

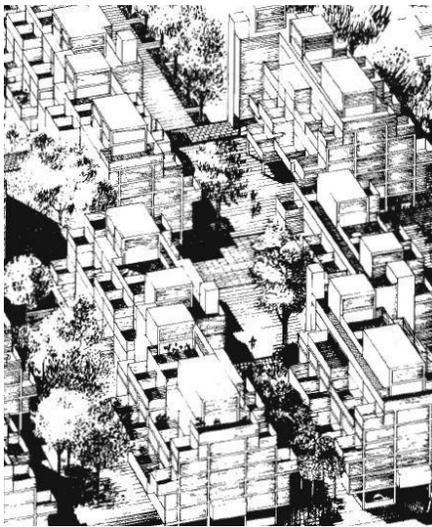
Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

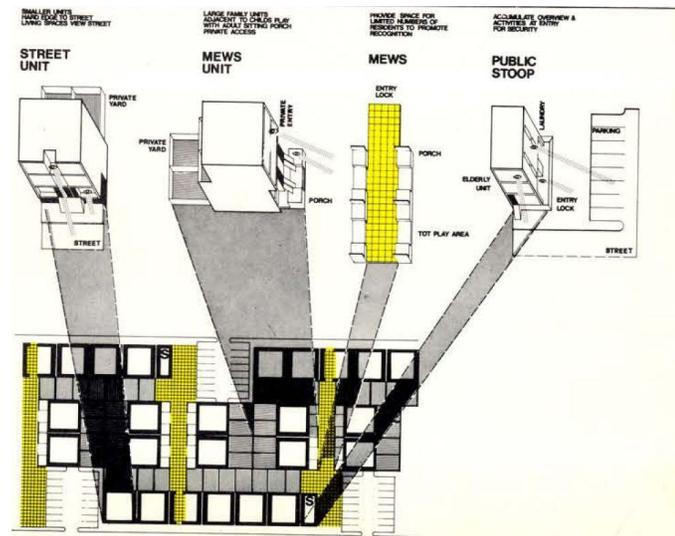
W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

# STATES OF HOUSING



East Harlem Housing Competition Entry, 1963.



Another Chance for Housing, Museum of Modern Art, 1973.

## Studio Description

Housing is the third and final semester of the required architecture core sequence. This studio is structured through three assignments; beginning with an urban and typological research and drawing set in New York City; followed by an analysis of a housing project, to the final design project. This year's studio will focus on the many different states of housing that we, as architects, typically encounter in practice. The studio is organized through two principal means—research/analysis and an architectural proposal—and will operate as a laboratory in which to explore new possibilities for urban living in New York City, specifically within the Crotona Park neighborhood of the South Bronx. Throughout the term each student will examine the significance of public and social housing through an inclusive approach. This position literally means to be inclusive of all things related to housing, from

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

both the past and the present, from local and to global, and to think about placing an emphasis on the history of visualization in parallel with the history of housing and its representation. Embedded within the studio, these examinations will be developed through team projects that speculate on the rich potential for contemporary urban housing types.

The studio aims to establish a space for a discussion about housing through typology, to occur throughout the term. Housing, by its very nature, is seemingly considered to be a generic building type. A universal type, and yet, when we embark on its study we uncover that this claim is false. Some may argue that working within a particular typology produces boring buildings. However, it is precisely through understanding of a type and its multiple points of influence that one to understand the motivations behind a particular building's peculiarities. Where and how does design shape such types? At what scales are most relevant in the design of housing? The specificities of a particular context in the city produce weird and unexpected moments that alter the original type's form. In the complexity of the contemporary city, housing offers up an exemplary form to be explored, rethought, altered, added to, and subtracted from, and so on. . . . The first part of this studio is structured around developing a body of research and understanding of housing in New York City, and housing found throughout global cities, introducing students to housing typologies through two specific short assignments. The first assignment will focus on site, infrastructures, and typology using a cross section of the New York City, from Manhattan to the Bronx. The second assignment will examine the architecture of housing with an emphasis on units and unpacking their design through, environment, programs and systems, culture and social. Students will be exposed to a variety of housing types and will work within New York City for their projects, but will undertake research projects in select cities around the world to compare and contrast a variety of subjects including: density; socioeconomic structures; climate; materiality; development models; cultural relationships; single-occupant and family dwellings; and the relationship between informality and luxury. To accompany this part of the studio, past invited lectures entitled Transcripts on Housing, by Michael Maltzan and Tatiana Bilbao presented a history of urban housing, as well as examples of their design work on housing, and this year will be the symposium Acts of Design: New Paradigms for Housing in North America. In addition, a studio wide field trip will occur that supports the overall mission of the studio to better understand housing as a global concern. The studio researches and examines a wide list of projects to establish an inclusive list for housing. The studio will also travel during the term from September 20-24th to Mexico City.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

The final project will consist of designing high-density, mixed-use housing and public space with community amenities. Each assignment builds upon the previous, starting with the urban scale and gradually zooming into the scale of the unit to, finally, integrate environmental and climatic systems into a design project. Students will examine distinct typologies of housing both public and private at a variety of scales. In addition, students will design units, aggregate these units, and explore the subjects of health, live/work, and the arts in relation to housing. In general, housing studios will use their precedents and site visits as a means to gain knowledge about what constitutes contemporary housing.

Although the brief puts forth the perimeter-block housing type for the given site, no housing type is off-limits to explore.

The studio emphasizes understanding the history of New York City's multiple housing types and how they continue to develop. But how is type in turn impacted by a multiplicity of forces, from the literal (gravity) to the more social and metropolitan. Through research and drawings, the studio will investigate neighborhoods surrounding Crotona Park in Bronx, two neighborhoods that offer innovative and rich architectures, developed over the past 50 years in the face of complex social and cultural histories. For instance, Harlem's "Main Street" along 125th Street reflects a changing landscape of ownership, occupation, and public vs. private space.<sup>1</sup> One can look to the lack of development of the East Harlem Triangle as an urban failure by the City, despite a local community's efforts to reshape the same. There are many lessons to be learned by studying these neighborhoods especially in the context of the current housing crisis that New York City is confronting. Similarly, as an urban connector the Bronx's Grand Concourse raises new possibilities for development and housing types. But are these changes and developments productive? Do they produce the kinds of neighborhoods that are culturally, socially, and economically beneficial? Rather than accepting the rules, can the studio provide the setting for a re-examination of their performance? How does architecture play a central role?

For the past six years the studio has examined sites in East Harlem and the South Bronx, focusing on the prominence of the East Harlem and its proximity to Harlem's "Main Street," on urban infrastructure, on the Greenway park system, and on Harlem River. They emphasized understanding the history of New York City's housing, its varied typologies, and the development of the city grid, but also questioned zoning code. Prior studio sites included City-owned property and sites designated for development under former Mayor Michael

---

<sup>1</sup> Sharon Zukin, *The Naked City: The Death and Life of Authentic Urban Places* (New York: Oxford University Press, 2010).

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

Bloomberg's New Housing Marketplace Plan, a public/private planning initiative that aimed to create and/or preserve 165,000 affordable housing units in NYC by 2014. The New York City Department of Housing Preservation and Development (HPD) is the largest municipal developer of affordable housing in the nation and will be a valuable resource for the studio.<sup>2</sup> In May 2015, Mayor Bill de Blasio announced his plan for affordable housing in New York City, building upon the previous administration's goals of increasing affordable housing units to provide a more equitable and healthy city. He set the goal of providing 200,000 affordable housing units, preventing 120,000 from becoming unaffordable and building 80,000 new affordable units. 17,400 affordable housing units were financed in 2014. De Blasio is also in the process of changing the 421-a low-income tax subsidy, typically known for its 80-20 model, to a 65-35 model, virtually cutting in half the rate of affordable unit production. The form of the modern and contemporary city, especially as exemplified through urban housing models, has had the greatest impact on general public health. Health remains one of the most important issues confronting public housing in the American city. This is especially the case in New York City, where recent developments have had a profound impact on citizens' health and, reciprocally, citizens' health has had a profound impact on the form of the city. Today, New York City leads the nation with its policies and programs for housing and health, making instrumental and visible changes to the city's social and built form through interventions like bike lanes and new parks. And yet the urban population continues to struggle with chronic health problems, from an obesity epidemic and childhood asthma in the South Bronx. The studio will study local and national policies – including New York City's Active Design Guidelines, PlaNYC, and the Affordable Health Care for America Act – in order to understand how shifting policies relate to urbanism.<sup>3</sup> Designing housing requires a critical rethinking of the relationship between individual and public health, the environment, development, and architectural and urban form. Health, as a subject of study within in this studio, can take on multiple meanings, the first being literal, physical health. But this term, health, can have value and be attributed to other conditions related to housing like economics, policy, ideas of sustainability, and the social. This year's studio builds upon and expands previous research by shifting its site to a historically significant location of the Bronx. The relationship between the previous years' sites and this year's will test new architectural and urban conditions, searching for new types of housing.

---

<sup>2</sup>See: <http://www.nyc.gov/html/hpd/html/about/message.shtml>

<sup>3</sup> Policies developed in NYC are proving to be groundbreaking and have been adopted by other cities around the country. See: <http://mayorchallenge.bloomberg.org/>

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

This studio will challenge each student to think about the aspect of urban public health within all assignments, but health will be a primary theme of the final housing project.

Over the course of the term the studio will examine a one block site in Crotona Park neighborhood. These boundaries not only create physical edges but also confront the site with their variety of scales. Each student team will be challenged to design a housing proposal that takes a position with respect to the "street," infrastructure, specific architectural typologies at play, and the shape and elevation of the site. Among the greatest challenges for this specific site are the location of its "front door," the question of the project's image and impact on the skyline, and the project as part in relation to a whole. Even if the architecture can perform sustainably and healthfully, what is its impact upon its context? Inherently, the three block-ends suggest a perimeter-block model, for the purpose of maximizing light and air to thereby maximize health and comfort, as well as expansive window-wall and envelope design opportunities.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

# Assignment #1

## Inventory of Elements

Due: September 18, 2017 at 01:30 p.m. in Avery 114.



Damian Ortega, *Cosmic Thing*, 2002.

To begin the term, we will undertake a variety of walking experiences both in New York City and in Mexico City. Our reason and purpose for studying multifamily housing or multiple households is a rational one -- there is an explicit need for the space of it and more of it is needed. There is a universal need for designed housing. Housing as a type may seem standard, but it is among the most varied of types. It is to this end that in this first and

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

introductory assignment, students will embark upon studying, documenting, and taking stock of households through a variety of housing types located in New York City, Mexico City, and through a given precedent. Each student will examine a housing type in NYC, and in Mexico City of their choice. The critic will present one precedent that each studio will study and analyze in detail and present as a collective project alongside of the NYC and CDMX housing project. And each studio will undertake an analytical investigation into the architectural issues associated with urban morphology and infrastructural development, as well as examine design features key to the architectural idea of the building. In both cities, each student will select one building type associated with housing and study its form in a 1:100 model; structure in a 1:50 model; a detail preferably a window or something related to climate at 1:25; and a detail related to the idea of health through a colorful drawing that fits on an 11"x17". This work will be presented as part of GSAPP's Open House and throughout the semester in pop-up shows.



O. M. Ungers Roosevelt Housing Competition, 1974-75.

The pedagogical goal of this work is to investigate relationships between specific housing types, fixed building systems, variable programs, and multiple forms that are both descriptive and representative of housing. Common housing types within New York City include but are not limited to the following: single corridor; double-loaded corridor; skip-stop; tower; courtyard; railroad; row house; transverse core; and single-room occupancy. With the knowledge gained about NYC housing types and their urban setting in the first assignment, investigate how this

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

knowledge relates to the many other types of housing that exist throughout global housing projects, see the "cutsheets". For the purpose of the studio, and given the short time frame for this assignment, each critic has preselected a precedent related to larger studio themes. Precedents range in type and in location. While the studio is based in the South Bronx, each student should undertake the problem of housing with a broad view.

Each housing type has a very specific ideology regarding the relationship between collective and domestic living, as well as specific implications for overall form and urban morphology. By its very nature housing produces new subjectivities within itself. Arguably no housing project is the same, despite largely repetitive programming of units, corridors, parking, laundromats, lobbies, elevators, stairwells, and other building systems. The precedent assignment is meant to introduce not only numerous formal types but also organizations and issues critical to housing and architecture like materials, environment, economics, value, and social and cultural influences. Further, the intent is to comprehend the systems that simultaneously inhabit the relatively small space of a dwelling, from circulation to plumbing, structure, and electrical. Precedent analysis is critical to conceptualizing work done later in the term. Where the distinction between house and home emerges is of critical importance in a housing project. To that end, divisions between public and private shape both the physical form of the building and are also embedded within the public policy and governance structuring the intent of all urban housing. Students are encouraged to research subjects that could be explored all term.

Each team is charged with the task of examining and taking apart their single precedent for its form and performance/systems. (Please see the below list.) Begin by gathering all relevant information, such as plans, sections, and images. From this information each team will begin to record and assess through the acts of making and drawing, producing an analytical study of each precedent. This evaluation should be approached from two scales: from the unit and from the overall form in urban context. For the purpose of this studio the unit is as equally important as the project's overall form. When examining precedents, analyze the models for health and wellbeing through the appropriate, related systems. Additional components and systems to investigate include: urban infrastructure; urban morphology; post-occupancy; materials; structure; life safety; accessibility; zoning; policy; etc.

Pedagogically, precedent analysis is a twofold exercise. First and foremost, it is a way into the housing studio through well-known architectural, formal, spatial, material, and structural examples. The systems found in each precedent and their relationship to one another will be defined by each team. Second, as a collective of eight studios, comparing and contrasting housing projects through specific lenses will require a particular analytical method of work. Through drawings and models, each team will reveal specific connections between the architectural form and related systems. These connections could range from the project's organizational logic to its structural diagram and material assemblage, to its relationship to site, to its cultural underpinnings. These two ambitions serve to establish a fundamental way of thinking about architecture in relation of the subject of housing.

At the completion of the assignment each studio will present a full, comprehensive overview of their housing precedent alongside of the inventory. It will be necessary to undertake research and documentation as well as apply methods of analysis that will then be reviewed in a group pin-up. The representation of the assignment shall be comparatively evaluated between these projects in a collective studio assignment.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

The studio will focus on the neighborhood of Crotona Park in the Bronx and compare to another neighborhood such as: Pelham Parkway; Hunts Point; Co-Op City Port Morris; Randall's Island; and the Grand Concourse of the Bronx, as well as the neighborhoods that are adjacent to the Park. In addition, each studio produces cross section drawings. From this exercise, each student will have the opportunity to reverse the working methodology to the studio, looking at housing from the outside in. Each student will learn new lessons and gain new insight into the larger area of the housing site.

In addition to the subject of health, the studio encourages each student to think about the intersection between architecture and urbanism, including subjects of economics, structure, materials, etc. as well as formal and spatial qualities. How does culture play into housing? Has the city done enough to integrate the Bronx's significant cultural heritage into its development of Crotona Park? How has the Bronx changed in response? Larger questions for the studio to consider include issues of homeownership: What is possible today? Is homeownership of interest? What makes a community? Emerging out of the Great Recession, nearly ten years ago and building up from the downturn in the national economy, a result of the recent housing crisis where properties in the Bronx on average experienced a 40% reduction in housing prices, how has the foreclosure crisis affected the neighborhoods the studio is working within? The South Bronx like much of Manhattan and other Boroughs also faces issues around gentrification. Today, the Bronx's close proximity to midtown Manhattan and its ease of access to public transit - only 25 mins by express train to Penn Station - are fueling gentrification and, at the same time, new developments like Silvercup Studios (a film studio adaptive reuse in Port Morris [de-industrialization]), the Special Harlem River Waterfront District, and a greater connection to parks like Randall's Island. The pedagogical goal of this studio is to understand the broader physical and historical context of the South Bronx, as well as to undertake an analysis of its urban infrastructure from its organization (think: the NYC grid) to the site section with its shifting geological terrain from the Harlem River to peak at Franz Sigel Park (think: soil types), to forms of urban connections (think: transit and accessibility), to the social fabric.

In the way artist Damian Ortega deconstructs the popular VW Bug, each student team is to examine and represent both their research and ideas about the site through a conceptual taking apart of the city. Students are to first examine the South Bronx and then begin to understand the specific site. (It is intended that the focus of the urban site study is the larger urban context of the South Bronx and may include comparative areas of the greater NYC area.) Students will continue to work on site issues throughout the remainder of the term and should ask questions about the site in a methodological manner that serves to both influence their designs and create architecture as much about buildings as it is about urban morphology and infrastructures.

#### Edge City<sup>4</sup>

Originally known as Bathgate Woods, Crotona Park officially became a city park in 1888. Located at the north-west edge of The South Bronx, Crotona Park developed largely during the 1930s as part of the Works Progress

---

<sup>4</sup> Steven Holl, *Pamphlet Architecture* 13, "Edge of a City," (New York: Princeton Architectural Press, 1991). See: <http://www.stevenholl.com/books-detail.php?id=41>

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

Administration, which included the boat house and rebuilt landscape, in addition under the purview of then City Park's Commissioner Robert Moses baseball diamonds, picnic and sitting areas, as well as an Olympic Pool and bathhouse were opened in 1936. While the South Bronx may be more frequently recognized for its history as "The Bronx is burning", to its industrial complexes, and traffic congested highways and arteries, it wasn't always the case. The South Bronx in particular was constructed to serve more of the middle class, that included a grand street and residential buildings alongside of it with parks woven alongside. The Grand Concourse, designed by Louis Risse, who intended for the street to become the Bronx's version of Paris's Champs Élysées. In 1909, the Concourse was extended south to 138th Street, stretching it to five miles and, at parts, 180 feet wide. In the early 20th century, the Concourse was considered to be the "Park Avenue of the Middle Class," bringing a centralized, "Main Street" connection through the entirety of the Bronx. This condition of the edge of the city and, in this case, the edge of the Manhattan Grid offers up a place to study the breakdown of the grid, its dissolution into urban infrastructure, and the physical possibilities of opening up to views as opposed to other buildings, and in the case of Crotona Park the natural landscape and park space within the city grid. The edge of the city is here at Crotona Park distinctive as a corner to the South Bronx, but the park itself also has unique edges. The is bound and contained by large-scale urban infrastructures by the Cross Bronx and Sheridan Expressways, in proximity to Boston Road, Louis Nine Boulevard, and Fulton Avenue; it is also in proximity to public transportation, the 174 Street Station, and several major bus lines with a bus station on the northern side of the site; one block away is the sunken Harlem line. Neighborhoods of Tremont, West Farms, Claremont Village, and Charlotte Gardens share Crotona Park. The park in its original offered views to the Palisades Parkway across the Hudson River and of the Brooklyn Bridge, part of the assignment is to explore geography and topography as well as landscape.

---

<sup>5</sup> Constance Rosenblum, *Boulevard of Dreams: Heady Times, Heartbreak, and Hope Along the Grand Concourse* (Ebook: NYU Press, 2009).

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

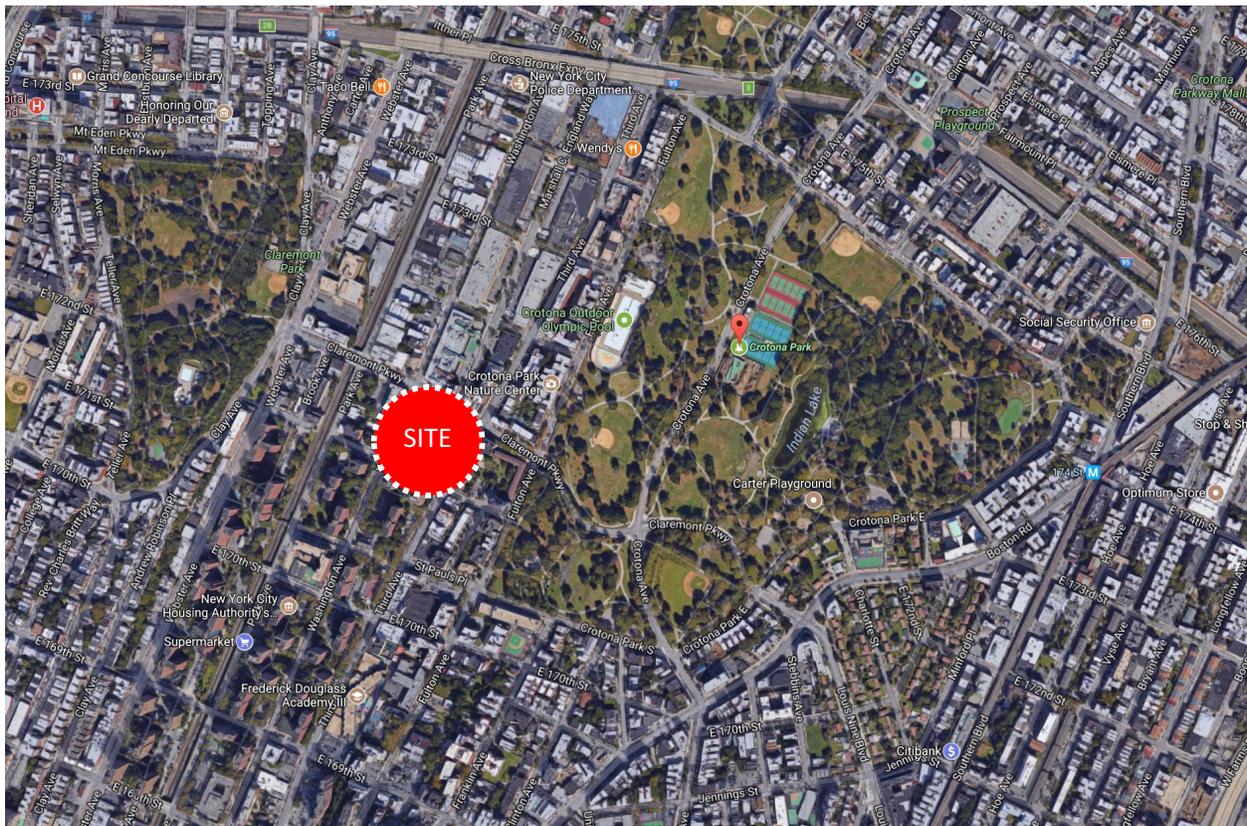
M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## SITE Claremont Parkway & Third Avenue

For the purpose of the studio, we will work with a site that is imaginary but in the context of real and diverse residential projects representative of NYCHA, private and non-profit developments, as well as educational institutions.



Studio Site Assignment #3: Block 2912, under-developed in R7-1

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## SITE ZONING DEFINITIONS

### Residential District R8A

Apartment buildings in R8 districts can range from mid-rise, eight- to ten-story buildings to much taller buildings set back from the street on large zoning lots. This high-density residential district is mapped along the Grand Concourse in the Bronx and on the edge of Brooklyn Heights. (R8 districts are also widely mapped in Manhattan neighborhoods like Washington Heights.) New buildings in R8 districts may be developed under either height-factor regulations or optional Quality Housing regulations, which often reflect an older, pre-1961 neighborhood streetscape.

The floor area ratio (FAR) for height-factor development in R8 districts ranges from 0.94 to 6.02; the open-space ratio (OSR) ranges from 5.9 to 11.9. A taller building may be obtained by providing more open space. In the diagram, for example, 64% of the zoning lot with the 17-story building must be open space (6.02 FAR x 10.7 OSR). Thus, the maximum FAR is achievable only where the zoning lot is large enough to accommodate a practical building footprint as well as the required amount of open space. The building must set back to a depth of 10 feet on a wide street ( $>75'$ ) or 15 feet on a narrow street ( $<75'$ ) before rising to its maximum height of 120 feet.

Off-street parking is required for only 40% of dwelling units, as these districts are easily accessed by mass transit, and can be waived entirely if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less.

### Special Purpose District MX-13<sup>6</sup>

The Special Mixed Use District (MX) was established in 1997 to encourage investment in, and enhance the vitality of existing neighborhoods with mixed residential and industrial uses in close proximity, as well as to create expanded opportunities for new mixed-use communities. New residential and non-residential uses – commercial, community facility, and light industrial – can be developed as-of-right and can be located side-by-side or within the same building.

### Special Purpose District M1-4

A manufacturing district, designated by the letter M – M1-1, M2-2 – is a zoning district in which manufacturing uses, most commercial uses, and some community facility uses are permitted. Industrial uses are subject to a range of performance standards. Residential development is not allowed, except in Special Mixed Use Districts.

### District C6-3

---

<sup>6</sup> <http://www.nyc.gov/html/dcp/pdf/zone/map6a.pdf>

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

C6 districts permit a wide range of high-bulk commercial uses requiring a central location. These commercial districts are typically mapped in areas outside central business cores that have a commercial FAR of 6.0 and a residential FAR of 0.99 - 7.525.

#### Public Housing

1974, Section 8 Housing, encourages the private development of affordable homes.

1992, HOPE VI, funds the demolition of poor-quality public housing projects and their replacement with mixed-income, lower-density housing.

The Bronx has 100 NYCHA developments, counting 44,500 apartments.

#### Affordable Housing

421-a Tax Abatement: 80% market rate / 20% affordable.

421-a Tax Abatement under Mayor Bill de Blasio: 25 - 35% affordable.

"Affordable" is determined by a percentage of the local median income.

#### Rent-Regulated Housing

Includes "rent-controlled" and "rent-stabilized" apartments, received through J-51 or 421-a tax-incentive programs.

Rent-control only viable if tenant has been living in apartment since before July 1, 1971.

Rent-stabilized apartments comprise approximately 59% of Bronx, 43% of Brooklyn, 45% of Manhattan, and 42% of Queens housing.

#### Market-rate Housing

An apartment with no rent restrictions, allowing the landlord to raise rent to the local market rate.

Less legal protection regarding the right to a lease renewal and evictions.

Different neighborhood market rates (feed back into new 421-a).

---

<sup>7</sup> [http://www.nyc.gov/html/dcp/pdf/zone/zoning\\_handbook/c6.pdf](http://www.nyc.gov/html/dcp/pdf/zone/zoning_handbook/c6.pdf)

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## Requirements and Representation

Each team will work toward a comprehensive understanding of their precedent and will document these findings through a range of scales and material output. While this research will serve as a basis to themes explored throughout the rest of the term, documentation and presentation should be treated as autonomous design exercises. All work should be clear, legible, and (very) well represented. Prepare the following materials, to be discussed in a Joint Studio pin-up:

1. A model of the whole building at 1:100
2. One [1] model structure in a 1:50 model;
3. One model or drawing of a detail preferably a window or something related to climate at 1:25;
4. One drawing of a significant detail of the building (either a unique component or a segment of a performative system) that you consider essential to the understanding of health (at a minimum scale of 1- $\frac{1}{2}$ " = 1' 0"). through a colorful drawing that fits on an 11"x17".
5. All drawings shall be presented on sheets that are 11" x 17" and no more than four [4] sheets per team as a small booklet.
6. Identify what type of housing project you are working with, and write one paragraph about NYC and Mexico that both summarizes and conceptualizes the system.
7. Photograph models.
8. Present work as a .pdf, to be projected.
9. All work is to be submitted on a labeled CD to the teaching assistant by September 18. Photos of models are to be submitted as 300 dpi .jpps, and all drawings are to be submitted as .eps files.
10. One [1] overall site model and site section to be determined in consultation with your critic. To be completed as a studio. Due September 30th.

### Review

Assignment is introduced on September 5th and all work will be presented as part of a joint studio with the entire Housing studio and faculty on October 1st starting at 01:30 p.m. in Avery 114. The review will start promptly at 01:30 p.m. The review will take the form of a round-robin with all faculty and all students reviewing the projects at once. Students are asked to keep their responses concise and should primarily speak through the documents produced for the review. The second assignment shall be presented at 05:30 p.m.

### Readings

Richard Plunz, *A History of Housing in New York City* (New York: Columbia University Press, 1990).

Andrew Dolkart, *Touring Historic Harlem: Four Walks in Northern Manhattan* (New York: New York Landmarks Conservancy, [August] 1997).

Mark Jarzombek, "Corridor Spaces," *Critical Theory* 36 04 (Summer 2010): 728-70.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

Mark Wigley, "Network Fever," *Grey Room* 04 (Summer 2001): 82 - 122. Repr. in *New Media, Old Media: A History and Theory Reader*, ed. Wendy Hui Kyong Chun and Thomas Keenan (New York: Routledge, 2006).

Alison and Peter Smithson, *Urban Structuring: Studies of Alison & Peter Smithson* (New York: Studio Vista/Reinhold, 1967).

Eric W. Sanderson. "The Lenape," in *Mannahatta: A Natural History of New York City* (New York: Abrams, 2009).

Denise Scott Brown Housing...

Lina Bo Bardi

Jane Drew...

Tatiana Bilbao...

Richard Plunz, *A History of Housing in New York City* (New York: Columbia University Press, 1990).

Alan Colquhoun, "Typology and Design Method," *Perspecta* 12 (1969): 71 - 74.

Rafael Moneo, "On Typology," *Oppositions* 13 (1978).

Reyner Banham, *The Architecture of the Well Tempered Environment*

Reyner Banham, "A House is Not a Home," *Architectural Design* (January 1969): 45.

Laurent Stalder, "Air, Light, and Air-Conditioning," trans. Jill Denton, *Grey Room* 40 (Summer 2010): 84 - 99.

William W. Braham, "Household conditioning (if you are cold, put a sweater on)," in *Building Systems, Design, Technology, and Society*, eds. Kiel Moe and Ryan E. Smith (London: Routledge, 2012), 185 - 92.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden;  
Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

# 25

## NYC Housing Projects

1. Harlem River Houses, 1937.
2. Williamsburg Houses, Public Works Administration.
3. First Houses, New York City Housing Authority.
4. Trump World Tower, Costas Kondylis & Associates.
5. Barbizon Hotel, Palmer H. Ogden and Partners.
6. Strivers Row, Bruce Price.
7. Astor Row.
8. East River Houses, Perry Coke Smith.
9. Colonnade and Pavilion Apartments, Ludwig Mies van der Rohe.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden;  
Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

10. The Apthorp, 2207 Broadway, Clinton and Russell.
11. Marcus Garvey Park Village, Urban Development Corporation.
12. Sherry Netherland Hotel, Schultze & Weaver.
13. Hotel Des Artistes, George Mort Pollard, Architect.
14. Twin Parks Northwest Site 4, Prentice & Chan.
15. Olympic Tower, Skidmore, Owings and Merrill.
16. Silver Towers/University Village, I. M. Pei.
17. Brownsville Apartments, Frederick G. Frost.
18. Stuyvesant Town / Riverton Houses, Irwin Clavan.
19. Waterside, Davis & Brody Associates.
20. Seward Park Cooperative, Herman Jessor.
21. Beekman Tower, Frank Gehry.
22. Via Verde, Grimshaw.
23. 459 West 18th Street, Della Valle Berheimer.
24. Manhattan Expressway, Paul Rudolph.
25. The Dunbar Apartments.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden;  
Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

# 40

## Global Housing Typologies

1. Cité de Refuge, Le Corbusier (Paris, France, 1933).
2. Hansaviertel Apartment House, Alvar Aalto (Berlin, Germany, 1955).
3. Guild House, Venturi Scott Brown (Philadelphia, 1961).
4. Linked Hybrid, Steven Holl (Beijing, China, 2009).
5. Gifu Kitagata, Kazuyo Sejima (Gifu, Japan).

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

6. Saishunkan Seiyaku Womens' Dormitory, Kazuyo Sejima (Kumamoto, Japan).
7. Kanchanjunga, Charles Correa (Bombay, India).
8. Kasbah, Piet Blom (Hengelo, Netherlands).
9. Madrid Social Housing, Morphosis (Madrid, Spain).
10. Habitat '67, Moshe Safdie (Montréal, Canada).
11. Unité d'Habitation, Le Corbusier (Marseille, France).
12. Mirador, MVRDV (Madrid, Spain).
13. Yerba Buena Lofts, Stanley Saitowitz (San Francisco, CA).
14. Le Nemausus, Atelier Jean Nouvel (Nimes, FR).
15. Hansaviertal Tower, Van den Broek en Bakerma (Berlin, Germany).
16. Nakagin Capsule Tower, Kisho Kurokawa (Tokyo, Japan).
17. Robin Hood Garden Apartments, Alison and Peter Smithson (London, England).
18. Jacques Forte (Postal Worker Housing), Philippe Gazeau (Paris, France).
19. KNMS and Java Eiland, Diener and Diener, Architects (Amsterdam, Netherlands).
20. Schots 1+2, S333 Architecture + Urbanism (Groningen, Netherlands).
21. Silodom Complex, MVRDV (Amsterdam, Netherlands).
22. Borneo, MAP Architects with Josep Lluís Mateo (Amsterdam, Netherlands).
23. Hook at Holland, J. J. P. Oud (Rotterdam, Netherlands).
24. Bouca Housing Complex, Alvaro Siza (Porto, Portugal).
25. Nexus World Housing, Steven Holl (Fukuoka, Japan).
26. Funabashi Apartments, Ryue Nishizawa (Chiba, Japan).
27. Eda Housing, Chiba Manabu Architects (Yokohama (Kanagawa, Japan).
28. Langham Court, Goody Clancy & Associates (Boston, MA).
29. Peabody Terrace, Sert, Jackson and Gourley (Cambridge, MA).
30. Lafayette Park Apartments Ludwig Mies Van Der Rohe (Detroit, MI).
31. Marina City, Bertrand Goldberg Associates (Chicago, IL).
32. VM Houses, BIG and JDS (Copenhagen, Denmark).
33. Quinta da Malagueira Housing, Alvaro Siza (Évora, Portugal).
34. Housing on Lutzowplatz, O. M. Ungers (Berlin, Germany).
35. Crawford Manor, Paul Rudolph (New Haven, CT)
36. Conjunto Urbano Presidente Miguel Alemán, Mario Pani, (Mexico City)
37. Conjunto Urbano Nonoalco, Tlatelolco, Mario Pani (Mexico City)
38. Apartment Houses on Calle Elba, Luis Barragan (Mexico City)
39. Apartment House, Luis Barragan, Jose Creixell, and Four Painters' Studios (Mexico City)
40. House, Luis Barragan (Mexico City)

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## Individual Studio Assignment\*

Each critic will confirm their precedent selection upon the beginning of this assignment.

Ames Studio: Madrid: Carabanchel Public Housing, Morphosis, 2006

Bunge Studio: Casablanca: Habitat Marocain, Andre Studer, 1956

Etchegaray Studio:

Frampton Studio: Detroit, Lafayette Park, Mies van der Rohe, 1959-63

Gooden Studio: Chicago: Lake Shore Drive, Mies van der Rohe, 1951

Papageorgiou Studio: Matteotti village by Giancarlo de Carlo in Terni Italy

Sample Studio: Den Haag: Punt en Komma, Alvaro Siza, 1986-1989

Solomonoff Studio: Copenhagen: # 32. VM Houses, BIG and JDS, 2005

Fukuoka: Void Space/Hinged Space Housing, Steven Holl, 1991

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

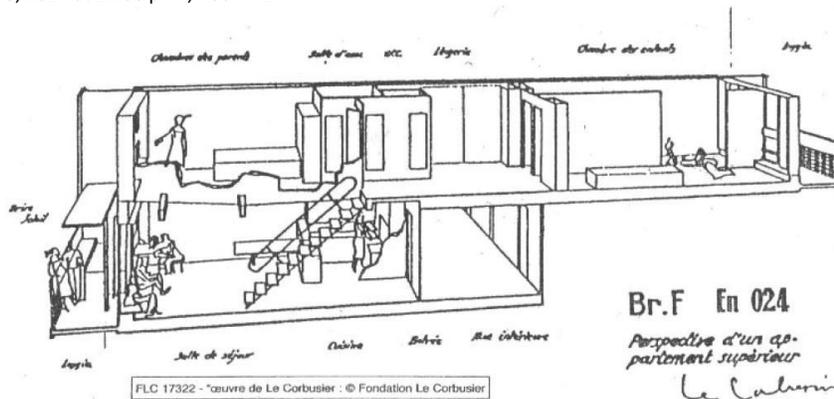
M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

## Assignment #2 Housing & Community: Units, Structures, and Environments

Due: December 7 or 8, 2017 at 12:00 p.m., Room TBA.



Le Corbusier, Unité.

### Units

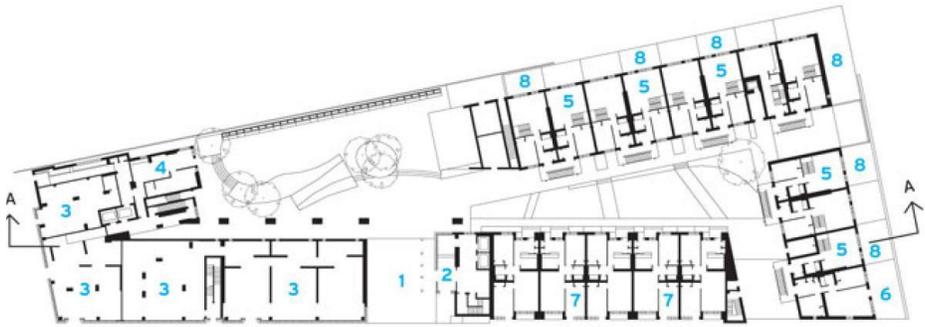
Having already been introduced to lessons from site and precedent studies, students will be introduced to the problem of designing housing by creating units, addressing the problem of aggregation not as an autonomous practice but instead through systems of structure, program, accessibility, and environment. Modern architects approached housing as a purely functional problem, often working from the inside out. An example of this approach can be seen in Czech avant-gardist Karel Teige's research for the 1932 book *The Minimum Dwelling*. For Teige, the housing question is essentially one of "a problem of statistics and technology," to the point that housing ultimately comes down to "a question of the general plan." While these ideas were formulated to address housing crises in the aftermath of World War I, today the idea of the minimal dwelling is understood to hold a different meaning. Each team will design a prototypical unit that explores the minimal. In a city often already at the minimum—minimum area, minimum light, minimum budgets, minimum amenities, and minimum proximity to fresh air—what is a minimal unit today? How is the minimal addressed in systems? Each team should speculate on the limits of this prototype. Inclusion of the model of the OMA/Rem Koolhaas's Lemoine House as model introduces structures, physics, and accessibility as a means to both understand and produce the design of a house and its basic forms. These same criteria are essential to urban public housing, and should begin the design of the unit.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu



FIRST FLOOR PLAN

- |                |                     |                            |
|----------------|---------------------|----------------------------|
| 1 ENTRY PORTAL | 7 LIVE-WORK SIMPLEX | 13 COMMUNITY GARDEN        |
| 2 LOBBY        | 8 BACKYARD          | 14 ACCESSIBLE GREEN ROOF   |
| 3 RETAIL       | 9 PLAY AREA         | 15 INACCESSIBLE GREEN ROOF |
| 4 LAUNDRY      | 10 AMPHITHEATER     | 16 COMMUNITY TERRACE       |
| 5 DUPLEX       | 11 CONIFER GARDEN   |                            |
| 6 SIMPLEX      | 12 ORCHARD          |                            |

Via Verde, Bronx.

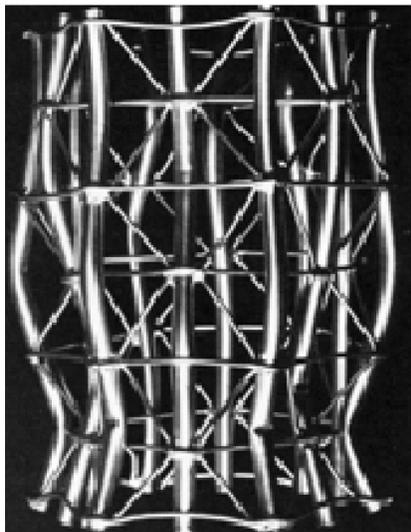
Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

### From Structures to Environments



G. Robert Le Ricolais,  
*The Beauty of Failure.*



Herman Hertzberger, Complex for the Elderly, Amsterdam, 1964-74.

Formal exercises of unit repetition will begin the next series of studies, on structures and aggregation. Here students are to propose complex structures of repeated units, learning lessons related to scale, structure, and systems, as well as engage in the dialectic between form and function. Today, aggregation is understood through different processes of production than those previously practiced. (Compare Moshe Safdie's Habitat [1967] in Montréal to Steven Holl's Linked Hybrid Housing [2009] in Beijing.) For the purposes of this studio, the focus will be on high-density models. Returning, perhaps nostalgically, to the beginning of the Columbia Housing Studio that is, to its emergence in reaction to 1960s urban renewal projects and in the context of the Museum of Modern Art's exhibition *New City: Architecture and Urban Renewal* (1967) and *Another Chance for Housing: Low-Rise Alternatives* (1973) the studio will hold history up as a valuable lens and reference for reading the city. (Both exhibitions presented housing projects for East Harlem.) This longstanding interest in high-density alternatives should not only form the ground of each aggregation study but also rethink the same for the contemporary conditions of the city.

The studio will examine high-density housing that serves a specific audience, such as aging populations or artists with a special regard for human comfort. Students will design a series of climate effects and comfort zones within their projects. Similarly, to test and model climatic envelopes, structural studies should be completed in the form of digital stress tests. The School's Roving Engineer program, which has previously accompanied the studio, is being reorganized this year; a new program of initial Presentation and Roundtable Discussion will be held in the beginning of the term. The purpose of this program is to provide students with access to structural engineering

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

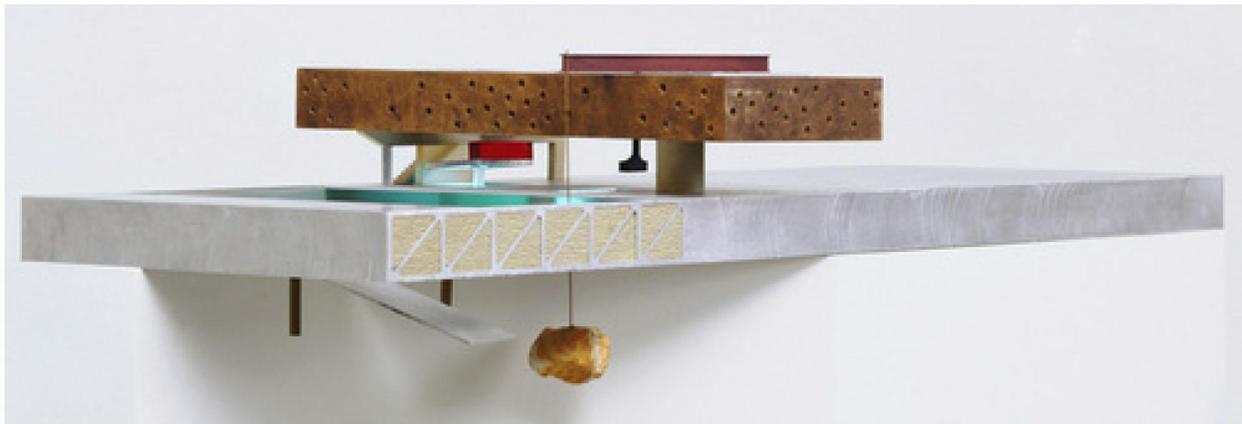
W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

principles and concepts at the beginning of the design process. Roundtable discussion will be followed by an engineer being assigned to each studio. This engineer will visit the studios once before the mid-review and once before the final review. Students should be prepared in advance of meeting with their assigned structural engineer. Structural and aggregation studies will interweave with site studies.

G. Robert Le Ricolais (1894 - 1977) examined the beauty of failures. The elements of stress upon built form include gravity, physics, wind loads, shear, lateral forces, and other strains placed on its structure. What type of structure can be made in response to such stresses? Imagining a stress diagram, will a particular type of stress produce a formal response? Is this stress examined from the inside out? Or from the outside in? Structural concepts will be explored primarily through model making. The structural stress should promote a fundamental concept for the project that equally reflects a particular position on the domestic.

#### Program



Lemoine House (Maison a Bordeaux), Floriac, Bordeaux, France, 1994.

Before beginning design work the program given as part of the housing project is to be analyzed, in consultation with your critic, through a series of modeling studies. The primary program for this studio includes housing, a community center for the aging, and a commercial space with public space. This city-owned property is to be developed under the Department of Housing Preservation and Development's (HPD) Low Income Rental Program. For the purpose of the studio it is also allowable to work with the guidelines of the 80-20 program: "At least 20% of the units in the project must be affordable to tenants earning no more than 50% of the Area Median Income (AMI), or 40% of the units must be affordable to tenants earning no more than 60% of the Area Median Income, or, in New York City only, 25% of the units to be affordable to tenants earning no more than 60% of the Area Median Income."

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

The zoning change permits a change in residential units and the inclusion of a community center to be located anywhere in the building(s) where residences are allowed. Each team should carefully examine both the program and the relationships between given programmatic parts. The program may be changed, but only following consideration with your critic. Any changes should be considered against the given zoning and codes.

While it is possible to approach housing through these systems of value and economies, it is also important to work towards new contemporary ideas of living and habitation. The Lemonie House by OMA/Rem Koolhaas presents commingles issues from domesticity, privacy, intimacy, and physical limitations to structural, environmental, and material novelty in creating a new form of living. If housing at a larger scale with repetitive units undertakes all of these elements, what types of design studies and concepts can each team explore?

New York development tends to follow artists, a movement currently synonymous with gentrification. This trend started in a deindustrialized SoHo, when artists renovated large industrial factories into live/work lofts. In 1971, the City rezoned the area to allow for commercial activity. SoHo has since been used as a precedent for Brooklyn, Queens, and now the Bronx. According to the current NYC zoning regulation, Chapter 2, Article 1, "home occupation" enables residents to use 10% of their homes for specific types of work: artist studios, professional offices, and teaching up to four pupils at a time. However, as our site is also under the MX-13 Special District Overlay, "home occupation" is redefined as 49% and allows greater variation in work. Live/work units can offer the neighborhood a variety of commercial types that directly relate to street life. Neighborhoods in Rio like Rio das Pedras are entirely constructed by mixing living and working spaces, where proximity to the street increases value and accessibility. Although signage and advertisement in live/work units in NYC are addressed in the zoning code, are there opportunities to link the impact of live/work units with the design of the street?

As part of the "home occupation" code and in relation to the NYC Housing Maintenance Code, the site's immediate context, of the schools and continuing education centers, the housing project should consider new models for working and education as part of its program. A community is growing in this neighborhood, and within the Bronx, through projects like Silvercup Studios that open up opportunities for live/work unit types and affordable or below-market-rate housing for artists. Consider the expanded programs of the Bronx Museum, as well as the programs of Crotona Park and exercise and sports, as well as the demographics of the area and the need for support of women and children.

As NYC has had a long tradition of mixing residential types and populations, the studio will also include programming for the aging. "Crystal ball in hand, I see a future that retires the retirement community and fully integrates older adults into every facet of American life," writes Dean Linda Fried of the Mailman School of Public Health in her book *Unafraid of Aging*.

There is evidence that, by the year 2030, certain global populations will count more elderly than child citizens. What it means to grow old in American society holds different meaning than in the past. ("Aging" and retirement were understood to take place at a particular age: 65.) What does this mean for society and for (urban) housing? Statistics show that Bronx's aging population is growing. Part of this studio's program is to design and develop a community center for the aging.

---

<sup>8</sup> <http://www.wsj.com/articles/linda-fried-on-the-future-of-retirement-1404762925>

Columbia University  
 Graduate School of Architecture, Planning and Preservation  
 A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
 Teaching Assistant: Emily Po, ewp211@columbia.edu

## PROGRAM\*

This program serves as a guide from which to start, but the studio project is open to change and being amended within reason.

<u>ROOM</u>	<u>SQUARE FOOTAGE (SF)</u>	<u>NOTES</u>
Entry	500 SF	Serves as entrance
Lobby		
Reception / Security Desk	1,000 SF	
Fire Command Station		
Mailboxes	1,000 SF	
Storage Room	1,000 SF	
Manager's Office	250 SF	
ATM	1,000 SF	
Core		
Stairwell	per code	
Accessible/Wayfinding graphics		
Elevators	per code	Accessible/Wayfinding
graphics		
Service		
Mechanical Room	per code	Accessible
Trash Collection Room	250 SF min.	
<b>SUBTOTAL</b>	<b>5,000 SF</b>	
<b><u>RESIDENT SHARED AMENITIES</u></b>		
Storage		15 SF per unit
Laundry		
Dryers		1 dryer per 40 units
Washers		10 washers

Columbia University  
 Graduate School of Architecture, Planning and Preservation  
 A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
 Teaching Assistant: Emily Po, ewp211@columbia.edu

Waiting & Folding Area		
Exercise Room	2,250 SF	cardio machines, stretching area
Accessible Green Roof	8,000 SF	
Bicycle Storage		50% of units; 15 SF / bike
Parking	30,000 SF	required for all buildings above 110th street
<b>SUBTOTAL</b>	<b>48,250 SF</b>	
<b>ROOM</b>	<b>SQUARE FOOTAGE (SF)</b>	<b>NOTES</b>
<u>COMMERCIAL</u>		
Retail (Café, Market)	500 SF	
Class A Office Space	2,000 SF	
<b>SUBTOTAL</b>	<b>2,500 SF</b>	
<u>COMMUNITY PROGRAMS</u>		
Public Pool	10,000 SF	
Community Garden / Terrace Equipment Storage	10,000 SF	
Community Center for the Aging	10,000 SF	
Exercise Room		
Lecture Hall / Auditorium		Stackable seating, piano
Country Kitchen		
Manager's Office		
Storage		
Accessible Restrooms		
Dining Room		
Arts and Crafts		
Beauty Salon		
Right to Assemble / Maintenance Office		
Desk	1,000 SF	Two computer stations, fax machine
<b>SUBTOTAL</b>	<b>29,000 SF</b>	

Columbia University  
 Graduate School of Architecture, Planning and Preservation  
 A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
 Teaching Assistant: Emily Po, ewp211@columbia.edu

<u>ROOM</u>	<u>SQUARE FOOTAGE (SF)</u>	<u>NOTES</u>
UNITS Total 300		
Micro Unit	300 SF	100% (50%)
Studio	500 SF	75%
One Bedroom	750 SF	75%
Two Bedroom	1,000 SF	50%, one superintendent
<b>SUBTOTAL</b>	<b>173,750 SF</b>	
<hr/>		
<b>TOTAL NET</b>	<b>258,500 SF+</b>	

Net Service areas include common spaces and mechanical at 20%.  
 Envelope enclosure to be determined in gross calculation.

\*The project must comply with ADA requirements and all current zoning guidelines and restrictions for New York City.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## BIBLIOGRAPHY

### CODE / ZONING REFERENCES

Edward Allen and Joseph Iano, *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (New York: Wiley, 2012).  
Edward Allen and Joseph Iano, *Fundamentals of Building Construction: Materials and Methods* (Hoboken, NJ: Wiley, 2009).  
Bruce L. Bassler, *Architectural Graphic Standards: Student Edition*. Hoboken, NJ: John Wiley & Sons, 2008.  
Frank Ching, *Building Construction Illustrated*. (Hoboken, NJ: John Wiley & Sons, 2008).  
Frank Ching, Barry Onouye, and Douglas Zuberbuhler, *Building Structures Illustrated: Patterns, Systems, and Design* (Hoboken, NJ: John Wiley & Sons, 2009).  
Alvin R. Tilley and Stephen B. Wilcox, *The Measure of Man and Woman: Human Factors in Design* (New York: John Wiley & Sons, 2002).  
"NYC Zoning - Zoning Districts." *NYC Zoning - Zoning Districts*. New York City: Department of City Planning.  
<http://www.nyc.gov/html/dcp/html/zone/zonehis2.shtml>  
"NYC Zoning - Glossary." *NYC Zoning - Glossary*. New York City: Department of City Planning.  
<http://www.nyc.gov/html/dcp/html/zone/glossary.shtml>  
"ZoLa: Zoning and Land Use." *ZoLa: Zoning and Land Use, City-Wide GIS*. New York City: Department of City Planning.  
<http://gis.nyc.gov/doit/nycitymap/template?applicationName=ZOLA#082511>  
"GeoData@Columbia" Columbia University Libraries  
[www.gis.columbia.edu](http://www.gis.columbia.edu)

### HARLEM HISTORY

\*Andrew Dolkart, *Touring Historic Harlem* (New York: The Oliphant Press, 1997).  
\*Gilbert Osofsky, "Harlem Tragedy: An Emerging Slum," in *Harlem: The Making of a Ghetto* (New York: Harper and Row, 1963).  
\*Jacqueline Leavitt, "Housing Abandonment: A Crisis for Communities and Households," *From Abandonment to Hope* (New York: Columbia University Press, 1990).  
\*Jonathan Gill, *Harlem: The Four-Hundred Year History from Dutch Village to Capital of Black America* (New York: Grove Press, 2011).  
Robert A. M. Stern, "Harlem and Upper Manhattan," in *New York 2000: Architecture and Urbanism Between the Bicentennial and the Millennium* (New York: The Monacelli Press, 2006).

### BRONX HISTORY

Daniel Libeskind, *Intersections: The Grand Concourse at 100* (New York: Fordham University Press, 2009).  
Constance Rosenblum, *Boulevard of Dreams: Heady Times, Heartbreak, and Hope Along the Grand Concourse* (Ebook: NYU Press, 2009).  
Jill Jonnes, *South Bronx Rising: The Rise, Fall, and Resurrection of an American City* (New York: Fordham University Press, 2002).  
New York Landmarks Preservation Commission. Public School 31: 425 Grand Concourse, Borough of the Bronx, built 1897, architect C.B.J. Snyder: [report] New York, N.Y.: The Commission, 1986.

### HOUSING HISTORY

Kenneth Frampton. "The Evolution of Housing Concepts: 1870 - 1970," in *Another Chance for Housing: Low-Rise Alternatives*. (New York: The Museum of Modern Art, 1973).  
Arthur Drexler, *The New City: Architecture and Urban Renewal* (New York: The Museum of Modern Art, 1967).  
Robert A. M. Stern. "Toward a Livable City," in *New York 2000: Architecture and Urbanism Between the Bicentennial and the Millennium* (New York: The Monacelli Press, 2006).  
Richard Plunz, *A History of Housing in New York City* (New York: Columbia University Press, 1990).

### PRECEDENTS

Alan Colquhoun. "Typology and Design Method," *Perspecta 12* (Cambridge: The MIT Press, 1969).

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp2111@columbia.edu

\*Michael Henry Adams. "The Row House in Harlem," *Harlem Lost and Found: An Architectural and Social History*. (New York: The Monacelli Press, 2001).

\*Richard Pommer. "The Architecture of Urban Housing in the United States during the Early 1930s," *Journal of the Society of Architectural Historians* 37, no. 04 (Dec. 1978): 235-64.

Rafael Moneo, "On Typology," *Oppositions* (1978).

Colin Rowe "Conditions of Modernity."

\*James Stirling "Apartments, NY: Investigation of an Urban Type," *International architect* (1981): 27-36.

#### URBAN/SITE STUDY

Alex Lehnerer, *Grand Urban Rules* (Rotterdam: 010 Publishers, 2009).

\*Ernest W. Burgess, "The Growth of a City."

Hilary Ballon, *The Greatest Grid: The Master Plan of Manhattan, 1811-2011*.

\*Jane Jacobs, *The Death and Life of Great American Cities*.

\*Julian Brash, "Bloomberg's New York: Class and Governance in the Luxury City."

Mabel Wilson, "Black in Harlem: Race, Architecture, and the City," in *Harlem World* (New York: Studio Museum, 2004).

Sharifa Rhodes-Pitts, *Harlem is Nowhere: A Journey to the Mecca of Black America*. (New York: Little, Brown, and Co., 2011).

"La Marqueta Mile: A Green Engine for Multi-Cultural Entrepreneurship," Harlem Community Development Corporation.

\*Le Corbusier, "The Masses: Reforming Space / Observing Culture," in *The City of Tomorrow and Its Planning* (New York, NY: Dover Publications, Inc., 1989).

Dan Graham, *Dan Graham's New Jersey* (Zurich: Lars Müller Publishers, 2012).

Anthony Appiah, *Cosmopolitanism: Ethics in a World of Strangers* (London: Penguin, 2007).

Eric Homburger, *The Historical Atlas of New York City: A Visual Celebration of Nearly 400 Years of New York City's History* (New York: Holt Paperbacks, 1998).

#### UNIT AND AGGREGATION

\*Albert Ferre, *Total Housing: Alternatives to Urban Sprawl* (Barcelona: Actar, 2010).

Alvaro Siza, "Living a House," in *Alvaro Siza: Private Houses: 1954-2004*. (Milan: Skira, 2004).

Barry Bergdoll and Reinhold Martin, *Foreclosed: Rehousing the American Dream*.

Beatriz Colomina, "Interior," in *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge: The MIT Press, 1996).

Buckminster Fuller, "Designing a New Industry," in *Architecture Culture 1943-1968* (New York: Rizzoli, 1993).

Charles Eames, "What is a House?" *Arts and Architecture* (July 1944).

Gwendolyn Wright, "Americanization and Ethnicity in Urban Tenements," in *Building the Dream: A Social History of Housing in America* (Toronto: Random House, 1981).

\*Henri Lefebvre, "Social Space," in *The Production of Space* (Oxford and Cambridge, MA: Blackwell, 1991).

Mary Douglas, "The Idea of a Home," in *Housing and Dwelling: Perspectives on Modern Domestic Architecture* (London: Routledge, 2006).

Michel Foucault, "Space, Knowledge and Power," in *The Foucault Reader* (New York: Pantheon Books, 1984).

Martin Heidegger, "What is Home?" in *Housing and Dwelling: Perspectives on Modern Domestic Architecture* (London: Routledge, 2006).

Peter G. Rowe, "Time, Space, and Technology," in *Design Thinking* (Cambridge: The MIT Press, 1987).

Reyner Banham, "A Home is Not a House," in *Housing and Dwelling: Perspectives on Modern Domestic Architecture* (London: Routledge, 2006).

"What is Affordable Housing?" in *Envisioning Development* (Brooklyn: The Center for Urban Pedagogy, 2009).  
*Public Housing: A New Conversation*, The Temple Hoyne Buell Center for the Study of American Architecture.

New York apartments may get even smaller with new 'micro' rent plan, The Guardian:  
<http://www.guardian.co.uk/world/2012/jul/10/new-york-micro-apartments?newsfeed=true>

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## AGING

*Volume 27*, "On Aging" (2011).

Francois Hopflinger, "The Second Half of Life: A Period of Life in Transition," in *New Approaches to Housing for the Second Half of Life*, ed. Andreas Huber (Basel: Birkhauser, 2008), 31 - 46.

*Imperfect Health: The Medicalization of Architecture* (Montréal: Canadian Centre for Architecture, 2012)

## HEALTH

Beatriz Colomina, "Unbreathed Air 1956," *Grey Room* 15 (2004): 28 - 59.

Alison Smithson, "Byelaws for Mental Health," *Architectural Design* 09 (1960): 356 - 57.

Dominique Laporte, *History of Shit* (Cambridge: MIT Press, 2000).

Alain Corbin, *The Foul and the Fragrant: The Sense of Smell and Its Social Image in Modern France* (Leamington, Spa: Berg, 1986).

Michel Foucault and Jean Khalfa, *History of Madness* (London: Routledge, 2006).

Emily Thompson, "Noise and Noise Abatement in the Modern City," in *Sense of the City: An Alternate Approach to Urbanism* (Montréal: Canadian Centre for Architecture/Lars Müller Publishers, 2005).

Hilary Sample, *Maintenance Architecture* (Cambridge: MIT Press, 2016).

## ACCESSIBILITY

ADA Guidelines: <http://www.ada.gov/>

## CONTEMPORARY HOUSING

<http://www.archdaily.com/173436/via-verde-grimshaw-architects-dattner-architects/>

<http://www.archdaily.com/109832/a-big-new-york-debut/>

<http://www.archdaily.com/34302/linked-hybrid-stein-holl-architects/>

<http://www.archdaily.com/626856-leonard-street-new-york-herzog-de-meuron/>

<http://urbanomnibus.net/2011/03/from-the-archives-harlems-psgo/>

<http://www.archdaily.com/614478/first-look-inside-big-s-w57-manhattan-pyramid>

## DOCUMENTARIES / FILMS

*Urbanized*

*Rezoning Harlem* (video available in Butler Library) put on reserve, check reviews

*The Pruitt-Igoe Myth: An Urban History*

*I Remember Harlem*, The Studio Museum in Harlem:

<http://www.studiomuseum.org/event-calendar/event/film-series-i-remember-harlem-2012-09-22>

Sarah Morris, Video Clips: <http://sarah-morris.info/?FilmClips/Midtown/> and <http://vimeo.com/user4010809>

The Bronx in The 1980's: <https://www.youtube.com/watch?v=xgUsEVwXcho>

The South Bronx: Where Hip-Hop Was Born: <http://www.wnyc.org/story/89709-south-bronx-hip-hop-year-zero/>

*Short, South Bronx Rising* <http://www.nytimes.com/video/arts/10000001089498/south-bronx-rising.html>

[\*Marty \(1955\)\*, Delbert Mann](#)

[\*The Warriors \(1979\)\*, Walter Hill](#)

[\*Fort Apache to the Bronx \(1981\)\*, Daniel Petrie](#)

[\*Paris Is Burning \(1990\)\*, Jennie Livingston](#)

[\*Jungle Fever \(1991\)\*, Spike Lee](#)

[\*Summer of Sam \(1999\)\*, Spike Lee](#)

[\*Finding Forrester \(2000\)\*, Gus Van Zandt](#)

[\*My Brooklyn \(2014\)\*, Kelly Anderson](#)

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## MID-REVIEW REQUIREMENTS

October 29<sup>th</sup> and November 1, 2018 1:30pm-5:30pm

*These requirements represent the minimum documentation required.*

### Drawings

At a scale of 1/32"=1'-0": Site Plan with context.

At a scale of 1/16"=1'-0" and 1/8"=1'-0": Plans with Ground Plan.

At a scale of 1/16"=1'-0": Sections and Elevations.

At a scale of 1/4"=1'-0": Full Building Section with detail.

### Models

At a minimum scale of 1/64"=1'-0": Massing Model within urban context.

At a scale of 1/16"=1'-0": Building Model with immediate site.

At a scale of 1/2"=1'-0": Detail Model of your selection.

### Perspectives

Minimum of two [2] views of a day in the life of the building, illustrating both interior and exterior. One [1] perspective should be of a unit.

### Conceptual Structural Diagrams

Produce one [1] key structural diagram that reflects your structural concept and system. In addition, produce a series of diagrams that illustrate the structural strategy and its relationship to other qualities of the design, from materials to light and form.

### Conceptual Daylighting Studies

Produce one [1] unit that is presented through either digital or physical modeling to illustrate daylighting effects on June 21 and Dec. 21st at sunrise, noon, and sunset.

### Post-Medium Specificity

Produce one [1] drawing, model or 30 seconds of video that captures the essence of your project. This work shall be created to expand upon a theme or narrative of your project.

### Additional Work

Other work is also acceptable, and should further elaborate on your design concept. Wherever possible, do not repeat information. Please discuss with your individual critic.

### Presentation and Time

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

Part of studio culture includes balancing your studio work with other classes, both inside and outside of the School. Since this term is dedicated to work as part of a team, please be considerate of your teammate's time in addition to your own. Reviews are meant to be productive, useful, and critical of your work, providing insight and thus helping you move your project forward. Reviews are limited in time and therefore require that each student arrives on time and presents in a concise manner. All digital work should present a visually clear description of your project. Pin-ups are an opportunity for students to test their project with varying audiences. Mock up your presentation before any review and discuss with your critic.

**Pencils down.** All work shall be collected the night before the mid-review at 11:00 p.m. Each student is to finish printing and pin up or submit their work. Students are advised to stop all work and get some rest. It is recommended that students attend studio reviews as well as the introduction presentation.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

## FINAL REVIEW REQUIREMENTS

December 5<sup>th</sup> and 6<sup>th</sup>, 2018 1:30-5:30pm

*These requirements represent the minimum documentation required.*

### Drawings

At a scale of 1/16"=1'-0": Site Plan with context.

At a scale of 1/8"=1'-0": Plans, Sections, Elevations. All drawings with context

At a scale of 1/4"=1'-0": Full Building Section with detail.

### Models

At a minimum scale of 1/64"=1'-0": Massing Model within urban context.

At a scale of 1/8"=1'-0": Partial Building Model with immediate site.

At a scale of 1/2"=1'-0": Detail Model of your selection.

### Perspectives

Minimum of three [3] views of a day in the life of the building, illustrating both interior and exterior. One perspective should be of a unit. Additionally, views should consider the qualification of experiential differences in public vs. private, shared vs. communal spaces, etc.

### Structural Diagrams

A diagram that reflects your structural concept. In addition, produce a series of diagrams that illustrates the structural strategy and its relationship to other qualities of the design from materials to light to form.

### Daylighting Studies

Produce at a minimum one space, preferably the unit that is presented through digital modeling to illustrate daylighting effects on June 21 and Dec. 21st at noon.

### Post-Medium Specificity

Produce one [1] drawing, model or one-minute video that captures the essence of your project. This work should be used to introduce your project.

### Additional Work

Other work is also acceptable, and should further elaborate on your design concept. Wherever possible, do not repeat information. Please discuss with your individual critic.

### Presentation and Time

Part of studio culture includes balancing your studio work with other classes, both inside and outside of the School. Since this term is dedicated to work as part of a team, please be considerate of your teammate's time

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

in addition to your own. Reviews are meant to be productive, useful, and critical of your work, providing insight and thus helping you move your project forward. Reviews are limited in time and therefore require that each student arrives on time and presents in a concise manner. All digital work should present a visually clear description of your project. Pin-ups are an opportunity for students to test their project with varying audiences. Mock up your presentation before any review and discuss with your critic.

***Pencils down.*** All drawings, digital presentations, .pdfs, PowerPoints, etc. shall be collected on December 4 at 8:00 p.m. Each team is to submit their work to their critic for review. Model making is acceptable until December 4 at 11:00 p.m. These deadlines are recommended for the purpose of ensuring that students present with clarity on review days.

Columbia University  
Graduate School of Architecture, Planning and Preservation  
A4003: Core Studio 3, Fall 2018. "States of Housing."

M / Th 01:30 - 06:30 p.m. Studio Faculty: Daisy Ames; Eric Bunge; Gabriela Etchegaray; Adam Frampton; Mario Gooden; Ilias Papageorgiou; Hilary Sample; Galia Solomonoff

W 02:00 - 04:00 p.m. Lectures in Avery 114, Hilary Sample with Faculty

Hilary Sample, Housing Studio Coordinator; hms2155@columbia.edu  
Teaching Assistant: Emily Po, ewp211@columbia.edu

### Final Documentation

All models, drawings, and other materials must be documented and collected for the School's archive and for *Abstract*. Please provide a CD to your critic of all drawings, model photos, and other forms of representation. No grade will be given until your work has been collected and archived. No exceptions.

### Schedule

The studio is structured around a profound set of critical issues that will build upon one another. Students will work in pairs for the entire term. Studio pedagogy will focus on a working methodology of building up the scale of each project throughout the term. Domestic projects should take the approach of building from the inside out, while urban projects will look from the outside in. The studio will begin with a one-week precedent study of one housing type. Following this short introductory exercise, the studio will shift scales and examine the site in the broadest of terms. At week four, students will begin design work by developing unit and aggregation schemes, proposing a structural concept, and analyzing the given program. Each team will produce several conceptual schemes for the housing block up to the mid-term review. Each studio will be assigned a structural engineer to work with throughout the term. In addition, presentations and roundtable discussions by experts and professionals will be a critical component of the studio.

### Studio Team Spirit

The housing studio aims to touch on many subjects and skill sets throughout the course of the semester. One challenge of the studio is working collaboratively. The ability to work and coordinate with others is a crucial skill for students to cultivate. If you find yourself frustrated, do not worry! Critics and teaching assistants have been through the same thing and are there to help. Students will learn as much, and perhaps more, from their classmates as from their studio critic. With that in mind, please be present in studio during studio class time and engage in pin-ups and class discussions. Students absolutely must be present at all pin-ups and reviews for the entire duration (unless for medical or other urgent reasons). It is more important that students are present for one another's' presentations than gluing last-minute additions to models. Roundtable discussions are intended for students to ask questions, inspire dialogue and challenge one another (and their critics!). Please attend and be on time. There may even be food. . . .

### End-of-year Show

In preparation for the End-of-year Show in May, all students must submit three [3] high-resolution images of their projects. Additionally, please remember to save your models for inclusion in the show.