A6888: Housing and Social Equity in the United States Professor Karen Kubey Summer 2021 Columbia GSAPP



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A6888: Housing and Social Equity in the United States Summer 2021

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ACKNOWLEDGEMENTS

We'd like to begin by thanking our professor, Karen Kubey, for giving us the opportunity to investigate affordable housing through the lens of social justice. We are particularly grateful for the autonomy she extended to us as we navigated equity in the home in relation to race, gender, the environment and human health. This class has inspired multiple new avenues of research and design that we look forward to developing as architects and urban designers.

Understanding the ways in which information is gathered and presented was a critical part of our learning in this class. We'd like to extend our thanks to ISA Architects, Salazar Architects and Bernheimer Architecture for allowing us the opportunity to practice our newly acquired knowledge of case study development on their projects. We're especially appreciative of their willingness to share their design process in relation to current policy as well as their working knowledge of the affordable housing industry in the United States. As students who 'practice' within the safety and optimistic outlook afforded by the studio atmosphere, it was uplifting to see the potential for the same optimism in the 'big, bad world'.

Lastly, we'd like to express our gratitude for each other - this class of eleven multifaceted individuals who are currently spread out between Beijing and New York City. We are incredibly proud to have been able to confront and conquer the twelve hour time difference together to produce this pamphlet of our ideas on 'Housing and Social Equity in the United States' over this COVID-19 era summer.

INTRODUCTION

From December 2020 to February 2021, Congress approved a total of \$46 billion in emergency funds in December and February to help tenants pay their rent. As of August 2021, President Biden attempted to extend a ban on evictions in areas that were still severely affected by Covid-19¹. While these were responses to the real possibility of people rendered homeless because of the economic hardships brought about by the unprecedented onset of a pandemic; one could argue that America's housing crisis has been generations in the making. From historic 'redlining' by the Home Owners' Loan Corporation to policies of 'containment' in cities like Los Angeles, the spatial organization of our cities and the architecture that followed played an undeniable role in the creation of this crisis. The virus only exacerbated and laid bare the urgent and severe deficiencies in the housing system that had been festering for decades.

In this pamphlet, we attempt to identify and unpack these deficiencies and their root causes, framing arguments around policy, economics, race, gender, human health and the environment; as they relate to domestic space. If 'Equity' is defined as the quality of being 'fair and impartial', how would it manifest in the housing system? **Who needs affordable housing? How do we finance it? Where do we build it? How do we design affordable spaces?** It is imperative that designers investigate these issues given the growing inequities that they propagate, especially within communities of color in America. Professor Kubey asks,"In the face of persistent social inequities in the United States, how can architects and urban designers make a meaningful contribution?". This pamphlet is a collection of reflections and arguments in response to this provocation. Each week of this student-driven seminar was focused on one of these multifaceted aspects of the housing system, supported by a robust asynchronous reading response exercise and presentations on the same followed by virtual discussions moderated by Professor Kubey. We also explored the power of documentation and communication of domestic space in conversations about equity. Through our own 'beta case studies' we have attempted to practice our learnings.

This pamphlet is titled 'In Pursuit of Housing Equity' to reflect our optimism and ambition to contribute positively to on-going conversation and efforts to understand and tackle the housing crisis in America. For everyone who has been a part of this research, it has been a journey, collective and individual, into questioning the idea of what makes (and breaks) housing in our complex societies. These are often societies that are carrying the burden of failed historic housing policy, heading head-first into new environmental and humanitarian crises and having been stricken unexpectedly by a global pandemic. At the end of this summer-long research, we emerge acutely aware of the urgency of our investigations and the potential of design to aid in the betterment of America's housing system.

ARGUMENTS



Canadian Centre for Architecture, *What It Takes to Make a Home*, <u>https://www.you-</u> <u>tube.com/watch?v=r83X-mtHt8o&t=7s</u>

THE HOUSING SYSTEM AND WHAT IT TAKES TO MAKE A HOME

The housing crisis looms large over the lives of a staggering number of New Yorkers. Until January 2020, more than 29% of New Yorkers spend about half of their income on rent payments, and 78% of them are below the New York City median income. Unfortunately (yet unsurprisingly), segregation, displacement, gentrification, and unaffordability have become labels commonly associated



with housing in NYC. This report will use examples and studies from New York to discuss the housing system at large and what it takes to make a home.

Housing System

The current housing system does not produce what people really need. In today's society, housing is more than just a place to live, socialize and relax. It is also a commodity. Private companies can make profits from it and to consumers it is often a symbol of wealth. "Housing inevitably raises issues about power, inequality, and justice in capitalist society."¹ Photo: In These Times, The Housing Crisis Is Worse Than You Think, 2019.

Quotation: David Madden and Peter Marcuse, *In Defense of Housing. The politics of crisis* .2016

"What needs defending is the use of housing as home, not as real estate." -David Madden and Peter Marcuse

What drives our housing "system"?

• Zonir

- Land disposition practicesFinancing
- Dont regulation
- Subsidy programs (project and tenant based)
- Design requirements
- Building codes
- Building material
- Construction techniques

Contracting and procurement policies

- cupancy rules
- Eligibility requirements
- Property managemer
- Housing allocation practice
- (eg: lotteries, waiting lists)
- Eviction protections or lack
 thereof
- Shelters.

- Transitional housing
 programs
- Public housing
- Tax credit and other units subject to regulatory agreements
- Privately owned rental housing
- Owner occupied housing
- Brokers and housing navigators
- Tax policy
- Litigation/Right to Shelter

In a video titled '*The Housing System: From silos to system*,' Rosanne Haggerty suggests that we need ambitious, equitable and measurable aims for the housing system - no homelessness and no families paying more than 50% of their income on rent. She also stresses on improving housing care, which means identifying vulnerable groups, assessing their needs and developing sensitive planning strategies to address them.

What it takes to make a home

Housing is not just the building of homes. It is given a new definition by politics and economy. For some people, the house becomes an economic asset. But it has also become an economic and spiritual burden for many. In the documentary film 'What It Takes to Make a Home,' an unnamed homeless person says that any places that makes him feel safe is home. So a walled community might not not necessarily feel like home. Even a car, if it's safe, might feel more like home. The idea of a home can be diverse it seems.

How can housing be universal and inclusive? To address homelessness, it is necessary to work with the local governments to provide people with more affordable housing with supporting facilities and policies, such as local employment opportunities. Homeless shelters are a failed concept to be relegated to the past. They

The Housing System: From silos to system, Preented by Donald M. Berwick at the Architectural League of New York

^{1.} David Madden and Peter Marcuse, in Defense of Housing (London and New York: Verso Books, 2016), 01.



Canadian Centre for Architecture, What It Takes to Make a Home, https://www. youtube.com/watch?v=r83X-mtHt8o&t=7s

simply do not work. Next, the regulation of the housing market is imperative and urgent. Private real estate companies will always be profit makign entities that are nevertheless essential in the modern economy. But we need stronger checks and balances to counter the commodification of an essential service : housing. Government intervention should be able to fairly control the trend of housing prices.

Susanne Schindler mentioned social housing in her 'Nine or So Housing Plans'. Different from affordable housing, "the goal of social housing is decommodification, social equality, and democratic resident control."² The ownership model of social housing should be government or non-profit organization based. More of a shared ownership model than before. A new ownership model allows collective action towards other shared goals such as energy efficiency too. Using clean energy and high performance building material, like high-insulation walls and windows can greatly reduce electricity bills. Lastly social resources in the city, such as schools, jobs, good public transport, etc. are concentrated in privileged areas, resulting in much higher housing prices here than in other areas. The purchase of a house has turned into the purchase of resources and planned redistribution is due.

2. Oksana Mironova and Thomas J. Waters, Social Housing in the U.S.(2020), https://www.cssny.org/news/entry/socialhousing-in-the-us

Conclusion

To achieve housing for all, policy and architectural design are complementary. To protest the commodification of housing, we must advocate for government political intervention to regulate the chaotic real estate market. Architects need to be on the side of the people; knowing the needs of vulnerable groups, paying attention to more housing types, high performance building materials and construction technology options. While providing low-cost housing, it is also important to be sensitive to the built environment and long term housing care.

Reference:

1. David Madden and Peter Marcuse. "In defense of housing." The politics of crisis (2016).

2. Schindler, Susanne. "Nine-or-so Housing Plans." The Avery Review 42 (2019).

4. Canadian Centre for Architecture, What It

Takes to Make a Home(2019), <u>https://www.</u> <u>cca.qc.ca/en/events/67843/what-it-takes-</u>

to-make-a-home

3. The architectural league of New York, The Housing System(2019), <u>https://</u>



DeHaven, Tad. "Housing and Urban Development Timeline." downsizinggovernment.org. Accessed August 6, 2021. https://www. downsizinggovernment.org/hud/timeline.

2 Modica, Aaron. "Cabrini Green Housing Project, Chicago, Illinois (1942-2009)," July 26, 2019. https://www.blackpast.org/ african-american-history/cabrini-greenhousing-project-chicago-1942-2009/.

PUBLIC HOUSING

In the United States of America, the purpose of public housing is to provide quality and safe homes for low-income families, the elderly, and those with disabilities who qualify. From dispersed single-family cottages to high-rises, public housing comes in different shapes and sizes. Despite the excellent intentions of the public housing system, it was constructed with an idealistic (and now outdated) perspective. Since 1937, public housing has been supported by bond initiatives and operated through rent payments; however, by the 1970s, the rent had begun to operate on an income basis (Stoloff, 2004)¹. Because the majority of the residents lacked sufficient finances, the funding could not support the buildings, and the quality of life in public housing began to deteriorate. The US government currently does not actively fund public housing, but it does sponsor the HOPE VI and RAD redevelopment initiatives (Turner et al., 2009)².

The United States faced ethical challenges in implementing public housing schemes. The relocation process should be carried out without the use of force or damaging measures. Furthermore, compensation should be paid to the former renters. The relocation scheme should not provide more benefits to the richer population than to vacating residents. Many of the housing industry's difficul-

¹ Stoloff, Jennifer. "A Brief History of Public Housing." ResearchGate, January 2001. https://www.researchgate.net/ publication/228789405_A_brief_history_of_ public_housing.



Bogira, Steve. "A Dream Unrealized for African-Americans in Chicago." Chicago Reader. Chicago Reader, July 24, 2021. https://www.chicagoreader.com/chicago/ african-american-percentage-povertyunemployment-schools-segregation/ Content?oid=10703562.

ties in the United States are solved through public housing, the most serious of which is a lack of social fairness. When it comes to the execution of a social policy, social equity focuses on fairness and

Public Perception

Dolores Wilson (2013)³ authored a paper about her experiences living in a public housing development in Chicago. In her recount of her experiences living in a high-rise public housing development in Chicago, she described how despite the problems and issues that she was facing, she eventually learned how to love her home. This is indeed a refreshing break from the prejudices about the so-calledfailures of public housing projects. This is arguably one of the most vivid and reliable stories about the harrowing experiences that people in the lower socioeconomic class of society have living in a public housing development. This is a clear evidence that there are a lot of problems with the way the United States' housing industry is being managed. There is a widespread public perception that public housing programs and developments in the United States have been plagued by social equity-related issues, which is ironic given that one of the reasons why public housing programs were drafted and implemented in the first place was to address social equity-re"You could tear up everything else on that side, because the Chicago Police Department didn't care about the stores and businesses."

- Audrey Petty

3 Wilson, D. (2013). A Excerpt from the New Voice of Witness Book High Rise Stories: Voices from Chicago Public Housing. McSweeney's, 1-15.



lated issues. People who live in subsidized housing often belong to the lowest income group, which further stigmatizes them and their environment. The physical and social architecture of public housing reflected distinctions in social class and rank - rather than providing a sense of community, it provided residents with social isolation. If this was the outcome, why did the US government continue to construct such segregated neighborhoods for the next fifty years?

Despite all the problems, we may see how people benefited from public housing. From the excerpt from the "NEW VOICE OF WIT-NESS BOOK HIGH RISE STORIES: VOICES FROM CHICAGO PUBLIC HOUSING ", the story of the Cabrini-Green neighborhood is a clear example of how people manages to get a better life in the public housing communities (Petty, 2013)^₄.

We see an area comprised of numerous high-rises: such conditions may be unpleasant for some people but may become a sufficient living for others – this depended on the background of the people living there. Despite the many funding and organizational challenges has faced since its inception, conventional public housing continues to be and is one of the largest sources of non-premium housing funded by the US federal government. Public housing has often been criticized for its poor design, but the real problem is its economic failure.

Petty, Audrey. A Excerpt from the New Voice of Witness Book High Rise Stories: Voices from Chicago Public Housing. McSweeney's, September 10, 2013

4 Wilson, D. (2013). A Excerpt from the New Voice of Witness Book High Rise Stories: Voices from Chicago Public Housing. McSweeney's, 1-15.

Public housing in the US



Coleman, Jasmine. "Why Is America Pulling down the Projects?" BBC News. BBC, April 13, 2016. https://www.bbc.com/news/ magazine-35913577.

Policy vs. Reality

From Dolores Wilson (2013)⁵, the purpose of public housing as a social policy is not to provide philanthropists with elegant and luxurious dwelling alternatives; rather, it is to meet a social and physical need, namely, shelter. This is why people who expect the government to create high-rise fancy and luxurious buildings for the poor would be disappointed, because public housing was never intended to do so as a policy.

The unpopularity of public housing in the United States can be seen from the graph above. As the architect, Henry Whitney stated: "publicly subsidized dwelling is deficient in interior space, in outdoor privacy..."⁶, this we can infer that the targeted community of the public housing strategy did not want to live in such conditions. In Penner & Bauer's (2018)⁷ article, it was revealed that one of the most common complaints about public housing developments is their monotonous design; and that they were highly standardized, leading to a lower level of enthusiastic acceptance. While this observation is certainly correct, it fails to put everything into the right context.

What if they are meant to be monotonous because their objective is to optimize the design of the buildings so that the maximum amount of social benefit in terms of the number of families who will be given socialized housing would be achieved? The truth is that the sooner people accept this, the sooner they will learn how to appreciate the role of public housing in solving social inequity in the US housing market. "Life in the usual public housing project just is not the way most American families want to live. Nor does it reflect our accepted values as to the way people should live."

- Barbara Penner

5 Wilson, D. (2013). A Excerpt from the New Voice of Witness Book High Rise Stories: Voices from Chicago Public Housing. McSweeney's, 1-15. 6, 7 Penner, B., & Bauer, C. (2018). The Still Dreary Deadlock of Public Housing.



HOUSING AND RACIAL JUSTICE

Public housing in the United States faces serious racial problems. From historic segregation and redlining to the modern day 'silo'-ing of homelessness in American cities; people of color are overwhelmingly at the recieving end of access to poor quality of housing. This plays no small role in perpetuating cycles of crime, lack of opportunities and poverty in these neighborhoods. In the article 'When public housing was White,' the author proposes to establish public housing in a uniform style to eliminate the appropriation of style on the basis of race or class. This helps us question the role of architecture in just and fair housing.

Article Review

Public housing in the United States is often thought of as the exclusive housing of low-income people. It is the unfortunate reality of low-income housing that a majority of it consists of people of color. They are easily discriminated against and have difficulty integrating into the local American culture. This is clearly explained in the ar-



ticle 'When Public Housing was White'. This is indeed the principal contradiction in modern society. It is also the main problem that we need to solve right now. But the article also proposed to establish a unified style of public housing to eliminate racial discrimination. Is this really feasible?

In my opinion, the problem of racial discrimination faced by people of color has little to do with the architectural style of public housing. The core reason is that because people of color are discriminated against, they cannot get good job opportunities and the economy accumulates slowly, which makes them unable to afford high-end housing. Therefore, I think as designers, we should consider how to reflect the differences and characteristics of different ethnic groups in architecture, and at the same time provide them with a better living environment.

Housing and Race

"It's similar in that we look the same like there's not that much different that you know, we don't look any different than African Americans. Except maybe sometimes I do get from people when they look at me "like, oh, you look Indian. You look like you're from Trinidad or you kook like some type of something that's not African American." "As the background becomes more standardized, so that it no longer applies to a single caste but a whole community, no longer to a single community but a whole civilization, so will the foreground become more individuated." -Mumford



But it's still a Black Caribbean. Now where the uniqueness comes in, is we speak Spanish. Our customs are different in that. What we eat is different than like an African American like cuisine. So here is what interesting for me. We did have a porch. We had our front stairs the step , we call it the stoop" says Saachi Creque. From this interview with Saachi, we can see that in addition to racial discrimination and inequality, class differences complicate the narrative.

In Addition to the officially usable Spaces in Saachi's public housing, she and her family have designed many leisure spaces themselves. There is not enough spatial diversity in most public housing today. This should encourage designers to enrich the spatial diversity of public housing from the perspective of user needs and meet people's varied spatial expectations.

What should the Government do?

Increasing access to down payment assistance. Because of racial inequality and social discrimination, large numbers of people of color are deprived of housing, education and job opportunities, hindering their ability to save money and build wealth. Increasing down payment assistance could help them with housing problems. For example, there is a need formore tax breaks or cheap loans for low-income first-time home buyers.

SOCIAL HOUSING • VIENNA, AUSTRIA The idea behind the Herzberg development is to create a built structure which combines a variety of residential offerings into one neighborhood that facilitates different ways of living. https://www.archdaily.com/173668/ herzberg-public-housing-alleswirdgutarchitektur?ad_medium=gallery



Social Housing: The Latest Architecture and News, ArchDaily

Increasing access to affordable credit. The American financial lending sector is discriminatory and unfriendly to low-income people. But to address racial inequality in housing, business credit must be extended to underserved, low-income and minority homebuyers and communities.

Investing in affordable home ownership. Affordable housing is fundamental to ensuring housing equity for all races. The root cause of non-availability of housing for people of color is unaffordable housing. So the government should increase the construction of affordable housing allocation, to provide developers with more opportunities to build affordable housing.

Racial justice and public housing design

"While Lescaze's efforts were concentrated on the outside of the building, a host of housing reformers used the interiors of this material context to precipitate the assimilation of new waves of Eastern and Southern European immigrants. In this way, the interior and exterior spaces of Williamsburg Houses performed complementary functions in the racial codification of public housing, with the architectural style providing a visual sign of the social norms encouraged by the civic dimensions of the architectural program."

-- When Public Housing was White



NYCHA in NYC, https://ny.curbed. com/2018/12/26/18156397/nychareceivership-federal-takeover

Indeed, public housing in the United States is perceived as low quality, undesirable space msotly occupied by people of color. How do we change this trend of racial inequality in the design of public housing? The answer has been given in this reading. We should follow the traditions of each ethnic group in the design of architectural shapes and the use of building materials and colors. To give people of different races a sense of belonging in public housing. Promote the integration of races.



Las Adelitas, SALAZAR ARCHITECT



Image 1: The Mother of Environmental Justice, Q Magazine, May 23, 2018

1.U.S. Environmental Protection Agency. (accessed July 25, 2021).

2. Barber, Daniel A. "After Comfort." Log no. 47 (Fall, 2019): 45-50, (accessed July 25, 2021).

 Billard, Robert. "To Achieve Climate Justice, Don't Leave Architecture to Architects." The Architectural League NY (June 9, 2020), (accessed July 25, 2021).
 Luce, Edward. "The Retreat of Western Liberalism". Atlantic Monthly Press, 2017, 47.

HOUSING AND ENVIRONMENTAL JUSTICE

Environmental justice is termed as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.1 Clearly, as being attested unremittingly during the recent social movement protesting against racially motivated violence against black people and asians in the U.S, a practical and convincing plan and execution mechanism towards more a environmental just society has not yet been devised. That conclusion none the less applies to the housing sector as a significant subsystem to the built environment. After Comfort by Daniel A. Barber and To Achieve Climate Justice, Don't Leave Architecture to Architects by Robert Bullard has offered us insightful lens for understanding environmental justice issues on housing in the U.S. and around the globe. Building on a profound analytical fundamental of viewing the problem through the metrics of Comfort level and the lucrative but problematic coalitions between housing projects' stakeholders, the two articles both radically puts forward intellectual prospects and possible paradigm shifts for a systematic transition. The provocations are by no means practicality-driven but have raised earnest questions that are urgent for the bigger picture.

In 'After Comfort', Architecture and Housing is reviewed and scrutinized under the metrics of comfort created out of the nature, namely the satiety beyond primordial and primitive demands of survival. Thus, Comfort has inevitably become integral to our anthropogenic built environment, while domestic interiors take the biggest deciles. 'Comforts are the rungs on the ladder to luxury. Class distinctions are distinctions of comfort, both broad- and fine-grained. They are also economic and geopolitical distinctions.' 2 As guite accurately pointed out by Daniel, the implication of distributing comfort among humans must lead to environmental injustice as comfort is an allurement to limitless self-centered and self-serving ownership, a 'Siren's song'. Daniel goes on numerating the aftermath on environment of enamored pursuit of comfort, 'The practices and policies that we typically see actually mitigate against giving everyone access to living conditions that are fair, affordable, accessible, and clean. There are policies that allow communities to become environmental sacrifice zones. That's amenities and resources that get allocated in some communities are lacking in other communities, whether that's parks and green space or grocery stores and adequate transport. That's why certain areas are saturated with polluting facilities.' 2

Unlike enclosure movement (which refers to the process which was used to end traditional rights, and has historically been accompanied by force, resistance, and bloodshed. It has been referred to as "among the most controversial areas of agricultural and economic history in England.") during the Industrial Revolution, today's poor are not always intentionally being displaced. Instead they are being silently priced out of their homes. They are victim to creeping gentrification. This is creating a new kind of poverty, where the poor are increasingly pushed out of sight. . 'The conditioned spaces form "In a few decades, the relationship between the environment, resources and conflice may seem almost as obvious as the connection we see today between human rights, democracy and peace."

- Wangari Maathai



Image 2: Resemblance between the historic redlining areas and current urban heat islands locations. Made by author.

3. Billard, Robert. "To Achieve Climate Justice, Don't Leave Architecture to Architects." The Architectural League NY (June 9, 2020), (ac the infrastructure of global capital, from offices and museums to airports and refrigerated shipping containers.² The uneven conditioned spaces have also instigated the troubled populism around the nation threatening the very liberal democracy that Americans long prided.

As Daniel has later precisely referred to the uncanny resemblance between the historic redlining areas and current locations of urban heat islands, and brought up the fact that 'Architecture, planning, health, transportation, land use, food security, finance, climate resilience – all these things are connected. It is ironic that people who are the most likely to not have cars and are transit dependent are more likely to live in areas that have the most air pollution. ^{'2} and ' So if you have architects and planners making plans without taking the political and economic dynamics of the larger system into consideration, these plans will likely exacerbate the inequality^{'3} To name a few concerning chain effects of the aforementioned new form of 'Slumberbia', the amount of time people have to spend in their cars driving from one-part time job to another could eventually turn out

^{2.} Barber, Daniel A. "After Comfort." Log no. 47 (Fall, 2019): 45-50, (accessed July 25, 2021).

to play havoc with one's political state of mind when the extra hours they spend on commuting would likely to induce hypertension, diabetes, stress and obesity – a shortened life expectancy. ⁴

The authors of the two readings have pointedly put forward that only by accepting unconditionally that common sense is not common, could we start to scrutinize and unpack the seemingly inexcorable and intricate environmental justice conundrum.



Jeremy Brooks, MPH CPH, Thessa Roy. Racial Disparities and COVID-19. May 13, 2020. National Center for Disaster Preparedness, Earth Institute, Columbia University.

HOUSING AND HEALTH EQUITY

Housing, broadly our living environments, play a crucial role in our physical, emotional and psychological health. However, the current state of housing in the United States impacts people's health unequally. For instance, as shown in the figure below, the New York City neighborhoods with the highest rates of positive COVID-19 cases also have some of the highest numbers of service workers, rent-burdened households and people of color (Brooks et al., 2020). In the face of health disparities, how could housing designers address the remediable causes and make interventions toward healthier equity?



Image above: A ceiling collapse in the kitchen of Princess Morris, a single mom living with her four children, at her NYCHA apartment at 1615 Dean Street in Brooklyn. Photo by Debbie Egan-Chin.

Image below: Josue Morales (pictured) has asthma that may result from living in NYCHA housing in New York. He lives in the Thomas Jefferson Houses in East Harlem. Photo by Raquel Morales.

Relationships between Health and Place

Health is connected to place through multiple aspects over time - a person's biology, hazards or support from the living environments and social positions. These influences are set in a wider context from the economy and social networks to specific policies and programs that shape places and health behaviors and outcomes (Forsyth et al., 2018). Therefore, healthy city planning cannot promote well-being using a limited, physically deterministic framework (Cor-

"People in economically disadvantaged communities have shorter life expectancies than those in more affluent neighborhoods."

Two images: Ben Chapman and Leonard Green. New York Daily News. Feb 02, 2019 at 12:50 pm. https://www. nydailynews.com/new-york/ny-metroasthma-nycha-problems-20190201-story. html

Quote: Phillips, Brian, and Deb Katz. "Designing for Impact: Tools for Reducing Disparities in Health." Architectural Design 88, no. 4 (2018): 56-61.



Forsyth, Ann, Emily Salomon, and Laura Smead. Creating healthy neighborhoods: evidence-based planning and design strategies. Routledge, 2017. burn, 2009). Considering the complex relations between health and places, designers have to manipulate physical features, social forces and even political processes in making healthier neighborhoods.

Design strategies to reduce health disparity

Given that the external impacts on health are hard and slow to be measured, how could designers relate design strategies and health outcomes? Interface Studio Architects(ISA) have attempted to develop a toolkit articulating how design decisions might impact health equity outcomes. The project Health Urbanism argued that co-location of housing with walkable health-oriented amenities creates health equity opportunities (Phillips and Katz, 2018).

Another strategy is taking a life course approach to creating a housing mix (Forsyth et al., 2018). With the aging population in the United States, older adults, who desire to stay with the same community, need affordable and stable housing options. One way to achieve this is the mixed housing types (single-family units, multi-generation



units, small apartments) and housing tenures in a neighborhood.

ISA, Healthy Urbanism, Brooklyn, New York, 2013.

However, both two strategies require additional amenities that probably increase the value of the land. What mechanism could avoid strike prices and ensure affordability in the neighborhoods toward health equity?

Additional political strategies are essential for health equity and affordability. Policies include providing housing outside the market through public ownership, subsidies, collective land ownership and increasing housing supply through additional construction or the dividing up of large units (Forsyth et al., 2018). They require the collaboration of governments, non-profit organizations, private sectors and democratic participation.

Students at Columbia GSAPP have offered their perspectives on the importance of political forces toward health equity. Anirudh Bodempudi argues, "Community ownership has to scale up to challenge incumbent financial models of land ownership. The land is power. Land ownership strategies have to solve for historic racial and economic imbalances in who owns the land and what the quality of this land is." Dhania Yasmin suggests putting health equity in the building code and explains that "So it's not just up to the non-profit developers but also the private developer. Health is a right for everybody, and we need to make sure every development contributes."

Indeed, moving toward healthy cities requires new political institutes and policies that promote health equity through the coalition among governments, non-profits, communities, and even developers. But to achieve this, how could the current political processes be shifted? How do urban designers get involved in these political practices that promote health equity? These questions are worthy of further consideration and discussion.

Citation:

 Phillips, Brian, and Deb Katz. "Designing for Impact: Tools for Reducing Disparities in Health." Architectural Design 88, no. 4 (2018): 56-61.
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Sieber, John, et al. "Kitchenless Homes: A Cook's Dystopian Future." CandysDirt.com, 6 July 2018, candysdirt.com/2018/07/06/ kitchenless-homes-a-cooks-dystopianfuture/.

In order to help shift the notion of women's roles in the home, the idea of the "kitchenless city" was born.

HOUSING AND GENDER EQUITY

The social health of our communities and the strength of individual households has a lot to do with the roles that women play in both the home and the broader world. In a traditional family composition, for many centuries, it is women who typically play the vital role of raising children, and the impact that these young ones will ultimately have on the health of our ecosystems has much to do with how they are brought up by their mothers. This makes ecofeminism a very important subject of discussion, and it automatically alludes to one of the culprits of the imbalance of both equity in communities and ecosystem properties, like greenhouse gas emissions. This culprit is white male dominance, which is also a central factor in material feminism, as the significance of women is devalued in the physical make-up of homes, such as those that place a huge emphasis on implementing a kitchen, where women are expected to fulfill their "duties" and do the same things women have done for centuries. As we observe today's household make-up and take note



of the high prevalence of single-family homes, but more specifically single-mother households, we must reshape our understanding of how the "home" is defined.

The depreciation of the roles of women is evident in today's society. This can be seen in written work from centuries ago. Dolores Hayden highlights a piece from "The Revolution," a weekly American women's rights newspaper in the 1800s 1, which writes, "I demand for the wife who acts as cook, as nursery-maid, or seamstress, or all three, fair wages, or her rightful share in the net income. I demand that the bearing and rearing of children, the most exacting of employments, and involving the most terrible risks, shall be the best paid work in the world.... – The Revolution, 1869" 2 This is indeed a bold statement.

Women's roles are part of processes that create a solid foundation in the American home and the broader society, and housing has been used as a tool to depreciate this crucial aspect of women in the home, as the need of a kitchen in living units has been underscored over many decades. "[The] economic exploitation of women's domestic labor by men [is] the most basic cause of women's inequality." 3 A Columbia GSAPP student, Dhania Yasmin, states: "It is also important to think about equal access to home ownership, "Women and Housework." The New York Times, The New York Times, 4 Dec. 2018, www.nytimes.com/2018/12/04/opinion/ letters/women-housework-stress.html.

For centuries, women have struggled with the obligations of the work field, in addition to those of the home.

1. "The Revolution." Encyclopædia Britannica, Encyclopædia Britannica, Inc., www.britannica.com/topic/The-Revolution. 2. Wright, Gwendolyn, and Dolores Hayden. "The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities." JAE, vol. 36, no. 2, 1982, p. 31., doi:10.2307/1424620. employment and practicing day to day lives. Today, although [women can] apply for mortgages, there are [still more and more] single mothers [who] need help to access [an affordable and appropriate] living environment." This speaks to a clear shift of what the "home" today looks like.

The kitchen has widely been a central piece to the role of women in the home, so removing this component from the living space helps redefine what a home should be composed of, giving light to the "kitchenless city." "[New] building types [include] the kitchenless house, the day care center, the public kitchen, and the community dining club." 4 Another Columbia GSAPP student, Hyuein Song, offers an intriguing critique of the kitchenless city, writing: "I have a strong doubt on the idea of removing the kitchen from the house for the sake of gender equity. The 'kitchen' itself is not guilty, but the social structure that defines 'kitchen' as female is guilty. The designer's job here, if the separation between kitchen and female can't be done in a short period of time, is not to remove it, but to articulate it in different ways so that the kitchen users are not segregated anymore." This train of thought is cogent and justified.

The intersection of gender and race

The primary means of diminishing the value of women in the social fabric is seen through unpaid domestic labor of women that clearly outweigh that of men, and the distinction made on women-dominated architectural programs compared to other design components. "Women spend an average of 260 minutes on unpaid domestic labor daily (as compared to 80 minutes for men)—an imbalance that grows more pronounced in developing nations."5 Margaret Correa, in response to the editor of "This Gender Gap Can't Be Stressed Enough," states: "For more than 25 years I have visited homes as a visiting nurse, the last 10 in an independent living community of about 3,000 residents. Repeatedly I have heard the women I visit apologize that their homes could be ... better vacuumed, freshly dusted, dishes completely washed, laundry done and more. And I repeatedly say to them, "Do you know how many men, after 10 years" of visits, explain their lack of housekeeping?" I hold up my hand and make a zero." 6 This is a clear testament to the extra weight that

^{3.} Wright, Gwendolyn, and Dolores Hayden. "The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities." JAE, vol. 36, no. 2, 1982, p. 31., doi:10.2307/1424620. 4. Ibid



women carry in the work field compared to that of men.

When we begin to redefine the roles of women in the home, we as designers can then reconsider what should be viewed as the ideal home – one that does not place high demand on the roles of the woman, but one that shows an understanding of the many layers that make a home function properly, from the woman to the man to the children. "Despite the clear impacts of domestic practice on sustainability, it remains an underexplored approach in design and planning. In fact, we argue environmental design has neglected to address domestic practices (and women's roles in them) as sites through which to address sustainability, and potentially gender inequity as well." 7 This highlights the need for designers to promote a new form of environmental design that takes into account women's roles and analyzes how these roles will ultimately impact sustainability.

Race inequality shares similar spaces with gender inequality, in that race inequality is partly caused by white supremacy, and gender inequality is partly caused by, more specifically, white male dominance. This intersectionality of race and gender is seen in a world that is primarily shaped to allow white males to benefit most from Jensen, Robert. "Opinion: The Dangers of White Male Supremacy." YES! Magazine, 9 June 2021, www.yesmagazine.org/ opinion/2021/06/09/white-malesupremacy.

White male dominance causes not only gender inequality, but also race inequality.

5. "The Avery Review: Women's Work: An Eco-Feminist Approach to Environmental Design." The Avery Review | Women's Work: An Eco-Feminist Approach to Environmental Design, averyreview.com/ issues/27/womens-work.

6. "Women and Housework." The New York Times, The New York Times, 4 Dec. 2018, www.nytimes.com/2018/12/04/opinion/ letters/women-housework-stress.html. 7. "The Avery Review: Women's Work: An Eco-Feminist Approach to Environmental what society has to offer, while pushing to the side women, minorities, and other bodies who do not match protocol. Gina Ford, co-founder and principal of Agency Landscape + Planning, once wrote: "Fifty years ago, the voice of our profession was eerily prescient, undeniably smart, and powerfully inspired. It was also, let's admit it, almost entirely white and male." 8 She then emphasizes "a need to diversify the ranks, to design with humanity." 9 The only way we can create equitable spaces is by designing in such a way that allows all bodies to thrive – not just those of white males.

Several scholars have offered their views towards this dialogue. Jack Halberstam, a professor in the Department of English and Comparative Literature at Columbia, argued: "We shouldn't just be building a gendered city. We should also be unbuilding patriarchal systems, foundations, and subsystems that invisibly support a city through which white men move easily." 10 A Columbia GSAPP student, Rui Zhang, writes: "Scholars' definition of the label of women's typologies is also based on women's use of space. However, the freedom of women cannot be isolated by the spaces. Nor can it define a certain space as a feminine space." Leslie Kern, author of "Feminist City: Claiming Space in a Man-Made World" states: "[even in a country where they say that the pandemic has been handled relatively well], these kinds of gendered and racialized care labor problems persist. What this suggests to me is that there are a whole lot of assumptions still underlying the way that we set up our cities and our homes, and a whole lot of being okay with relying on a very shaky, unequal, and exploitative status quo." 11 It is this status quo that designers must make a concerted effort to change. The question is, "how?"

How can we rethink housing design so that it embraces the roles of women – such as housework and motherly duties – and is inclusionary towards black and other minority communities? Addressing this question will aid us in shifting away from the status quo of white men having full control over the make-up of the housing industry and will help us come closer to a world where women and minorities do not have to feel like they were not put on the list of those who deserve a fair share of happiness and overall well-being in the housing market.

^{8. &}quot;The Avery Review: Women's Work: An Eco-Feminist Approach to Environmental Design." The Avery Review | Women's Work: An Eco-Feminist Approach to Environmental Design, averyreview.com/ issues/27/womens-work. 9. Ibid

^{10.} Werle, Shannon. "Moving Toward a Feminist City." Columbia News, 20 Oct. 2020, news.columbia.edu/news/gsapprecap-the-feminist-city.





A Servantless House" by William C. Heck for Ladies Journal in 1922 A.L. Hu, "Domestic Bodies, Trans-Embodiments : Reframing Binary-Gendered Spaces"

NYCA Housing https://rew-online.com/landlords-call-fordrastic-measures-as-vacancy-climbs-toover-12-percent/

¹Leigha Dennis, "Making Room," DO-MUS (Domusweb, September 14, 2017), https://www.domusweb.it/en/architecture/2013/03/05/making-room.html.

² A.L. Hu, "Domestic Bodies, Trans-Embodiments : Reframing Binary-Gendered Spaces"

BEYOND FAMILY Housing

Historically in the US, housing was designed for a traditional family or nuclear family. In today's society 'family' has broader definitions of new social units. In New York City the majority of households are increasingly single, couples with no children, single parents family and others¹. By considering new types of users, we need to rethink the current model of family housing that should be more inclusive and flexible. A.L. Hu² argues that designing for inclusivity could start by first reframing the domestic past as archive and home as shelters, which will break the old binary in domesticity and move towards a more gender equitable design.

AM INTERESTED IN AFFORDABLE HOUSING - IAM NOT INTERESTED IN PEOPLE MAKING & PROFIT BY SELLING APTS ... ALL OF US PLAY THE RHUMBA & ALL DF US DANCE ... BY AFFORD ABLE HOUSING I MEAN AFFORDABLE WHICH IS NOT THE GOVT'S DEFINITION OF AFFORDABLE THE EAST VILLAGE DOESNT EXIST - THATS & FIG. MENT OF IMAGINATION THIS IS LOISAIDA ... I AM GOING TO GIVE THE FIGHT OF MY LIFE FOR THIS - BUT YOU HAVE TO PROCEED JERY CAREFULLY .. DO NOT DISCLOSE THE MEMBERS OF YR GROUP UNTIL CERTAIN REQUIREMENTS ARE MET ... DO NOT ENGAGE IN ACTIVITIES THAT ARE ILLEGAL - IF THERE IS DRUG TRAFFICING IT WILL HAVE TO STOP .. YOU HAVE TO KEEP IT SQUEAKY CLEAN ... MAY 30 2K ARFLY

Margarita Lopez lays down the law at the first meeting with her and Joe Center of the Urban Homesteading Assistance Board (UHAB), to consider the idea of legalization, May 30, 2000. | Courtesy of Fly

Amy Starchesky, "The Story of Squats," Urban Omnibus, March 9, 2018, https://urbanomnibus.net/2017/02/story-of-squats/.

Ownership is also a very integral part of housing. As a home becomes unaffordable and expensive, many people are left homeless. These housing crises are evidenced through the squatting movement in the '80s and '90 in the lower east side, in which people occupied many city-owned abandoned buildings. In the end they successfully pushed the government to sell the property cheap to the non-profit organizations and converted them into low-income cooperatives with renovation loans to become mortgages. Unlike traditional home ownership, these shared ownership models could better ensure affordability.



View from northeast. The public realm on the street level and below is open to the residents as well as to the rest of the city. It is connected with the open courtyards of the living spaces and continuous with a diverse system of networks around the site.

N H D M, Wolgok Youth Platform, Seoul, 2017

Bhatia, Neeraj and Antje Steinmuller, "Spatial models for the domestic commons : communes, co-living and cooperatives" 'Baugruppen are a solution for the moment when the city is not acting as it should.' — Florian Zeyfang, Baugruppen project resident2

Another example is the Baugruppen project that eliminates developers and directly pools their financial resources into a cohousing project creating a large 'urban family'. Although by using these new cooperative models, it could mean a home could no longer be a wealth building measure like it used to be. If we want equitable housing as a part of human rights, this big shift of ownership paradigm is necessary to create an alternative from the current housing market. Citing a quote from DW Gibson at UnionDocs "What it comes down to is a competing vision for how we can orient ourselves as a society. It's stewardship versus ownership"



By exchanging elevators for common spaces and arranging units along the length of the building, one can build more units more affordably — giving the growing constituency of singles, elderly and small families the option to live roommate-less without sacrificing amenities like private bathrooms and kitchens

https://www.domusweb.it/en/architecture/2013/03/05/making-room.html.

"While specific designs are suggested, the point is that by making a few updates in policy and recalibrating our perception of the contemporary home, we can extend the possibilities for housing New York City's growing and diverse population" — Leigha Dennis

These shared ownership models usually manifest in its building/ unit typology with shared domestic spaces. Baugruppen units have a shared amenity and public spaces in its circulation core. Sharehouse project designed with a nodes of social units that also consist of washrooms, kitchens, living spaces and dining areas. Individual autonomy was reduced to its minimum. On one side these moves were good as the shared units could have better quality of spaces and became a place for social interaction. However from a health perspective not all people are comfortable living in a very close proximity to each other. Designers have a very important job Insuring and balancing the private and public space.



a screenshot of the miro analysis of Total Housing: Alternatives to Urban Sprawl.

ANATOMY OF A CASE Study

Eleven Case Studies

Through Anatomy of a Case Study, the class critically analyzed 11 case studies to explore communication strategies for expert and lay audiences. By answering the following 6 questions, this activity laid the groundwork for our own case studies. This section introduces two examples of case studies with selected questions.

What does the case study focus on? What does it leave out? What kinds of sources do the authors use? What do they leave out? What questions does case study bring up for you?

How does this connect to issues you've seen in your neighborhood or city? Who do you think the audience is for this case study? How well does the case study communicate issues of social equity?



Total Housing: Alternatives to Urban Sprawl

a screenshot of the miro analysis of Genealogy of Modern Housing.

Tihamer Salij, Albert Ferre

1. What does the case study focus on? What does it leave out?

It focuses on the hybrid physical context, "pepper potted" unit types and the communal spaces for social integration, while it leaves out the social context within the project is located and construction techniques explaining the structure of the building.

2. What questions does case study bring up for you?

Except for mandatory planning policy on affordable housing, how urban designers, architects and clients decide the proportion of affordable housing and private sale? Is there any model that could be applied in the preliminary design phase?

3. How does this connect to issues you've seen in your neighborhood or city?

The adaptive units and multi-layered communal space design could relate to Hangzhou's "urban village" regeneration. Their medium row



a screenshot of the miro analysis of Genealogy of Modern Housing. housing typology is similar to the traditional terrace in this case. Inhabited by the poor and transient, urban village also have the issue of social segregation.

4. Who do you think the audience is for this case study?

The primary audience for this case study is architects and urban designers who are engaged in or interested in a medium-density housing project focusing on multiple users, unit variety, and adaptability. Another possible audience could be urban planners. Additionally, it is also a good reference for architecture students.

Genealogy of Modern Housing

Kenneth Frampton

1. What kinds of sources do the authors use? What do they leave out?

It utilizes different types of architectural drawings and photos, mostly professional - site plans, plans, sections, unit plans, perspective drawings, detail and construction drawings. It also marks different spatial characteristics. However, sources showing residents using the spaces are missing.

2. Who do you think the audience is for this case study?

The aspects and terms used indicate that the audience of this case study is more focused on those who are educated as architecture-related professionals, such as architecture students, architects, and urban designers.

3. How well does the case study communicate issues of social equity?

The focus and materials of this case study is not fully addressing issues of social equity. The communication is limited to intended users of the housing, and their life aspects rather than different aspects related to the social equity.

Two Exhibition Walls

During the class, students curated two exhibition walls with 11 case studies. Those case studies were collectively rearranged according to exhibition themes, developed based on the relationship between case studies. The relational analysis on case studies helped students set a background for the beta case studies, clarifying the directions suitable for intentions of projects. This section introduces the two exhibition walls with parts of the visualized case studies that reveals the described points well, including quotes from the texts.

EXHIBITION WALL 1 VOICES ON HOUSING

This emphasized different voices introduced by the case studies. By incorporating various perspectives of stakeholders such as architect, developers, policy makers and users, housing issues can be thoroughly discussed and understood.

ARCHITECT'S

Global Housing Projects / Josep Lluís Mateo "The building volume provides optimal air, daylight and views to all apartments with triangular-shaped balconies characterizing the south facing façade."



ARCHITECT'S + OTHER CASES'

A Genealogy of Modern Architecture / Kenneth Frampton "Like Le Corbusier's Radiant City, both of these mediumrise housing blocks aspired to the ideal for the mid-rise residential fabric suspended in the midst of nature."

ARCHITECT'S + OTHER CASES'

Housing for Everyone: Affordable Living / Klaus Domer, Hans Drexler, Joachim Schultz-Granberg *"Tour Bois Le Pretre by Druot, Lacaton & Vassal Architects, Vertical Village by Anna Nikodem, Longhua Affordable Building by Capol, and Eurogate by Dietmar Fiechtinger Architekten"*

ARCHITECT'S + DEVELOPER'S

Designing New York: Quality Affordable Housing / Alicia Glen *"Each module functions and is designed to look like an individual building, which breaks down the visual impact on the street when more than one infill model is developed in a series side-by-side."*

ARCHITECT'S + POLICY MAKERS'

House after the Neoliberal Turn / Christian Hiller, JEsko Fezer, Nikolaus Hirsch, Wilfried Kuehn, Hila Peleg *The authors point to prominent examples of the effects of this deregulation, such as the 2008 banking crisis, which led to a global recession. – from Chinedu's explanation*

ARCHITECT'S + DEVELOPER'S + POLICY MAKERS'

Via Verde / Rudy Brenner Award "The NHNY steering committee led the project in partnership with ANIANY, the NYC Department of Housing Preservation and Development, the New York State Energy Research Development Authority (NYSERDA), and Enterprise Community Partners,"









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EXHIBITION WALL 2 IDEAS ON HOUSING

Exhibition Wall 2 – Ideas on Housing addressed various focuses of case studies. Some case studies focused more on the spatial qualities while others focused on suggesting speculative futures. By acknowledging different directions of case studies, intentions of various housing projects became clearer and well delivered.

SPATIAL QUALITIES



Housing Design: A Manual / Bernard Leupen & Harald Mooij

"A dwelling can also be divided into three zones at greater depths, whereby the additional floor space can be allocated to any of the three zones."

10 Stories of Collective Housing / a+t research group

"The aim was to make these units available to workers in the post-revolutionary period until the State could offer them dwellings with a fully communal lifestyle." Total Housing: Alternatives to Urban Sprawl

/ Tihamér Salij, Albert Ferré

"The genuinely 'pepper-potted' mix of accommodation is an integration of 61% affordable-housing and 39% private sale, made possible by shared stairwells and interlinking units."

SPECULATIVE FUTURE





Affordable Housing in New York / Nicholas Dagen Bloom & Mathhew Gordon Lasner

""generating a mixed-income and, more crucially, mixed-race community, free of the white flight and instability so characteristic of urban neighborhoods in New York and nationally in the 1960s." Social Housing / Paul Karakusevic, Abigail Batchelor

"In essence, it is an example of housing being provided on the basis of local need without the assistance of either the local authority or the private residential market."

BETA CASE STUDIES



Image, by Sam Oberter, 2016. / Interface Studio Architects

POWERHOUSE Philadelphia, PA

Architects: Interface Studio Architects, ISA Status: October 23, 2013 - June 15, 2016

Size: 35,000 sf Hard Construction Cost: \$4,900,000 Units: 31 units (4 single-family homes, 16 duplex units, 2 multi-family buildings)

Clients: Equinox Management & Construction and Postgreen Homes Lead Architect: Brian Phillips, FAIA LEED AP, ISA Contractor: Equinox Management & Construction Consultants: Larsen and Landis; Cornerstone Consulting Engineers & Architectural, Inc.; J&M Engineering, LLC; Steven Winter Associates; Jenny Sabin Manufacturers: Metal Sales Manufacturing Corp., Bailey Wood Products, Fiber Frame

Photographs: Sam Oberter



A model of the project and its site context. By ISA, AIA New York

(https://www.aiany.org/architecture/ featured-projects/view/powerhouse/. Powerhouse, ISA, Accessed 25 Jul 2021.)

Site Context

Powerhouse is a winning project for the competition by Philadelphia Redevelopment Authority in Philadelphia's Francisville neighborhood. Francisville is a rapidly gentrifying edge between an expanding Center City core and outlying Philadelphia neighborhoods. There is an urgent need to develop sustainable and affordable housing for middle-income residents, counteracting gentrification accompanied by price spikes and displacement.

Given the gentrification, Powerhouse embraces the "missing middle", which refers to the middle class ignored by public housing projects and the private market. The designer Brian Phillips explains, "There are subsidized housing that often tries to take care of the least economically positioned homeowners. And there's the private market, which is insatiably seeking the highest number of all time. The missing middle is really what happens when we work in between. I think that's where this project falls into."



A comparison between a traditional Philadelphia stoop and a super stoop, by Sam Oberter, 2016. Interface Studio Architects

Super Stoop

Super stoop is one of the design strategies to make the project naturally fit into the neighborhood by expanding a traditional Philadelphia stoop space into a street level social space. A traditional stoop is a series of steps in front of the house, a mediator between the public sidewalk and the private residence. A "super stoop" expands on this idea by a sequence of generous entry platforms navigating grade changes, entry stairs, and basement windows and featuring fabricated metal handrail panels designed by a local artist.

"There is a funny tension between design, architecture, styling and gentrification." said Phillips, "We are not just talking about gentrification as a measurable series of numbers, but also things that look like gentrification." Phillips regards this project as an act of peaceable development. The super stoop and the brick facades all relate to the row house context in Francisville.



Unit typologies of Powerhouse Interface Studio Architects

Typology & Sustainability

UNIT TYPES

A total of 31 units in Powerhouse are neatly arranged. It provides clients with 3 housing types and 6 unit types. Housing types include single-family townhomes, duplexes, and apartment buildings, which could meet the different requirements and budgets of clients. The unit types include three-story single family houses and two-story duplex (including the vertical location of high or low). There are 3 apartment types in the apartment, 2 of which are two-story, and 1 of them is flat. The arrangement of each unit is also carefully designed. 3 existing spaces are interspersed among them.

Powerhouse has 2 apartment buildings, and they are next to each other. There is an existing between them. The 2 apartment buildings are located in the southern area of the Powerhouse. Single family and duplex buildings are arranged alternately, facing the west side. Among them, the duplex has 8 buildings, each with 2 duplex units. There are 4 single family buildings, each with a unit.





Powerhouse is a super green apartment. The staggered arrangement of buildings on the horizontal level provides more outdoor space for the site and increases the possibility of green vegetation to settle in, such as yard, upper and lower green roof terrace and so on. Powerhouse is also super energy-efficient and has achieved LEED Platinum certification. In addition to solar panels on the roof and other mechanical systems, ISA pays more attention to the high insulated wall and high-performance windows of the building. These have accounted for 60-70% of building energy output.

One of the challenges of green building is, as an architect, in addition to completing the architectural drawings, always present onsite to ensure that these windows and walls do not leak air and still maintain their original performance as the drawing expected during the construction process. At this time, cooperation with contractors is very important. More importantly, for residents, high performance buildings can save a lot of energy bills. "We do it not only because it's good for the environment and it's good for buildings that are more efficient, but also again, it reduces energy bills. The difference between having a 250 or \$300 a month heating bill in January versus a \$40 heating bill, you literally can put \$1,000 in people's pockets because they're not paying for heat in their house.", said by Phillips.



Project selected materials: Brick, metal panel, thermally modified wood Interface Studio Architects

Community Engagement

As open as Philadelphia is, some of the challenges of a regulatory system are apparent. It was developed about ten years ago as a magnificent development, as a method to foster development and economic opportunities in a city that had been decreasing for a long time. "I think the zoning code, many cities as. Nobody does anything within this code. You have to get a variance for every project." Phillips brought up the point. There are several projects in Philadelphia that do not require public comment or variance hearings. Many developers prefer this because the approval process is extremely predictable.

"There wasn't a community meeting that one pretty well, since I think people appreciate the idea, but I can't say there was a process where there was considerable interaction with the community around what they would require and then a direct reaction in the housing design." Phillips stated. As a result, there was no structure in place to conduct a thorough discussion with the community about what they required in the housing design. Furthermore, this home was designed with the purpose of being as ecologically friendly and mixed-income as possible. ISA thinks it is their duty to express the principles of both the city and its neighbors to the best of their abilities.

"We've learned a couple of things about going to the site after the iar seal and looking at it. Often making sure there's an air sealing subcontractor whose total job that day is to go through the building and seal it." - Brian Phillips



Render of Las Adelitas from the Salazar Architects website.

LAS ADELITAS Portland, OR

Client: Hacienda CDC and Living Cully Architects : Salazar Architect Developer : Hacienda CDC Contractor : Chris Duffin, LMC Construction

Finance: PHB, OHCS LIHTC & HUD funding being considered Project Year : 2016, Construction in progress Units: 142 apartments including 18 permanent supportive housing units Building Area: 194,424 sf with 11,540 sf of community areas Sustainability: Earth Advantage Gold certification in progress Las Adelitas is an affordable housing project that is born from a former strip club and illegal gambling site. Along with new affordable housing, public plaza and a pedestrian friendly streetscape with mid-block crosswalk, the development brings housing justice without displacement to NE Cully, one of Portland's most diverse and rapidly gentrifying neighborhoods.

The Salazar Architect team led hands-on workshops with immigrant Latinx and African Muslim families, and open houses with neighborhood residents and allied organizations, provided culturally specific input that helped guide the design of the apartments, Community Hall, public plaza and streetscape.

The firm began working in community design and urban design advocacy, and then transformed into affordable housing renovation work. Before the pandemic, it implemented the design lab structure, which is a community design center making profit and then turning the profit into the design labs. Team can also involve the achievement of design labs into the design. Las Adelitas is a product of this structure.

NE Cully

Las Adelitas is located in the health of NE Cully, one of Portland's most diverse and rapidly gentrifying neighborhoods. The site sits in a former strip club that is being demolished known for illegal gambling and human trafficking on the corner of cully boulevard and Killingsworth streets. It is in proximity with the Hacienda office, community school, health clinic, and hundreds of homes. It is the place for many Latin immigrants, Native American, and African Muslim families that makeup almost 50% of the total population with an average income lower than what the city is.

With the rent price going up, many struggle to keep their place, whether it is a residence or small business. To hold this, Cully NE has proactively taken prevention for the displacement of their community and businesses through non-profit, activist, community-based organizations, and city council support. They were buying out lots to keep it affordable and out of reach of the developer, pushing for



Las Adelitas site from google image

rezoning, and took initiative to revitalize businesses in the neighborhood.

Community Engagement

Named after feminist Mexican revolutionaries, the project is an attempt to bring deep social, economic and environmental benefits to the community. In collaboration with Familias en Accion, a culturally specific organization to promote health for Latinos in Oregon, Salazar Architect conducted a series of community outreach events. Through mapping sessions, verbal surveys, Zoom meetings and other programs, they were able to design a space that conceptually reflects the values and aspirations of the low income BIPoC community in the Cully neighbourhood.

The firm hopes to continue to stay engaged with the community well after this hand-over period. Salazar Architects values social



commitment and believes that they will only continue to learn from each experience which will aid in enhancing the quality of their design work as a firm. Las Adelitas is owned and operated by Hacienda Community Development Corps and was funded by a number of public and private investors like City of Portland Housing Bureau.

Master Plan

Las Adelitas is a product of collaboration between teams of 'design labs' within Salazar Architects. There are four labs : Community design, sustainable design, well-being design, and a new covid era team that deals with equity, diversity and inclusion during the design process. Pieces of these different labs embody Las Adelitas design and plans. The community design as a core leads the project participants and community engagement aspects. It is manifest in the large areas dedicated to public spaces and social functions in the building. The public plaza table from a Focus Group / Community Design workshop in 2018. Salazar Architect Inc.



On the ground level, there is a community room, daycare, cafe, and big plaza that incorporates mural art, areas for events and performances, a temporary food cart zone, and space for a future playground. On top of that, with knowledge from the sustainability lab, the building will be certified with Earth Advantage Gold certified. On the roof, there will be an Oregon Community Solar PV array and a digital-justice focused electric vehicle (EV) program.

The well-being design lab work displayed in the interior design incorporates both cultural and trauma-informed design elements. There are also partnerships with Cascadia Behavioral Healthcare, as a service Partner. The community design labs are also currently developing a method of survey work after the project is constructed to re-engage the community after the process.

Design Inspiration

The exterior of Las Adelitas is characterized by its low height and colorful masses. The low masses and bright colors motivated by indigenous and Luis Barragan's architecture from Mexico, introduces a new but familiar atmosphere to the site where 50% of the residents are from BIPoC communities, particularly immigrants from Latinx and African families.

The combination of colors provides Las Adelitas a unique sense of place that brings energy to the neighborhood. The color 'red', which

The site plan includes outdoor seating and a performance stage, as well as space for temporary food carts and a future playground.

Salazar Architect Inc.



The design draws inspiration from the vernacular and modernist buildings in the Americas that have large surfaces, overlapping forms and bold contrasting colors.

Casa Barragan, Luis Barragan, cueramaro, Mexico, 1948

is used mainly on the walls looking outside of the building, represents vitality and passion that Las Adelitas will bring to the site. The color 'blue', applied on the courtyard looks inward, represents stability and calmness that Las Adelitas will deliver to the residents. The residents, while staying in the courtyard, will be able to make themselves at home, relaxing.

Community Spaces & The Public Plaza

Las Adelitas includes various outdoor and indoor spaces for the residents of the housing and the neighboring communities. The family courtyard provides the residents a cozy outdoor space to rest. The welcoming community hall serves as a place to gather, host community events, and socialize. Public plaza, incorporates a mural art, areas for events and performances, and spaces for future events such as a playground and a food cart zone, inviting nearby neighbors.

The well-designed communal and outdoor spaces of Las Adelitas can help improve health justice of the social. The public plaza can enhance physical health by increasing outdoor activities of the residents, while the communal spaces such as community hall and courtyard can advance psychological well-being with senses of belonging to the community.



The color 'blue', applied on the courtyard looks inward, represents stability and calmness that Las Adelitas will deliver to the residents

Salazar Architect Inc.

Unit Combination & Funding

Affordable housing is public funded housing and public agencies cannot get profits from it. It serves people who are homeless and low income and families who are 60%-80% AMI. People whose income is beyond 80% AMI will not be qualified to apply for affordable housing. Developers are trying to fill this gap. Since such projects are unprofitable, there are great financial difficulties in meeting everyone's needs

Unit combinations have shifted over the last five years because they need to serve the growing needs of homeless folks according to the requirements of cities and states. Though the importance of community and public space was well understood by the designers and developers of the project, it was impossible for the project to be funded for those community spaces by the city because a lot of community space is commercial space which public funding cannot fund.

By incorporating 18 permanent supportive housing units to Las Adelitas, the project was given special funding, and able to keep the ideas of the plaza and communal spaces, at the same time, to provide a wider range of affordable housing unit types. The result is a multi-family typology with 142 housing units including 18 permanent supportive housing units in this project .



Conclusion

On paper, Las Adelitas is an example of what is possible when both design and capital are aligned in their efforts to create affordable housing that fosters an equitable community. It is currently under construction and slated for completion in the near future, making it hard to assess the performance of the building as either architecture or a social condenser. However, given the robust community engagement and thoughtful design process, the future looks optimistic. Plaza and Building on NE Killingsworth Salazar Architect Inc.



1490 SOUTHERN BOULEVARD

New York City, NY

Architects: Bernheimer Architecture Project Team: Will Sheridan, Thom Medek, Brandon Pietras, Lauren Bordes, Nicole Halsey, Michael Nunnink, Leeland McPhail

Size: 85,000 sf Units: 115 Units Clients: Type A Advisors Status: Completed in late 2020



The facade of 1490 Southern Boulevard continues a theme of design despite budget constraints to present a sleek aesthetic

1490 Southern Boulevard, Bernheimer Architecture, July 22 2021

Bernheimer Architecture was founded around 2009, and the firm mainly focuses on multi-family housing projects in the New York city and Long Island area, and most of their projects are affordable or low-income housing.

1490 Southern Boulevard is located in the south Bronx, New York, and it is an 100% affordable housing development that primarily focuses on senior housing and dwellings for the formerly homeless. While designing sufficient unit spaces to accommodate the senior and homeless population, the project also provide residents with abundant common spaces for various kinds of public activities. And because of the particularity of the senior residents, the firm also partners with JASA, a non-profit organization that offers on-site supportive services to residents.

"The largest stakeholder in the room is the budget."



The facade of 1490 Southern Boulevard continues a theme of design despite budget constraints to present a sleek aesthetic

1490 Southern Boulevard, Bernheimer Architecture, July 22 2021

Context

The project is located on a 1.4 mile transit corridor that connects the Crotona Park East and Longwood neighborhoods of the Bronx. The main building types in this area are residential and commercial and the neighborhood is densely populated with more than 57,000 people living within a half-mile radius of the street. The neighborhood flourished in the 1930s and 1940s as the inflow of working and middle class population sought for adjacency to the new transit line. And due to the new housing developments that have taken place since last decade, the neighborhood is still growing with a 17% population growth since 2000. The Southern Boulevard is rich in cultural history, particularly in music industry including Jazz and Hip-hop, and it is one of the most popular destinations for New Yorkers from other boroughs.



Challenges

The loudest stakeholder in the room is the budget," says Brandon Pietras, one of the architects from the firm Bernheimer Architects, who worked on the project. He talks about the delicate dance between building code and monetary constraints and how these are overwhelmingly the biggest design drivers for affordable housing projects like 1490 Southern Boulevard. He also stresses that despite these tight parameters, every project tends to evolve a unique personality because of site conditions and client preferences.

In this project, it was decided that the 'block and plank' construction technique would be deployed. This was also a major factor in determining shape and size of individual units. Further, the fact that the project was designed for senior citizens and formerly homeless



1490 Southern Boulevard, Bernheimer Architecture, July 22 2021

> people meant that the architects were extra sensitive to the need for a dignified, accessible and well lit common area despite the monetary constraints. This manifests as a simple yet impactful space in the front of the building that will hopefully augment the residents' mental and physical well-being. On the question of funding, Pietras says that while it is known that this project was funded by various financing options such as tax exempt bonds, low-income tax credits and multiple grants; it is not necessarily in the purview of the designer to wrestle with these issues. While it seems pragmatic to take a project as it comes with its set of financial constraints, one has to wonder if there is a place to question the ethics of financing affordable housing and where the money comes from.

Design Process

Talking about the design process for projects like 1490 Southern Boulevard, Brandon says that the firm uses a set of floor plan templates they have designed as well as simple massing exercises to first decipher the built possibilities within the building code constraints of the site in question. The question then arises about how to humanise design that is inherently born out of numerical



constraints and the mechanical rearrangement of impersonal templates. On seeing the finished product though, it seems that this iterative process actually helps the architect best negotiate the crushing pressures of code and budget. In the repeated planning, refining and execution of simple, replicable units; the spaces that are produced seem humane and livable. Perhaps designing affordable housing is less about the uniqueness of design and more about the dignity of space.

Brandon talks about how an affordable housing unit must not feel like a compromise in terms of material and finish. Where affordable housing is always going to be a battle to accommodate as many residents as possible without designing claustrophobic spaces; he is of the opinion that the material finishes and the crafting of the building can help in making these units feel like home. This assertion really does shine through in the minimal yet sleek aesthetic of the units designed in 1490 Southern Boulevard. While there is no way to judge the performance of the materials over time in this recently completed project, the early impression of the space is that it seems to extract great spatial value for the resident. 1490 Southern Boulevard Typical Floor Plan, Bernheimer Architecture, July 22 2021



Common Space

Projects like 1490 are important in that they are good examples of how to create an environment that is actually geared towards both the well-being and productivity of its tenants. Creating a space where the tenants are pushed outside of the walls of their private units is unique in that it sends the message that the space is not just for people to live individually, but a space where people live collectively as a true community. The 1490 project creates an environment where people can actively engage with one another beyond a superficial level.

Bernheimer Architecture states that the project "really encourages people from the moment they come through the doors of the building to be more physically active, so those who are able can go right up the stairs in the lobby immediately to the rear yard, which is part of the corridor sequence." Given that this housing development is made for senior housing and the formerly homeless, the project changes the way we view senior living as a whole and the way we design spaces for those who might not particularly be able to afford to live in similar types of residential spaces. BA has created a space that "encourages people to spend more time outside of their units and more time socially engaged with people." BA states, "In terms of senior living and those who might have been previously marginalized by being houseless, this helps a lot from a psychological-welfare perspective and makes the building feel more like home." As we continue to discuss affordable living and housing equity, the ways in which we can create spaces that feel like "home" is crucial to the overall success of new developments.

Conclusion

Given the many challenges facing affordable housing designs, 1490 Southern Boulevard is nonetheless an instructive and innovative project that informs a more dignified and healthy barometer of multi-family housing typology. With apparent budget constraints and intricate stakeholders' interests, designing decent affordable housing means precisely dancing with shackles. Even so, Bernheimer Architecture's endeavor makes the seemingly inexorable result somehow pleasantly different, thus pushing the envelope of multi-family housing design from the very beginning of the project - massing experimentation till the very end of the project after the completion with a feedback loop. Efforts in treating affordable housing design as such does not offer a direct paradigm shift that one may expect from an architecture's power of criticizing the reality but it does imply the most valuable quality of a systematic change by elevating and dignifying those who were neglected with a tangible structure. And great things are done by a series of small things brought together.