for redirection, while offering practical methods for advancing a place-based design research process discussed earlier. Resources presented in the book are an assortment of ways of working in the field and for leveraging the assets of the community a designer might be working with and in. As a resource, the collection of tools and tactics found in the playbook are easily accessible through simplified images and complementary text which explains each passage in an approachable manner. The playbook provides real world practical methods for designers and community organizers interested in working at the scale of community, asset-based community planners and developers looking to develop trust and build equity with local residents and community organizations and neighborhood groups looking for resources to advance local projects and build collective political will for turning a place around.

Future Work

Throughout the research, issues and interesting questions arose which were outside the scope of my thesis and some of them offer opportunities for possible future research. The creation of a design framework focused on redirecting everyday practices related to issues of sustainability, both personal and environmental, demonstrates a non-traditional approach to design research and challenges theories existing in the respective fields researched for this thesis. A way of structuring research was developed for doing place-based design research which has potential for influencing other design researchers and informing new ways of doing fieldwork. And a playbook emerged out of inquiry achieved through situated practice for applying the knowledge developed in this thesis to communities and practitioners looking to advance social innovation and build equity in their own localized context.

Exploring the spectrum for redirection design framework through the fields of environmental psychology, social practice theory and learning theory offers a new interpretation for how environments shape behavior, how daily practices emerge from local landscapes and the material culture facilitating learning and collaborating. Researchers working in these different domains may find a design framework comprising fields useful for thinking about their work beyond disciplinary boundaries. The design framework provides researchers in these domains an opportunity to engage in the field of design with potential implications for interdisciplinary collaboration. Questions related to how the framework acts as a means for facilitating collaboration and cross disciplinary knowledge sharing might be further pursued. How does this framework inform communities of practice and shape interdisciplinary collaboration?

What disciplinary fields might benefit from ideas established in designing for redirective practice? And how might those fields evolve from a redirective perspective and what might new outcomes look like?

From a sustainability standpoint, the design framework offers the potential for researchers interested in redirective practice as a means of expanding their own research interests and reimagining their own approaches to redirective practice. The spectrum, developed out of an interdisciplinary exploration, offers the potential for informing a multiplicity of professional practices as a means of critical reflection on the outputs of their own practices. More work can be done to explore how the design framework can be used as an artifact for reflection-on-action. How might the field of sustainable design studies benefit from the linking of theories found in the design framework? What kinds of practices might be redirected and at what scale and impact? And how can the framework inform deeper research in the field of redirective design research?

As a model for structuring research, place-based design research offers a means for doing fieldwork by connecting theory and practice. The model provides a situated way for understating a population and a place while advancing inquiry through action and reflection. The research practice process model is intended to shape an approach to inquiry with many different types of communities and offers up new possibilities for doing design research. What new ways of doing community based participatory research will come from this approach to structuring research? What does this approach to doing fieldwork look like when applied to other communities and in the hands of other practitioners? And how might place-based design research grow and become more generalized through an analysis of research projects across different community based work?

The final output from this research was a playbook for communicating this thesis beyond an academic setting. The intentions of the playbook are to practically apply place-based design research to a variety of locations and build upon work related to asset based community development. As a collection of methods, it requires distribution and testing in different contexts and with different communities. Questions around the uptake and applicability of these methods needs to be taken into consideration as the book is shared broadly with similarly motivated practitioners. Challenges around the distribution of the book also need to be acknowledged and how and where it is applied in practice need be taken into consideration. How do communities make use of tools like these? What do they do with them? And how do

they apply them to their local challenges? And lastly, how is that knowledge captured, documented and archived for extending learning?

Looking forward, I expect 'equity from within' to be the wider frame of research to which I will continue to contribute, and hope that my work will be useful to others in building further on this area of inquiry.

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Appendix

LIST OF EXPERT INTERVIEWS ARISING FROM THE RESEARCH

Expert Interviews

Name	Role	Organization	Domain	Location	Date
Aaron Thompson	Assistant Professor of Landscape Architecture	Purdue University	Community Development	Indiana	October 25, 2018
Andrew Shea	Assistant Professor of Integrated Design	Designing for Social Change	Education	New York City	January 18, 2019
April DeSimone	Founder	Designing the We	Civic Design	New York City	February 4, 2019
Cheryl Dahl	Founder	Flip Labs	Civic Design	International	September 26, 2018
Dennis Derryck	Founder	Corbin Hill Food Project	Community Development	New York City	October 12, 2018
Eduardo Staszowski, Laura Penin	Director, Parsons DESIS Lab Associate Professor of Design Strategies --- Co-founder, Parsons DESIS Lab Associate Professor of Transdisciplinary Design	Design for Social Innovation and Sustainability	Education	New York City	November 19, 2018
Gabriel Halili	Project Consultant	Hester Street Collective	Community Development	New York City	December 4, 2018
Jamie Williams	Healthy Livable Communities Coordinator	Urban Health Plan	Public Health	Hunts Point, New York	May 21, 2019
Jill Rouch	Executive Director	Hunts Point Alliance for Children	Education	Hunts Point, New York	August 8, 2019
Jim Diers	Founder	Neighbor Power	Civic Design	International	November 12, 2018
Jon Lloyd	Project Coordinator for the Centers for Disease Control and Prevention (CDC) and the Veterans Administration Pittsburgh Healthcare System	Positive Deviance	Public Health	International	February 18, 2019
Jonas Piet	Founding Partner & Advisor	InWithForward	Community Development	Vancouver, BC	October 26, 2018
Karla Giboyeaux	Dietitian	Urban Health Plan	Public Health	Hunts Point, New York	August 8, 2019
Kristin Hughes	Associate Professor	Carnegie Mellon University	Education	Pittsburgh, PA	October 3, 2018
Learning Collaborative	Funding & Grant-maker	New York Community Trust	Public Health	New York State	September 16, 2019
Lynn Ross	Project Consultant	Reimagining the Civic Commons	Community Development	National	October 25, 2018
Maryrose Flanigan	Executive director of the Alliance for the Arts in Research Universities (a2ru)	University of Michigan	Education / Placemaking	Ann Arbor, Michigan	September 26, 2018
Phil Bors	Technical Assistance Director	Healthy Places by Design	Public Health	National	November 13, 18
Ruth Santana	Certified Wellness Program Director	Urban Health Plan	Public Health	Hunts Point, New York	August 10, 2019
Steve Grabow	Educator, University of Wisconsin-Extension community development educator	University of Wisconsin	Community Development	Wisconsin	October 3, 2018
Stuart Candy	Founder & Associate Professor	Carnegie Mellon University - Situation Lab	Education	Pittsburgh, PA	October 25, 2018



“When you bring community empowerment into the conversation, it starts to change the dynamic in which we are approaching planning. In my mind, it changes it dramatically for practitioners.”

Aaron Thompson

*Assistant Professor of Landscape Architecture
Purdue University
West Lafayette, Indiana*

That, for me, breaks down in a couple of different ways, those components of local belief systems so how their attitudes about the community will actually effect the longterm behavior. Those believe systems are a critical component we often don't understand. And the other one we really struggle with is we often don't do any structural analysis of the actual capacity of local institutions.

Step 1 in capacity analysis was I put these communities through a social network analysis, who are your allies? Broadly defined where your shared values are between your organization and others that exist out there. What they started to realize was that there, even in the smallest communities, there are dozens of groups and organizations that might share some of this interest of an ability to contribute some leadership or structure or volunteer support. That's where we started to see real success.

The planning needs to change and respond to this. We have done a lot of damage especially in rural places with well intentioned planning efforts. If we don't really start looking at the social landscape that were investing in and looking at the weaknesses to try and build up capacity within these communities, in a lot of cases we are doing more harm than good.

Where I've seen success with this is I've worked with a number of communities who kind of rejected the idea that every single planning effort needs to be fully comprehensive. Especially in rural places where you lack capacity. Sometime the planning is the prioritizing process

October 25, 2018



“What is the baseline of the issue and the underlying causes and symptoms? Allows for a behavioral, evidenced-based approach.”

Andrew Shea
*Assistant Professor of Integrated Design
Parsons School of Design
New York, New York*

“

Discovery phase, information gathering and observation, history and context and underlying issues. What is the baseline of the issue and the underlying causes and symptoms? Allows for a behavioral, evidenced-based approach.

A lot of times you are working with an organization who is trying to help certain cross-section of people and a lot of times we have to unpack what that means to that community. Creative session, to community brainstorm session for setting the groundwork. Some of that is building trust and putting a face to the name.

Talk about storytelling or narrative in the proposal, in every project I try to find where the story is in the project. You're on a journey and people are going through a series of place-based experiences.

Understated as a artifact, illuminate challenges and flattening egos and build trust with community. Using visual storytelling to speak to your client and for improving collaboration.



“How does perception frame the built environment and how does the built environment shape perception?”

April DeSimone

*Founder
Designing the We
New York, New York*

“

This is a history that happened that turned this neighborhood, the consequences of this turning yielded these outcomes. In order to un-design these outcomes we have to have a different trajectory of the narrative that shows it's not your fault. It's not shaming and blaming, but these things just don't happen, to happen. They're intentionally designed. Which means we have to take design as a tool and harness that power to do something different.

The social-spatial dynamics which imposes upon equity and human need. We worked with them to look at business impact models or innovative programming which does not reinforce the stigma and dehumanization. It jumpstarts and allows people to connect to a local economy.

Challenging the concept of what businesses usually mean. Or what designers usually mean in the built environment. And if you don't have the proof of concept to walk down the street, that shifts our perception around how we engage in the built environment. We're going to be reconditioned into this paradigm of who is valuable and who isn't. Who is deserving and who is undeserving. So we're going to reinforce human hierarchy of value. Right now, when I walk down a street, I'm being told a story. We see this.

Ella Baker and the negro cooperative movement in the 30's and 40's. Those were the real high road businesses because they paid back into the ecosystem to create equity, civil rights and change. How do we go back to the basics?

Creating a culture, not just products.

February 4, 2019



“What is interesting about all these analysis I’ve done over the years, there is always one barrier to a system being fixed that is being neglected. It is almost always the one that requires collaboration at scale.”

Cheryl Dahl
*Co-Founder & CEO
Flip Labs
Chicago, Illinois*

“

We would be looking at turning that into kits and online stuff, long distance training and objects that would train the method. And again a lot of it is the research method and the gap analysis. It is a learnable process, there are varying degrees which people are good at it. People who are very linear, hate it, its not a linear process.

Some of what we design in our workshops is really elegantly summarized portions of whats the set of problem. How might finance be apart of it? You get everybody in the room on the same cognitive level of understanding why everybody is there. You need to be able to move in between expertise and sectors. Business is talking one way, NGO's are talking another and again if you want to get them in the room working together you've got to understand those differences and kind of bridge. That is a big one.

They didn't see us as a consulting firm, they saw us as a really helpful connection. It was one of the only things I did right in the beginning was focus on building the relationship and build trust and all this other stuff that failed didn't take the whole project down with it because those relationships helped carry us through to the next phase and a different way of operating.

Sometimes, in the consulting environment, design tends to emphasize new, cool whiz bang, innovative stuff and innovative in the sense of what is obvious innovation. One of the things that was incredibly innovative about our model, that looked not innovative at all, was the kind of incubator we were. We were incubating systems change, we weren't incubating companies.



“Health issues shared in common as a collective for a particular community.”

Dennis Derryck
*Co-Founder & President
Corbin Hill Food Project
New York, New York*

“

Go under the surface and disaggregate some assumptions. Assumption that communities are not organized. That's not true, they're very much organized, in ways we don't think of as organization. They might be organized because of the nature or institutions that serve them.

Similarly as you go across a particular community we begin talking about communities within a community. An example is foster care kids, that is a community in of itself. If you take the case of women entrepreneurs who deal with providing home daycare for 4-6 kids, that's an entirely different community, that is well organized in terms of how they do their marketing and serve their needs.

For instance, if you take Abyssinian Development Corporation, you will find a cluster within that particular community which runs the range from daycare to housing for seniors to middle class housing and supportive housing. All within this one organization, that is its own community, bring in all these other different communities into a room to have a discussion. They are structured in very different ways to serve their individuals within that community very differently from others

October 12, 2018



“Public library system becoming a community hub and really serving the needs of those patrons according to neighborhood needs and demographics.”

Eduardo Staszowski & Lara Penin

*Director & Co-Founder
Parsons DESIS Lab
New York, New York*

“

When dealing with public health and public institutions you are in those practical development, implementation of service programs which are meeting those immediate needs and problems. The other is, how this can trigger process of social change and transform society. How we operate in ways that you're dealing with the micro and the macro.

So we amplify that. We value these things that are emerging. The other is the notion of creating lateral forms of collaboration which strengthen the institutions themselves. Operating already in this way, forms of collaboration that which social life is already constructed, that are lateral and less hierarchical.

Our work still operates with similar foundations, we try to figure out what symmetries that exist, the structural holes and what appears in those cracks. Appear in face in the complexity of the problems. They are creating symmetries of power of information and resources. How we build this bridge over these gaps and finding ways of sharing power, information, resources more evenly and effectively.

So you're doing small engagements because of the shorts periods of time to work with the community. You cant just finish this in two months, you need to build the knowledge and the capacities of the institutions to do this work themselves.



“Equity and equitable development is something that’s super important and that’s the goal, that’s always the goal. How are we dismantling social injustice through urban planning?”

Gabriel Halili
Project Consultant
Hester Street Collective
New York, New York

Our job is what are we going to do for engagement? What are the steps? Who do we need to talk to? No matter what the projects going to be, we partner with a community-based organization, that already has roots within the community.

There has to be a baseline of the same concepts and tools everyone to be making decisions for everyone to be making decisions on the same page. Making sure everyone is on the same page and they can talk about the same things.

Knowing that we are outsiders coming into this community and we may have technical expertise but not necessarily neighborhood expertise. So you’re mostly their technical assistance people we help them talk about pros and cons trade-offs to help them come to this decision about very technical stuff.

Again we are outsiders we usually fill the gaps, we prioritize community members to lead those conversations. After you kind of done these facilitation training with members of the community and you’re starting to get these conversations going at the community level and you see your role more as filling the gaps within the dialog what would be the next step in the process for you guys and your involvement?

December 4, 2018



“We are all apart of the action group. Because we give the support to the residents. HPAC has their resources they offer to the community like childcare and parenting classes. And FEC as well, they provide a safe space for families in Hunts Point to go and connect them to different resources. And we are the healthcare component, so we provide the medical part of it and also the workforce component. We all bring something different to the table. That’s what public health is.”

Jamine Williams
*Healthy Livable Communities Coordinator
Urban Health Plan
New York, New York*

This is a Zumba class that does community work. Now trying to change the mindset to that this is a community action group, and one of the resources they have available to them is fitness classes. Changing that mindset, because folks will come out for the exercise and free classes. And then when we have meetings, or we’re trying to get something done in the community it was a little difficult to get them to be invested. Trying to change that narrative and the ways they see this.

I’ve seen a change, in the little less than a year that I’ve been here, I’ve seen a change in the active members. They feel more empowered, in this last meeting we had, someone from the council members office, someone from the community board, Wildcat, DOH and I was happy to see they had their questions ready and they are fighting for things they want in their community. Little by little, you see them getting more confident. I don’t want it to be, you come to me with your questions. Where they can sit across the table and ask the questions, Where, if I leave this position tomorrow or leave the community tomorrow, they still know they have a voice.

Utilizing the 311 app to create impact around trash cans in the neighborhood. Hitting that app whenever they see trash cans overflowing or they see a trash can that was necessary, that wasn’t there. The lady, I’m assuming the owner, she offered to do a 311 clinic to teach residents how to use the app. It is a way to bring community residents together and also a way to bring business to her place. So if she hosted it at her shop (Boogie Down). Little things we’re doing that will transform into something big.

The action group, they communicate through Whatsapp and this is how the disseminate information. Not just from the action group, but whatever is going on in the community. They greet each other, they share resources with someone, they share resources about housing. They’ll post the flyer. It’s a group of people in Hunts Point working together to improve their community.

May 21, 2019

Interview Insights

Education



“Connecting every child to the resources that they needed, from cradle to career.”

Jill Rouch Gomez
*Executive Director
Hunts Point Alliance for Children
New York, New York*

“

Collaborative grant, to really think about how you do involve the community in making lifestyle changes, not just from programs, but from the way they’re thinking about healthy lifestyles.

Offering people to have opportunities to have experiences that would hopefully change their behavior and instead, the step back was to say how do you really impact knowledge and skills which then change behavior on their own.

It is constantly evolving in response to, like if you introduce a resource, people then find ways to use it to make the means to an end.

August 8, 2019



“The iron rule of community organizing is never do for people what they can do for themselves”

Jim Diers
Founder
Neighbor Power
Seattle, Washington

Community-led development, not ABCD, but asset based community driven. To empathize that it is not about identifying the strengths of the community to do more business as usual but it is about how do we do work in a totally different way that is driven by the communities agenda.

The places that tend to have the strongest communities are the places with the fewest agencies trying to help the community.

All these new ways people are coming together in community. The local food movement, it is everything from community gardens to farmers markets to community kitchens and community driven art and the placemaking movement and local environmental projects. And the sharing economy and participatory democracy. New ways people are coming together in community.

Place is the opportunity for place-making, it is the place where everything comes together and everything else gets separated. So you tend to separate the economic, from the physical, from the natural from the social. It is in neighborhoods where all those things come together. When you're designing, you're designing things that will impact all those.

The key part here is we brought massive volunteer labor so any neighborhood can do it. Its not just for the neighborhood's who have a lot of resources. It is also just the best way to build community because you build it through people working together, not through donating money. Each community is different and I really encourage whoever it is, to build on their strengths with the resources they have there to begin with. You take different models.

November 12, 2018



“Acting new ways of thinking into being” - “It is easier to act your way into a new way of thinking than think you way into a new way of acting. It turns the usual approach of education on its head.”

Jon Lloyd

*Project Coordinator for the Centers for Disease Control and Prevention (CDC) and the Veterans Administration Pittsburgh Healthcare System
Positive Deviance*

What are some alternative approaches to designing for behavior change that will be long lasting and add meaning for people that are going through the process?

Getting at the root cause, and enable the community to stop this violence.

Staff would ‘buy-in’ to someone else’s idea, so ‘buy-in’ is the opposite of ownership and what Positive Deviance enabled the frontline staff, the housekeepers, the kitchen workers, the frontline staff actually owned the system they created.

But if you have a comprehensive menu of improvement strategies with an awareness of what dimension. Most problems are not about either simple or complicated or complex, there are dimensions of each and degrees of severity. It is really taking on a problem that’s common, a problem acknowledged by the community and a problem that requires behavior change.

But it works in the communities that are already there or their backs are against the wall and nothing else has worked. Or they’re open enough for the facilitator or coach to develop, to prepare the soil. Build the relationships and let them know that the solution is already here. It is in your community and it is a process to enable you, that’s the relationship building.



“Opportunities flow through networks. Good interventions intentionally expand and diversify social networks, helping to broker bridging relationships.”

Jonas Piet
*Founding Partner & Advisor
InWithForward
Vancouver, British Columbia*

There a lot of stakeholders in our work if you look at it from the system from that perspective. Too often are we in our own work, then we are not aware of how similar what we do is.

Doing the ethnographic research will often look for positive deviance, so like everyone else we look for the extremes in the curve. This also comes from Public Health, we are particularly interested in people who are in similar type of situation as the rest of the population with some with poor outcomes across the board, somehow these people do something different and because of what they do different they have much better outcomes than other people. So we are always on the lookout for positive deviance in the research stage.

That level of ambition takes years and years just to come up and implement and embed new practices. That's why we feel it's very important to start with capacity building and so other teams can start to do that too.

We've recognized that our mission is about next practice or radical change if you like. Not just a better version of what is existing, something different, based on a different set of values often. Which is much more about equality up staff and end-users. And different kinds of professional roles which are less.

What typically people think of co-design I'm not sure we do that. Things like focus groups where you come up with ideas in the focus group, we don't do that kind of stuff. Increasingly we are acting as expert designers but also as facilitators. I think an important component of co-design is to build capacity.

October 26, 2018



“A big part of wellness is knowing how to cook healthier and eating healthier. To show patients how to cook and eat healthier in their homes.”

Karla Giboyeaux
*Teaching Chef & Dietitian
Urban Health Plan
New York, New York*

“

The agenda for UHP is how to cook healthier and how to use their money to spend on better decisions. To advance wellness and more positive health outcomes. And to incorporate family into the cooking and eating process. That's another issue we have, people don't eat with their families anymore. Kids will eat in front of the tv. It is a very big disconnect. Making a family dinner and everyone having a role.

How do you measure outcomes? We do a survey in the beginning and at the end. The same questions. We modify from a survey they did, called Latina Behaviors (in the manual). So what it has is it is evidence-based, it was featured in the academy of nutrition and dietetics. We wanted to use something that was used for latino's. Most of our patients are Latinos. We used this one because it was tested on Latino's with diabetes.

I wanted it to be very visual with almost every step. That turned out to be a lot of work. We have most of the steps as pictures and all of the ingredients. Very visual and the design was meant to be user friendly. We did it in Spanish and English and the wording is very simple. We use very short descriptions. The patients can take them home, share it and actually use it in their homes because it is easy to use.

They love it, they get very excited. They love the book, they use it. They share it with their families and the recognize my hands and like seeing my picture in the book. They feel like they're part of something. The patients feel like they are part of this program when they see my hands, when they see my face. They feel like I did this for them. They make that connection.

August 8, 2019



“Over the course of seven years of FitWits you start to understand place and how people make decisions, who are they making decisions with and what are those decisions and those influences really had the potential to change the community mindset.”

Kristin Hughes

*Associate Professor in Design
Carnegie Mellon University
Pittsburgh, Pennsylvania*

“ You have to think about all areas of social ecological I’ll be individual but it’s about how the individual makes decisions with friends how individuals make decisions when in a group that’s a really critical part of design that’s missing we haven’t figured out how to design across the spectrum.

I think it’s the bigger questions about access and privilege and identity . You cannot force people to change, they have to decide when they’re ready to change . But you have to make sure that you’ve created an inclusive and equitable environment for them to do that.

Creating a common language for engagement. Create tools and methods for engagement that get people to more deeply understand the complexity around a particular issue.

A lot of the front end process was to understand where these shared assets inside the community that need to create equity but also to create this network of care . How do we leverage those Networks?

I think those micro changes are so important because so often they carry significant about one’s culture and one’s values and one’s belief system. And that better informs what you design next. If you don’t have that then it just becomes does big data set, That sometimes doesn’t really have that much meaning.



“Everyone has spoken about this, not as a project, but as a continuity. Nobody has said that this is stopping.”

The Learning Collaborative
Funding & Grant-Makers
New York Community Trust
New York, New York

“It’s about NY, its about community and while the trust, in the NVCT talks about banks and trusts they hold. It’s about the trust, for our purposes, is the trust between all of us. It requires that level of partnership and commitment to continue to move forward.

It’s about building that visibility. I wish we had done that from the very beginning. The branding to bring in people, the visibility, should have been done from the very beginning but we just didn’t think of it. Because I didn’t see it, from the very beginning. The whole idea of change in a community. In the beginning we were seeing this as food access, it really became change. Food access as one of the elements of change. A very important one, but as one of the elements for change.

I see each of these efforts has evolved over time. And we as grant-makers think of a start time and an end time. It is a 3 year project, a 5 year project. We are speaking in that mind-frame that the lessons we have now, and the things we couldn’t have known when we started. They provide, from an evolutionary perspective, an opportunity to retake the work and move it to the next level. What we are hearing you share are not lost opportunities, but rather a moment to share in the reflection point in the evolutionary stage to grow whatever the next stage is. To open our minds and give up this limited time frame, of projects and think about work as community

September 16, 2019



“But we make sure that we’re not just doing good in a place, but in fact doing right. By right, I mean delivering justice and equity.”

Lynn Ross
*Project Consultant
Reimagining the Civic Commons
United States*

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At this point I think we need to understand, that we need to be equitable, in our practice we have to be evidence based in our practice, we have to be not just looking for silver bullets to one problem but in fact trying to multitask with the plans and the policies that we are putting in place. How can we attack multiple issues, not just one with what we’re doing?

Civic Commons is an approach, that says let’s rethink our Civic Commons, let’s rethink our parks our libraries our community centers our waterfronts and even our sidewalks. How do we activate that space? Let’s try to rethink those spaces to get at this multitude of issues, if we can Revitalize and reconnect the spaces, not just physically but also with programming and I’m going maintenance and operation. Might we then build or rebuild some of that social capital and trust that is so desperately needed and missing?

But those four areas are: Civic engagement, socio-economic mixing, value creation and environmental sustainability. I really think that it is those four outcome areas that are sort of the secret sauce and making this work, because it gives you that mile post to be going toward. But you are doing that in a way that is authentic to your community but you are also learning along the way from the other communities participating in this work.

Unless you live in that community, been there, you actually don’t know everything. You may know it intellectually but you don’t know it in your heart. It is not about you inviting people to a table. It is about building a new table together with these partners. And setting that table together. That is this work. This work is we are building a new table together, we will co-create this, and then we are going to decide how we would like to set this table.

October 25, 2018



“If it’s not being done right, it is not good for the students and it is not good for the community.”

Maryrose Flanigan

*Executive director of the Alliance for the Arts in Research Universities (a2ru),
University of Michigan
Ann Arbor, Michigan*

Brainstorm ways to educate people about doing creative placemaking ethically and well. Instead of doing a 101 on the principles of creative placemaking, How about everybody who goes to a university, when they start there as freshmen, they have to learn about the community.

Creative placemaking can start with extension programs because they have such deep roots in the community. So it is a really great place to take root at a university.

How do you ethically work with a community and do no harm? Nothing deep or cross-discipline, new for higher education, a lot of people are doing it they are just not calling it the same thing



“One thing we discovered by being in the process is how critical peer-to-peer learning is and under appreciated by funders and other agencies that provide resources and support to localities. How powerful these credible sources are, for people who are in the same position.”

Phil Bors
*Technical Assistance Director
Healthy Places by Design
Chapel Hill, North Carolina*

To address physical activities in communities you had to have a comprehensive approach that included partnerships, promotions and programs, policy and environmental change approaches. Basis of interventions was to be an interdisciplinary partnership. Because of how complex the environment is and how complex any behavior is especially physical activity with a heavy influence on where we live and where we go to school.

They were asked to think outside the walls of their clinic, their building. And to really ask, what are these social determinants of health, what if be backed upstream, what are those things likely to be impacting why people are coming into our clinic?

The creative tension between doing something well in a neighborhood and trying to scale it. It is a place-based activity. Trying to scale that to a county where a health department's job is to serve the whole county. There are some challenges there.

Community Action Model as 5000 foot view and if you drill down in the community context the community wants to know ‘how do I use this?’ ‘What questions should I be asking? What should our partnerships be doing? Context is important, how do they get from that belief to using the information to what they’re doing better? Make an adjustment in their approach, or stop what they’re doing. Or start something else.

November 13, 2018



“Trust has to be the foundation of everything you do with community residents.” It’s very easy for people to come to us and say I’m tired of people coming here, starting something and then leaving. I’m tired of people coming here obtaining data and then leaving.”

Ruth Santana, MPH
*Certified Wellness Program Director
Urban Health Plan
New York, New York*

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Because I’m a program developer, everything I think of has to be evaluated. That is what is going to tell me if I should do it again, if I need to fix it. That’s the reason Farm Share is best practices today because I was constantly evaluating and fixing it. If not, how do you know? ... it becomes better because we evaluate and say, oh this is not working out right now, let’s try to figure it out. Tailoring evaluations to specific programs. When we think about programs of this magnitude, when were talking about an entire community.

That has been one of the most powerful experiences, that we as a cohort, as a group, as public health practitioners, as people doing so many different types of work. Realizing that in the end we all wanted the same thing. And we go about it in different ways. And then learning from each other. What can you do to make what you’re doing better? And how can we do make what we are doing better?

The programming developed, This is what the space is going to look like. You have a food program now you’re going to have a grocery. You have fitness classes, now you’re going to have a wellness center. You have a clinic space here. Decentralized elements brought together in one space.

I heard questions that were authentic and the programming responded to those conversations. Today Project Hope is a workforce development program. That’s what we learned. This is what people wanted. That offers ESL classes, GED classes, that’s what people needed. We had computers that were supposed to be resource centers. People weren’t leaving because they were looking for jobs.

August 10, 2019



“The first part of community vitality is mobilizing the community, how do you do that? It’s not going to be a public hearing, that we know.”

Steve Grabow

*Community Development Educator
University of Wisconsin-Extension
Madison, Wisconsin*

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It’s assumed we have quality designers, but how do we work with the aspiring designers and aspiring change agents, the people? To mobilize them to make the positive change happen. To provide some guidance, empowerment and building the capacity of these folks to lead the change in their communities.

“You have all this work on process, but you never tell us what success would look like.” That was deliberate, because as a community development professional, it doesn’t really matter what our vision is. It is about drawing out the vision and mobilizing the community and helping them determine their vision and strategies in response.

Every community would have their steering committee, their ad-hoc advisory group, whatever you want to call it. Lets arm them with foundational fundamentals so they could do a better job articulating what they would like to see in their communities.

Understanding the culture of the folks you’re working with. Being relatable and ultimately developing trust. You don’t do that from the ivory tower. You do that by incorporating evidence-based research from the ivory tower, what does that mean to shape communities?

The diagnosis might suggest that we might need to bring people together to explore values, community values, passion and readiness for change. It’s not so much about data.

October 3, 2018



“How do you design and implement, create conditions for people, to think and feel things about futures that help them make wiser decisions?”

Stuart Candy

Founder & Associate Professor

The Situation Lab & Carnegie Mellon University

Pittsburgh, Pennsylvania

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One of the axioms of the field, a philosopher named Robert Brumbaugh distilled it, ‘there are no future facts.’ The consequence of that is you’re not dealing with factual mastery, you’re dealing with processual exploration which is always contextual, always context and culture and time specific. Concretely what that means, being a futurist and doing Futures type work, really means designing the facilitating processes for people to inquire into those things.

Thinking about the yet-to-be in the plural is the single kind of key that unlocks the whole way of working. Instead of thinking about what the future, singular, is going to be, we are interested in the landscape of things that could be. That landscape, in principle is infinite which makes it inherently tricky.

In a way, the four different stories that exist about the future - continued growth, collapse or decline, discipline or deliberate pursuit of particular outcomes, and transformation.

It has become apparent there are different scales of design of output that you can work with. So at one end of the spectrum there are object virtues of them is that they’re easier to make than something immersive usually. So you’ve got objects at one end of the spectrum and immersive experiences at the other and we’ve developed processes for both of those.

The embodiment, the performance of it, storytelling where you are in it, not just reading about it. Story showing in a way.

October 25, 2018

