

HIGH RISE WITH A HIGH DIVE

Abstract

The “In Between” is not a discrete space, but emerges from a continuum, a common pool of overlapping resources. It is the place touched by the boundaries of private, public, and institutional entities. Intentional, well-designed places in between buildings can act as a synapse between such agents, facilitating what Bruno Latour described as an “Actor Network.” What better site to imagine such a life between buildings for Chicago than 420–430 W. North Ave.? Straddling the border between two distinct Chicago neighborhoods — “The Wick” to the South, and “Old Town” to the North — this location has a hidden potential to provide youth (among others) the opportunity to observe the intermingling of both communities through a transit-served urban corridor. **“High Rise with a High Dive” synthesizes multiple site-specific research methods into a restorative, socially conscious, and synergistic design proposal.**

Introduction

Yet the young residents of such a site, a strip of lots along North Ave owned by the Chicago Housing Authority, would only benefit so much from a fully enclosed garden, a daycare or other private enterprise. **In order to learn about the present public urban life, and even begin to imagine a future one, children must also in some sense participate.** Simply framing a public vignette as the backdrop for a screened, insular play environment disembodies children as somehow separate from the public realm. Indeed, this setting must be tethered into the public realm in tangible, mappable ways, bridging the social networks of young Chicagoans across geographies and mobilities.

Furthermore, the space in between these residential buildings must be singular, the activity facilitating this social network must increase its gravitational pull as more individuals participate. An improved section for the pedestrian crossing across North Ave can only bridge the physical divide between neighborhoods; the quality and nature of the attraction itself must also cut across network striation.

The in-betweenness of this unique site also manifests itself through access to water. The site’s two existing buildings,

furloughed due to plumbing issues, sit along a bus route which during the summer of 2021 and 2022 closed due to “overcrowding” at the storied North Avenue Beach. As Architecture Professor Akima Brackeen notes, **“access to water has often been meted out and restricted across racial lines, limiting where Black and Brown Chicagoans can engage in places of leisure and recreation.”** Perhaps, as rapper Mick Jenkins suggests, water can also be “the healing component.”

The creative hypothesis of this project is to imagine a spatial arrangement of resources, institutions, structures and people that can address this confluence of urban issues which permeate Chicago: de facto segregation, underserved youth, imagining a new public life, access to quality affordable housing and jobs, and the need for robust basins of outdoor activity. The goal of this exercise is not to resolve these issues — as Maurice Cox often says in his lectures on Detroit, **“there are no easy answers.”** Instead, the goal is more to do what Peter Eisenman imagines architecture doing — that is, “architecture has the potential to open up these problems to their own internal constructions and contradictions.”

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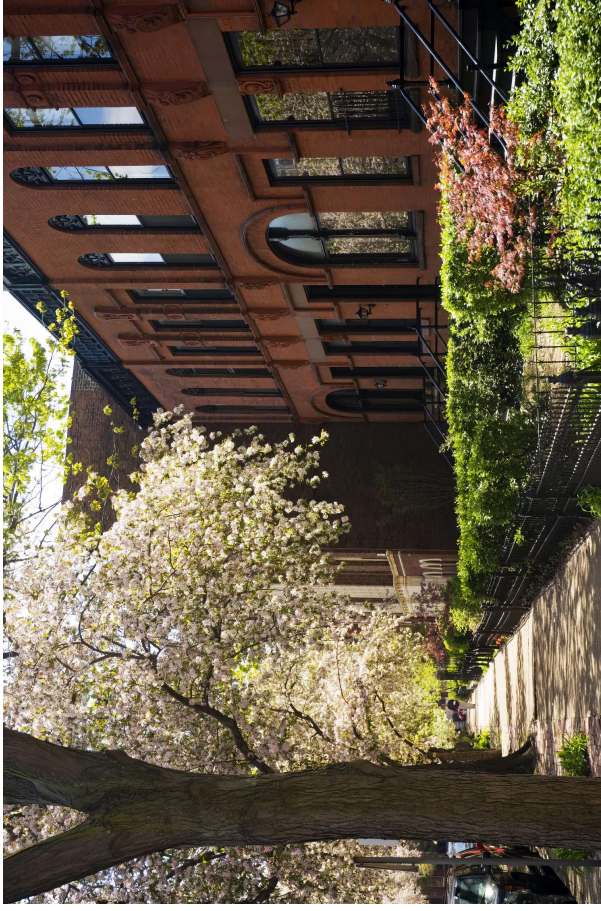


Figure 1: Photo of Ann Halsted Rowhouses. (Source: Chinese Chicago Neighborhoods - Old Town.)

The project begins with a placed-based typology of accessible housing. It then maps the amenities around the site, highlighting the robust network of essentials and the unequal distribution of aquatics in the area. The map demands further investigation, utilizing the Urban Networks Analysis toolkit produced by MIT’s City Form Lab to perform pedestrian network modeling. I then give the historical precedents, amenity needs, existing (and possible) pedestrian flows, stakeholders, and climate/housing issues of Chicago a form.

Towards a New Mixed-Income Housing Typology

The buildings immediately surrounding 420–430 W. North Ave. serve as a microcosm for the history of modern social housing in the United States. The buildings, created by some of the most renowned and industrious architects of the 19th and 20th centuries, set a high bar for thorough, socially attuned and well-designed affordable housing indeed. These edifices also serve as a wealth of knowledge for future generations of architects. Each building complex carries genes — thematic ideas which seek their expression through architectural form. It is then the work of the design proposal to inherit the genetic ideas of previous attempts to provide quality housing for the greatest number, with correct proportions and well situated in a viable neighborhood context, documented as follows.

Louis Sullivan

In 1883, a young Louis Sullivan produced three simple row-houses for Ann Halsted, a philanthropic woman who lived and operated on Chicago’s near-north side. These simple townhouses were rented out by Ann Halsted for a generous price, to recent immigrants and new families who were still establishing their foothold in the emerging city. As intimate

rent-to-own properties situated in full view of a well-to-do neighborhood, the Ann Halsted rowhouses (Figure 1) had a strong prescriptive social agenda, in dialogue with other prominent female scholars and activists of the time such as Jane Addams and Edith Abbott. Louis Sullivan and Dankmar Adler constructed two additional units on the premises in subsequent years.

The townhouses themselves represented a stylish, incremental yet modern and scalable vision for reasonably priced, accessible housing. The modest floor space of each flat (under 200 square meters) pairs with the shared party walls and slight setbacks for the sidewalk to create an enclosed neighborhood at the human pedestrian scale. The spatial syntax of the units themselves is visible on the facade.

The warm tones of the doors and large, arched windows emphasize the communal living areas, to which most of the modest space is dedicated. This expression of the family greeting space rests below the more slender, regular, and treated windows of the bedroom units themselves. Yet despite this outward appearance’s suggested single-family lifestyle, their renovation in 1986 uncovered evidence of as many as twelve different families living in any single unit at a given time (Foerster, 1986). These unofficial micro-units paired with an inspiring, syntactically coherent elevation creates a striking balance between organic forms and systematic solutions to housing demand.

Andrew J. Thomas

During the interwar period, Andrew J. Thomas was inclusively pursuing his vision for affordable, mass-produced housing in the boroughs of New York. While taking a break from working for Queensboro, a large corporation

invested in social housing. Thomas partnered with Graham, Anderson, Probst, and White to produce a Chicago-based version of his Garden Apartment for Marshall Fields (Figure 2). Despite graffiti, damage, and other alterations, these buildings continue to edify an early modernist utilitarian solution for the social ills of inadequate public housing infrastructure (Benjamin 2010).

The apartments work in tandem to produce a green enclave within an otherwise dense city. The outer facade projects a sense of privacy, bulk, and rhythm. Groups of units form large cubes, which are paired symmetrically around an entrance. The varied fenestration reflects the particular function of the space beyond and resists absolute vertical stratification. These blocky masses create a sense of enclosure, forming inward-facing, green, pedestrian enclaves. In a more high-density setting such as New York, Mumbai or even Lagos, such an approach would make sense, meeting demand for both housing and green space. The Marshall Field Garden Apartments speak to the importance of real optimism in rapidly densifying cities.

Pace Associates

The Cabrini-Green housing development has become something of a stand-in for public housing criticisms of the late 20th century. In 1962, the Chicago Housing Authority (CHA) commissioned the construction of eight high rises with a total of 1,096 units, known as the William Green Homes. These towers stood next to the Francis Cabrini Rowhouses, built for workers during World War II. The Rowhouses, Francis Cabrini Extensions of 1958 and the William Green Homes became known as Cabrini-Green, a public housing development on the Near North Side (Socash, 2022). As the demographics of the housing complexes shifted in the decades after the war, the maintenance, policing, and transportation budgets for Cabrini-Green were cut (Crouch, 2014). The development soon gained a notorious reputation for substandard living conditions, crime, and intergenerational cycles of poverty.

The positive design elements of the Cabrini-Green towers are overshadowed by its relation to the history of racism and the struggle for Civil Rights in the United States. As the towers ascend with vertical uniformity, the individual units lose their relationship to the streets. The massing of the towers features a central elevator with units bunched at two opposing extremes. The corridors leading to either end feature fenced-in openings, providing natural ventilation. The units themselves were comfortable, providing ample space and state-of-the-art systems and appliances which could accommodate a diverse array of residents. The design of the William Green Homes represents a large-scale effort to provide functional, humane, and contemporary public housing for all, against all odds. To date, the William Green Homes are the last public housing high-rise buildings to have been built in Chicago.

Helmut Jahn

In 2007, Helmut Jahn took a break from his preferred architectural types — luxury high rises, airport terminals, commercial headquarters — to produce the Near North Apartments (Figure 3), a 96-unit SRO building for Mercy Housing Lakefront, a charitable organization (Kamin, 2007). This move outside of a prominent architect's usual repertoire is unlike the previous works studied, completed by a yet-undiscovered talent, a narrowly focused architect with a clear social mission, and a high-capacity corporate firm. The building represents both innovation in terms of materials, stakeholders, and urban planning, as well as a balanced understanding of local historical lessons.

At first glance, the Near North Apartments fit nicely with the eclectic mix of middle-density housing along Sedgewick Street. The streamlined, tubular form of the building expresses a dignified liminality, suggesting that temporary housing can still be pleasant and visually appealing. The staggered fenestration responds to the height of the Cabrini-Green towers (Figure 4), which were just a few blocks West of the Near North Apartment's site. The only vertically aligned element is a central column of windows,



Figure 2: Photo of Marshall Fields Garden Apartments. (Source: Author.)

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revealing a unified circulation scheme and dividing the units into two clusters. A close study of the building belies its nature as a high-performance, socially optimized experiment in future housing typologies (Kimura, 2007). This experimental housing type has proven successful in similar structures, such as State Street Village on IIT's campus.

The massing of the social housing buildings in this area have evolved over time, like cells in various stages of division. When demand for housing reaches critical capacity, when a certain number of housing units per building is exceeded, it becomes necessary for buildings to divide. With increases in density, units flood to either extreme, until two distinct entities become legible from the exterior. Finding this precise moment of departure, as a ratio of units, space, cost, and site-specific factors, is the core principle of social housing design, which transcends the nature of the stakeholders, the historical circumstances, and the temperament of the architect with regards to the Near North Side.

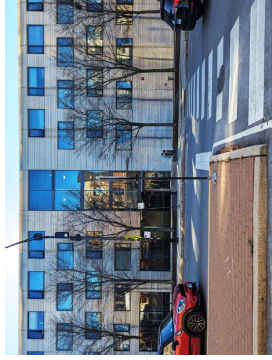


Figure 3: Photo of Near North Apartments. (Source: Author.)



Figure 4: Photo of one of the Cabrini-Green Towers. (Source: Chicago Reader.)

Pedestrian Network Modeling

A successful housing development depends on proximity to robust urban street life. By conventional standards, Old Town and The Wick are highly walkable neighborhoods, with ample access to food, education, religion, green space, healthcare, and miscellaneous retail amenities. However, field investigations reveal that access to swimming is spatially correlated with wealthy, lakefront condominiums (Figure 5).

In order to delve deeper into this issue, City Form Labs' Urban Networks Analysis was used to conduct a gravity-model study of access to pools from residential buildings

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(Figure 6). The propensity to walk was modeled as a logistic decay function with an inflection point of 300 meters (Sevtsuk, 2022). The "masses" of each pool were calculated with the following equation:

$$m_{pool}^s = (Sq\ Footage * Age\ Range) / Price^{0.5}$$

The speculative impacts of a modestly sized public pool are mapped in Figure 7. The proposed pool would have multiple points of entry. Membership fees would be structured according to residential status, address, and related socioeconomic factors — with premium amenities available. Much of the pool's time would be structured by the numerous nearby schools, assisted living facilities, NGOs, and neighborhood organizations, such that the pool would see near-constant use in the relevant seasons. The map in Figure 8 shows the intensity of pedestrian commuter traffic, as people take the train to the city's job opportunities. The pool would synergize with that energy, as part of a larger interconnected urban network.



Figure 9: Architectural site plan for reference only. (Source: Author.)

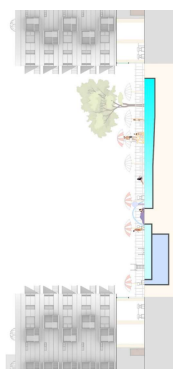


Figure 10: Architectural section for reference only. (Source: Author.)



Figure 11: Speculative rendering for the site. (Source: Author.)

Mid Rise with a High Dive

Previous iterations of public housing often include play-grounds in the impromptu space between towers. As an alternative, the public pool has an age-specific zoning of its program built into the form. Certain areas naturally appeal to the desires and abilities of different age groups while

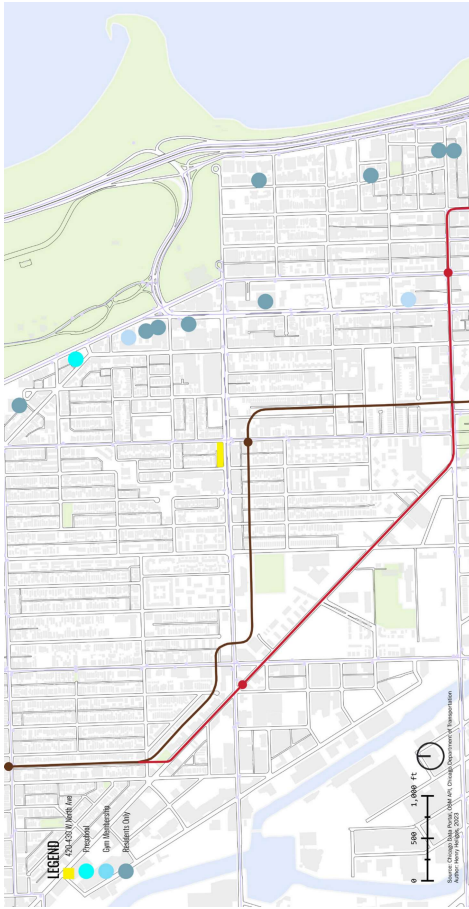


Figure 5: Map highlighting diverse typologies of swimming facilities. (Source: Author.)

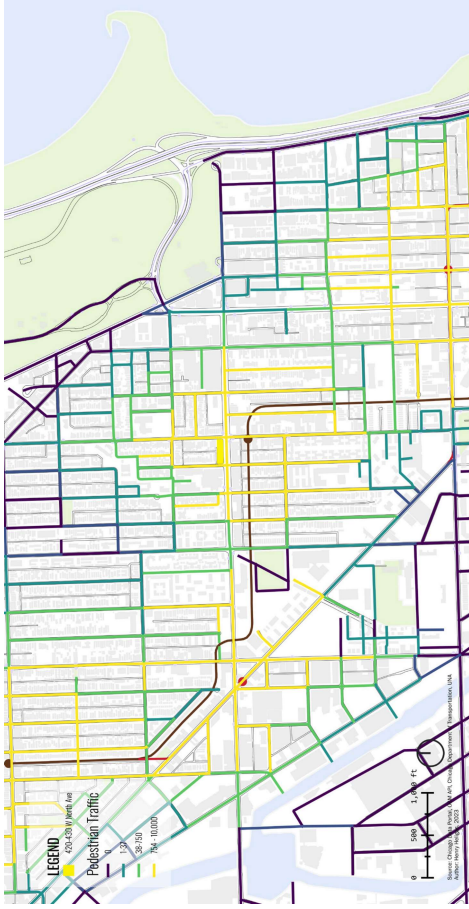


Figure 7: Speculative impact of a modestly sized public pool. (Source: Author.)

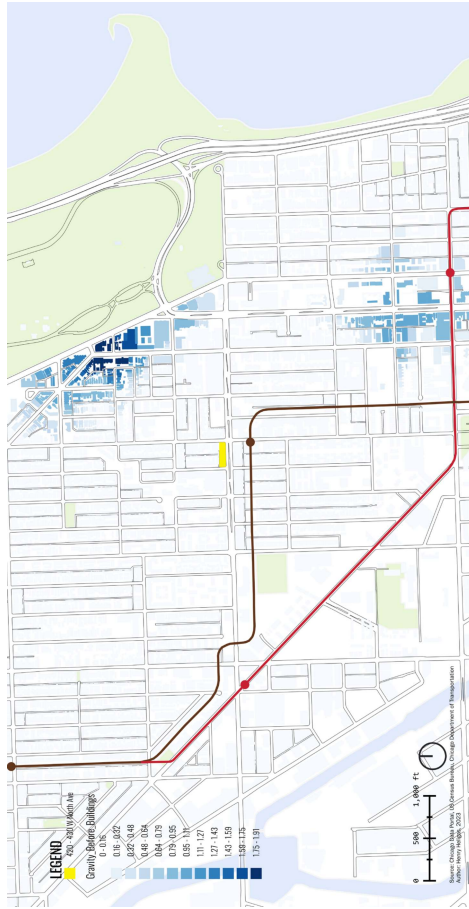


Figure 6: Gravity model of access to pools from residential buildings. (Source: Author.)

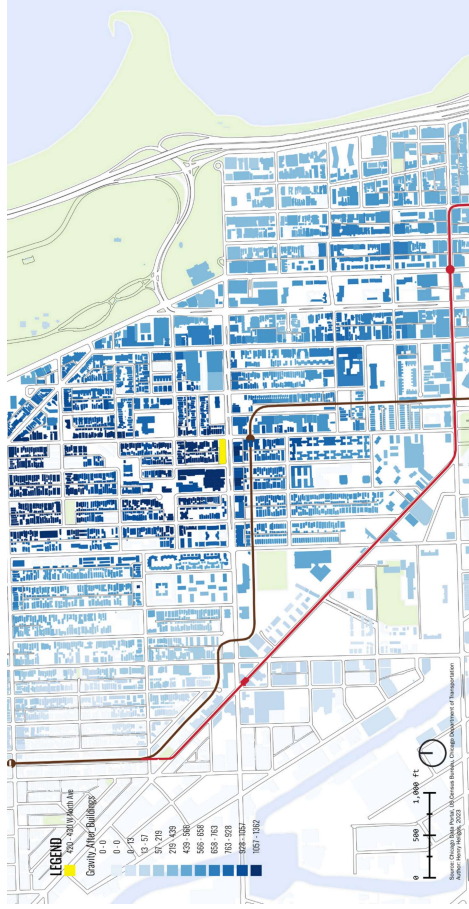


Figure 8: Intensity of pedestrian commuter traffic. (Source: Author.)

maintaining near-universal accessibility. Furthermore, the pool's nature as a mass of resources attracts a wide range of stakeholders (swim teams, the elderly etc.) which de-territorializes the first floor. As an attractive node in the public network, the pool gives the entire complex an urban vitality. The High-Rise/High-Dive strategy exhibits what Bernard Tschumi dubbed a "clash" between program and form. The depicted section (Figures 9, 10 and 11) creates unexpected proximity between the life on the street, the activity of the pool, and the privacy of the home. Yet it is precisely this class, the abutting of the domestic and the public resources, which is necessary to resuscitate the sense of commonality in such post-industrial urban settings. The clash also provides a tremendous testing ground for young Chicagoans. The layers of regulation include program

facilitators, lifeguards, building security, watchful citizens. These layers mediate the disciplinary burdens of socializing a child, which often fall disproportionately onto police. The design is thus in compliance with Restorative Practices. Future studies on speculating these kinds of interventions will have to address questions of demographics, depiction, and diverse representation in architectural drawings. Facilitators, lifeguards, building security, watchful citizens. These layers mediate the disciplinary burdens of socializing a child, which often fall disproportionately onto police. The design is thus in compliance with Restorative Practices. Future studies on speculating these kinds of interventions will have to address questions of demographics, depiction, and diverse representation in architectural drawings.

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